



NOTICE OF GRANT AND AGREEMENT AWARD

1. Award Identifying Number NR233A750004G028	2. Amendment Number	3. Award /Project Period Date of final signature - 04/07/2028	4. Type of award instrument: Grant Agreement
5. Agency (Name and Address) USDA Partnerships for Climate-Smart Commodities c/o FPAC-BC Grants and Agreements Division 1400 Independence Ave SW, Room 3236 Washington, DC 20250 Direct all correspondence to FPAC.BC.GAD@usda.gov		6. Recipient Organization (Name and Address) CARIBBEAN REGENERATIVE COMMUNITY DE VELOPMENT INC. CRCD PO BOX 1119 SABANA GRANDE PR 00637 UEI Number: EMA1CXBKL719 EIN:	
7. NRCS Program Contact Name: ECHO DOMINGUES (b)(6)	8. NRCS Administrative Contact Name: CHARLENE WINTERS	9. Recipient Program Contact Name: Connor Harron	10. Recipient Administrative Contact Name: Mariana Quiñones-
11. CFDA 10.937	12. Authority 15 USC 714 et seq	13. Type of Action New Agreement	14. Program Director Name: Mariana Quiñones-Rosado (b)(6)
15. Project Title/ Description: Expands markets for climate-smart coffee and cacao in Puerto Rico and supports farmer implementation and monitoring of climate-smart practices.			
16. Entity Type: M = Nonprofit with 501C3 IRS Status (Other than Institution of Higher Education)			
17. Select Funding Type			
Select funding type:	<input checked="" type="checkbox"/> Federal	<input checked="" type="checkbox"/> Non-Federal	
Original funds total	\$7,500,000.00	\$2,596,350.00	
Additional funds total	\$0.00	\$0.00	
Grand total	\$7,500,000.00	\$2,596,350.00	
18. Approved Budget			

Personnel	\$2,643,856.00	Fringe Benefits	\$0.00
Travel	\$59,171.00	Equipment	\$251,760.00
Supplies	\$428,636.00	Contractual	\$1,772,810.00
Construction	\$0.00	Other	\$2,343,767.00
Total Direct Cost	\$7,046,639.00	Total Indirect Cost	\$453,361.00
		Total Non-Federal Funds	\$2,596,350.00
		Total Federal Funds Awarded	\$7,500,000.00
		Total Approved Budget	10,096,350.000

This agreement is subject to applicable USDA NRCS statutory provisions and Financial Assistance Regulations. In accepting this award or amendment and any payments made pursuant thereto, the undersigned represents that he or she is duly authorized to act on behalf of the awardee organization, agrees that the award is subject to the applicable provisions of this agreement (and all attachments), and agrees that acceptance of any payments constitutes an agreement by the payee that the amounts, if any, found by NRCS to have been overpaid, will be refunded or credited in full to NRCS.

Name and Title of Authorized Government Representative KATINA HANSON Acting Senior Advisor for Climate-Smart Commodities	Signature KATINA HANSON Digitally signed by KATINA HANSON Date: 2023.04.17 09:13:53 -05'00'	Date 04/17/2023
Name and Title of Authorized Recipient Representative MARIANA QUIÑONES-ROSADO Program Manager	Signature Mariana Quiñones Digitally signed by Mariana Quiñones Date: 2023.04.14 13:16:03 -04'00'	Date 04/14/2023

NONDISCRIMINATION STATEMENT

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or a part of an individual's income is derived from any public assistance program. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at (202) 720-2600 (voice and TDD). To file a complaint of discrimination write to USDA, Director, Office of Civil Rights, 1400 Independence Avenue, SW., Washington, DC 20250-9410 or call (800) 795-3272 (voice) or (202) 720-6382 (TDD). USDA is an equal opportunity provider and employer.

PRIVACY ACT STATEMENT

The above statements are made in accordance with the Privacy Act of 1974 (5 U.S.C. Section 522a).

Statement of Work

Purpose

The purpose of this agreement, between the U.S. Department of Agriculture, Natural Resources Conservation Service (NRCS) and Caribbean Regenerative Community Development, Inc. (Recipient), is to build markets for climate-smart commodities and invest in America's climate-smart producers to strengthen U.S. rural and agricultural communities.

Objectives

The objectives of this project are to support the production and marketing of climate-smart commodities by providing voluntary incentives to producers and landowners, including early adopters, to implement climate-smart agricultural production practices, activities, and systems on working lands; measure/quantify, monitor and verify the carbon and greenhouse gas (GHG) benefits associated with those practices; and develop markets and promote the resulting climate-smart commodities.

Budget Narrative

The official budget summarized below and described in the attached Budget Narrative will be considered the total budget as last approved by the Federal awarding agency for this award.

Amounts included in this budget narrative are estimates. Reimbursement or advance liquidations will be based on actual expenditures, not to exceed the amount obligated.

TOTAL BUDGET \$ 10,096,350.00

TOTAL FEDERAL FUNDS \$7,500,000.00

PERSONNEL \$2,403,506.00

FRINGE BENEFITS \$0

TRAVEL \$53,792.00

EQUIPMENT \$251,760.00

SUPPLIES \$389,669.00

CONTRACTUAL \$1,611,645.00

CONSTRUCTION \$0

OTHER \$2,336,267 (includes PRODUCER INCENTIVES \$270,000.00)

TOTAL DIRECT COSTS \$7,046,639.00

INDIRECT COSTS \$453,361.00

TOTAL NON-FEDERAL FUNDS \$2,596,350.00

PERSONNEL \$462,864.00

FRINGE BENEFITS \$0

TRAVEL \$0

EQUIPMENT \$0

SUPPLIES \$1,275,000.00

CONTRACTUAL \$0

CONSTRUCTION \$0

OTHER \$619,215.00

TOTAL DIRECT COSTS \$2,357,079.00

INDIRECT COSTS \$239,271.00

Recipient has elected to use the de minimis indirect cost rate.

Recipient has elected to use unrecovered indirect costs as match in the amount of \$239,271.00.

When equipment is purchased with Federal funds it must be used until no longer needed as described in the General Terms and Conditions and 2 CFR 200. If the residual value of the equipment is \$5,000 or more at the time it is no longer needed, the recipient must request disposition instructions. The disposition instructions may direct the recipient to: 1) sell the equipment and return a proportionate share of the proceeds to the Federal agency; 2) transfer title to another eligible entity identified by the Federal agency; or 3) keep the equipment if desired and compensate the Federal agency for its proportionate share of the value.

Responsibilities of the Parties:

If inconsistencies arise between the language in this Statement of Work (SOW) and the General Terms and Conditions attached to the agreement, the language in this SOW takes precedence.

RECIPIENT RESPONSIBILITIES

Perform the work and produce the deliverables as outlined in this Statement of Work and attachments.

Ensure Paperwork Reduction Act (PRA) clearance is obtained prior to conducting data collection from producers or other project participants, including data collection performed by subrecipients.

Comply with the applicable version of the General Terms and Conditions.

Submit reports and payment requests to the ezFedGrants system as outlined in the applicable version of the General Terms and Conditions. Reporting frequency is as follows:

Performance Reports: Quarterly

SF425 Financial Reports: Quarterly

Detailed Progress Report: Quarterly

(The detailed progress report is in addition to the performance and financial reports referenced above and described in the general terms and conditions)

Expected Accomplishments and Deliverables

See attached Benchmarks Table and associated Project Narrative.

Resources Required

See the Responsibilities of the Parties section for required resources, if applicable.

Milestones

See attached Benchmarks Table and associated Project Narrative.

GENERAL TERMS AND CONDITIONS

Please reference the below link(s) for the General Terms and Conditions pertaining to this award:

<https://www.fpacbc.usda.gov/about/grants-and-agreements/award-terms-and-conditions/index.html>

Attachments:

Budget Narrative

Project Narrative

Benchmarks Table

Climate-Smart Practices List and Limitations

Data Dictionary

Climate-Smart Specific Terms and Conditions

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Sustainable Market Approaches for Regenerating Territories with Agricultural Goods in Puerto Rico (Smart Ag PR)

1. Executive Summary of Pilot Project

The Smart Ag Puerto Rico project, led by Caribbean Regenerative Community Development (CRCD), will support and empower smallholder coffee and cacao farmers in Puerto Rico to transition to climate-smart agriculture and forestry (CSAF) practices through identification of viable practices and support for their implementation on farms, accounting of greenhouse gas-related benefits and co-benefits throughout the supply chain, and development of a unique Puerto Rican branded climate-smart coffee label and voluntary program. It will address the barriers to successful uptake of CSAF practices in Puerto Rico's agricultural sector through creative, collaborative marketing efforts that highlight the social and environmental benefits of sustainably produced coffee and cacao and help the island meet its potential to become a world leader in climate-smart coffee and cacao production.

The proposed project addresses compelling and urgent needs in Puerto Rico to improve human livelihoods, restore ecosystem services, and increase resiliency for the future of people and agricultural production, especially considering the territory's future vulnerability to climate change impacts. A multitude of disruptions in recent decades, including devastating hurricanes, soil degradation resulting from intensive imported agricultural practices, and loss of important infrastructure services has profoundly affected Puerto Rico's agriculture sector. These disruptions have led to increased vulnerability to storm events, economic downturns and labor shortages, and conditions that discourage sustainable and responsible agricultural practices in the region. As a result, the island's production of coffee – a culturally and economically important commodity in Puerto Rico – has plummeted and is currently underperforming relative to its historical and potential rates (See Section 2 of this proposal). In contrast, cacao production is a new yet growing agricultural sector in Puerto Rico with demonstrated promise, primarily comprised of younger farmers who are seeking innovative practices and are interested in the implementation of climate smart practices on their farms. Similar to coffee farmers though, cacao farmers have faced significant disruptions to their operations in the form of major storm events, and are in need of technical assistance and additional labor to implement changes. In addressing these challenges, the project seeks to promote the tremendous market opportunities in these two industries. It will help improve the territory's resiliency, self-sufficiency, and economic health through the development of specialized climate-smart coffee and chocolate industries that can be uniquely marketed throughout the United States and can serve as a model of sustainable agriculture throughout Puerto Rico.

Specifically, the project will entail information, training, and support for participating farmers and community members on CSAF practices and their benefits; investments in needed materials and labor for CSAF practice implementation (with a focus on soil carbon amendment applications and shade tree planting on smallholder farms); development of a commodity market in the U.S. for sustainably-grown climate-smart coffee and chocolate produced in Puerto Rico and removal of barriers to entry for Puerto Rican farmers; development of a certification system for Puerto Rico's sustainably grown commodities; development of infrastructure for efficient and accurate carbon

accounting and environmental benefit leveraging; and exploration of opportunities to monetize the carbon and environmental benefits through offset credit markets to supplement farmers' return on investment. The project also includes economic modeling to demonstrate the effect of the project on the Puerto Rico economy. As described in Sections 4 and 5 of this proposal, the project has been designed to empower farmers in Puerto Rico, creating opportunities for them to participate in potentially lucrative markets by establishing accessible and locally-centered climate-smart coffee and cacao industries based on a voluntary agreement and benefiting the territory's industry beyond the pilot project's participants long after the project's end. It will reduce transactions costs and remove barriers to entry through stakeholder engagement and collaboration that steers project methodologies toward those that work for the local community, rather than relying on models that have been applied elsewhere.

The Smart Ag Puerto Rico project will be led by CRCD,¹ a woman-led 501(c)(3) non-profit founded and based in Puerto Rico to support the development of sustainable agriculture and food security on the island, with support from partners Gnarly Tree Sustainability Institute (GTSI), the University of Wisconsin (UWisc), Cafiesencia, and the University of Puerto Rico (UPR). As described in Section 3 and demonstrated in Appendix A, this team is centered around local Puerto Rican experts in environmental science, agronomy, and marketing who have strong existing relationships with landowners and farmers. For example, CRCD has an existing network of over 100 small and underserved coffee and cacao producers who already have sustainable management plans in place and have expressed their willingness to participate in CSAF practice implementation and demonstration. The local team is supported by international experts in climate change policy design and evaluation; carbon accounting and co-benefits quantification and valuation; life cycle analysis; carbon offsets; stakeholder engagement and collaboration; design of voluntary environmental programs; and sustainable marketing. Taken together, the team has a proven track record in marketing climate-smart commodities. DuPuis Group, who submitted a bid to lead national marketing efforts and certification design for the project, has a powerhouse design team that has deep experience with developing, positioning, naming, and branding, as well as developing and activating various sustainability certificates and initiatives.

An important feature of the team's work is its extensive track record in collaborating and working with underserved and minority-focused communities. For example, founding members of CRCD have been contributing to the sustainable development of disadvantaged communities and conservation efforts in Puerto Rico for over ten years, furthering the organization's primary goal of assisting disadvantaged communities and underserved landowners in achieving economic resilience and well-being. Other team members also focus on underserved and minority communities, including Cafiesencia, a Puerto Rican NGO that supports rural coffee farmers and provides opportunities for economic development and training to disadvantaged communities, and GTSI, which as an example developed a carbon offset system for the government of South Africa designed for the economic circumstances of their developing economy.

As demonstrated in this proposal, the Smart Ag Puerto Rico team is ideally composed and situated to successfully implement this project to create a lasting impact in Puerto Rico's agricultural sector and in the U.S. coffee and cacao commodities market. The balance of this document further characterizes the background of Puerto Rico and the compelling need for this project (Section 2),

¹ The main point of contact for this proposal is Mariana Quiñones-Rosado (email: mquinones@crcdpr.org; phone: 787-614-0895).

briefly introduces the project team and summarizes its qualifications (Section 3), details the project plan including implementation of CSAF practices, participant recruitment and engagement, measurement, monitoring, reporting, and verification (MMRV) and commodities market development, (Section 4), and provides an overview of project tasks and timelines (Section 5). The accompanying appendix provides descriptions of partner organizations and CVs for key team personnel from CRCDD and its project partners.

2. Background and Introduction: The Challenge and Promise of Puerto Rico's Agricultural Sector

The Commonwealth of Puerto Rico (PR) is a tropical archipelago located in the Caribbean, subject to intense soil, water, and biodiversity degradation by agricultural purposes ([Fain et al. 2017](#)). Although historically PR has been an important exporter of commodities, such as coffee and sugarcane, the future of the agriculture sector in PR faces major challenges. These include, but are not limited to, the effects of climate change, recent hurricane disasters, the global coronavirus pandemic, and a protracted economic crisis – the combined impact of which has revealed poor food security, fragmented ecosystems, a fragile energy grid, and an agricultural sector in decline. In addition, the poverty rate in PR is approximately 43%, more than double that of Mississippi, the state with the highest poverty rate in the United States ([Census Bureau, 2021](#)). As a result of the island-wide destruction caused by Hurricane Maria in September 2017 and subsequent earthquakes that struck the island throughout the first half of 2020, an outward migration has begun; if not reversed, this will hinder the capacity of PR to recover from recent catastrophes. There is an urgent need to improve human livelihoods, restore ecosystem services, and increase resiliency for the future of people and agricultural production in PR, especially considering future vulnerability to climate change impacts.

These challenges present an opportunity to transition PR to a new sustainable development pathway that models resilient agriculture in the 21st century. There is much reason for optimism in the future of PR and success of climate-smart agriculture and forestry (CSAF) approaches that have the potential to help reverse recent trends affecting a population of 3.2 million U.S. citizens and critical agroecosystems. There is great potential in developing a strong and sustainable economy built on agroforestry, silviculture, and natural resource management promoting CSAF practices on up to 87% of PR's surface, or 3,058 sq. miles ([Gould et al. 2017](#)). Despite recent challenges, in 2020 PR produced commodity goods valued at over \$800 million annually ([O'Neill, 2022](#)) while dedicating less than 20% of the island's surface area to agricultural and/or forestry products ([World Bank, 2018](#)). Due to the landscape's dynamic mosaic of land use types and ecosystems, there is great potential for PR to implement a range of climate-smart strategies to cultivate a sustainable, ethical, and profitable agricultural industry.

Coffee is one of the most important commodities in PR, both culturally and economically. It is currently cultivated on roughly 13,000 acres, primarily in the mountainous regions of the island and almost entirely managed by small landowner and underserved farmers ([US Census, 2017](#)). Although the industry is still recovering from recent disasters, as recently as 2012 coffee production in PR was valued at over \$30 million annually. Looking back though, at the turn of the 19th century PR was the world's sixth leading coffee producer, cultivating the plant on over 190,000 acres while employing an estimated 200,000 people and yielding over 44 million pounds a year ([Pumarada, 1989](#)). At the end of the Spanish American War, in 1898 the U.S. took possession of PR and as a result, PR lost its favored trade status with European markets and in the

U.S., coffee culture had not yet developed to make PR's small-scale, artisanal style production of premium coffee economically viable (Pumarada, 1989). As a result, coffee exports fell to just over 12 million pounds in 1901, leading to an industry-wide decline. In an attempt to revitalize the industry during the 1970s and 1980s, the U.S. provided incentives to move farmers away from traditional, shade grown coffee cultivation towards more intensive, full-sun farming with higher yielding varieties and increased agrochemical inputs (Perfecto et al. 1996). For a time, this shift influenced a steady increase in production, with harvests regularly topping 26 million pounds per year in the 1990s. Hurricane George disrupted this trend in 1998, causing immense damage and triggering a 38% harvest reduction the following year. As a combined impact of soil degradation resulting from more intensive agricultural practices and increased vulnerability to storm damage, reduced investment in PR's agricultural sector, and rising labor costs, the PR coffee industry once again fell into decline. While the full impacts of Hurricane Fiona (which made landfall in September 2022) are still being assessed, it serves as an important reminder that learning to cope with major storms events are likely to be an increasingly important form of adaptation for this archipelago. Fortunately, there is substantial evidence that shade canopy cover can serve as an important predictor of increased resilience to and recover after hurricanes, improve soil carbon storage and promote biodiversity (Mayorga, 2021).

Considering coffee's historical significance and PR's demonstrated capacity to be a world leader in its production, coffee is a commodity crop that is ideally suited for the implementation of CSAF practices in PR. Coffee is vulnerable to climate change impacts, has large representation of smallholder farmers, and has significant potential for agroforestry practices to mitigate climate change impacts and GHG emissions while also diversifying sources of income and increasing food security (Fain et al. 2017). Following recent environmental and economic crises, the agricultural community in PR is seeking pathways to improve the sustainability and resiliency of their farms. In 2018 over 70% of farmers surveyed on the island reported they had or intended to adopt climate-smart practices such as crop rotation and diversification, integrated pest management, and planting of native trees to protect crops and reduce erosion (Rodriguez Cruz et al. 2021). Puerto Rico's young but growing cacao industry fits squarely into this category of producers. Although current cacao production on the island covers fewer than 1,000 acres, there is a growing interest from farmers in the crop, with over 400,000 cacao trees having been planted since 2012 (Cafiesencia, 2022)². Additionally, cacao farmers are younger and more likely to be early adopters of CSAF practices and many are actively seeking support in the establishment of agroforestry systems on working lands currently under agricultural production.

Working with PR's small landowner coffee and cacao growers to support the adoption of CSAF practices can lead to an important transition in the larger agriculture sector, building on tremendous market opportunities to help improve the territory's resiliency, self-sufficiency, and economic health. At the same time, CSAF practices could reduce the carbon footprint of the industry and potentially advance market opportunities in the U.S. for PR's sustainable agricultural products.

While there are tremendous opportunities to move the PR commodities sector toward a climate-smart foundation, there are hurdles that need to be addressed.

1. **Information and training.** A significant subset of the agricultural community has expressed interest in expanding sustainable practices. While there is a solid understanding

²Source: Lisette Fas, Director of Cafiesencia, Interview with Juan Echevarria of Jean Marie Chocolat, PR. October 2022.

of basics, community members need additional training, access to information, and ongoing field extension support. Even for farmers with ready access to advanced agricultural universities and extension agents, there remains a consistent need for support platforms, standards, and accessible, documented best management practices. For the practices and strategies of climate-smart commodities to spread through the larger agricultural community, there is a need to document and build the case for the economic benefits of sustainable practices.

2. ***Investment funding.*** While many sustainability practices pay for themselves, the returns are often not realized for several years. Also, smallholders and family farms do not have the funds to invest and access to capital markets is limited, particularly in the wake of the disruption from Hurricane Maria. There has been an increase in investment and incentive programs, but there is a critical need to redirect these investments from environmentally damaging development to resiliency-enhancing CSAF practices. Therefore, there is a need to provide fair and accessible sources of financial support for implementing CSAF practices such as agricultural and shade tree inputs.
3. ***Access to markets.*** For commodities aimed at increasing self-sufficiency and serving local markets, small and new farmers have limited support systems they can rely upon to help them enter competitive markets. Thus, there is a need to organize the distribution and marketing infrastructure within the territory. For commodities aimed at export, there is a need to develop a strategy for entering those markets and for competing and developing brand recognition that will provide a premium for the PR products – especially coffee and cacao.
4. ***Ability to leverage environmental benefits.*** If CSAF practices yield measurable and verifiable carbon emission reductions (or increased sequestration), there is the potential for farmers to benefit from participation in carbon markets. However, the infrastructure for such market participation does not currently exist and barriers to entry for individual farmers are prohibitive. In addition, implementation of CSAF practices can achieve significant co-benefits that occur at a more local level, including increased crop yields, and improved air and water quality. However, such benefits can be challenging to conceptualize and communicate to the local communities who must buy into practices for successful implementation. Measuring and sharing such local benefits has the potential to meaningfully increase further investment in green projects and ensure longevity of CSAF practices beyond those spurred by initial outside investments. Additionally, the use of voluntary environmental programs and labels is becoming an increasingly popular means of encouraging sustainable production and consumption ([Andrew Wu, 2015](#)).

This project is designed to address those hurdles. Moving towards voluntary certification programs has been identified as a viable way to better integrate smallholder coffee and cacao farmers into agricultural value chains. However, critical to transitioning towards voluntary certification programs is the integration of community collaboration and ownership. Given the extensive time and complexity involved in moving towards major sustainable certifications, the goal of this project is to support and empower smallholder farmers in the transition to CSAF practices by working with farmers to identify viable practices, support their implementation on farms, measure GHG and co-benefits throughout the supply chain, and develop a unique Puerto Rican branded climate-smart-agriculture certification that adapts criteria from third party certifications to local conditions and provides a viable future pathway toward other third party certifications. This

certification will provide an added value to participating coffee and chocolate brands and will encourage other farmers to transition towards the adoption of CSAF practices.

3. Introduction to Project Team

The team for this project will be led by Caribbean Regenerative Community Development (CRCD), a woman-led 501(c)(3) non-profit founded and based in Puerto Rico to support the development of sustainable agriculture and food security on the island. The founding members of CRCD have been contributing to the sustainable development of disadvantaged communities and conservation efforts in PR for over ten years. CRCD's mission aims to implement on the ground efforts to advance the regeneration of PR's natural resources and communities. In particular, CRCD's main goal is to assist disadvantaged communities and underserved landowners in achieving economic resilience and well-being. The CRCD team includes a group of experts from diverse backgrounds including agroforestry, social ecology, grant management, public relations, marketing, and environmental and biological sciences. The team will engage underserved landowners, with whom relations have been already established from providing technical assistance in the development of Forest Stewardship Management Plans, and coordinate activities between partners to achieve the overall implementation of project goals.

For this project, CRCD will enlist the support of project partners Gnarly Tree Sustainability Institute (GTSI), Cafiesencia, the University of Wisconsin (UWisc), and the University of Puerto Rico (UPR). Appendix A provides partner descriptions and CVs for key personnel from CRCD and partner organizations.

4. Project Plan

For the past three years, CRCD co-founders, together with partners, have worked with a network of over 100 small and underserved coffee and cacao producers to develop CSAF plans in line with best management practices (BMPs) and USDA guidelines for climate-smart agricultural and forestry practices. This project will allow the network of farms to move from plan to implementation. The project team will establish an advisory board to lead community engagement efforts and launch a grant program to solicit applications for financial support in the form of climate-smart farm inputs (*e.g.*, biochar-based soil amendment, access to shade trees and planting support) to implement CSAF practices on 1,900 acres of coffee and cacao farms during the pilot project period. The pilot program will demonstrate the viability of CSAF practices in Puerto Rico, revitalize the climate-smart shade-grown premium coffee and cacao industries in PR, and support the on-boarding of hundreds more farmers over the next 5 years. To accomplish these goals, CRCD and its partners will implement a four-pronged approach:

- CRCD, Cafiesencia, and GTSI will collaborate to establish a community advisory board, engage in participant enrollment and feedback, and host ongoing community workshops to facilitate onboarding and improve understanding of CSAF, while supporting context-based implementation and BMPs.
- CRCD, GTSI, and UWisc will co-establish the MMRV plan and local monitoring teams, coordinate baseline and follow-up data collection, build databases useful for the implementation of COMET-Planner and iTree on agricultural lands in PR, and engage with local universities to support student research opportunities and data collection. The team will ensure transparency and verification of GHG and co-benefits, and explore options for

remote-sensing to correlate with field data collection. This approach will help assess the potential for participants to access cost-effective GHG and co-benefit offset and PES markets.

- CRCD agronomists, with support from Cafiesencia, the University of Puerto Rico Agricultural Extension Services, in coordination with participating farmers, will lead the implementation of agroforestry and afforestation practices on working lands, and the application of a biochar-based soil amendment, which has demonstrated long-term GHG benefits. CRCD will establish biochar and shade tree supply lines, prepare a high-quality biochar based organic fertilizer prepared with fish hydrolysate, and coordinate the planting of 60,000 native trees and application of 1,800 tons of biochar fertilizer provisions on 1,900 acres within participating farms. CRCD will provide 85% of the native shade trees as in-kind contributions, which will be produced in two nursery facilities. CRCD has received an initial bid for the needed biochar from Bio Restorative Ideas, a commercial biochar producer that utilizes a feedstock of rescued bamboo waste and whose facilities are located less than 15 miles from the project headquarters in Southwestern Puerto Rico. Bio Restorative Ideas is a sustaining member of the International Biochar Initiative (IBI) and can provide IBI certifications and lab results (in line with NRCS code 336) upon request. CRCD has utilized the bid received from Bio Restorative Ideas for budgeting purposes only and will award this contract on a competitive basis as per Procurement Standards.
- All practices will be implemented on land currently used for agricultural production and in alignment with NRCS Caribbean Area conservation practice standards. Since NRCS Caribbean Area practice standards for Soil Carbon Amendments (code 336) have not yet been developed for the Caribbean Area, CRCD agronomists will work closely with NRCS Caribbean Area office to guide practice implementation. Findings from the project will support the development of NRCS Caribbean Area practice standards for soil carbon amendments and improve guidance for further adoption and use of biochar in the future. None of the practices implemented under this project will involve ground disturbance below the plow zone or concentrated animal feeding operations (CAFOs).
- CRCD will contract a national marketing specialist to develop a climate-smart certification brand for Puerto Rican coffee and chocolate. CRCD's local marketing specialist will work collaboratively with the contracted firm to spearhead the ideating name and tagline, design a climate-smart certification that is in line with or exceeds third party certification standards, develop the brand story, provide product validation of the name, language, and design in both Spanish and English, create a brand website and social media starter kit, and launch a brand activation program to generate interest and excitement in PR's premium quality, ethical, and sustainable coffee and chocolate products. CRCD has received an initial bid from DuPuis Group for the completion of this project component. This bid has been used for budgeting purposes only. CRCD will award this contract on a competitive basis as per Procurement Standards. GTSI and CRCD will ensure the climate-smart certification is in line with or exceeds third party certification standards and Cafiesencia will lead outreach and recruitment efforts with farmers.

The overall project will encompass five tasks: 1) project management; 2) participant recruitment, training, and outreach; 3) implementation of CSAF practices; 4) measurement/quantification, monitoring, reporting, and verification of environmental impacts; and 5) development and

expansion of climate-smart commodities. The remainder of this section describes these tasks, and Section 5 provides additional details on the project timeline.

1. Project Management

The project will be managed by CRCDD in close coordination and collaboration with all project partners. CRCDD will develop tools for tracking the status of participants; coordinate between various ongoing and related project tasks (e.g., carbon accounting methodology development, field monitoring teams, and workshop planning and execution); project team labor and cost tracking; and develop quarterly progress reports that synthesize and summarize the progress, challenges, and successes of all project tasks. CRCDD's accountant will dedicate between 60-70% of their time to helping maintain strong internal controls, well-documented and compliant procurement procedures. At project inception the CRCDD Project Manager will complete federal grant management training to ensure awareness of all necessary information to develop and strengthen existing internal protocols to promote rigorous record-keeping. In addition to practical project management functions, this task will encompass regular communication with the USDA as well as the team's participation in the USDA Partnership for Climate-Smart Commodities Learning Network, including all virtual and in person meetings and the development of material contributions to the Network's outputs, such as lessons learned in various stages of project implementation; MMRV protocols and associated challenges and successes; best practices in community and participant engagement; and synthesis of project and task outcomes.

Within the first three months of the project, the team will develop an inception report that reflects the common understanding of the project team, the key stakeholders within Puerto Rico, and the USDA regarding the purpose, scope, and detailed work plan of the project. The inception report provides an opportunity to clarify any remaining ambiguities from the proposal and to align expectations for project implementation. It will incorporate details on and outcomes from the project's initiation activities under Tasks 2 to 5.

Additionally, because some aspects of project implementation will depend on the specific participants recruited under Task 2, critical aspects of project planning will be ongoing and occur after completion of the inception report. For example, participant enrollment will occur over years 1 and 2 of the project, and the specific timing and location of those enrollments will define the logistical details of implementation, particularly under Task 3, such as needed biochar quantities and the number of shade trees needed in different regions of the island. As such, this project will also encompass ongoing project planning and coordination among all stakeholders to ensure efficient, effective, and timely implementation of all activities.

2. Participant Recruitment, Training, and Outreach

To better ensure sustainability of CSAF practices, programs need to move beyond informing and consulting community members to collaboration and ownership to facilitate strong social networks and social capital (Gonzalez, 2019; Martinez-Baron et al., 2018). In PR a limiting factor in the adoption of climate smart practices is the shortage of labor, which is in part a reflection of low wages and historically adverse working conditions. Coffee and cacao that is produced using CSAF provides an opportunity to expand fair labor practices, including better wages and conditions. The integration of community collaboration, ownership, and fair labor practices will be critical to the transition towards voluntary certification programs. Given the extensive time and complexity involved in moving towards major sustainable commodity certifications, this program aims to

support and empower smallholder farmers and their employees in the transition to CSAF by developing a unique Puerto Rican-branded climate-smart commodity certification program.

Our team will engage a broad range of stakeholders in project decision-making. Early in the process, CRCD, GTSI, Cafiesencia, and faculty from UPR will work collaboratively to develop a detailed plan for stakeholder engagement. The goals of stakeholder engagement will be to:

- Enable conversations regarding the perceived benefits and drawbacks of sustainable coffee and cacao farming;
- Facilitate collaborative decision-making processes of a Puerto Rican Climate-Smart - Agriculture Advisory Board;
- Support comparisons of alternative third party standards for sustainable agriculture and facilitate discussions of the perceived benefits and drawbacks on alternative standards with Advisory Board;
- Develop a Puerto Rican Climate-Smart-Agriculture voluntary program that draws upon the experience of similar standards to create an approachable, future pathway for third party certification;
- Engage institutional decision-makers (e.g., USDA, mayors) in discussions and development of collaborative solutions to sustainable coffee/cacao farming challenges;
- Share resources on finances, technical expertise, and marketing resources with farmers; and
- Work closely with farmers to facilitate adoption of CSAF practices.

The engagement strategy will be largely operationalized through the formation of a Puerto Rican Climate-Smart-Agriculture voluntary program and associated Advisory Board. The creation of this board builds from CRCD's existing strong relationships with local smallholder farmers. In addition, CRCD has developed a strong relationship with a key partner, Cafiesencia, which works to provide sustainable development opportunities for Puerto Ricans, particularly in rural areas. Cafiesencia has built extensive networks with coffee and cacao farmers in PR through the development over more than 60 technical management plans and generated trust through nearly 15 years of continuous collaboration, hosting dozens of workshops and farm-based trainings. In addition, extension agents from the University of Puerto Rico have offered their time as in-kind contributions to support farmer outreach and facilitate additional workshops based on the guidance of the Puerto Rican Climate-Smart-Agriculture Advisory Board. Integral to the first phase of the Advisory Board will be a focus on community collaboration, social networking, social capital, and community ownership ([Martinez-Baron et al., 2018](#)). This Advisory Board will center the community stakeholders as leaders, and CRCD and its partners as a support system to address voluntary CSAF benefits and pain points. CRCD will defer to the interests and needs of the small-scale community farmers in the development of the climate-smart agriculture practices as a mechanism to improve resident livelihoods and social-ecological resilience.

This Program Advisory Board will be developed at the beginning of the project. Early tasks of this board will include enlisting a diverse and inclusive participant group, discussing third party standards to incorporate into a Puerto Rican Climate-Smart-Agriculture voluntary program for coffee and cacao, identifying major committees, and outlining council and committee

responsibilities through a scope of work. For example, some potential committees and accompanying scopes of work that may be developed include:

- Certification Pathway Development Committee;
- Community-based Monitoring and Evaluation Committee;
- Fair Labor Practices Committee;
- Technical Assistance Needs Committee; and
- Grant Program for on farm financial investment Committee.

We note that there are synergies across many of the committees, and we would work with local partners and the overall Advisory Board to facilitate communication and coordination. This engagement strategy is a cross-cutting part of the entire proposal. In addition to describing preliminary thoughts on the engagement strategy here, the team will intentionally integrate collaboration across all program components, which will culminate in the development of a Puerto Rican Climate-Smart-Agriculture voluntary program as conveyed in Table 1.

Table 1. Program Components Addressing Barriers and Incentives to Adoption of CSAF Practices³

PR Climate-Smart-Ag Program Component	Barrier to CSAF Adoption Addressed
Climate-Smart-Agriculture label <i>Benefits:</i> shared marketing resources, product distinction, added value to participating businesses	<ul style="list-style-type: none"> ▪ Lack of consumer awareness of environmental and social benefits of CSAF ▪ Time and effort to fully integrate third party standards ▪ Third party standards may need to be adapted to local needs
Grant program <i>Benefit:</i> fair and inclusive access to information on farm investments, in addition to sharing information about additional funding sources	<ul style="list-style-type: none"> ▪ Limited financial capital ▪ Lack of access to financing ▪ Lack of awareness of financing options
Training program (financing, third party certifications, sustainable agriculture practices, agrotourism, marketing, fair labor practices) <i>Benefit:</i> enhanced knowledge and shared understanding	<ul style="list-style-type: none"> ▪ Lack of complete understanding of CSAF practices and potential benefits
Annual agritourism tour & coffee/chocolate tasting <i>Benefit:</i> marketing and public relations	<ul style="list-style-type: none"> ▪ Consumers may lack awareness of companies using CSAF practices and/or Climate-Smart-Ag label
Annual conference and awards <i>Benefit:</i> marketing and public relations	<ul style="list-style-type: none"> ▪ Consumers may lack awareness of companies using CSAF practices and/or Climate-Smart-Ag coffee/cacao label
Quarterly newsletter <i>Benefit:</i> sharing practices with other farmers	<ul style="list-style-type: none"> ▪ Lack of complete understanding of CSAF practices and potential benefits

³ The design of the Climate-Smart Agriculture Program reflects best practices for the design of voluntary environmental agreements such as those illustrated by the [U.S. EPA's Green Lights Program](#) (1991).

3. Implementation of CSAF Practices

Although coffee farming in PR has decreased following industrialization, it remains a dominant land use and a source of economic activity in the central part of the island (USDA, 2014). Cacao on the other hand, is a new yet growing industry, with roughly 400,000 trees planted since 2012. Although cacao is a fledgling industry in Puerto Rico, the growers experimenting with this crop represent an important subsection of early adopters within the Puerto Rican agricultural community and many are actively seeking support to implement CSAF practices on their farms. Producers in Puerto Rico are still working to recover from the devastating effects of recent hurricanes on their farms and most of them are currently under a labor shortage crisis. To ensure that pilot CSAF practices are implemented in alignment with local NRCS standards, and that underserved landowners obtain benefits, CRCD's agronomist, along with support from UPR Extension agents, will provide hands-on technical assistance and provide initial landowners everything that is needed for the implementation and monitoring of these practices, including labor, with a goal to treat ~20 acres per farm. CRCD planting managers and a team of 8 hired laborers will treat the initial 1,000 acres within the pilot project.

Participating landowners will receive technical assistance using a learning-by-doing approach in the implementation of CSAF practices in their coffee and cacao production areas. Eliminating as many barriers to adoption as possible will be especially important to support the implementation of soil carbon amendment practices, which to date have received limited attention locally resulting in a lack of awareness regarding potential benefits.

In years three and four of the project, CRCD will expand material and technical offerings to support a second round of native shade trees and biochar based organic fertilizer applications to additional landowners. Once CSAF practices have been established and landowners have had the chance to participate in workshops and trainings, in the second round, CRCD will provide material and technical assistance, including access to native shade trees and biochar based fertilizer, and offer participants financial reimbursements of \$300 per acre of treatment to offset documented labor costs associated with the further implementation of CSAF practices. In total, CRCD aims to implement CSAF practices on at least 1,900 acres (~1,960 cuerdas) of coffee/cacao production areas, having a direct impact on at least 1.8 million coffee and cacao trees and approximately 100 landowners. For the first wave of participants, CRCD will invest an average of \$50,611 per landowner in federal and in-kind contributions to support the implementation of CSAF practices on 1,000 acres and ~50 coffee and cacao farms. In the second wave, CRCD will invest an average of \$48,290 per landowner to support the continued implementation of CSAF practices on an additional 900 acres and ~50 additional landowners.

This project will focus mainly on the following two practices, which are described below:

1. Agroforestry and afforestation on working lands; and
2. Application of biochar as a soil carbon amendment.

The combination of these practices offers farmers an efficient strategy to adopt climate-smart practices that rapidly improve soils and provide GHG benefits and carbon sequestration. Implementation of all CSAF practices will be conducted under the guidance of trained agronomists and follow local NRCS standards and practices. CRCD will coordinate site-specific Environmental Evaluations, when needed, and have included personnel time to complete EIS and EA statements when required. To ensure the scalability of these practices, CRCD will provide hands-on training

to farmers and labor for the initial implementation and maintenance of CSAF practices. To demonstrate project results on the ground within one year, implementation and training efforts will begin in the first year of the project and farms with existing sustainable management plans will be prioritized for project selection.

Agroforestry and afforestation on working lands

To encourage higher yields, the Puerto Rico Department of Agriculture formerly provided incentives and subsidies to support full sun coffee farming, and many coffee farms in PR are still sun-grown. However, to encourage resilience and climate benefits, federal agencies have been encouraging a return to shade farming through financial incentives to plant shade trees on coffee and cacao farms. Participating in these programs is voluntary and many landowners have criticized the excessive paperwork, delayed payments, and lack of funding. Therefore, it is important to implement a learning-by-doing approach where landowners can better understand the benefits associated with the implementation of these CSAF practices, including being able to add value to their product. CRCD will support the implementation of these practices in close coordination with federal agencies to ensure that no participating farms have existing contracts or agreements to support CSAF practices on treatment areas.

The combination of coffee/cacao and native trees that provide shade promotes the formation of a secondary forest that provides environmental benefits such as soil protection against erosion, improved water quality, habitat for wildlife, the opportunity to obtain timber and additional non-timber products, increased carbon sequestration, and the return of a sustainable socioeconomic environment. The conservation practice standard used by NRCS in the Caribbean for this activity falls under Multi-Story Cropping (code 379). This practice is defined as an “existing or planted stands of trees or shrubs that are managed as an overstory with an understory of woody and/or non-woody plants that are grown for a variety of products.”

Following NRCS practice standards and the shade-grown coffee model published by the U.S Fish and Wildlife Service, which has been implemented for over ten years, CRCD will assist and train landowners in establishing or reestablishing/enhancing shade in coffee and cacao production areas using native trees. Trees recommended for this practice include *Inga vera*, *Andira inermis*, *Inga laurina*, *Anadenanthera peregrina*, and *Cordia alliodora*. CRCD expects to produce and plant 60,000 native trees as part of this project to achieve a density of approximately 36-40 native trees per cuerda (40 feet apart), in coffee and cacao production areas where shade has not yet been established or needs to be enhanced. Native shade tree species will be selected based on their adaptability to the implementation sites. Trees will be produced in two main nurseries and will be planted when they have reached at least 2 feet height.

Application of biochar based soil carbon amendment

Biochar is a carbon-rich product that comes from the pyrolysis of biomass and has been tested as a promising alternative to improve the physical, chemical, and microbiological characteristics of the soil while increasing crop yields. Even though it is an ancient agricultural practice, the use of biochar has recently garnered support as a tool to combat climate change through its ability to hold carbon in soil for hundreds to thousands of years. NRCS has recently recognized the importance of biochar as an effective tool for farmers. As an example, the state of Utah has developed an interim practice standard known as the Soil Carbon Amendment Standard (808) to use amendments derived from plant or animal residues to improve the physical, chemical, and biological properties of the soil.

Through this project, CRCD will create a high-quality organic fertilizer from biochar and cold processed fish hydrolysate, which provides abundant phosphorus and potassium, micronutrients, carbohydrates, and lipids essential for vigorous plant growth. We expect to apply up to 1,800 tons of this biochar-based fertilizer as a soil carbon amendment on 1,900 acres (one acre is 1.03 cuerdas) in coffee and cacao production areas. CRCD has received an initial bid for the needed biochar from Bio Restorative Ideas, who is a sustaining member of the International Biochar Initiative (IBI) and a producer of high-quality biochar with access to abundant feedstocks in the form of intercepted bamboo waste.

In preparation for application, crushed biochar will be combined with a mature liquid fish hydrolysate-based fertilizer produced by CRCD agronomists that will increase soil biological activity and diversity to enhance health and promote resistance to pathogenic organisms. CRCD agronomists and technical assistants will be responsible for inoculating biochar, balancing nutrients and nutrient interactions, stabilizing pH, and adjusting amendment moisture content to aid application. CRCD agronomists will ensure that fertilizer application follows local NRCS Nutrient Management (code 590) practice standards. In the case of soil carbon amendments (code 336), since local standards for this practice have not yet been developed for the Caribbean area, CRCD agronomists will ensure implementation is in alignment with best management practices. Findings from the project will in turn support the development of formal standards for the use of soil carbon amendments in the Caribbean and help foster further adoption of the practice. For a complete list of NRCS Conservation Practices to be implemented in the Smart Ag PR Project, see table 2.

Table 2. Smart Ag PR NRCS Conservation Practices

Conservation Practice	Code #
Alley Cropping	(311)
Brush Management	(314)
Conservation Cover	(327)
Contour Farming	(330)
Soil Carbon Amendments	(336)
Field Border	(386)
Mulching	(484)
Multi-story Cropping	(379)
Nutrient Management	(590)
Riparian Forest Buffer	(391)
Tree-Shrub Establishment	(612)
Tree-Shrub Pruning	(660)
Tree-Shrub Site Preparation	(490)

CRCD will provide an initial application of approximately one pound of the biochar-based fertilizer to each existing coffee/cacao tree already planted, expecting to reach at least 1.8 million coffee and cacao trees over five years. During the first three years of project implementation, CRCD will apply an initial application of biochar to all participating farmers, reaching one thousand acres of cultivated lands. In years four and five, CRCD will invite applications from additional farmers to receive materials and financial incentives for treating an additional 900 acres of coffee and cacao farms. During this period, participants will be provided with all needed materials, including technical support and a reimbursement of demonstrated labor costs of up to \$300 per acre after practice implementation. The biochar-based fertilizer will also be utilized in the production of shade trees and applied to the soil before planting. Although estimated impacts on yield and GHG benefits are difficult to quantify given that existing investigations in tropical contexts and coffee/cacao plantations are limited, there is growing evidence that substantial impacts with regards to both increased crop productivity and GHG benefits will be observed ([Jung et al. 2019](#); [Puga et al. 2020](#); [Samoraj et al. 2022](#)).

4. Measurement/Quantification, Monitoring, Reporting, and Verification

Measurement, monitoring, reporting, and verification (MMRV) of GHG emissions effects are critical to both the programmatic and substantive success of this project. Additionally, this project will include evaluation of key co-benefits of CSAF, both environmental and economic. This task will encompass field monitoring, primarily through soil sampling and testing, as well as the development of lifecycle carbon accounting methodologies with increasing levels of rigor and variable foci throughout project duration.

GTSI will oversee the MMRV and related efforts described in this section, collaborating with researchers from UWisc who will lead the soil sampling work. In addition, soil scientists from UWisc and UPR will support training and implementation of a community-based monitoring system for assessing soil carbon stocks and co-benefits of project implementation, including soil health, soil compaction, as well as surface and ground water quality. The UWisc team will also lead quarterly GHG emissions monitoring at project implementation sites. As the project moves from field testing for specific carbon conditions to overall monitoring of land use and practices, the team will examine opportunities to track changes through remote sensing platforms. This can potentially support the long-term development of cost-effective verification procedures of GHG benefits associated with climate-smart agricultural practices in Puerto Rico.

The MMRV activities under this project support several different activities and goals. For program credibility, the USDA needs to demonstrate that increased commodity output is paralleled by net GHG emissions reductions. In addition, USDA intends for the project to be consistent with its Carbon Management Evaluation Tool (COMET-planner), and to contribute to the Partnerships for Climate-Smart Commodities Learning Network. Additionally, the project will generate carbon gains that could eventually have market value in either voluntary or compliance offset markets, and the results of the MMRV task will feed the efforts to have the commodities certified for sustainability, possibly generating a market premium for farmers. Those potential financial gains could enhance the benefits to farmers participating in the project, leading to a more robust business model for climate-smart commodities.

Because of the multiple functions of the MMRV program under this project, the type and methods for GHG measurement and monitoring will entail a layered approach over the duration of the project – including application of COMET-Planner; extension of that system to accommodate the unique characteristics of this proposed project and evaluate GHG impacts along the entire supply chain; a more detailed, entity-level approach to support entry into the voluntary offset carbon market; and potentially, a still more rigorous MMRV approach that could allow entry into the more lucrative compliance offset market.

- **USDA COMET-planner.** At the outset, the project will employ methodologies consistent with USDA's COMET-planner and *Methods for Entity-Scale Inventory* to provide an overview of the net GHG effects of the project. The advantage of this approach is that it is relatively simple to deploy, particularly for non-specialists in GHG estimation. For planning purposes, it provides *ex-ante* estimates of GHG impacts of specific conservation practices. By providing a common platform for all projects under the program, the tool also increases comparability.

There are, however, inherent limitations in deploying a single tool, particularly for an innovative project such as the one proposed here. First, the geographic coverage does not extend to Puerto Rico, a U.S. territory. Second, some of the proposed practices are not

included in the menu of conservation practices. While the COMET platform is an excellent starting point for the MMRV efforts, it will need to be supplemented with customized analysis.

- **USDA Programmatic Analysis.** As described under Task 3, this project will involve several innovative methods to promote increased climate-smart commodity output, reduce GHG emissions associated with PR coffee production and processing, support economic development, including harvesting invasive bamboo, generating biochar, reducing conventional fertilizer use and supplementing soil with biochar and fish byproduct in coffee and cacao plantations, planting protective windrows and native support trees, and reducing GHG emissions associated with marketing and consumption of coffee and chocolate by using sustainable packaging and shortening the distance between producers and consumers. These practices have GHG emissions impacts extending up and down the supply chain.

To accommodate this range of practices and technologies and accurately attribute GHG reductions along the supply chain, the team will conduct extensive environmental lifecycle analysis (LCA), employing best practices for transparency, data quality, and clarity, and following, as appropriate, the principles, framework, and requirements for LCA laid out in the ISO 14040 and 14044 standards, as well as the guidance for carbon footprints of products in the ISO 14067 standard. The analysis will carefully identify differences in the estimates from the COMET-planner-based approach and the LCA.

Much of the input for the LCA will be based on data available in the literature. However, because soil organic carbon (SOC) is both a substantial and site-specific element of the project, and because the project team aims to ground truth existing carbon accounting methodologies around the practices employed, the team will sample and measure soil carbon in the field. At least three locations in each field will be sampled using a composite sampling approach to provide a measure of SOC variability. Soil samples will be collected from 0- to 6-inch and 6- to 12-inch depths. These soil samples will be analyzed by standard dry combustion methods. To provide a more complete picture of the advantages of climate-smart commodity practices, in tandem with the SOC tests, the project will assess improvements in soil health, stability, respiration, active carbon as a proportion of SOC, and erosion resistance. The results of the field tests will be incorporated into the LCA. One advantage of the LCA approach is that it provides a framework to identify, and ultimately track, effects on emissions throughout the value chain of the commodities.

- **Voluntary and Compliance Market Offset Analysis.** While the COMET-based approach and the LCA will operate at the project and product levels, respectively, the team will also evaluate MMRV methodologies that may support participants' entry into carbon markets. There are a broad range of standards of varying rigor to estimate carbon impacts, some focused on voluntary carbon markets and others designed to support offset certification in compliance markets. These standards often incorporate other related environmental and social elements as well, such as water, land, and biodiversity.

Therefore, a small but important part of the project will be to review a broad range of voluntary and compliance standards for their potential to both guide the GHG analysis and support the generation of additional income for the participating farmers. This exercise will accompany additional analysis of the carbon impacts of the carbon-smart practices promoted by the project. For example, under the Climate Action Reserve, methodologies proposed for

biochar projects have met with mixed success, illustrating the challenges of meeting the requirements of some offset markets.

In conjunction with the review of standards and potential business opportunities for farmers under the voluntary market, the team will review (1) whether the standards designed for the offset market could inform the project GHG impact analysis, (2) whether the compliance market could provide better financial opportunities for farmers than the voluntary market, and (3) the role and costs of third-party verification in the offset certification process.

In addition to the several GHG MMRV approaches undertaken in this task, GTSI will assess post-project potential, ability to scale project activities, and the long-term likelihood of CSAF practice adoption amongst coffee and cacao farmers in PR. GTSI will also estimate the effects of expansion of the coffee and cacao industries on the larger Puerto Rico economy. That analysis will be supported by the IMPLAN model, a state- and county-level input-output economic model commonly used in the U.S. to assess the effects of new development assessments. The model will help identify and estimate economy-wide impacts of this CSAF initiative, including effects on inter-industry flows, job creation, effect on territory level GDP, and imports of specific goods and services.

5. Development and Expansion of Climate-Smart Commodities

To support market development for climate-smart commodities produced in PR, CRCD is partnering with GTSI to forge a strategic voluntary program divided in two main ecosystems: business to business (B2B) and business to consumer (B2C).

For the program to be successful, the team's focus will be to provide each target market a well-thought, authentic story with purpose, intention, and beliefs. To achieve this, communication will be driven not only by storytelling principles but story doing. This unique selling proposition is a certified climate-smart label that will stand out and distinguish any products produced using CSAF practices in PR. This brand will bridge the project's main objectives and end users, providing them with the tools they need to create awareness and add value to their practices and products.

Partnerships in the B2B ecosystem will include coffee and cacao producers, farmers, specialty coffee and chocolate shops, 'Escuela de Café y Baristas de Puerto Rico', and local markets. Also, the team will explore opportunities to create relationships with different nonprofit organizations that promote environmental health and innovative initiatives. Partnerships in the B2B ecosystem will also incorporate roles for local thought leaders, industry mentors, and diverse personalities as brand ambassadors.

To ensure project success, a procurement and reporting program will also be implemented. This program will provide an ongoing agile project management structure that can lead to an effective program development with key performance indicators, project framing, final deliverables, and continuation. This is a crucial structure to provide brand agile composure and flexibility, ensuring values and end results.

5. Work Plan

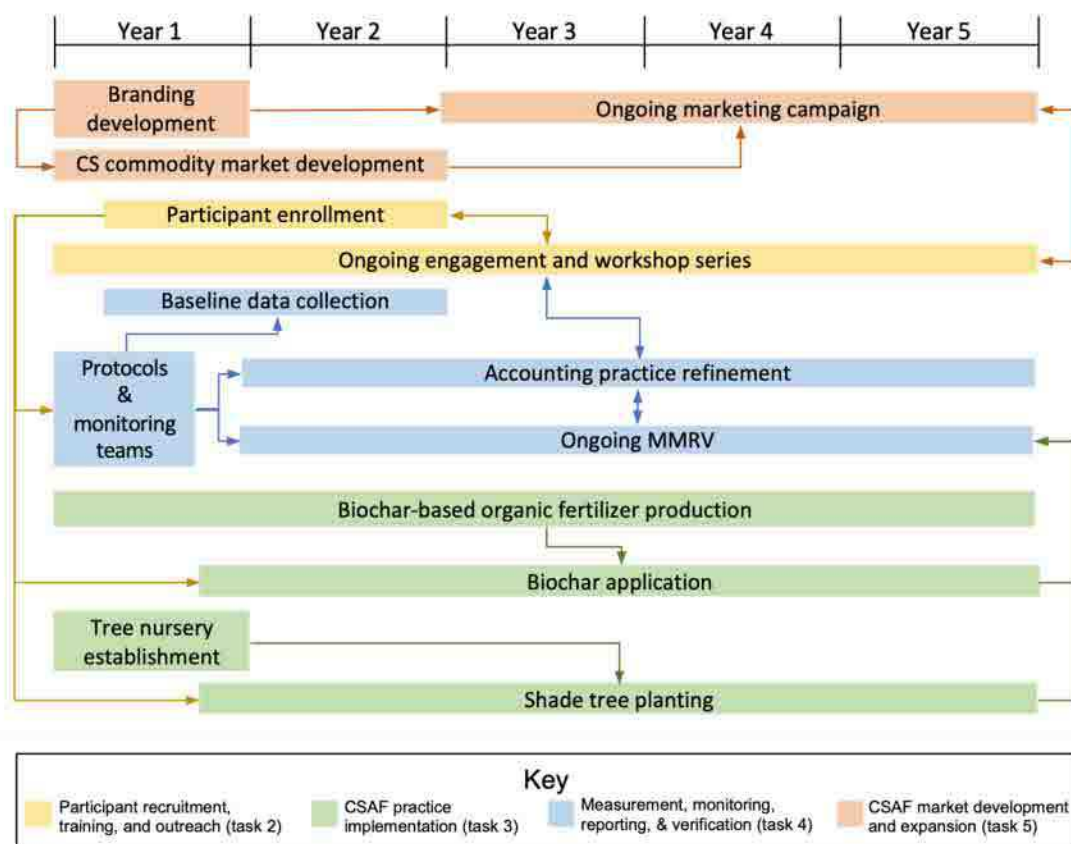


Figure 1: Timing and Interaction of Project Tasks

While the project is divided into 5 discrete tasks as described in Section 4, all the project tasks will necessarily and practically interact with and depend on each other throughout the project. For example, outputs from Tasks 3 (practice implementation), 4 (MMRV), and 5 (commodities market development) will each form the basis for one or more of the workshops executed under Task 2 (engagement).

Figure 1 shows the overall structure of the proposed project and key task activities including how they relate to each other and the overall timeline. Each of the tasks will occur over the entire five-year duration of the project, with initial concurrent activity at the outset to launch the project. Additionally, while project management (Task 1) is not depicted in the diagram, it will encompass and direct all of the tasks executed under the project and is embodied in the connections among the substantive tasks, given that a key function of that task is to coordinate all of the various team members and activities to ensure project efficiency and coherence. Further, the diagram shows key interactions but is not comprehensive; for example, it does not reflect connections between MMRV and the marketing campaign although outputs from MMRV activities will inform the certifications encompassed under the market development task. These interactions and specific deliverables for each task will be enumerated further in the project's inception report, as described under Task 1 in Section 4 of this project narrative. The following section provides a preliminary outline for the quarterly milestones anticipated for the Smart Ag PR project.

6. Smart Ag PR Preliminary Quarterly Milestones Q1-20

In accordance with guidance provided in the Final Draft Partnerships for Climate Smart Commodities Data Guide, Caribbean Regenerative Community Development (CRCD) will submit quarterly reports to document project performance under the Partnerships for Climate Smart-Commodity funding opportunity. Submissions will utilize the workbook template to be provided by USDA and include all required elements included under the Project Summary, Partnership Activities, Marketing Activities, Producer Enrollment, Field Enrollment, Farm Summary, Field Summary, GHG Benefits - Alternate Modeled, GHG Benefits - Measured, Additional Environmental Benefits, and Supplemental data submission worksheets where applicable.

The following section provides estimated milestones/benchmarks for key project objectives, as well as estimated project expenses for each of the 5 major tasks described in this document. It is important to note, however, that the core principle of the project is collaborative, supported development of best climate-smart practices for coffee and cacao farmers in Puerto Rico (PR). This means that the project will provide technical support ex ante to the farmers' organizations during decision making processes, MMRV support in terms of field measurements and estimations, and ex post support to reap the maximum benefits from increases in GHG benefits. However, until the actual treatment regimes, areas, and initial conditions are determined, due to a lack of existing data in PR it is impossible to gauge either current levels of soil and above ground carbon content, or future trajectories.

For this reason, initial estimates of potential GHG benefits associated with this project should be considered speculative and account only for net reductions in carbon emissions from reductions in the use of commercial fertilizers and increases in biomass from the planting of native shade trees. Benchmarks included at this preliminary stage do not account for increases in soil carbon, if any, from biochar organic retention. Nor does it account for changes in transportation-related emissions, changes in emissions that arise from improvements in soil health and reductions in runoff of fertilizer, or from increased crop production from the biochar treatment. After the first 4 quarters of project implementation and baseline data collection, these benchmarks will be revised and updated.

The remainder of the document provides a summary of project milestones for quarters 1-20 based on an estimated start date of April 2023.

Quarter 1 (April-June 2023)

Task 1: Project Management

- **Project Coordination and Oversight**
 - Project initiation
 - Inception report
 - Engagement of Major partners
 - Host team kickoff meeting in Puerto Rico
 - Evaluate and Consider Project Management Tools
- **Project Tracking and Reporting**
 - Planning and implementation of project tracking
 - Develop procedures and templates for expense tracking
 - Produce Quarterly progress/financial reports
 - Reporting on lessons learned
 - Develop procedures for sharing lessons learned
 - Consideration and selection of tools for tracking participant status
 - Produce quarterly report on participant status
- **Task 1 Estimated Quarter 1 Expenses: \$97,292.71**

Task 2: Participant recruitment, training, and outreach

- **Development of voluntary program**
 - Research on Third-party CSAF standards
 - Identification on barriers to CSAF
 - Early-stage interviews on barriers to CSAF
- **Participant enrollment - 0**
- **Ongoing engagement and workshops**
 - Engagement analysis and planning
 - Report on engagement plan
 - Formation of advisory board and committees
- **Outreach, training and other technical assistance provided: N/A**
- **Task 2 Estimated Quarter 1 Expenses: \$17,999.59**

Task 3: Implementation of CSAF Practices

- **Biochar-based fertilizer production**
 - Source materials and develop supply chains
- **Biochar application- 0**
- **Tree Nursery establishment**
 - Start seedlings in temporary CRCD nurseries
 - Establish permanent nursery w/ capacity to produce 15,000 trees annually
- **Number of Acres treated: 0**
 - Number of producers involved: 0
 - Number of underserved producers involved: 0
 - Climate-smart technologies employed: 0
 - Dollars provided to producers: \$0
- **Task 3 Estimated Quarter 1 Expenses: \$187,203.00**

Task 4: MMRV and supply chain traceability attributes

- **Protocol and monitoring team establishment**
 - Establishment of monitoring workgroup
 - Development of procedures/tools and associated materials
 - Develop soil monitoring and data management procedures
- **Data Collection and Monitoring**
 - Purchase equipment
- **Accounting practice development and refinement**
 - Development of COMET-equivalent analysis
- **Development of economic analysis methodology**
- **GHG Benefits (Metric Tons of CO₂e Reduced or Sequestered): 0**
- **Number of measurement tools utilized: 0**
- **Task 4 Estimated Quarter 1 Expenses: \$342,082.75**

Task 5: Market Development and expansion for climate-smart commodities

- **No activities until Q2**
- **Number of new marketing channels* established: 0**
 - **Number of marketing channels* expanded: 0**
- **Task 5 Estimated Quarter 1 Expenses: \$0**

Total Estimated Quarter 1 Expenses: \$644,578.05

Quarter 2 (July-September 2023)

Task 1: Project Management

- **Project Coordination and Oversight**
 - Evaluate and Consider Project Management Tools
 - Selection of project management tool
 - Oversight and coordination
- **Project Tracking and Reporting**
 - Planning and implementation of project tracking
 - Produce Quarterly progress/financial reports
 - Reporting on lessons learned
 - Consideration and selection of tools for tracking participant status
 - Produce quarterly report on participant status
- **Task 1 Estimated Quarter 2 Expenses: \$82,700.73**

Task 2: Participant recruitment, training, and outreach

- **Development of voluntary program**
 - Continue research on Third-party CSAF standards
 - Early-stage interviews on barriers to CSAF
 - Report on research and interview outcomes
 - Development of custom voluntary program
- **Participant enrollment**
 - Enrollment of ~5 early-stage participants
 - Number of producers involved: 5
 - Number of underserved producers involved: 5
- **Ongoing engagement and workshops**
 - Quarterly report on engagement/advisory board/workshop outcomes
 - Quarterly newsletter
 - Formation of advisory board and committees
 - Ongoing advisory board meetings
- **Outreach, training and other technical assistance provided**
 - Planning and execution of informational and technical workshops
 - Number of workshops offered: 2
 - Personal meetings with participants: 5
 - Tour of coffee and chocolate farms
- **Task 2 Estimated Quarter 2 Expenses: \$22,845.59**

Task 3: Implementation of CSAF Practices

- **Biochar-based fertilizer production**
 - Source materials and develop supply chains
 - Trial batches for analysis and evaluation
- **Biochar application- N/A**
- **Tree Nursery establishment**
 - Start seedlings in temporary CRCRD nurseries
 - Establish permanent nursery w/ capacity to produce 15,000 trees annually
- **Number of Acres treated: 0**

- Climate-smart technologies employed: 0
- Dollars provided to producers: \$0
- **Task 3 Estimated Quarter 2 Expenses: \$151,585.40**

Task 4: MMRV and supply chain traceability attributes

- **Protocol and monitoring team establishment**
 - Development of procedures/tools and associated materials
 - Develop procedures/tools for on-farm GHG data management/quantification
- **Data Collection and Monitoring**
 - Baseline monitoring of soil conditions
- **Accounting practice development and refinement**
 - Development of COMET-equivalent analysis
 - Development of economic analysis methodology
 - Initial review and documentation of carbon offset market options
- **GHG Benefits (Metric Tons of CO₂e Reduced or Sequestered): 0**
- **Number of measurement tools utilized: 4**
- **Task 4 Estimated Quarter 2 Expenses: \$87,292.75**

Task 5: Market Development and expansion for climate-smart commodities

- **Branding program development**
 - Market research on coffee/chocolate in the U.S.
- **Number of new marketing channels* established: 0**
 - Number of marketing channels* expanded: 0
- **Task 5 Estimated Quarter 2 Expenses: \$1,666.67**

Total Estimated Quarter 2 Expenses: \$346,091.13

Quarter 3 (October - December 2023)

Task 1: Project Management

- **Project Coordination and Oversight**
- **Project Tracking and Reporting**
 - Planning and implementation of project tracking
 - Produce Quarterly progress/financial reports
 - Reporting on lessons learned
 - Consideration and selection of tools for tracking participant status
 - Produce quarterly report on participant status
- **Task 1 Estimated Quarter 3 Expenses: \$81,210.73**

Task 2: Participant recruitment, training, and outreach

- **Development of voluntary program**
 - Development of custom voluntary program
 - Memo summarizing env/social CSAF benefits
 - Memo summarizing funding sources
- **Participant enrollment**
 - Enrollment of ~5 early-stage participants
 - Number of producers involved: 5
 - Number of underserved producers involved: 5
- **Ongoing engagement and workshops**
 - Quarterly report on engagement/advisory board/workshop outcomes
 - Quarterly newsletter
 - Ongoing advisory board meetings
- **Outreach, training and other technical assistance provided**
 - Planning and execution of informational and technical workshops
 - Number of workshops offered: 2
 - Personal meetings with participants: 5
- **Task 2 Estimated Quarter 3 Expenses: \$17,999.59**

Task 3: Implementation of CSAF Practices

- **Biochar-based fertilizer production**
 - Trial batches for analysis and evaluation
- **Biochar application- 0**
- **Tree Nursery establishment**
 - Start seedlings in temporary CRCDD nurseries
 - Establish permanent nursery w/ capacity to produce 15,000 trees annually
- **Number of Acres treated: 0**
 - Climate-smart technologies employed: 0
 - Dollars provided to producers: \$0
- **Task 3 Estimated Quarter 3 Expenses: \$151,585.40**

Task 4: Measurement, Monitoring, Reporting, and Verification

- **Protocol and monitoring team establishment**
 - Development of procedures/tools and associated materials
 - Develop procedures/tools for on-farm con-benefits quantification
 - Develop processes/training materials for community-based monitoring
- **Data Collection and Monitoring**
 - Baseline monitoring of soil conditions
- **Accounting practice development and refinement**
 - Development of COMET-equivalent analysis
 - Report on the results of COMET-equivalent analysis
 - Development of economic analysis methodology
 - Initial review and documentation of carbon offset market options
- **GHG Benefits (Metric Tons of CO₂e Reduced or Sequestered): 0**
- **Number of measurement tools utilized: 4**
- **Task 4 Estimated Quarter 3 Expenses: \$87,292.75**

Task 5: Market Development and expansion for climate-smart commodities

- **Branding program development**
 - Market research on coffee/chocolate in the U.S.
- **Climate Smart commodity market development**
 - Collection of stories highlighting participant experience
 - Development of advertising/marketing strategy
- **Number of new marketing channels* established: 0**
 - **Number of marketing channels* expanded: 0**
- **Task 5 Estimated Quarter 3 Expenses: \$1,666.67**

Total Estimated Quarter 3 Expenses: \$339,755.13

Quarter 4 (January - March 2024)

Task 1: Project Management

- **Project Coordination and Oversight**
- **Project Tracking and Reporting**
 - Planning and implementation of project tracking
 - Produce Quarterly progress/financial reports
 - Conduct annual audit
 - Reporting on lessons learned
 - Consideration and selection of tools for tracking participant status
 - Produce quarterly report on participant status
- **Task 1 Estimated Quarter 4 Expenses: \$101,700.73**

Task 2: Participant recruitment, training, and outreach

- **Development of voluntary program**
 - Development of custom voluntary program
 - Communication materials on program for stakeholders
 - Report on proposed voluntary program
- **Participant enrollment**
 - Enrollment of first-round participants
 - Number of producers involved: 17
 - Number of underserved producers involved: 17
- **Ongoing engagement and workshops**
 - Quarterly report on engagement/advisory board/workshop outcomes
 - Quarterly newsletter
 - Ongoing advisory board meetings
 - Participant survey planning and implementation
- **Outreach, training and other technical assistance provided**
 - Planning and execution of informational and technical workshops
 - Number of workshops offered: 4
 - Personal meetings with participants: 17
- **Task 2 Estimated Quarter 4 Expenses: \$17,999.59**

Task 3: Implementation of CSAF Practices

- **Biochar-based fertilizer production**
 - Scale production to inoculate 1,800 tons of biochar.
 - Number of tons ready for application: 50
- **Biochar application**
 - Biochar application on 50 acres for 5 early-stage participants
- **Tree Nursery establishment**
 - Produce 15,000 trees annually
- **Number of Acres treated: 50**
 - Climate-smart technologies employed:
 - Application of biochar
 - Native shade tree planting on 50 acres for 5 early-stage participants
 - Number of trees planted: 1,500

- Dollars provided to producers: \$0
- **Task 3 Estimated Quarter 4 Expenses: \$151,585.40**

Task 4: MMRV and supply chain traceability attributes

- **Data Collection and Monitoring**
 - Baseline monitoring of soil conditions
 - Reporting on soil conditions and GHG emissions
 - Annual report on soil conditions and GHG emissions
 - Recruitment of community monitoring team
- **Accounting practice development and refinement**
 - Development of economic analysis methodology
 - Initial review and documentation of carbon offset market options
 - Summary of general understanding of offset options
- **GHG Benefits (Metric Tons of CO₂e Reduced or Sequestered): 7.1125**
- **Number of measurement tools utilized: 4**
- **Task 4 Estimated Quarter 4 Expenses: \$87,292.75**

Task 5: Market Development and expansion for climate-smart commodities

- **Branding program development**
 - Market research on coffee/chocolate in the U.S.
- **Climate Smart commodity market development**
 - Collection of stories highlighting participant experience
 - Development of advertising/marketing strategy
- **Number of new marketing channels* established: 0**
 - **Number of marketing channels* expanded: 0**
- **Task 5 Estimated Quarter 4 Expenses: \$1,666.67**

Total Estimated Quarter 4 Expenses: \$360,245.13

Quarter 5 (April - June 2024)

Task 1: Project Management

- **Project Coordination and Oversight**
- **Project Tracking and Reporting**
 - Planning and implementation of project tracking
 - Produce Quarterly progress/financial reports
 - Reporting on lessons learned
 - Consideration and selection of tools for tracking participant status
 - Produce quarterly report on participant status
- **Task 1 Estimated Quarter 5 Expenses: \$81,680.18**

Task 2: Participant recruitment, training, and outreach

- **Development of voluntary program**
 - Voluntary program implementation
- **Participant enrollment**
 - Enrollment of first-round participants
 - Number of producers involved: 29
 - Number of underserved producers involved: 29
- **Ongoing engagement and workshops**
 - Quarterly report on engagement/advisory board/workshop outcomes
 - Quarterly newsletter
 - Ongoing advisory board meetings
 - Participant survey planning and implementation
- **Outreach, training and other technical assistance provided**
 - Planning and execution of informational and technical workshops
 - Number of workshops offered: 4
 - Personal meetings with participants: 29
- **Task 2 Estimated Quarter 5 Expenses: \$17,999.59**

Task 3: Implementation of CSAF Practices

- **Biochar-based fertilizer production**
 - Scale production to inoculate 1,800 tons of biochar.
 - Number of tons ready for application: 175
- **Biochar application**
 - Biochar application on 138 acres on first round participating farms
- **Tree Nursery establishment**
 - Produce 15,000 trees annually
- **Number of Acres treated: 138**
 - Climate-smart technologies employed:
 - Application of biochar
 - Native shade tree planting on 138 acres on first round participating farms
 - Number of trees planted: 4,140
 - Dollars provided to producers: \$0
- **Task 3 Estimated Quarter 5 Expenses: \$211,534.81**

Task 4: MMRV and supply chain traceability attributes

- **Data Collection and Monitoring**
 - Soil and GHG emissions monitoring and analysis
 - Reporting on soil conditions and GHG emissions
 - Training for community-based monitoring
- **Accounting practice development and refinement**
 - Lifecycle analysis of climate smart commodities
- **GHG Benefits (Metric Tons of CO₂e Reduced or Sequestered): 26.7425**
- **Number of measurement tools utilized: 4**
- **Task 4 Estimated Quarter 5 Expenses: \$70,437.19**

Task 5: Market Development and expansion for climate-smart commodities

- **Branding program development**
 - Market research on coffee/chocolate in the U.S.
- **Climate Smart commodity market development**
 - Collection of stories highlighting participant experience
 - Development of advertising/marketing strategy
- **Number of new marketing channels* established: 0**
 - **Number of marketing channels* expanded: 0**
- **Task 5 Estimated Quarter 5 Expenses: \$2,500.00**

Total Estimated Quarter 5 Expenses: \$384,151.76

Quarter 6 (July - September 2024)

Task 1: Project Management

- **Project Coordination and Oversight**
- **Project Tracking and Reporting**
 - Planning and implementation of project tracking
 - Produce Quarterly progress/financial reports
 - Reporting on lessons learned
 - Consideration and selection of tools for tracking participant status
 - Produce quarterly report on participant status
- **Task 1 Estimated Quarter 6 Expenses: \$82,802.23**

Task 2: Participant recruitment, training, and outreach

- **Development of voluntary program**
 - Voluntary program implementation
- **Participant enrollment**
 - Enrollment of first-round participants
 - Number of producers involved: 41
 - Number of underserved producers involved: 41
- **Ongoing engagement and workshops**
 - Quarterly report on engagement/advisory board/workshop outcomes
 - Quarterly newsletter
 - Ongoing advisory board meetings
 - Participant survey planning and implementation
 - Report on participant survey results and implications
 - Annual conference and awards
- **Outreach, training and other technical assistance provided**
 - Planning and execution of informational and technical workshops
 - Number of workshops offered: 5
 - Personal meetings with participants: 41
- **Task 2 Estimated Quarter 6 Expenses: \$22,845.59**

Task 3: Implementation of CSAF Practices

- **Biochar-based fertilizer production**
 - Scale production to inoculate 1,800 tons of biochar.
 - Number of tons ready for application: 275
- **Biochar application**
 - Biochar application on 226 acres on first round participating farms
- **Tree Nursery establishment**
 - Produce 15,000 trees annually
- **Number of Acres treated: 226**
 - Climate-smart technologies employed:
 - Application of biochar
 - Native shade tree planting on 226 acres on first round participating farms

- Number of trees planted: 6,780
 - Dollars provided to producers: \$0
- **Task 3 Estimated Quarter 6 Expenses: \$210,534.81**

Task 4: MMRV and supply chain traceability attributes

- **Data Collection and Monitoring**
 - Soil and GHG emissions monitoring and analysis
 - Reporting on soil conditions and GHG emissions
- **Accounting practice development and refinement**
 - Lifecycle analysis of climate smart commodities
- **GHG Benefits (Metric Tons of CO₂e Reduced or Sequestered): 58.861**
- **Number of measurement tools utilized: 4**
- **Task 4 Estimated Quarter 6 Expenses: \$70,437.19**

Task 5: Market Development and expansion for climate-smart commodities

- **Branding program development**
 - Market research on coffee/chocolate in the U.S.
 - Development of brand materials
- **Climate Smart commodity market development**
 - Collection of stories highlighting participant experience
 - Development of advertising/marketing strategy
- **Number of new marketing channels* established: 0**
 - **Number of marketing channels* expanded: 0**
- **Task 5 Estimated Quarter 6 Expenses: \$2,500.00**

Total Estimated Quarter 6 Expenses: \$389,119.81

Quarter 7 (October - December 2024)

Task 1: Project Management

- **Project Coordination and Oversight**
- **Project Tracking and Reporting**
 - Planning and implementation of project tracking
 - Produce Quarterly progress/financial reports
 - Reporting on lessons learned
 - Consideration and selection of tools for tracking participant status
 - Produce quarterly report on participant status
- **Task 1 Estimated Quarter 7 Expenses: \$81,312.23**

Task 2: Participant recruitment, training, and outreach

- **Development of voluntary program**
 - Voluntary program implementation
- **Participant enrollment**
 - Enrollment of first-round participants
 - Number of producers involved: 50
 - Number of underserved producers involved: 50
- **Ongoing engagement and workshops**
 - Quarterly report on engagement/advisory board/workshop outcomes
 - Quarterly newsletter
 - Ongoing advisory board meetings
- **Outreach, training and other technical assistance provided**
 - Planning and execution of informational and technical workshops
 - Number of workshops offered: 5
 - Personal meetings with participants: 50
- **Task 2 Estimated Quarter 7 Expenses: \$17,999.59**

Task 3: Implementation of CSAF Practices

- **Biochar-based fertilizer production**
 - Scale production to inoculate 1,800 tons of biochar.
 - Number of tons ready for application: 350
- **Biochar application**
 - Biochar application on 314 acres on first round participating farms
- **Tree Nursery establishment**
 - Produce 15,000 trees annually
- **Number of Acres treated: 314**
 - Climate-smart technologies employed:
 - Application of biochar
 - Native shade tree planting on 314 acres on first round participating farms
 - Number of trees planted: 9,420
 - Dollars provided to producers: \$0
- **Task 3 Estimated Quarter 7 Expenses: \$210,534.81**

Task 4: MMRV and supply chain traceability attributes

- **Data Collection and Monitoring**
 - Soil and GHG emissions monitoring and analysis
 - Reporting on soil conditions and GHG emissions
- **Accounting practice development and refinement**
 - Lifecycle analysis of climate smart commodities
- **GHG Benefits (Metric Tons of CO₂e Reduced or Sequestered): 103.1075**
- **Number of measurement tools utilized: 5**
- **Task 4 Estimated Quarter 7 Expenses: \$70,437.19**

Task 5: Market Development and expansion for climate-smart commodities

- **Branding program development**
 - Development of brand materials
 - Draft brand materials (e.g. logo, packaging, info)
- **Climate Smart commodity market development**
 - Collection of stories highlighting participant experience
 - Development of advertising/marketing strategy
 - Overall advertising/market strategy
 - Memo identifying potential marketing partners
 - Cultivation of relationships with potential marketing partners
- **Number of new marketing channels* established: 0**
 - **Number of marketing channels* expanded: 0**
- **Task 5 Estimated Quarter 7 Expenses: \$41,500.00**

Total Estimated Quarter 7 Expenses: \$421,783.81

Quarter 8 (January - March 2025)

Task 1: Project Management

- **Project Coordination and Oversight**
- **Project Tracking and Reporting**
 - Planning and implementation of project tracking
 - Produce Quarterly progress/financial reports
 - Conduct annual audit
 - Reporting on lessons learned
 - Consideration and selection of tools for tracking participant status
 - Produce quarterly report on participant status
- **Task 1 Estimated Quarter 8 Expenses: \$101,802.23**

Task 2: Participant recruitment, training, and outreach

- **Development of voluntary program**
 - Voluntary program implementation
- **Participant enrollment**
 - Enrollment of first-round participants
 - Number of producers involved: 50
 - Number of underserved producers involved: 50
- **Ongoing engagement and workshops**
 - Quarterly report on engagement/advisory board/workshop outcomes
 - Quarterly newsletter
 - Ongoing advisory board meetings
- **Outreach, training and other technical assistance provided**
 - Planning and execution of informational and technical workshops
 - Number of workshops offered: 6
 - Personal meetings with participants: 50
- **Task 2 Estimated Quarter 8 Expenses: \$17,999.59**

Task 3: Implementation of CSAF Practices

- **Biochar-based fertilizer production**
 - Scale production to inoculate 1,800 tons of biochar.
 - Number of tons ready for application: 450
- **Biochar application**
 - Biochar application on 402 acres on first round participating farms
- **Tree Nursery establishment**
 - Produce 15,000 trees annually
- **Number of Acres treated: 402**
 - Climate-smart technologies employed:
 - Application of biochar
 - Native shade tree planting on 402 acres on first round participating farms
 - Number of trees planted: 12,060
 - Dollars provided to producers: \$0
- **Task 3 Estimated Quarter 8 Expenses: \$210,534.81**

Task 4: MMRV and supply chain traceability attributes

- **Data Collection and Monitoring**
 - Soil and GHG emissions monitoring and analysis
 - Reporting on soil conditions and GHG emissions
 - Annual report on soil conditions and GHG emissions
- **Accounting practice development and refinement**
 - Lifecycle analysis of climate smart commodities
 - Report on lifecycle analysis of climate smart commodities
- **GHG Benefits (Metric Tons of CO₂e Reduced or Sequestered): 160.292**
- **Number of measurement tools utilized: 5**
- **Task 4 Estimated Quarter 8 Expenses: \$70,437.19**

Task 5: Market Development and expansion for climate-smart commodities

- **Branding program development**
 - Development of brand materials
 - Finalization of brand materials
- **Climate Smart commodity market development**
 - Collection of stories highlighting participant experience
 - Development of advertising/marketing strategy
 - Website and social media plan
 - Communication materials for businesses/consumers
 - Cultivation of relationships with potential marketing partners
 - Development/execution of sales reporting program procedures
 - Development of Climate Smart label and branding
- **Number of new marketing channels* established: 0**
 - **Number of marketing channels* expanded: 0**
- **Task 5 Estimated Quarter 8 Expenses: \$41,500.00**

Total Estimated Quarter 8 Expenses: \$442,273.81

Quarter 9 (April - June 2025)

Task 1: Project Management

- **Project Coordination and Oversight**
- **Project Tracking and Reporting**
 - Planning and implementation of project tracking
 - Produce Quarterly progress/financial reports
 - Reporting on lessons learned
 - Consideration and selection of tools for tracking participant status
 - Produce quarterly report on participant status
- **Task 1 Estimated Quarter 9 Expenses: \$81,680.18**

Task 2: Participant recruitment, training, and outreach

- **Development of voluntary program**
 - Voluntary program implementation
- **Participant enrollment**
 - Enrollment of second round participants
 - Number of producers involved: 59
 - Number of underserved producers involved: 59
- **Ongoing engagement and workshops**
 - Quarterly report on engagement/advisory board/workshop outcomes
 - Quarterly newsletter
 - Ongoing advisory board meetings
 - Participant survey planning and implementation
- **Outreach, training and other technical assistance provided**
 - Planning and execution of informational and technical workshops
 - Number of workshops offered: 6
 - Personal meetings with participants: 59
- **Task 2 Estimated Quarter 9 Expenses: \$17,999.59**

Task 3: Implementation of CSAF Practices

- **Biochar-based fertilizer production**
 - Scale production to inoculate 1,800 tons of biochar.
 - Number of tons ready for application: 550
- **Biochar application**
 - Biochar application on 490 acres on first round participating farms
- **Tree Nursery establishment**
 - Produce 15,000 trees annually
- **Number of Acres treated: 490**
 - Climate-smart technologies employed:
 - Application of biochar
 - Native shade tree planting on 490 acres on first round participating farms
 - Number of trees planted: 14,700
 - Dollars provided to producers: \$0
- **Task 3 Estimated Quarter 9 Expenses: \$226,308.56**

Task 4: MMRV and supply chain traceability attributes

- **Data Collection and Monitoring**
 - Soil and GHG emissions monitoring and analysis
 - Reporting on soil conditions and GHG emissions
 - Training for community-based monitoring
- **Accounting practice development and refinement**
 - Detailed review of carbon offset markets/standards
- **GHG Benefits (Metric Tons of CO₂e Reduced or Sequestered): 229,9945**
- **Number of measurement tools utilized: 5**
- **Task 4 Estimated Quarter 9 Expenses: \$60,197.81**

Task 5: Market Development and expansion for climate-smart commodities

- **Climate Smart commodity market development**
 - Collection of stories highlighting participant experience
 - Development of advertising/marketing strategy
 - Consumer survey and implementation plan
 - Cultivation of relationships with potential marketing partners
 - Development of Climate Smart label and branding
 - Development/execution of sales reporting program procedures
 - Quarterly sales reports
 - Consumer survey implementation
 - Social Media Engagement
- **Number of new marketing channels* established: 2**
 - Email marketing (newsletter on progress of Climate Smart brand)
 - Social Media
- **Number of Marketing Channels expanded: 1**
 - Websites
- **Task 5 Estimated Quarter 9 Expenses: \$11,875.00**

Total Estimated Quarter 9 Expenses: \$398,061.14

Quarter 10 (July - September 2025)

Task 1: Project Management

- **Project Coordination and Oversight**
- **Project Tracking and Reporting**
 - Planning and implementation of project tracking
 - Produce Quarterly progress/financial reports
 - Reporting on lessons learned
 - Consideration and selection of tools for tracking participant status
 - Produce quarterly report on participant status
- **Task 1 Estimated Quarter 10 Expenses: \$82,802.23**

Task 2: Participant recruitment, training, and outreach

- **Development of voluntary program**
 - Voluntary program implementation
- **Participant enrollment**
 - Enrollment of second round participants
 - Number of producers involved: 68
 - Number of underserved producers involved: 68
- **Ongoing engagement and workshops**
 - Quarterly report on engagement/advisory board/workshop outcomes
 - Quarterly newsletter
 - Ongoing advisory board meetings
 - Participant survey planning and implementation
 - Report on participant survey results and implications
 - Tour of coffee/chocolate farms
 - Annual conference and awards
- **Outreach, training and other technical assistance provided**
 - Planning and execution of informational and technical workshops
 - Number of workshops offered: 7
 - Personal meetings with participants: 68
- **Task 2 Estimated Quarter 10 Expenses: \$22,845.59**

Task 3: Implementation of CSAF Practices

- **Biochar-based fertilizer production**
 - Scale production to inoculate 1,800 tons of biochar.
 - Number of tons ready for application: 625
- **Biochar application**
 - Biochar application on 578 acres on first round participating farms
- **Tree Nursery establishment**
 - Produce 15,000 trees annually
- **Number of Acres treated: 578**
 - Climate-smart technologies employed:
 - Application of biochar

- Native shade tree planting on 578 acres on first round participating farms
 - Number of trees planted: 17,340
 - Dollars provided to producers: \$0
- **Task 3 Estimated Quarter 10 Expenses: \$225,308.56**

Task 4: MMRV and supply chain traceability attributes

- **Data Collection and Monitoring**
 - Soil and GHG emissions monitoring and analysis
 - Reporting on soil conditions and GHG emissions
- **Accounting practice development and refinement**
 - Detailed review of carbon offset markets/standards
- **GHG Benefits (Metric Tons of CO₂e Reduced or Sequestered): 312.215**
- **Number of measurement tools utilized: 5**
- **Task 4 Estimated Quarter 10 Expenses: \$60,197.81**

Task 5: Market Development and expansion for climate-smart commodities

- **Climate Smart commodity market development**
 - Collection of stories highlighting participant experience
 - Cultivation of relationships with potential marketing partners
 - Development/execution of sales reporting program procedures
 - Quarterly sales reports
 - Consumer survey implementation
 - Report on consumer survey results and implications
- **Number of new marketing channels* established: 3**
 - Email marketing (newsletter on progress of Climate Smart brand)
 - Social Media
 - Events (Tours of participating farms)
- **Number of Marketing Channels expanded: 1**
 - Websites
- **Task 5 Estimated Quarter 10 Expenses: \$11,875.00**

Total Estimated Quarter 10 Expenses: \$403,029.19

Quarter 11 (October - December 2025)

Task 1: Project Management

- **Project Coordination and Oversight**
- **Project Tracking and Reporting**
 - Planning and implementation of project tracking
 - Produce Quarterly progress/financial reports
 - Reporting on lessons learned
 - Consideration and selection of tools for tracking participant status
 - Produce quarterly report on participant status
- **Task 1 Estimated Quarter 11 Expenses: \$81,312.23**

Task 2: Participant recruitment, training, and outreach

- **Development of voluntary program**
 - Voluntary program implementation
- **Participant enrollment**
 - Enrollment of second round participants
 - Number of producers involved: 77
 - Number of underserved producers involved: 77
- **Ongoing engagement and workshops**
 - Quarterly report on engagement/advisory board/workshop outcomes
 - Quarterly newsletter
 - Ongoing advisory board meetings
- **Outreach, training and other technical assistance provided**
 - Planning and execution of informational and technical workshops
 - Number of workshops offered: 8
 - Personal meetings with participants: 77
- **Task 2 Estimated Quarter 11 Expenses: \$17,999.59**

Task 3: Implementation of CSAF Practices

- **Biochar-based fertilizer production**
 - Scale production to inoculate 1,800 tons of biochar.
 - Number of tons ready for application: 825
- **Biochar application**
 - Biochar application on 666 acres on first round participating farms
 - Biochar provision of 100 tons for second-round acres
- **Tree Nursery establishment**
 - Produce 15,000 trees annually
- **Number of Acres treated: 766**
 - Climate-smart technologies employed:
 - Application of biochar
 - Native shade tree planting on 666 acres on first round participating farms
 - Native shade tree provision of 3,000 trees for second-round acres
 - Number of trees planted: 19,980
 - Dollars provided to producers: \$30,000
- **Task 3 Estimated Quarter 11 Expenses: \$255,308.56**

Task 4: MMRV and supply chain traceability attributes

- **Data Collection and Monitoring**
 - Soil and GHG emissions monitoring and analysis
 - Reporting on soil conditions and GHG emissions
- **Accounting practice development and refinement**
 - Detailed review of carbon offset markets/standards
 - Development of strategy for offset markets
- **GHG Benefits (Metric Tons of CO₂e Reduced or Sequestered): 414.4535**
- **Number of measurement tools utilized: 5**
- **Task 4 Estimated Quarter 11 Expenses: \$60,197.81**

Task 5: Market Development and expansion for climate-smart commodities

- **Climate Smart commodity market development**
 - Collection of stories highlighting participant experience
 - Cultivation of relationships with potential marketing partners
 - Development/execution of sales reporting program procedures
 - Quarterly sales reports
- **Number of new marketing channels* established: 4**
 - Email marketing (newsletter on progress of Climate Smart brand)
 - Social Media
 - Events (Tours of participating farms)
 - Content Marketing (Development of guidance of climate smart practices)
- **Number of Marketing Channels expanded: 2**
 - Websites
 - Social Media
- **Task 5 Estimated Quarter 11 Expenses: \$11,875.00**

Total Estimated Quarter 11 Expenses: \$426,693.19

Quarter 12 (January - March 2026)

Task 1: Project Management

- **Project Coordination and Oversight**
- **Project Tracking and Reporting**
 - Planning and implementation of project tracking
 - Produce Quarterly progress/financial reports
 - Conduct annual audit
 - Reporting on lessons learned
 - Consideration and selection of tools for tracking participant status
 - Produce quarterly report on participant status
- **Task 1 Estimated Quarter 12 Expenses: \$101,802.23**

Task 2: Participant recruitment, training, and outreach

- **Development of voluntary program**
 - Voluntary program implementation
- **Participant enrollment**
 - Enrollment of second round participants
 - Number of producers involved: 86
 - Number of underserved producers involved: 86
- **Ongoing engagement and workshops**
 - Quarterly report on engagement/advisory board/workshop outcomes
 - Quarterly newsletter
 - Ongoing advisory board meetings
- **Outreach, training and other technical assistance provided**
 - Planning and execution of informational and technical workshops
 - Number of workshops offered: 8
 - Personal meetings with participants: 86
- **Task 2 Estimated Quarter 12 Expenses: \$17,999.59**

Task 3: Implementation of CSAF Practices

- **Biochar-based fertilizer production**
 - Scale production to inoculate 1,800 tons of biochar.
 - Number of tons ready for application: 1,000
- **Biochar application**
 - Biochar application on 754 acres on first round participating farms
 - Biochar provision of 200 tons for second-round acres
- **Tree Nursery establishment**
 - Produce 15,000 trees annually
- **Number of Acres treated: 954**
 - Climate-smart technologies employed:
 - Application of biochar
 - Native shade tree planting on 754 acres on first round participating farms
 - Native shade tree provision of 6,000 trees for second-round acres

- Number of trees planted: 22,620
 - Dollars provided to producers: \$60,000
- **Task 3 Estimated Quarter 12 Expenses: \$255,308.56**

Task 4: MMRV and supply chain traceability attributes

- **Data Collection and Monitoring**
 - Soil and GHG emissions monitoring and analysis
 - Reporting on soil conditions and GHG emissions
 - Annual report on soil conditions and GHG emissions
 - Develop procedures/guidance for ongoing monitoring/quantification
- **Accounting practice development and refinement**
 - Detailed review of carbon offset markets/standards
 - Development of strategy for offset markets
 - Final strategy for offset market participation
- **GHG Benefits (Metric Tons of CO₂e Reduced or Sequestered): 550.16**
- **Number of measurement tools utilized: 5**
- **Task 4 Estimated Quarter 12 Expenses: \$60,197.81**

Task 5: Market Development and expansion for climate-smart commodities

- **Climate Smart commodity market development**
 - Collection of stories highlighting participant experience
 - Cultivation of relationships with potential marketing partners
 - Development/execution of sales reporting program procedures
 - Quarterly sales reports
- **Number of new marketing channels* established: 5**
 - Email marketing (newsletter on progress of Climate Smart brand)
 - Social Media
 - Events (Tours of participating farms)
 - Content Marketing (Development of guidance of climate smart practices)
 - Networking (Annual Conference)
- **Number of Marketing Channels expanded: 2**
 - Websites
 - Social Media
- **Task 5 Estimated Quarter 12 Expenses: \$11,875.00**

Total Estimated Quarter 12 Expenses: \$447,183.19

Quarter 13 (April - June 2026)

Task 1: Project Management

- **Project Coordination and Oversight**
- **Project Tracking and Reporting**
 - Planning and implementation of project tracking
 - Produce Quarterly progress/financial reports
 - Reporting on lessons learned
 - Consideration and selection of tools for tracking participant status
 - Produce quarterly report on participant status
- **Task 1 Estimated Quarter 13 Expenses: \$79,453.68**

Task 2: Participant recruitment, training, and outreach

- **Development of voluntary program**
 - Voluntary program implementation
- **Participant enrollment**
 - Enrollment of second round participants
 - Number of producers involved: 95
 - Number of underserved producers involved: 95
- **Ongoing engagement and workshops**
 - Quarterly report on engagement/advisory board/workshop outcomes
 - Quarterly newsletter
 - Ongoing advisory board meetings
 - Participant survey planning and implementation
- **Outreach, training and other technical assistance provided**
 - Planning and execution of informational and technical workshops
 - Number of workshops offered: 9
 - Personal meetings with participants: 95
- **Task 2 Estimated Quarter 13 Expenses: \$17,999.59**

Task 3: Implementation of CSAF Practices

- **Biochar-based fertilizer production**
 - Scale production to inoculate 1,800 tons of biochar.
 - Number of tons ready for application: 1,150
- **Biochar application**
 - Biochar application on 816 acres on first round participating farms
 - Biochar provision of 300 tons for second-round acres
- **Tree Nursery establishment**
 - Produce 15,000 trees annually
- **Number of Acres treated: 1,116**
 - Climate-smart technologies employed:
 - Application of biochar
 - Native shade tree planting on 816 acres on first round participating farms
 - Native shade tree provision of 9,000 trees for second-round acres

- Number of trees planted: 24,480
 - Dollars provided to producers: \$90,000
- **Task 3 Estimated Quarter 13 Expenses: \$224,777.63**

Task 4: MMRV and supply chain traceability attributes

- **Data Collection and Monitoring**
 - Soil and GHG emissions monitoring and analysis
 - Reporting on soil conditions and GHG emissions
 - Annual report on soil conditions and GHG emissions
 - Training for community-based monitoring
- **Accounting practice development and refinement**
 - Implementation of offset market strategy
- **GHG Benefits (Metric Tons of CO₂e Reduced or Sequestered): 708.911**
- **Number of measurement tools utilized: 5**
- **Task 4 Estimated Quarter 13 Expenses: \$41,254.71**

Task 5: Market Development and expansion for climate-smart commodities

- **Climate Smart commodity market development**
 - Collection of stories highlighting participant experience
 - Cultivation of relationships with potential marketing partners
 - Consumer survey implementation
 - Development/execution of sales reporting program procedures
 - Quarterly sales reports
- **Number of new marketing channels* established: 5**
 - Email marketing (newsletter on progress of Climate Smart brand)
 - Social Media
 - Events (Tours of participating farms)
 - Content Marketing (Development of guidance of climate smart practices)
 - Networking (Annual Conference)
- **Number of Marketing Channels expanded: 2**
 - Websites
 - Social Media
- **Task 5 Estimated Quarter 13 Expenses: \$11,250.00**

Total Estimated Quarter 13 Expenses: \$374,735.61

Quarter 14 (July - September 2026)

Task 1: Project Management

- **Project Coordination and Oversight**
- **Project Tracking and Reporting**
 - Planning and implementation of project tracking
 - Produce Quarterly progress/financial reports
 - Reporting on lessons learned
 - Consideration and selection of tools for tracking participant status
 - Produce quarterly report on participant status
- **Task 1 Estimated Quarter 14 Expenses: \$80,575.73**

Task 2: Participant recruitment, training, and outreach

- **Development of voluntary program**
 - Voluntary program implementation
- **Participant enrollment**
 - Enrollment of second round participants
 - Number of producers involved: 100
 - Number of underserved producers involved: 100
- **Ongoing engagement and workshops**
 - Quarterly report on engagement/advisory board/workshop outcomes
 - Quarterly newsletter
 - Ongoing advisory board meetings
 - Participant survey planning and implementation
 - Report on participant survey results and implications
 - Tour of coffee/chocolate farms
 - Annual conference and awards
- **Outreach, training and other technical assistance provided**
 - Planning and execution of informational and technical workshops
 - Number of workshops offered: 9
 - Personal meetings with participants: 100
- **Task 2 Estimated Quarter 14 Expenses: \$17,999.59**

Task 3: Implementation of CSAF Practices

- **Biochar-based fertilizer production**
 - Scale production to inoculate 1,800 tons of biochar.
 - Number of tons ready for application: 1,325
- **Biochar application**
 - Biochar application on 878 acres on first round participating farms
 - Biochar provision of 400 tons for second-round acres
- **Tree Nursery establishment**
 - Produce 15,000 trees annually
- **Number of Acres treated: 1,278**
 - Climate-smart technologies employed:

- Application of biochar
 - Native shade tree planting on 878 acres on first round participating farms
 - Native shade tree provision of 12,000 trees for second-round acres
 - Number of trees planted: 26,340
- Dollars provided to producers: \$120,000
- **Task 3 Estimated Quarter 14 Expenses: \$224,277.63**

Task 4: MMRV and supply chain traceability attributes

- **Data Collection and Monitoring**
 - Soil and GHG emissions monitoring and analysis
 - Reporting on soil conditions and GHG emissions
- **Accounting practice development and refinement**
 - Implementation of offset market strategy
- **GHG Benefits (Metric Tons of CO₂e Reduced or Sequestered): 890.7065**
- **Number of measurement tools utilized: 5**
- **Task 4 Estimated Quarter 14 Expenses: \$41,254.71**

Task 5: Market Development and expansion for climate-smart commodities

- **Climate Smart commodity market development**
 - Collection of stories highlighting participant experience
 - Cultivation of relationships with potential marketing partners
 - Consumer survey implementation
 - Report on consumer survey results and implications
 - Development/execution of sales reporting program procedures
 - Quarterly sales reports
- **Number of new marketing channels* established: 5**
 - Email marketing (newsletter on progress of Climate Smart brand)
 - Social Media
 - Events (Tours of participating farms)
 - Content Marketing (Development of guidance of climate smart practices)
 - Networking (Annual Conference)
- **Number of Marketing Channels expanded: 2**
 - Websites
 - Social Media
- **Task 5 Estimated Quarter 14 Expenses: \$11,250.00**

Total Estimated Quarter 14 Expenses: \$375,357.66

Quarter 15 (October – December 2026)

Task 1: Project Management

- **Project Coordination and Oversight**
- **Project Tracking and Reporting**
 - Planning and implementation of project tracking
 - Produce Quarterly progress/financial reports
 - Reporting on lessons learned
 - Consideration and selection of tools for tracking participant status
 - Produce quarterly report on participant status
- **Task 1 Estimated Quarter 15 Expenses: \$79,085.73**

Task 2: Participant recruitment, training, and outreach

- **Development of voluntary program**
 - Voluntary program implementation
- **Participant enrollment**
 - Number of producers involved: 100
 - Number of underserved producers involved: 100
- **Ongoing engagement and workshops**
 - Quarterly report on engagement/advisory board/workshop outcomes
 - Quarterly newsletter
 - Ongoing advisory board meetings
- **Outreach, training and other technical assistance provided**
 - Planning and execution of informational and technical workshops
 - Number of workshops offered: 10
 - Personal meetings with participants: 100
- **Task 2 Estimated Quarter 15 Expenses: \$17,999.59**

Task 3: Implementation of CSAF Practices

- **Biochar-based fertilizer production**
 - Scale production to inoculate 1,800 tons of biochar.
 - Number of tons ready for application: 1,500
- **Biochar application**
 - Biochar application on 940 acres on first round participating farms
 - Biochar provision of 500 tons for second-round acres
- **Tree Nursery establishment**
 - Produce 15,000 trees annually
- **Number of Acres treated: 1,440**
 - Climate-smart technologies employed:
 - Application of biochar
 - Native shade tree planting on 940 acres on first round participating farms
 - Native shade tree provision of 15,000 trees for second-round acres
 - Number of trees planted: 28,200
 - Dollars provided to producers: \$150,000
- **Task 3 Estimated Quarter 15 Expenses: \$224,277.63**

Task 4: MMRV and supply chain traceability attributes

- **Data Collection and Monitoring**
 - Soil and GHG emissions monitoring and analysis
 - Reporting on soil conditions and GHG emissions
- **Accounting practice development and refinement**
 - Implementation of offset market strategy
- **GHG Benefits (Metric Tons of CO₂e Reduced or Sequestered): 1,095.5465**
- **Number of measurement tools utilized: 5**
- **Task 4 Estimated Quarter 15 Expenses: \$41,254.71**

Task 5: Market Development and expansion for climate-smart commodities

- **Climate Smart commodity market development**
 - Collection of stories highlighting participant experience
 - Cultivation of relationships with potential marketing partners
 - Development/execution of sales reporting program procedures
 - Quarterly sales reports
- **Number of new marketing channels* established: 5**
 - Email marketing (newsletter on progress of Climate Smart brand)
 - Social Media
 - Events (Tours of participating farms)
 - Content Marketing (Development of guidance of climate smart practices)
 - Networking (Annual Conference)
- **Number of Marketing Channels expanded: 2**
 - Websites
 - Social Media
- **Task 5 Estimated Quarter 15 Expenses: \$11,250.00**

Total Estimated Quarter 15 Expenses: \$373,867.66

Quarter 16 (January - March 2027)

Task 1: Project Management

- **Project Coordination and Oversight**
- **Project Tracking and Reporting**
 - Planning and implementation of project tracking
 - Produce Quarterly progress/financial reports
 - Conduct annual audit
 - Reporting on lessons learned
 - Consideration and selection of tools for tracking participant status
 - Produce quarterly report on participant status
- **Task 1 Estimated Quarter 16 Expenses: \$99,575.73**

Task 2: Participant recruitment, training, and outreach

- **Development of voluntary program**
 - Voluntary program implementation
- **Participant enrollment**
 - Number of producers involved: 100
 - Number of underserved producers involved: 100
- **Ongoing engagement and workshops**
 - Quarterly report on engagement/advisory board/workshop outcomes
 - Quarterly newsletter
 - Ongoing advisory board meetings
- **Outreach, training and other technical assistance provided**
 - Planning and execution of informational and technical workshops
 - Number of workshops offered: 10
 - Personal meetings with participants: 100
- **Task 2 Estimated Quarter 16 Expenses: \$17,999.59**

Task 3: Implementation of CSAF Practices

- **Biochar-based fertilizer production**
 - Scale production to inoculate 1,800 tons of biochar.
 - Number of tons ready for application: 1,600
- **Biochar application**
 - Biochar application on 1000 acres on first round participating farms
 - Biochar provision of 600 tons for second-round acres
- **Tree Nursery establishment**
 - Produce 15,000 trees annually
- **Number of Acres treated: 1,600**
 - Climate-smart technologies employed:
 - Application of biochar
 - Native shade tree planting on 1000 acres on first round participating farms
 - Native shade tree provision of 18,000 trees for second-round acres
 - Number of trees planted: 30,000
 - Dollars provided to producers: \$180,000
- **Task 3 Estimated Quarter 16 Expenses: \$224,277.63**

Task 4: MMRV and supply chain traceability attributes

- **Data Collection and Monitoring**
 - Soil and GHG emissions monitoring and analysis
 - Reporting on soil conditions and GHG emissions
 - Annual report on soil conditions and GHG emissions
 - Training for community-based monitoring
 - Implementation of procedures/guidance for ongoing monitoring/quantification
 - Transition of monitoring and analysis to community partners
- **Accounting practice development and refinement**
 - Implementation of offset market strategy
 - Report on offset market strategy implementation
- **GHG Benefits (Metric Tons of CO₂e Reduced or Sequestered): 1,323.1465**
- **Number of measurement tools utilized: 5**
- **Task 4 Estimated Quarter 16 Expenses: \$41,254.71**

Task 5: Market Development and expansion for climate-smart commodities

- **Climate Smart commodity market development**
 - Collection of stories highlighting participant experience
 - Cultivation of relationships with potential marketing partners
 - Development/execution of sales reporting program procedures
 - Quarterly sales reports
- **Number of new marketing channels* established: 5**
 - Email marketing (newsletter on progress of Climate Smart brand)
 - Social Media
 - Events (Tours of participating farms)
 - Content Marketing (Development of guidance of climate smart practices)
 - Networking (Annual Conference)
- **Number of Marketing Channels expanded: 2**
 - Websites
 - Social Media
- **Task 5 Estimated Quarter 16 Expenses: \$11,250.00**

Total Estimated Quarter 16 Expenses: \$394,357.66

Quarter 17 (April - June 2027)

Task 1: Project Management

- **Project Coordination and Oversight**
- **Project Tracking and Reporting**
 - Planning and implementation of project tracking
 - Produce Quarterly progress/financial reports
 - Reporting on lessons learned
 - Consideration and selection of tools for tracking participant status
 - Produce quarterly report on participant status
- **Task 1 Estimated Quarter 17 Expenses: \$79,250.94**

Task 2: Participant recruitment, training, and outreach

- **Development of voluntary program**
 - Voluntary program implementation
- **Participant enrollment**
 - Number of producers involved: 100
 - Number of underserved producers involved: 100
- **Ongoing engagement and workshops**
 - Quarterly report on engagement/advisory board/workshop outcomes
 - Quarterly newsletter
 - Ongoing advisory board meetings
 - Participant survey planning and implementation
- **Outreach, training and other technical assistance provided**
 - Planning and execution of informational and technical workshops
 - Number of workshops offered: 11
 - Personal meetings with participants: 100
- **Task 2 Estimated Quarter 17 Expenses: \$17,999.59**

Task 3: Implementation of CSAF Practices

- **Biochar-based fertilizer production**
 - Scale production to inoculate 1,800 tons of biochar.
 - Number of tons ready for application: 1,700
- **Biochar application**
 - Biochar application on 1000 acres on first round participating farms
 - Biochar provision of 700 tons for second-round acres
- **Tree Nursery establishment**
 - Produce 15,000 trees annually
- **Number of Acres treated: 1,700**
 - Climate-smart technologies employed:
 - Application of biochar
 - Native shade tree planting on 1000 acres on first round participating farms
 - Native shade tree provision of 21,000 trees for second-round acres
 - Number of trees planted: 30,000
 - Dollars provided to producers: \$210,000
- **Task 3 Estimated Quarter 17 Expenses: \$105,090.40**

Task 4: MMRV and supply chain traceability attributes

- **Data Collection and Monitoring**
 - Soil and GHG emissions monitoring and analysis
 - Reporting on soil conditions and GHG emissions
 - Training for community-based monitoring
 - Transition of monitoring and analysis to community partners
- **Accounting practice development and refinement**
 - Offset market program development and management.
- **GHG Benefits (Metric Tons of CO₂e Reduced or Sequestered): 1,564.9715**
- **Number of measurement tools utilized: 5**
- **Task 4 Estimated Quarter 17 Expenses: \$42,743.73**

Task 5: Market Development and expansion for climate-smart commodities

- **Climate Smart commodity market development**
 - Collection of stories highlighting participant experience
 - Cultivation of relationships with potential marketing partners
 - Consumer survey implementation
 - Development/execution of sales reporting program procedures
 - Quarterly sales reports
- **Number of new marketing channels* established: 5**
 - Email marketing (newsletter on progress of Climate Smart brand)
 - Social Media
 - Events (Tours of participating farms)
 - Content Marketing (Development of guidance of climate smart practices)
 - Networking (Annual Conference)
- **Number of Marketing Channels expanded: 2**
 - Websites
 - Social Media
- **Task 5 Estimated Quarter 17 Expenses: \$1,875.00**

Total Estimated Quarter 17 Expenses: \$246,959.66

Quarter 18 (July - September 2027)

Task 1: Project Management

- **Project Coordination and Oversight**
- **Project Tracking and Reporting**
 - Planning and implementation of project tracking
 - Produce Quarterly progress/financial reports
 - Reporting on lessons learned
 - Consideration and selection of tools for tracking participant status
 - Produce quarterly report on participant status
- **Task 1 Estimated Quarter 18 Expenses: \$80,372.99**

Task 2: Participant recruitment, training, and outreach

- **Development of voluntary program**
 - Voluntary program implementation
- **Participant enrollment**
 - Number of producers involved: 100
 - Number of underserved producers involved: 100
- **Ongoing engagement and workshops**
 - Quarterly report on engagement/advisory board/workshop outcomes
 - Quarterly newsletter
 - Ongoing advisory board meetings
 - Participant survey planning and implementation
 - Report on participant survey results and implications
 - Tour of coffee/chocolate farms
 - Annual conference and awards
- **Outreach, training and other technical assistance provided**
 - Planning and execution of informational and technical workshops
 - Number of workshops offered: 11
 - Personal meetings with participants: 100
- **Task 2 Estimated Quarter 18 Expenses: \$17,999.59**

Task 3: Implementation of CSAF Practices

- **Biochar-based fertilizer production**
 - Scale production to inoculate 1,800 tons of biochar.
 - Number of tons ready for application: 1,750
- **Biochar application**
 - Biochar application on 1000 acres on first round participating farms
 - Biochar provision of 800 tons for second-round acres
- **Tree Nursery establishment**
 - Produce 15,000 trees annually
- **Number of Acres treated: 1,800**
 - Climate-smart technologies employed:
 - Application of biochar

- Native shade tree planting on 1000 acres on first round participating farms
 - Native shade tree provision of 24,000 trees for second-round acres
 - Number of trees planted: 30,000
 - Dollars provided to producers: \$240,000
- **Task 3 Estimated Quarter 18 Expenses: \$105,090.40**

Task 4: MMRV and supply chain traceability attributes

- **Data Collection and Monitoring**
 - Soil and GHG emissions monitoring and analysis
 - Reporting on soil conditions and GHG emissions
 - Transition of monitoring and analysis to community partners
- **Accounting practice development and refinement**
 - Offset market program development and management.
- **GHG Benefits (Metric Tons of CO₂e Reduced or Sequestered): 1,821.0215**
- **Number of measurement tools utilized: 5**
- **Task 4 Estimated Quarter 18 Expenses: \$42,743.73**

Task 5: Market Development and expansion for climate-smart commodities

- **Climate Smart commodity market development**
 - Collection of stories highlighting participant experience
 - Cultivation of relationships with potential marketing partners
 - Consumer survey implementation
 - Report on consumer survey results and implications
 - Development/execution of sales reporting program procedures
 - Quarterly sales reports
- **Number of new marketing channels* established: 5**
 - Email marketing (newsletter on progress of Climate Smart brand)
 - Social Media
 - Events (Tours of participating farms)
 - Content Marketing (Development of guidance of climate smart practices)
 - Networking (Annual Conference)
- **Number of Marketing Channels expanded: 2**
 - Websites
 - Social Media
- **Task 5 Estimated Quarter 18 Expenses: \$1,875.00**

Total Estimated Quarter 18 Expenses: \$248,081.71

Quarter 19 (October - December 2027)

Task 1: Project Management

- **Project Coordination and Oversight**
- **Project Tracking and Reporting**
 - Planning and implementation of project tracking
 - Produce Quarterly progress/financial reports
 - Reporting on lessons learned
 - Consideration and selection of tools for tracking participant status
 - Produce quarterly report on participant status
- **Task 1 Estimated Quarter 19 Expenses: \$78,882.99**

Task 2: Participant recruitment, training, and outreach

- **Development of voluntary program**
 - Voluntary program implementation
- **Participant enrollment**
 - Number of producers involved: 100
 - Number of underserved producers involved: 100
- **Ongoing engagement and workshops**
 - Quarterly report on engagement/advisory board/workshop outcomes
 - Quarterly newsletter
 - Ongoing advisory board meetings
- **Outreach, training and other technical assistance provided**
 - Planning and execution of informational and technical workshops
 - Number of workshops offered: 12
 - Personal meetings with participants: 100
- **Task 2 Estimated Quarter 19 Expenses: \$17,999.59**

Task 3: Implementation of CSAF Practices

- **Biochar-based fertilizer production**
 - Scale production to inoculate 1,800 tons of biochar.
 - Number of tons ready for application: 1,800
- **Biochar application**
 - Biochar application on 1000 acres on first round participating farms
 - Biochar provision of 900 tons for second-round acres
- **Tree Nursery establishment**
 - Produce 15,000 trees annually
- **Number of Acres treated: 1,900**
 - Climate-smart technologies employed:
 - Application of biochar
 - Native shade tree planting on 1000 acres on first round participating farms
 - Native shade tree provision of 27,000 trees for second-round acres
 - Number of trees planted: 30,000
 - Dollars provided to producers: \$270,000
- **Task 3 Estimated Quarter 19 Expenses: \$105,090.40**

Task 4: MMRV and supply chain traceability attributes

- **Data Collection and Monitoring**
 - Soil and GHG emissions monitoring and analysis
 - Reporting on soil conditions and GHG emissions
 - Transition of monitoring and analysis to community partners
- **Accounting practice development and refinement**
 - Offset market program development and management.
- **GHG Benefits (Metric Tons of CO₂e Reduced or Sequestered): 2,091.2965**
- **Number of measurement tools utilized: 5**
- **Task 4 Estimated Quarter 19 Expenses: \$42,743.73**

Task 5: Market Development and expansion for climate-smart commodities

- **Climate Smart commodity market development**
 - Collection of stories highlighting participant experience
 - Cultivation of relationships with potential marketing partners
 - Development/execution of sales reporting program procedures
 - Quarterly sales reports
- **Number of new marketing channels* established: 5**
 - Email marketing (newsletter on progress of Climate Smart brand)
 - Social Media
 - Events (Tours of participating farms)
 - Content Marketing (Development of guidance of climate smart practices)
 - Networking (Annual Conference)
- **Number of Marketing Channels expanded: 2**
 - Websites
 - Social Media
- **Task 5 Estimated Quarter 19 Expenses: \$1,875.00**

Total Estimated Quarter 19 Expenses: \$246,591.71

Quarter 20 (January - March 2028)

Task 1: Project Management

- **Project Coordination and Oversight**
- **Project Tracking and Reporting**
 - Planning and implementation of project tracking
 - Produce Quarterly progress/financial reports
 - Conduct annual audit
 - Reporting on lessons learned
 - Consideration and selection of tools for tracking participant status
 - Produce quarterly report on participant status
- **Task 1 Estimated Quarter 20 Expenses: \$99,372.99**

Task 2: Participant recruitment, training, and outreach

- **Development of voluntary program**
 - Voluntary program implementation
- **Participant enrollment**
 - Number of producers involved: 100
 - Number of underserved producers involved: 100
- **Ongoing engagement and workshops**
 - Quarterly report on engagement/advisory board/workshop outcomes
 - Quarterly newsletter
 - Ongoing advisory board meetings
- **Outreach, training and other technical assistance provided**
 - Planning and execution of informational and technical workshops
 - Number of workshops offered: 13
 - Personal meetings with participants: 100
- **Task 2 Estimated Quarter 20 Expenses: \$17,999.59**

Task 3: Implementation of CSAF Practices

- **Biochar-based fertilizer production**
 - Scale production to inoculate 1,800 tons of biochar.
 - Number of tons ready for application: 1,800
- **Biochar application**
 - Biochar application on 1000 acres on first round participating farms
 - Biochar provision of 900 tons for second-round acres
- **Tree Nursery establishment**
 - Produce 15,000 trees annually
- **Number of Acres treated: 2,000**
 - Climate-smart technologies employed:
 - Application of biochar
 - Native shade tree planting on 1000 acres on first round participating farms
 - Native shade tree provision of 30,000 trees for second-round acres
 - Number of trees planted: 30,000
 - Dollars provided to producers: \$270,000
- **Task 3 Estimated Quarter 20 Expenses: \$75,090.40**

Task 4: MMRV and supply chain traceability attributes

- **Data Collection and Monitoring**
 - Soil and GHG emissions monitoring and analysis
 - Reporting on soil conditions and GHG emissions
 - Annual report on soil conditions and GHG emissions
- **Accounting practice development and refinement**
 - Offset market program development and management.
 - Final report on project's GHG emissions outcomes
- **GHG Benefits (Metric Tons of CO₂e Reduced or Sequestered): 2,369.0715**
- **Number of measurement tools utilized: 5**
- **Task 4 Estimated Quarter 20 Expenses: \$42,743.73**

Task 5: Market Development and expansion for climate-smart commodities

- **Climate Smart commodity market development**
 - Collection of stories highlighting participant experience
 - Cultivation of relationships with potential marketing partners
 - Development/execution of sales reporting program procedures
 - Quarterly sales reports
- **Number of new marketing channels* established: 5**
 - Email marketing (newsletter on progress of Climate Smart brand)
 - Social Media
 - Events (Tours of participating farms)
 - Content Marketing (Development of guidance of climate smart practices)
 - Networking (Annual Conference)
- **Number of Marketing Channels expanded: 2**
 - Websites
 - Social Media
- **Task 5 Estimated Quarter 20 Expenses: \$1,875.00**

Total Estimated Quarter 20 Expenses: \$237081.71

SEE PROJECT NARRATIVE, Pages 18-58

Climate-Smart Practices and Limitations

Climate-Smart practices under this grant shall be limited to the following practices:

NRCS Practice Code (if applicable)	Practice Name
311	Alley Cropping
314	Brush Management
327	Conservation Cover
330	Contour Farming
336	Soil Carbon Amendments
386	Field Border
484	Mulching
379	Multi-Story Cropping
590	Nutrient Management
391	Riparian Forest Buffer
612	Tree-shrub Establishment
660	Tree-shrub Pruning
490	Tree-shrub Site Preparation

All practices applied under this grant will follow NRCS practice standards unless noted below:

Practice Name	Alternative Practice Standards
336 Adapted – Soil Carbon Amendments on Steeper Slopes	In the case of soil carbon amendments (code 336), since local standards for this practice have not yet been developed for the Caribbean area, CRCDD agronomists will follow the national standard with the exception of, on a case-by-case basis, with mitigating practices in place consider the application of biochar on slopes greater than 15% in alignment with best management practices. Findings from the project will in turn support the development of formal standards for the use of soil carbon amendments in the Caribbean and help foster further adoption of the practice.



Partnerships for
Climate-Smart
Commodities
Data Dictionary
for Recipients
February 2023
Version 1.0



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Overview of Reporting Requirements

Grant recipients are required to submit reports to document their performance under the *Partnerships for Climate-Smart Commodity* funding opportunity. These submissions will be required to use the Microsoft Excel workbook templates provided by USDA. The workbooks contain a series of worksheets that collect data in a standardized format to ensure data quality and allow for aggregation and summary of this information. The entire workbook must be submitted quarterly, with updates to all applicable worksheets. This guide is divided into three sections. The *Overview of Reporting Requirements* section summarizes the layout of the reporting workbook and presents the data elements included in each worksheet. It also describes additional documents that must be submitted to supplement the performance reports. The *Data Definitions* section provides descriptions and allowable response options for each data element. The guide also indicates whether each data element is required, applicable at times, or optional; as well as how frequently each data element must be updated. Finally, the *Appendices* contain practice and commodity lists that will be used for these reports. Reporting is necessary for USDA oversight of this effort. The data elements required for inclusion in the quarterly performance reports allow USDA to conduct selected audits to review whether producers are receiving federal funds from multiple sources for the same purpose; to determine whether GHG benefits from implementation of climate-smart agriculture and forestry (CSAF) practices are being estimated accurately; and for other purposes deemed appropriate by USDA.

The reporting worksheets collect information at four levels: project, partner, producer, and field.

Descriptions of each level:

Project level: Information about activities and impacts at a whole project/aggregate level (i.e., reflecting all activities under the grant agreement). Some project-level reporting is further subdivided by commodity type or a combination of commodity and CSAF practice(s) (commodity x practice).

Partner level: Information about activities related to a single organization (recipient, subrecipient, contractor, or other partner) within a project.

Producer level: Information about individual producers who have one or more farms enrolled in a project.

Field level: Information about individual fields enrolled in a project.

Certain data elements are required to be reported for each producer and field enrolled in a project. In order to minimize the burden associated with data collection and to enable USDA to match data to existing records, these producer- and field-specific records must use the producer's established FSA Farm, Tract and Field IDs, and report the State and County associated with the Farm ID. Associated data entered in conjunction with these data elements, such as Producer Name, must match the data contained in the customer's Business Partner record, and the Farm Operating Plan in Business File for that Farm ID. Disclosure of this information is protected under Section 1619 of the Food, Conservation, and Energy Act of 2008 (PL 110- 246), 7 U.S.C. 8791. Additionally, Departmental Regulation 4370-001 provides USDA's policies for collecting demographic data, including race, ethnicity and gender. Providing demographic information is voluntary and at the discretion of the customer. Demographic information is used by USDA for statistical purposes only and will not be used to determine an applicant's eligibility for programs or services for which they apply.

Note: For purposes of this guide, "farm" refers to the operation from which climate-smart commodities are produced and may represent farms, ranches, forests or other operations. Similarly, "field" refers to the individual land units at which climate-smart practices are being implemented to produce climate-smart commodities and may represent lots, farmsteads or other units, depending on the type of operation and commodity. The use of "Farm", "Tract" and "Field" align with the FSA definitions; for example, "A field is a part of a farm that is separated from the balance of the farm by a permanent boundary, such as; fences, permanent waterways, woodlands, croplines in cases where farming practices make it probable that this cropline is not subject to change, and other similar features."



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The following tables list the data elements included in each reporting worksheet, along with a brief description of each item.

Project Summary

These data will be collected about each project. Cumulative results are reported each quarter. Report last quarter's entry if there has been no change in this quarter.

Table 1. Project Summary elements

Data element name	Description	Frequency
Commodity type	Type of commodity(ies) incentivized by the project	Quarterly
Commodity sales	Indicates sales of the commodity(ies) related to the project occurred this quarter	Quarterly
Farms enrolled	Indicates enrollment activities occurred this quarter	Quarterly
GHG calculation methods	Methods used to calculate greenhouse gas (GHG) benefits	Quarterly
GHG cumulative calculation	Method used to calculate cumulative GHG benefits	Quarterly
Cumulative GHG benefits	Whole project estimate of total GHG (CO ₂ e) emission reductions	Quarterly
Cumulative carbon stock	Whole project estimate of total carbon sequestration	Quarterly
Cumulative CO ₂ benefit	Whole project estimate of total CO ₂ emission reductions	Quarterly
Cumulative CH ₄ benefit	Whole project estimate of total CH ₄ emission reductions	Quarterly
Cumulative N ₂ O benefit	Whole project estimate of total N ₂ O emission reductions	Quarterly
Offsets produced	Amount of carbon offsets produced by project	Quarterly
Offsets sale	Name of marketplace where carbon offsets were sold	Quarterly
Offsets price	Price of carbon in offset sales	Quarterly
Insets produced	Amount of carbon insets produced by project	Quarterly
Cost of on-farm TA	Cost of on-farm technical assistance (TA) provided to producers	Quarterly
MMRV cost	Cost of measurement, monitoring, reporting, and verification (MMRV) activities	Quarterly
GHG monitoring method	Methods used by project to monitor GHG benefits (up to 5)	Quarterly
GHG reporting method	Methods used by project to report on GHG benefits (up to 5)	Quarterly
GHG verification method	Methods used to verify GHG benefits (up to 5)	Quarterly



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Partner Activities

These data will be collected at the project level. Each row in this worksheet will represent one organization involved in the project, including the recipient and all contributing partners. A partner is any organization that is receiving project funds or providing matching contributions (funds or in-kind contributions) to the project. While the recipient must complete one row for their own organization, not all data elements apply to the recipient. These exceptions are noted in the detailed descriptions of the specific elements in the *Data Definitions* section of this guide. Data are reported cumulatively each quarter. Report last quarter's entry if there has been no change in this quarter.

Table 2. Partner Activities elements

Data element name	Description	Frequency
Partner ID	Unique ID for each partner	One-time
Partner name	Name of partner organization	One-time
Partner type	Type of organization	One-time
Partner POC	Partner point of contact name	As applicable
Partner POC email	Partner point of contact email	As applicable
Partnership start date	Start of partnership on project	One-time
Partnership end date	End of partnership on project	As applicable
New partnership	Indicator for partner organizations that have no prior work with the recipient	As applicable
Partner total requested	Total amount requested to date by partner from recipient	Quarterly
Total match contribution	Total amount of match contribution by partner to date	Quarterly
Total match incentives	Total amount of match contribution by partner for incentives	Quarterly
Match type	Top 3 types of match contribution by partner, other than incentives	Quarterly
Match amount	Value of match contributions by type	Quarterly
Training provided	Top 3 types of training provided to the partner through project	Quarterly
Activity by partner	Top 3 types of activities provided by this partner to producers or other partners	Quarterly
Activity cost	Approximate cost per activity type provided by partner to producers or other partners	Quarterly
Products supplied	Names of products supplied to producers as part of project activities or incentives	Quarterly
Product source	Supplier or source of products supplied to producers as part of project activities or incentives	Quarterly



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Marketing Activities

These data will be collected at the project level. Each row in this worksheet will correspond to one commodity for which the project enrolls fields and one marketing channel used to sell that commodity by the project or producers enrolled in the project. Data are reported for the current quarter and are not cumulative. If no sales of the commodity were reported during a quarter, do not complete this worksheet for that quarter.

Table 3. Marketing Activities elements

Data element name	Description	Frequency
Commodity type	Type of commodity incentivized by the project	Quarterly
Marketing channel type	Type of marketing channels used	Quarterly
Number of buyers	Number of buyers per marketing channel	Quarterly
Names of buyers	Names of buyers in the marketing channel	Quarterly
Marketing channel geography	Geography of marketing channel	Quarterly
Value sold	Value of commodity sold by marketing channel	Quarterly
Volume sold	Volume of commodity sold by marketing channel	Quarterly
Price premium	Price premium of commodity by marketing channel	Quarterly
Price premium to producer	Percent of price premium that goes to the producer	Quarterly
Product differentiation method	Top 3 types of product differentiation methods used	Quarterly
Marketing method	Top 3 types of marketing methods used	Quarterly
Marketing channel identification method	Top 3 ways marketing channel was identified	Quarterly
Traceability method	Top 3 types of supply chain traceability methods used	Quarterly



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Producer Enrollment

These data will be collected at the producer level about each farm enrolled in the project. In this worksheet, each row will correspond to one farm that has at least one field enrolled in the project. Data are reported when a producer first enrolls one or more fields in the project. If a producer is enrolled in the project for multiple years, review the farm characteristics each time a new contract is signed and provide any necessary updates. The quarterly submission should contain information about each farm initially enrolled in the project during that quarter and for updates to farms that have re-enrolled during that quarter, as applicable. If no farms are enrolled during that quarter, do not complete this worksheet for that quarter.

Table 4. Producer Enrollment elements

Data element name	Description	Frequency
Farm ID	Unique Farm ID assigned by FSA	
State or territory	State name (must match FSA farm enrollment data)	
County of residence	County name (must match FSA farm enrollment data)	
Producer data change	Indicator that producer data was updated at re-enrollment	As applicable
Producer start date	Contract start date	Enrollment
Producer name	Name of primary operator	Enrollment
Underserved status	Indicator the primary operator is considered underserved and/or a small producer	Enrollment
Total area	Total area of enrolled operation	Annual
Total crop area	Total crop area in enrolled operation enrolled	Annual
Total livestock area	Total livestock confinement, pasture and rangeland in enrolled operation	Annual
Total forest area	Total forest area in enrolled operation	Annual
Livestock type	Top 3 types of livestock on enrolled operation	Annual
Livestock head	Total livestock currently managed (by type)	Annual
Organic farm	Indicator that part of the farm is certified or transitioning organic	Annual
Organic fields	Indicator that any of the enrolled fields are certified or transitioning organic	Annual
Producer motivation	Motivation for participation	Annual
Producer outreach	Top 3 types of outreach provided to producer	Annual
CSAF experience	Indicator of prior implementation of CSAF practices at this farm	Annual
CSAF federal funds	Indicator of prior receipt of federal funds for CSAF practices	Annual
CSAF state or local funds	Indicator of prior receipt of state funds for CSAF practices	Annual
CSAF nonprofit funds	Indicator of prior receipt of nonprofit funds for CSAF practices	Annual
CSAF market incentives	Indicator of prior receipt of market incentives for CSAF practices	Annual



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Field Enrollment

These data will be collected about each field enrolled in the project. In this worksheet, each row corresponds to one field x commodity combination enrolled in the project. Generally, data are reported once for each field, at its initial enrollment. The quarterly submission should contain information about each field initially enrolled in the project during that quarter. If no fields are enrolled during that quarter, do not complete this worksheet for that quarter. If a field is enrolled for multiple years, any relevant changes, such as a new ID number or changes to the commodity or practice combinations should be entered in this worksheet during the quarter it is re-enrolled, or as applicable.

Table 5. Field Enrollment elements

Data element name	Description
Farm ID	Unique Farm ID assigned by FSA
Tract ID	Unique Tract ID assigned by FSA
Field ID	Unique Field ID assigned by FSA
State or territory of field	State name
Physical County of field	Physical county name must match FSA farm records
Prior Field ID	Previous Field ID when reconstitution of farm results in new Field IDs
Field data change	Indicator that field data has changed from initial enrollment
Contract start date	Start date of contract
Total field area	Size of enrolled field
Commodity category	Category of commodity(ies) produced
Commodity type	Type of commodity(ies) produced
Baseline yield	Average yield of commodity in 3 years prior to enrollment
Baseline yield location	Location for which baseline yield is provided
Field land use	Most common land use in field in past 3 years
Field irrigated	Most common irrigation type in field in past 3 years
Field tillage	Most common tillage in field in past 3 years
Practice past extent - farm	Extent of operation that implemented this practice prior to project enrollment
Field any CSAF practice	Indicator for prior CSAF practices in this field in past 3 years
Practice past use - this field	Indicator of prior use of this practice in this field in the past 3 years
Practice type	CSAF practice(s) that will be implemented in enrolled field (up to 7)
Practice standard	Organization that developed CSAF practice standard implemented in field
Planned practice implementation year	Year that practice is planned to be implemented
Practice extent	Area or number of animals for which practice is implemented
Follow-on questions	Follow-on questions by practice type (see Table 11)



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Farm Summary

These data will be collected about each farm enrolled in the project. In this worksheet, each row will correspond to one farm that has at least one field enrolled in the project. The quarterly submission should contain updates to any data elements that have changed for each farm enrolled in the project during that quarter. If there are no changes from the previous quarter, do not complete this worksheet for that quarter. Data are not cumulative.

Table 6. Farm Summary elements

Data element name	Description	Frequency
Farm ID	Unique Farm ID assigned by FSA	
State or territory	State name	
County of residence	County name	
Producer TA received	Type of technical assistance provided to producer	Quarterly
Producer incentive amount	Total financial incentive provided to the producer	Quarterly
Incentive reason	Top 4 reason(s) for financial incentives provided to producer	Quarterly
Incentive structure	Top 4 units on which financial incentives are structured	Quarterly
Incentive type	Top 4 type(s) of financial incentives provided to producer	Quarterly
Payment on enrollment	Extent of payment provided to producer upon enrollment	Quarterly
Payment on implementation	Extent of payment provided to producer upon implementation of CSAF practices	Quarterly
Payment on harvest	Extent of payment provided to producer upon harvest or slaughter	Quarterly
Payment on MMRV	Extent of payment provided to producer upon reporting or verification	Quarterly
Payment on sale	Extent of payment provided to producer upon sale of commodity	Quarterly



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Field Summary

These data will be collected about each field enrolled in the project for a commodity x practice(s) combination. In this worksheet, each row will correspond to one field x commodity x practice(s) combination enrolled in the project. Data for each field will be reported quarterly and are not cumulative. Report data for any elements that have an update in that quarter. Greenhouse gas benefit estimates must be entered upon practice completion or annually, as appropriate. If there are no changes from the previous quarter, do not complete this worksheet for that quarter. This worksheet includes a section to report the “official” estimate of GHG benefits – amounts of greenhouse gas emissions reduced and carbon sequestered – for the field. These quantities refer to the estimates that are used to calculate the project’s aggregate impact (reported in Table 1). Tables 8 and 9 are used to report alternate estimates of the field-level GHG benefits when additional methods are used to model (Table 8) or measure (Table 9) these impacts. Any field that can use COMET-Planner must submit those results, either as the official or alternate model.

Table 7. Field Summary elements

Data element name	Description	Frequency
Farm ID	Unique Farm ID assigned by FSA	
Tract ID	Unique Tract ID assigned by FSA	
Field ID	Unique Field ID assigned by FSA	
State or territory of field	State name	
County of field	County name	
Commodity type	Type of commodity produced from field	Quarterly
Practice type	Type of practice(s) incentivized in field (up to seven)	Quarterly
Date practice complete	Date that practice implementation is certified complete	Quarterly
Contract end date	End date of contract	Quarterly
MMRV assistance provided	Indicator that MMRV assistance is provided to field	Quarterly
Marketing assistance provided	Indicator that marketing assistance provided for commodity from field	Quarterly
Incentive per acre or head	Indicator that a per acre/head incentives is provided for the CSAF practice(s) on this field	Quarterly
Field commodity value	Value of commodity produced from field	Quarterly
Field commodity volume	Volume of commodity produced from field	Quarterly
Cost of implementation	Total cost of practice implementation in field	Quarterly
Cost coverage	Percent of total cost of implementation of practice covered by project incentives	Quarterly
Field GHG monitoring	Methods used to monitor GHG benefits in field (up to 3)	Quarterly
Field GHG reporting	Methods used to report on GHG benefits for field (up to 3)	Quarterly
Field GHG verification	Methods used to verify GHG benefits for field (up to 3)	Quarterly
Field GHG calculations	Methods used to calculate GHG benefits for field	Quarterly
Field official GHG calculation	Method used to calculate official GHG benefits for field	Quarterly
Field official GHG ER	Official estimate of total GHG emission reductions for field	Quarterly
Field official carbon stock	Official estimate of total carbon sequestration for field	Quarterly
Field official CO ₂ ER	Official estimate of total CO ₂ emission reductions for field	Quarterly
Field official CH ₄ ER	Official estimate of total CH ₄ emission reductions for field	Quarterly
Field official N ₂ O ER	Official estimate of total N ₂ O emission reductions for field	Quarterly
Field offsets produced	Amount of carbon offsets produced in field	Quarterly
Field insets produced	Amount of carbon insets produced in field	Quarterly
Other field measurements	Indicator that field data was collected for reasons other than GHG benefit estimation	Quarterly



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GHG Benefits - Alternate Modeled

If greenhouse gas benefits are modeled for the same field using multiple methods, the results for the alternate models are reported in this worksheet. The “alternate” models refer to those model results that were not used in the calculation of the project’s aggregate impact (as reported in Table 1). Any field that can use COMET-Planner must submit those results, either as the official or alternate model. These data will be collected about the modeled GHG benefits for each field x commodity x practice(s) combination. In this worksheet, each row will correspond to one field enrolled in the project. Data are not cumulative. Each quarterly submission should include information for all fields that have new modeled data. Greenhouse gas benefit estimates must be entered upon practice completion or annually, as appropriate.

Table 8. GHG Benefits – Alternate Modeled elements

Data element name	Description	Frequency
Farm ID	Unique Farm ID assigned by FSA	
Tract ID	Unique Tract ID assigned by FSA	
Field ID	Unique Field ID assigned by FSA	
State or territory of field	State name	
County of field	County name	
Commodity type	Type of commodity(ies) produced from the field (up to 6)	Annual
Practice type	Type of practice(s) incentivized in field (up to 7)	Annual
GHG model	Model used to calculate GHG benefits	Annual
Model start date	Start date of model run	Annual
Model end date	End date of model run	Annual
Total GHG benefits estimated	Estimate of total GHG benefits for field	Annual
Total carbon stock estimated	Estimate of total change in carbon stock for field	Annual
Total CO2 estimated	Estimate of total CO2 emission reductions for field	Annual
Total CH4 estimated	Estimate of total CH4 emission reductions for field	Annual
Total N2O estimated	Estimate of total N2O emission reductions for field	Annual



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GHG Benefits - Measured

Projects must report the results of any carbon stock or greenhouse gas emission measurements in this worksheet. These data will be collected at the field level. Each row will represent a separate measurement method used to calculate GHG benefits for a given field. Data are reported once per year of measurement and are not cumulative. Each quarterly submission should include information for any field for which there are new soil samples or new calculations of annual GHG benefits based on actual measurements.

Table 9. GHG Benefits - Measured data elements

Data element name	Description	Frequency
Farm ID	Unique Farm ID assigned by FSA	
Tract ID	Unique Tract ID assigned by FSA	
Field ID	Unique Field ID assigned by FSA	
State	State name	
County	County name	
GHG measurement method	Method of measurement	Annual
Lab name	Entity that conducted analysis	Annual
Measurement start date	Start date of measurements	Annual
Measurement end date	End date of measurements	Annual
Total CO ₂ reduction calculated	Calculation of total CO ₂ reduction	Annual
Total carbon stock change calculated	Calculation of change in carbon stock	Annual
Total CH ₄ reduction calculated	Calculation of total CH ₄ reduction	Annual
Total N ₂ O reduction calculated	Calculation of total N ₂ O reduction	Annual
Soil sample result	Numeric result from soil sample	Annual
Measurement type	Type of analysis conducted	Annual



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Additional Environmental Benefits

Projects that track additional environmental benefits (e.g., water quality improvements) from enrolled fields report results in this worksheet. These data will be collected about each field. Each row in this worksheet will correspond to an enrolled field. Data are not cumulative. Estimates of environmental benefits must be entered upon practice completion or annually, as appropriate.

Table 10. Additional Environmental Benefits elements

Data element name	Description	Frequency
Farm ID	Unique Farm ID assigned by FSA	
Tract ID	Unique Tract ID assigned by FSA	
Field ID	Unique Field ID assigned by FSA	
State	State name	
County	County name	
Environmental benefits	Indicator that project tracks other environmental benefits	Annual
Reduction in nitrogen loss	Indicator that project tracks reductions in nitrogen loss	Annual
Amount	Amount	Annual
Purpose	Purpose of tracking those co-benefits	Annual
Reduction in phosphorus loss	Indicator that project tracks reductions in phosphorus loss	Annual
Amount	Amount	Annual
Purpose	Purpose of tracking those co-benefits	Annual
Other water quality	Indicator that project tracks other water quality improvements	Annual
Type	Type of water quality metric being tracked	Annual
Amount	Amount	Annual
Purpose	Purpose of tracking those co-benefits	Annual
Water quantity	Indicator that project tracks reduced water use	Annual
Amount	Amount	Annual
Purpose	Purpose of tracking those co-benefits	Annual
Reduced erosion	Indicator that project tracks reductions in soil erosion	Annual
Amount	Amount	Annual
Purpose	Purpose of tracking those co-benefits	Annual
Reduced energy use	Indicator that project tracks reductions in energy use	Annual
Amount	Amount	Annual
Purpose	Purpose of tracking those co-benefits	Annual
Avoided land conversion	Indicator that project tracks reductions in land conversion	Annual
Amount	Amount	Annual
Purpose	Purpose of tracking those co-benefits	Annual
Improved wildlife habitat	Indicator that project tracks improvements in wildlife habitat	Annual
Amount	Amount	Annual
Purpose	Purpose of tracking those co-benefits	Annual



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Supplemental Data Submission

Project MMRV Plan

Definition of MMRV elements:

Measurement: Quantification of the greenhouse gas benefits (reduction or capture) using mathematical models and/or direct physical measurements in the field

Monitoring: Ongoing review and confirmation that the climate-smart practice has been implemented according to the agreed upon standard and documentation of any changes in the site, implementation, or GHG emissions impacts over time

Reporting: Documenting and sharing monitoring and measurement results with project partners, the recipient, and any third-party verification organization

Verification: Independent confirmation that measurement, monitoring and reporting information are complete, accurate and reliable.

Projects must submit an MMRV plan that includes details about how each of the following are addressed:

- Quantification approach, including:
 - GHG models used
 - GHG measurement plan (if applicable)
 - Approach to quantifying additional environmental benefits, if applicable (e.g., water quality, habitat)
- Verification approach:
 - Compliance criteria
 - Verification plan/methodology
- Approach to ensuring:
 - Additionality
 - Permanence
 - Leakage
 - Impacts of weather
- Plan for non-compliance

If the project is using a specific MMRV methodology or approach developed by the recipient, a project partner, or an outside organization, the project can submit documentation associated with the methodology as long as the documentation addresses each of the above categories.

If the project is tracking other environmental benefits (as reported in the *Additional Environmental Benefits* worksheet), include a description of the methodology and tools used to track and report on these benefits.

Field modeled GHG benefit reports

Results from any models besides COMET-Planner used to estimate GHG benefits must also be submitted as a separate report. This includes projects running COMET-Farm. The full results of any model can be submitted in the native/standard format generated by the modeling tool and must include the following Unique IDs in the report or in the file name: State, County, Farm ID, Tract ID, Field ID.

Field direct measurement results

For any direct physical measurements in the field, measurement results must be submitted as a separate report and must include the following Unique IDs in the report or in the file name: State, County, Farm ID, Tract ID, Field ID. Measurement results reports must include the name of the equipment used for sampling or data collection, the name of the lab that analyzed the data, and the analytical method used.

Sample report types include soil analysis reports, summarized results of portable emissions analyzers or flux towers, water quality analyses, and plant species counts. These could be collected for the purposes of determining GHG emission reductions or carbon sequestration amounts, for calibration of tools or models, for tracking other environmental benefits, or for other reasons.



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Data Descriptions

This section provides descriptions and allowable response options for each data element. The guide also indicates whether each data element is required, applicable at times, or optional; as well as how frequently each data element must be updated.

Unique IDs

Project ID: Unique ID at the project level – “Award Identifying Number” shown on award documentation

Partner ID: Unique ID at the partner level – use EIN; if no EIN, a unique ID will be assigned for use in these reports

State or territory of operation: State or territory name

County of operation: Physical county name

Farm ID: Unique ID at the operation level assigned by Farm Service Agency (FSA)

Tract ID: Unique ID at the tract level assigned by FSA

Field ID: Unique ID at the field level assigned by FSA



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Project Summary**Commodity type****Data element name:** Commodity type**Reporting question:** What climate-smart commodity types are produced by this project?**Description:** Type of commodity incentivized by the project. These commodities include those for whom farmers are directly receiving incentives or other types of marketing support. See full list of commodity options in Appendix B. List one commodity per row.**Data type:** List**Select multiple values:** No**Measurement unit:** Category**Allowed values:** FSA commodity list**Logic:** None – all respond**Required:** Yes**Data collection level:** Project**Data collection frequency:** Quarterly**Commodity sales****Data element name:** Commodity sales**Reporting question:** Did project activities result in sales this quarter of the commodity(ies) produced by this project?**Description:** Indicator of sales of commodity(ies) related to project activities. If sales are reported, complete the *Marketing Activities* worksheet (Table 3) as part of the quarterly performance report.**Data type:** List**Select multiple values:** No**Measurement unit:** Category**Allowed values:**

- Yes
- No

Logic: None – all respond**Required:** Yes**Data collection level:** Project**Data collection frequency:** Quarterly**Farms enrolled****Data element name:** Farms enrolled**Reporting question:** Did the project enroll any producers or fields this quarter?**Description:** Indicator that the project enrolled producers or fields. If enrollment activities occurred this quarter, complete the *Producer Enrollment* and *Field Enrollment* worksheets (Tables 4 and 5) as part of the quarterly performance report.**Data type:** List**Select multiple values:** No**Measurement unit:** Category**Allowed values:**

- Yes
- No

Logic: None – all respond**Required:** Yes**Data collection level:** Project**Data collection frequency:** Quarterly**GHG calculation methods****Data element name:** GHG calculation methods**Reporting question:** What methods is the project using to calculate GHG benefits?**Description:** List the way(s) that GHG benefits are being measured and calculated by the project this quarter.**Data type:** List**Select multiple values:** No**Measurement unit:** Category**Allowed values:**

- Models
- Direct field measurements
- Both

Logic: None – all respond**Required:** Yes**Data collection level:** Project**Data collection frequency:** Quarterly



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GHG cumulative calculation**Data element name:** GHG cumulative calculation**Description:** List the method(s) that was used to calculate the total cumulative GHG benefits reported by the project this quarter.**Data type:** List**Measurement unit:** Category**Logic:** None – all respond**Data collection level:** Project**Reporting question:** What method(s) was used to calculate the total cumulative GHG benefits reported here?**Select multiple values:** No**Allowed values:**

- Models
- Direct field measurements
- Both

Required: Yes**Data collection frequency:** Quarterly**Cumulative GHG benefits****Data element name:** Cumulative GHG benefits**Description:** Total cumulative estimated greenhouse gas emission reductions from practice implementation. This is updated quarterly. If there are no changes, enter the same number as the previous quarter.**Data type:** Decimal**Measurement unit:** Metric tons CO₂eq**Logic:** None – all respond**Data collection level:** Project**Reporting question:** What are the project's estimated total GHG emission reductions (CO₂eq) to date?**Select multiple values:** No**Allowed values:** 0-10,000,000**Required:** Yes**Data collection frequency:** Quarterly**Cumulative carbon stock****Data element name:** Cumulative carbon stock**Description:** Estimated total cumulative change in carbon stock based on practice implementation. This is updated quarterly. If there are no changes, enter the same numbers as the previous quarter. Conversion rate is one ton of carbon = 3.67 tons of CO₂eq.**Data type:** Decimal**Measurement unit:** Metric tons CO₂eq**Logic:** None – all respond**Data collection level:** Project**Reporting question:** How much carbon has the project sequestered to date?**Select multiple values:** No**Allowed values:** 0-10,000,000**Required:** Yes**Data collection frequency:** Quarterly**Cumulative CO₂ benefit****Data element name:** Cumulative CO₂ benefit**Description:** Estimated total cumulative carbon dioxide emission reductions based on practice implementation. This is updated quarterly. If there are no changes, enter the same number as the previous quarter.**Data type:** Decimal**Measurement unit:** Metric tons CO₂**Logic:** None – all respond**Data collection level:** Project**Reporting question:** What are the project's estimated total cumulative CO₂ emission reductions to date?**Select multiple values:** No**Allowed values:** 0-10,000,000**Required:** Yes**Data collection frequency:** Quarterly**Cumulative CH₄ benefit****Data element name:** Cumulative CH₄ benefit**Description:** Estimated total cumulative methane reduction based on practice implementation. This is updated quarterly. If there are no changes, enter the same numbers as the previous quarter. Conversion rate is one ton of CH₄ = 25 tons of CO₂eq.**Data type:** Decimal**Measurement unit:** Metric tons CH₄ reduced in CO₂eq**Logic:** None – all respond**Data collection level:** Project**Reporting question:** What are the project's estimated total CH₄ emission reductions to date?**Select multiple values:** No**Allowed values:** 0-10,000,000**Required:** Yes**Data collection frequency:** Quarterly



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Cumulative N2O benefit**Data element name:** Cumulative N2O benefit**Reporting question:** What are the project's estimated total N2O emission reductions to date?

Description: Estimated total cumulative nitrous oxide reduction based on practice implementation. This is updated quarterly. If there are no updated numbers enter the same number as the previous quarter. Conversion rate is one ton of N₂O = 298 tons of CO₂eq.

Data type: Decimal**Select multiple values:** No**Measurement unit:** Metric tons N2O reduced in CO₂eq**Allowed values:** 0-10,000,000**Logic:** None – all respond**Required:** Yes**Data collection level:** Project**Data collection frequency:** Quarterly**Offsets produced****Data element name:** Offsets produced**Reporting question:** How many carbon offsets have been produced in the project?

Description: Total carbon offsets produced by enrolled project fields during the quarter. Offsets are defined as having been verified and certified using an accepted standard and sold into the carbon marketplace.

Data type: Decimal**Select multiple values:** No**Measurement unit:** Metric tons CO₂eq**Allowed values:** 0-10,000,000**Logic:** None – all respond**Required:** Yes**Data collection level:** Project**Data collection frequency:** Quarterly**Offsets sale****Data element name:** Offsets sale**Reporting question:** To what marketplace(s) were carbon offsets sold?

Description: Marketplaces to which carbon offsets produced by enrolled project fields were sold. Offsets are defined as having been verified and certified using an accepted standard and sold into the carbon marketplace. List each marketplace name. Separate names with commas.

Data type: Text**Select multiple values:** NA**Measurement unit:** Name**Allowed values:** Text**Logic:** Respond if >0 to 'Offsets produced'**Required:** Yes**Data collection level:** Project**Data collection frequency:** Quarterly**Offsets price****Data element name:** Offsets price**Reporting question:** What was the average price of carbon received for offsets?

Description: Average price per metric ton paid for carbon offsets produced by enrolled project fields. Offsets are defined as having been verified and certified using an accepted standard and sold into the carbon marketplace.

Data type: Decimal**Select multiple values:** No**Measurement unit:** Dollars per metric ton**Allowed values:** 0-500**Logic:** Respond if >0 to 'Offsets produced'**Required:** Yes**Data collection level:** Project**Data collection frequency:** Quarterly**Insets produced****Data element name:** Insets produced**Reporting question:** How many carbon insets have been produced in the project?

Description: Total carbon insets produced by enrolled fields during the quarter. Insets are defined as having been verified and certified using an accepted standard and accounted for within Scope 3 emissions for a firm.

Data type: Decimal**Select multiple values:** No**Measurement unit:** Metric tons CO₂eq**Allowed values:** 0-10,000,000**Logic:** None – all respond**Required:** Yes**Data collection level:** Project**Data collection frequency:** Quarterly



Partnerships for Climate-Smart Commodities Data Dictionary for Recipients

February 2023

Cost of on-farm TA**Data element name:** Cost of on-farm TA**Reporting question:** What is the total amount that has been spent to provide on-farm TA?**Description:** Total cost of any field- or practice-specific technical assistance provided by the project (by recipient or partners) to any producers. This is updated quarterly. If there are no changes, enter the same number as the previous quarter.**Data type:** Decimal**Select multiple values:** No**Measurement unit:** Dollars**Allowed values:** \$0-\$50,000,000**Logic:** None – all respond**Required:** Yes**Data collection level:** Project**Data collection frequency:** Quarterly**MMRV cost****Data element name:** MMRV cost**Reporting question:** What is the total amount that has been spent on MMRV activities?**Description:** Total cost of all MMRV activities paid for by the project (recipient or partners). MMRV components are defined as measurement (calculations or estimations of GHG emissions), monitoring (ongoing review and confirmation that the climate-smart practices have been implemented according to the agreed upon standard and documentation of any changes in the site, implementation, or GHG emissions impacts over time), reporting (documenting and sharing monitoring and measurement results with project partners, the recipient, and any third-party verification organization), and verification (independent confirmation that measurement, monitoring and reporting information are complete, accurate and reliable). This is updated quarterly. If there are no changes, enter the same number as the previous quarter.**Data type:** Decimal**Select multiple values:** No**Measurement unit:** Dollars**Allowed values:** \$0-\$50,000,000**Logic:** None – all respond**Required:** Yes**Data collection level:** Project**Data collection frequency:** Quarterly**GHG monitoring method****Data element name:** GHG monitoring 1-5**Reporting question:** How did the project monitor GHG benefits?**Description:** Up to the five most common forms of monitoring GHG benefits used this quarter as part of MMRV requirements. Monitoring is defined as ongoing review and confirmation that the climate-smart practice has been implemented according to the agreed upon standard and documentation of any changes in the site, implementation, or GHG emissions impacts over time. Include up to 5 methods, based on which methods are most commonly used for this project. The worksheet provides five columns with a drop-down list of the allowed values. Choose one value for each column. If fewer than 5 GHG monitoring methods are used, leave unnecessary columns blank. If "other" is chosen, use the additional column to enter other GHG monitoring methods as free text.**Data type:** List**Select multiple values:** No**Measurement unit:** Category**Allowed values:**

- Drones
- Ground-level photos and videos
- On-farm visit
- Plot-based sampling
- Producer records or attestation
- Satellite monitoring or remote sensing
- Soil metagenomics
- Soil sensors
- Water sensors
- Other (specify)

Logic: None – all respond**Required:** Yes**Data collection level:** Project**Data collection frequency:** Quarterly



Partnerships for Climate-Smart Commodities Data Dictionary for Recipients

February 2023

GHG reporting method**Data element name:** GHG reporting 1-5**Reporting question:** How did the project track and report implementation of practices to reduce GHG emissions?

Description: Up to the five most common forms of tracking and reporting on practice implementation used this year as part of MMRV requirements. Reporting is defined as documenting and sharing monitoring and measurement results with project partners, the recipient, and any third-party verification organization. Include up to 5 methods, based on which methods are most commonly used for this project. The worksheet provides five columns with a drop-down list of the allowed values. Choose one value for each column. If fewer than 5 GHG reporting methods are used, leave unnecessary columns blank. If "other" is chosen, use the additional column to enter other GHG reporting methods as free text.

Data type: List**Select multiple values:** No**Measurement unit:** Category**Allowed values:**

- Automated devices
- Email
- Mobile app
- Paper
- Third-party actors
- Website
- Other (specify)

Logic: None – all respond**Required:** Yes**Data collection level:** Project**Data collection frequency:** Quarterly**GHG verification method****Data element name:** GHG verification method 1-5**Reporting question:** How did the project verify implementation of practices to reduce GHG emissions?

Description: Up to the five most common forms of verifying practice implementation used this year as part of MMRV requirements. Verification is defined as independent confirmation that measurement, monitoring and reporting information are complete, accurate and reliable. Include up to 5 methods, based on which methods are most commonly used for this project. The worksheet provides five columns with a drop-down list of the allowed values. Choose one value for each column. If fewer than 5 GHG verification methods are used, leave unnecessary columns blank. If "other" is chosen, use the additional column to enter other GHG verification methods as free text.

Data type: List**Select multiple values:** No**Measurement unit:** Category**Allowed values:**

- Artificial intelligence
- Audit by recipient
- Computer modeling
- Photos
- Record audit
- Satellite imagery
- Site or field visit
- Third-party audit
- Other (specify)

Logic: None – all respond**Required:** Yes**Data collection level:** Project**Data collection frequency:** Quarterly



Partnerships for Climate-Smart Commodities Data Dictionary for Recipients

February 2023

Partner Activities**Unique IDs**

Partner ID	Unique Project ID for each partner
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Partner name

Data element name: Name of partner organization	Reporting question: What is the official name of the recipient or partner organization?
Description: Legal name of recipient or partner organization	
Data type: Text	Select multiple values: NA
Measurement unit: NA	Allowed values: Text
Logic: None – all respond	Required: Yes
Data collection level: Partner	Data collection frequency: Partnership initiation

Partner type

Data element name: Type of partner organization	Reporting question: What type of organization is this?
Description: Legal/financial structure of recipient or partner organization	
Data type: List	Select multiple values: No
Measurement unit: Category	Allowed values: <ul style="list-style-type: none"> • Commodity groups (501c5) • For-profit • Individual • Nonprofit • State or local agency • Tribal agency • University
Logic: None – all respond	Required: Yes
Data collection level: Partner	Data collection frequency: Partnership initiation

Partner POC

Data element name: Partner POC	Reporting question: Who is the point of contact for this project at the recipient or partner organization?
Description: Name of a point of contact for the recipient or partner organization	
Data type: Text	Select multiple values: NA
Measurement unit: NA	Allowed values: Text
Logic: None – all respond	Required: Yes
Data collection level: Partner	Data collection frequency: Partnership initiation; update as necessary

Partner POC email

Data element name: Partner POC email	Reporting question: What is the point of contact's email address?
Description: Email of the point of contact for the recipient or partner organization	
Data type: Text	Select multiple values: NA
Measurement unit: NA	Allowed values: Text
Logic: None – all respond	Required: Yes
Data collection level: Partner	Data collection frequency: Partnership initiation; update as necessary



Partnerships for Climate-Smart Commodities Data Dictionary for Recipients

February 2023

Partnership start date**Data element name:** Partnership start date**Reporting question:** When did the partnership start?**Description:** Date that the partner organization and the recipient began formally partnering on the project**Data type:** Date**Select multiple values:** NA**Measurement unit:** MM/DD/YYYY**Allowed values:** 01/01/2023 – 12/31/2030**Logic:** No response for recipient**Required:** Yes**Data collection level:** Partner**Data collection frequency:** Partnership initiation**Partnership end date****Data element name:** Partnership end date**Reporting question:** When did the partnership end?**Description:** Date that the partner organization and the recipient stopped formally partnering on the project**Data type:** Date**Select multiple values:** NA**Measurement unit:** MM/DD/YYYY**Allowed values:** 01/01/2023 – 12/31/2030**Logic:** No response for recipient**Required:** Yes**Data collection level:** Partner**Data collection frequency:** Partnership end quarter**New partnership****Data element name:** New partnership**Reporting question:** Is this a new partnership?**Description:** A new partnership means that the recipient and the partner organization have not had a formal working relationship (under contract or on a grant) prior to the start of the project.**Data type:** List**Select multiple values:** No**Measurement unit:** Category**Allowed values:**

- Yes
- No
- I don't know

Logic: No response for recipient**Required:** Yes**Data collection level:** Partner**Data collection frequency:** Partnership initiation**Partner total requested****Data element name:** Partner total requested**Reporting question:** What is the total amount of funding the partner has requested to date from this project?**Description:** Cumulative (total) amount of funds that the partner has requested reimbursement for from the recipient from the start of the partnership to the end of the reporting quarter. For each quarter's data entry, the value must be the sum of all previous entries plus the amount of funds requested in the reporting quarter. If there are no changes, report the value from the previous quarter.**Data type:** Decimal**Select multiple values:** NA**Measurement unit:** Dollars**Allowed values:** \$0-\$100,000,000**Logic:** No response for recipient**Required:** Yes**Data collection level:** Partner**Data collection frequency:** Quarterly



Partnerships for Climate-Smart Commodities Data Dictionary for Recipients

February 2023

Total match contribution**Data element name:** Total match contribution**Reporting question:** What is the total match value the organization has contributed to the project to date?

Description: Cumulative (total) value of funds and in-kind contributions (e.g., staff time, inputs, equipment rental, marketing support) that the partner has provided as a project match contribution from the start of the partnership to the end of the reporting quarter. For each quarter's data entry, the value must be the sum of all previous entries plus match contributions in the reporting quarter. If there are no changes, report the value from the previous quarter.

Data type: Decimal**Select multiple values:** NA**Measurement unit:** Dollars**Allowed values:** \$0-\$100,000,000**Logic:** None – all respond**Required:** Yes**Data collection level:** Partner**Data collection frequency:** Quarterly**Total match incentives****Data element name:** Total match incentives**Reporting question:** What is the total value of match provided by this organization for producer incentives?

Description: Cumulative (total) value of funds for incentive payments directly to producers that the partner has provided as a project match contribution from the start of the partnership to the end of the reporting quarter. For each quarter's data entry, the value must be the sum of all previous entries plus match incentives in the reporting quarter. If there are no changes, report the value from the previous quarter.

Data type: Decimal**Select multiple values:** NA**Measurement unit:** Dollars**Allowed values:** \$0-\$100,000,000**Logic:** None – all respond**Required:** Yes**Data collection level:** Partner**Data collection frequency:** Quarterly**Match type****Data element name:** Match type 1-3**Reporting question:** What types of match contributions has the organization provided to the project?

Description: Types of match contributions *other than incentives* provided directly to producers by the organization from the start of the partnership to the end of the reporting quarter. Enter up to the top three (in dollar value) types of match contributions provided. In-kind staff time could be used for technical assistance, marketing assistance, or other support to producers. Production inputs include seed, fertilizer, pesticides, equipment and other inputs for use in the field. The worksheet provides three columns with a drop-down list of the allowed values. Choose one value for each column. If fewer than 3 match types are used, leave unnecessary columns blank. If "other" is chosen, use the additional column to enter other match types as free text.

Data type: List**Select multiple values:** No**Measurement unit:** Category**Allowed values:**

- Equipment rental or use
- In-kind staff time
- Production inputs (reduced cost or free)
- Program income
- Software
- Other (specify)

Logic: None – all respond**Required:** Yes**Data collection level:** Partner**Data collection frequency:** Quarterly



Partnerships for Climate-Smart Commodities Data Dictionary for Recipients

February 2023

Match amount**Data element name:** Match amount 1-3**Reporting question:** What is the value of the match contributions the organization provided to the project?

Description: Cumulative (total) value of funds for each match type that the organization has provided as a project match contribution from the start of the partnership to the end of the reporting quarter. Enter amounts for up to the top three (in dollar value) match types. The worksheet provides three columns for this data element. Enter one value for each column. If fewer than 3 match types are used, leave unnecessary columns blank.

Data type: Decimal**Select multiple values:** NA**Measurement unit:** Dollars**Allowed values:** \$0-\$100,000,000**Logic:** None – all respond**Required:** Yes**Data collection level:** Partner**Data collection frequency:** Quarterly**Training type provided****Data element name:** Training type 1-3 provided**Reporting question:** What types of training has the organization provided to project partners?

Description: Types of training provided to the project partner as a result of participating in the project during the past quarter. Training can come from the recipient, a project partner organization (including other divisions of their own organization, or an outside organization. Enter up to the top three (in dollar value) types of partner training provided. The worksheet provides three columns with a drop-down list of the allowed values. Choose one value for each column. If fewer than 3 training types are used, leave unnecessary columns blank. If “other” is chosen, use the additional column to enter other training types as free text.

Data type: List**Select multiple values:** No**Measurement unit:** Category**Allowed values:**

- Data collection
- Grant reporting
- Marketing opportunities
- Providing financial assistance
- Providing technical assistance
- Writing producer contracts
- Other (specify)

Logic: None – all respond**Required:** Yes**Data collection level:** Partner**Data collection frequency:** Quarterly**Activity by partner****Data element name:** Activity 1-3 by partner**Reporting question:** What types of activities has the organization provided to the project?

Description: Types of activities that the recipient or partner organization has provided during the reporting quarter. Enter up to the top three (in dollar value) types of activities undertaken. The worksheet provides three columns with a drop-down list of the allowed values. Choose one value for each column. If fewer than 3 activity types are used, leave unnecessary columns blank. If “other” is chosen, use the additional column to enter other activity types as free text.

Data type: List**Select multiple values:** No**Measurement unit:** Category**Allowed values:**

- Marketing support
- MMRV support
- Producer outreach for enrollment
- Technical assistance to producers
- Training to other partner organizations
- Other (specify)

Logic: None – all respond**Required:** Yes**Data collection level:** Partner**Data collection frequency:** Quarterly



Partnerships for Climate-Smart Commodities Data Dictionary for Recipients

February 2023

Activity cost**Data element name:** Activity cost 1-3**Reporting question:** What is the value of the activities this organization has provided to the project?

Description: Cumulative (total) cost of each activity type that the organization has undertaken or offered from the start of the partnership to the end of the reporting quarter. Enter amounts for up to the top three (in dollar value) activity types. The worksheet provides three columns for this data element. Enter one value for each column. If fewer than 3 activity types are provided, leave unnecessary columns blank.

Data type: Decimal**Select multiple values:** NA**Measurement unit:** Dollars**Allowed values:** \$0-\$100,000,000**Logic:** None – all respond**Required:** Yes**Data collection level:** Partner**Data collection frequency:** Quarterly**Products supplied****Data element name:** Products supplied**Reporting question:** What products or supplies were provided to enrolled fields?

Description: Name(s) of products supplied to enrolled producers as incentives or matching contributions. Enter the name of each product, including its brand. Separate each product name with a comma. If no products or supplies were provided by the organization, leave the column blank.

Data type: Text**Select multiple values:** NA**Measurement unit:** Name**Allowed values:** Text**Logic:** None – all respond**Required:** Yes**Data collection level:** Partner**Data collection frequency:** Quarterly**Product source****Data element name:** Product source**Reporting question:** Which companies provided the supplies?

Description: Name of firm or company from which supplies were obtained.

Data type: Text**Select multiple values:** NA**Measurement unit:** Name**Allowed values:** Text**Logic:** Respond if text entered for 'Products supplied'**Required:** Yes**Data collection level:** Partner**Data collection frequency:** Quarterly



Partnerships for Climate-Smart Commodities Data Dictionary for Recipients

February 2023

Marketing Activities**Commodity type**

Data element name: Commodity type	Reporting question: What type of commodity is produced by the farmers enrolled in this project?
Description: List a single commodity produced or marketed through incentives from this project. If multiple commodities are produced by the project, use additional rows of the worksheet to report each commodity. Use the FSA commodity list in Appendix B and choose the commodity from the list.	
Data type: List	Select multiple values: No
Measurement unit: Category	Allowed values: FSA commodity list
Logic: None – all respond	Required: Yes
Data collection level: Project	Data collection frequency: Quarterly

Marketing channel type

Data element name: Marketing channel type	Reporting question: What type of marketing channel is used to sell this commodity?
Description: List a single type of marketing channel used to sell the commodity produced by farmers enrolled in the project. If a single commodity is marketed through multiple channels, use additional rows of the worksheet to report each combination of commodity and marketing channel. If “other” is chosen, use the additional column to enter the other marketing channel type(s) as free text.	
Data type: List	Select multiple values: No
Measurement unit: Category	Allowed values: <ul style="list-style-type: none"> • Agricultural marketing board • Biorefinery • Commodity broker • Direct to consumer • Direct to institution • Direct to restaurant • Distributor (including grain elevators) • Food hub or cooperative • Food processor • Non-food byproducts processor • Retailer • USDA • Other (specify)
Logic: None – all respond	Required: Yes
Data collection level: Project	Data collection frequency: Quarterly

Number of buyers

Data element name: Number of buyers	Reporting question: How many buyers are there in this marketing channel?
Description: List the number of individual firms or buyers in this marketing channel.	
Data type: Integer	Select multiple values: No
Measurement unit: Count	Allowed values: 1-500
Logic: None – all respond	Required: Yes
Data collection level: Project	Data collection frequency: Quarterly



Partnerships for Climate-Smart Commodities Data Dictionary for Recipients

February 2023

Names of buyers**Data element name:** Names of buyers**Reporting question:** What are the names of all of the buyers in this marketing channel?**Description:** Provide the names of all buyers in this marketing channel. Separate each name with a comma.**Data type:** Text**Select multiple values:** NA**Measurement unit:** Name**Allowed values:** Text**Logic:** None – all respond**Required:** Yes**Data collection level:** Project**Data collection frequency:** Quarterly**Marketing channel geography****Data element name:** Marketing channel geography**Reporting question:** What is the primary geography of the marketing channel?**Description:** The primary geography of the type of marketing channel. Primary geography means the scale at which most of the activity of buying and selling happens. Local means within a single state or directly neighboring states. Regional means within a five-to-ten state area. National means across the United States. International means specific locations outside of the United States. Global means across the world or not to a specific international location.**Data type:** List**Select multiple values:** No**Measurement unit:** Category**Allowed values:**

- Local
- Regional
- National
- Global

Logic: None – all respond**Required:** Yes**Data collection level:** Project**Data collection frequency:** Quarterly**Value sold****Data element name:** Value sold**Reporting question:** What is the value of the commodity sold in this marketing channel?**Description:** The dollar value of the commodity sold in this marketing channel this quarter (non-cumulative).**Data type:** Decimal**Select multiple values:** No**Measurement unit:** Dollars**Allowed values:** \$1-\$100,000,000**Logic:** None – all respond**Required:** Yes**Data collection level:** Project**Data collection frequency:** Quarterly**Volume sold****Data element name:** Volume sold**Reporting question:** What is the volume of the commodity sold in this marketing channel?**Description:** The volume of the commodity sold in this marketing channel this quarter (non-cumulative).**Data type:** Decimal**Select multiple values:** No**Measurement unit:** Number**Allowed values:** 1-100,000,000**Logic:** None – all respond**Required:** Yes**Data collection level:** Project**Data collection frequency:** Quarterly



Partnerships for Climate-Smart Commodities Data Dictionary for Recipients

February 2023

Volume sold unit**Data element name:** Volume sold unit**Reporting question:** What is the unit of volume?**Description:** The unit associated with the volume of the commodity sold in the marketing channel. If "other" is chosen, use the additional column to enter the appropriate unit as free text.**Data type:** List**Select multiple values:** No**Measurement unit:** Category**Allowed values:**

- Bales (500 pounds)
- Bushels
- Carcass pounds
- Gallons
- Kilograms
- Linear board feet
- Liveweight pounds
- Metric tons
- Pounds
- Short tons
- Other (specify)

Logic: None – all respond**Required:** Yes**Data collection level:** Project**Data collection frequency:** Quarterly**Price premium****Data element name:** Price premium**Reporting question:** What price premium is received for the commodity sold in this marketing channel?**Description:** The price premium received for the commodity sold in this marketing channel this quarter. Price premium is the amount received above a 'business as usual' price.**Data type:** Decimal**Select multiple values:** No**Measurement unit:** Dollars**Allowed values:** \$0.01-\$10,000**Logic:** None – all respond**Required:** Yes**Data collection level:** Project**Data collection frequency:** Quarterly**Price premium unit****Data element name:** Price premium unit**Reporting question:** What is the unit for the price premium?**Description:** The unit associated with the price premium for the commodity sold in the marketing channel. If "other" is chosen, use the additional column to enter the appropriate unit as free text.**Data type:** List**Select multiple values:** No**Measurement unit:** Category**Allowed values:**

- Per bale (500 pounds)
- Per bushel
- Per carcass pound
- Per gallon
- Per kilogram
- Per linear board foot
- Per live pound
- Per metric ton
- Per ounce
- Per short ton
- Other (specify)

Logic: None – all respond**Required:** Yes**Data collection level:** Project**Data collection frequency:** Quarterly



Partnerships for Climate-Smart Commodities Data Dictionary for Recipients

February 2023

Price premium to producer**Data element name:** Price premium to producer**Reporting question:** What percent of the price premium is provided to the producer for the commodity sold in this marketing channel?**Description:** The percent of the price premium provided to the producer for the commodity sold in this marketing channel this quarter. Price premium is the amount received above a 'business as usual' price.**Data type:** Decimal**Select multiple values:** No**Measurement unit:** Percent**Allowed values:** 0-100**Logic:** None – all respond**Required:** Yes**Data collection level:** Project**Data collection frequency:** Quarterly**Product differentiation method****Data element name:** Product differentiation method 1-3**Reporting question:** What methods are used to differentiate climate-smart commodities in this marketing channel?**Description:** Provide the methods used to differentiate the climate-smart commodity in this market channel. Product differentiation methods are ways to distinguish or differentiate the climate-smart commodity in the marketplace. Include up to 3 methods, based on which methods are most commonly used for this project. The worksheet provides three columns with a drop-down list of the allowed values. Choose one value for each column. If fewer than 3 product differentiation methods are used, leave unnecessary columns blank. If "other" is chosen, use the additional column to enter other product differentiation methods as free text.**Data type:** List**Select multiple values:** No**Measurement unit:** Category**Allowed values:**

- Certification/verification for internal insetting
- Farm certification
- Label or badge used on packaging or marketing
- Third party certification/verification
- Trademark
- Other (specify)

Logic: None – all respond**Required:** Yes**Data collection level:** Project**Data collection frequency:** Quarterly**Marketing method****Data element name:** Marketing method 1-3**Reporting question:** What methods are used to market climate-smart commodities in this marketing channel?**Description:** Provide the method(s) used to market this commodity in this market channel. Marketing method is the way that potential buyers of the climate-smart commodity are engaged by the project partners as the sellers or facilitators of sale. Include up to 3 methods, based on which methods are most commonly used for this project. The worksheet provides three columns with a drop-down list of the allowed values. Choose one value for each column. If fewer than 3 marketing methods are used, leave unnecessary columns blank. If "other" is chosen, use the additional column to enter other marketing methods as free text**Data type:** List**Select multiple values:** No**Measurement unit:** Category**Allowed values:**

- Label or badge used on packaging or marketing materials
- Marketing partnership (e.g., promotion by buyer)
- Print marketing campaign
- Social media and digital marketing campaign
- Verbal marketing campaign (e.g., radio, word of mouth)
- Other (specify)

Logic: None – all respond**Required:** Yes**Data collection level:** Project**Data collection frequency:** Quarterly



Partnerships for Climate-Smart Commodities Data Dictionary for Recipients

February 2023

Marketing channel identification method**Data element name:** Marketing channel identification method 1-3**Reporting question:** What methods are used to generate interest in climate-smart commodities in this marketing channel?

Description: Provide the marketing channel identification method(s) used for this commodity in this market channel. Market channel identification methods are the ways that producers and project partners generate interest in purchasing the climate-smart commodity. Include up to 3 methods, based on which methods are most commonly used for this project. The worksheet provides three columns with a drop-down list of the allowed values. Choose one value for each column. If fewer than 3 marketing channel identification methods are used, leave unnecessary columns blank. If "other" is chosen, use the additional column to enter other marketing channel identification methods as free text

Data type: List**Select multiple values:** No**Measurement unit:** Category**Allowed values:**

- Educational tours for buyers
- In-person lead generation
- Negotiated contracts with buyers
- Partnership network or project partner
- Other (specify)

Logic: None – all respond**Required:** Yes**Data collection level:** Project**Data collection frequency:** Quarterly**Traceability method****Data element name:** Traceability method 1-3**Reporting question:** What traceability methods are used for climate-smart commodities in this channel?

Description: Provide the traceability method(s) used for the climate-smart commodity in this market channel. Traceability methods are ways to trace the climate-smart commodity or the climate-smart claims through the supply chain. Include up to 3 methods, based on which methods are most commonly used for this project. The worksheet provides three columns with a drop-down list of the allowed values. Choose one value for each column. If fewer than 3 traceability methods are used, leave unnecessary columns blank. If "other" is chosen, use the additional column to enter other traceability methods as free text.

Data type: List**Select multiple values:** No**Measurement unit:** Category**Allowed values:**

- Barcode or unique ID
- Blockchain
- Book and claim
- Chain of custody
- Mass balance
- Recordkeeping
- Registry with certification
- Segregation
- Supply shed
- Volume proxy
- Other (specify)

Logic: None – all respond**Required:** Yes**Data collection level:** Project**Data collection frequency:** Quarterly



Partnerships for Climate-Smart Commodities Data Dictionary for Recipients

February 2023

Producer Enrollment**Unique IDs**

Farm ID	Unique Farm ID assigned by FSA
State or territory	State name (must match FSA farm enrollment data)
County of residence	County name (must match FSA farm enrollment data)

Producer data change**Data element name:** Producer data change**Reporting question:** Is there new/updated information for a producer who is re-enrolling in the project?**Description:** Indicates that there is new or updated information for a producer who had previously enrolled in the project and is re-enrolling.**Data type:** List**Select multiple values:** No**Measurement unit:** Category**Allowed values:**

- Yes
- No

Logic: None – all respond**Required:** Yes**Data collection level:** Producer**Data collection frequency:** Re-enrollment**Producer start date****Data element name:** Producer start date**Reporting question:** When did the producer enroll in the project?**Description:** Date that the producer enrolled in the project by signing their first contract.**Data type:** Date**Select multiple values:** NA**Measurement unit:** MM/DD/YYYY**Allowed values:** 01/01/2023 – 12/31/2030**Logic:** None – all respond**Required:** Yes**Data collection level:** Producer**Data collection frequency:** Initial enrollment**Producer name****Data element name:** Producer name**Reporting question:** What is the name of producer enrolled in the project?**Description:** Name of the producer enrolled in the project; the name must match the name contained in the customer's Business Partner record and the Farm Operating Plan in FSA Business File for that Farm ID.**Data type:** Text**Select multiple values:** NA**Measurement unit:** NA**Allowed values:** Text**Logic:** None – all respond**Required:** Yes**Data collection level:** Producer**Data collection frequency:** Initial enrollment



Partnerships for Climate-Smart Commodities Data Dictionary for Recipients

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Underserved status**Data element name:** Underserved status**Reporting question:** Is this producer considered an underserved and/or a small producer?

Description: Underserved status of the primary operator of the enrolled operation. Underserved producers generally include beginning farmers, socially disadvantaged farmers, veteran farmers, and limited resource farmers; women farmers and producers growing specialty crops are generally also included in these categories. Small farms are generally those with less than \$350,000 in annual gross cash farm income. Indicate whether this producer is considered underserved, a small producer, or both underserved and a small producer. Use "I don't know" if the producer declines to answer. Departmental Regulation 4370-001 provides USDA's policies for collecting demographic data, including race, ethnicity and gender. Providing demographic information is voluntary and at the discretion of the customer. Demographic information is used by USDA for statistical purposes only and will not be used to determine an applicant's eligibility for programs or services for which they apply.

Data type: List**Select multiple values:** No**Measurement unit:** Category**Allowed values:**

- Yes, underserved
- Yes, small producer
- Yes, underserved and small producer
- No
- I don't know

Logic: None – all respond**Required:** No**Data collection level:** Producer**Data collection frequency:** Initial enrollment**Total area****Data element name:** Total area**Reporting question:** What is the total area of the farm?

Description: Total area of the farm associated with the Farm ID. Report total area of the farm, even if only a portion of the farm is enrolled in the project. If a producer is enrolled in the project for multiple years, review the total area each time a new contract is signed and provide any necessary updates.

Data type: List**Select multiple values:** No**Measurement unit:** Category**Allowed values:**

- Less than 1 acre
- 1 to 9 acres
- 10 to 49 acres
- 50 to 69 acres
- 70 to 99 acres
- 100 to 139 acres
- 140 to 179 acres
- 180 to 219 acres
- 220 to 259 acres
- 260 to 499 acres
- 500 to 999 acres
- 1,000 to 1,999 acres
- 2,000 to 4,999 acres
- 5,000 or more acres

Logic: None – all respond**Required:** Yes**Data collection level:** Producer**Data collection frequency:** Initial enrollment and subsequent enrollment(s), if applicable



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February 2023

Total crop area

Data element name: Total crop area **Reporting question:** What percent of the current operation is cropland?

Description: Area of the total farm that is currently used as cropland. If a producer is enrolled in the project for multiple years, review the total crop area each time a new contract is signed and provide any necessary updates.

Data type: Integer

Select multiple values: No

Measurement unit: Acres

Allowed values: 0-100,000

Logic: None – all respond

Required: Yes

Data collection level: Producer

Data collection frequency: Initial enrollment and subsequent enrollment(s), if applicable

Total livestock area

Data element name: Total livestock area **Reporting question:** What amount of the current operation is used for livestock (by area)?

Description: Area of the total farm that is currently used for pasture, grazing, rangeland; or animal housing, feeding or milking. If a producer is enrolled in the project for multiple years, review the total livestock area each time a new contract is signed and provide any necessary updates.

Data type: Integer

Select multiple values: No

Measurement unit: Acres

Allowed values: 0-100,000

Logic: None – all respond

Required: Yes

Data collection level: Producer

Data collection frequency: Initial enrollment and subsequent enrollment(s), if applicable

Total forest area

Data element name: Total forest area **Reporting question:** What amount of the current operation is forested (by area)?

Description: Area of the total farm that is currently considered forest land use. Forest land use means that at least 10% of the land area is covered in trees that will be at least 13 feet tall when mature. If a producer is enrolled in the project for multiple years, review the total forest area each time a new contract is signed and provide any necessary updates.

Data type: Integer

Select multiple values: No

Measurement unit: Acres

Allowed values: 0-100,000

Logic: None – all respond

Required: Yes

Data collection level: Producer

Data collection frequency: Initial enrollment and subsequent enrollment(s), if applicable



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Livestock type**Data element name:** Livestock type 1-3**Reporting question:** What types of livestock are raised on the farm?

Description: Up to top three types of livestock (by head count) on the farm. The worksheet provides three columns with a drop-down list of the allowed values. Choose one value for each column. If there are fewer than 3 livestock types, leave unnecessary columns blank. If "other" is chosen, use the additional column to enter other livestock types as free text. If a producer is enrolled in the project for multiple years, review the livestock type each time a new contract is signed and provide any necessary updates.

Data type: List**Select multiple values:** No**Measurement unit:** Category**Allowed values:**

- Alpacas
- Beef cows
- Beefalo
- Buffalo or bison
- Chickens (broilers)
- Chickens (layers)
- Dairy cows
- Deer
- Ducks
- Elk
- Emus
- Equine
- Geese
- Goats
- Honeybees
- Llamas
- Reindeer
- Sheep
- Swine
- Turkeys
- Other (specify)

Logic: Respond if 'Total livestock area' >0**Required:** Yes**Data collection level:** Producer**Data collection frequency:** Initial enrollment and subsequent enrollment(s), if applicable**Livestock head****Data element name:** Livestock head 1-3**Reporting question:** How many livestock (by type) are on this operation?

Description: Average annual head count for each type of livestock. Enter amounts for up to the top three livestock types by number. The worksheet provides three columns for this data element. Enter one value for each column. If there are fewer than 3 livestock types, leave unnecessary columns blank. If a producer is enrolled in the project for multiple years, review the average annual head count each time a new contract is signed and provide any necessary updates.

Data type: Integer**Select multiple values:** NA**Measurement unit:** Head count**Allowed values:** 1-10,000,000**Logic:** Respond if 'Total livestock area' >0**Required:** Yes**Data collection level:** Producer**Data collection frequency:** Initial enrollment and subsequent enrollment(s), if applicable



Partnerships for Climate-Smart Commodities Data Dictionary for Recipients

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Organic farm**Data element name:** Organic farm**Reporting question:** Is any part of the farm currently USDA-certified organic or transitioning to USDA-certified organic?

Description: USDA-certified organic means that the farm has been certified by an accredited organic certifying agent or is transitioning to USDA-certified organic by not using any of the prohibited substances. Yes means that some or all of the farm is certified organic or transitioning to certified organic. No means that no part of the farm is certified organic or transitioning to certified organic. If a producer is enrolled in the project for multiple years, review the organic certification status of the farm each time a new contract is signed and provide any necessary updates.

Data type: List**Select multiple values:** No**Measurement unit:** Category**Allowed values:**

- Yes
- No
- I don't know

Logic: None – all respond**Required:** No**Data collection level:** Producer**Data collection frequency:** Initial enrollment and subsequent enrollment(s), if applicable**Organic fields****Data element name:** Organic fields**Reporting question:** Are any of the fields enrolled in the project currently USDA-certified organic or transitioning to USDA-certified organic?

Description: USDA-certified organic means that the operation has been certified by an accredited organic certifying agent or is transitioning to USDA-certified organic by not using any of the prohibited substances. Yes means that some or all of the fields enrolled in the project are certified organic or transitioning to certified organic. No means that no part of the fields enrolled in the project are certified organic or transitioning to certified organic. If a producer is enrolled in the project for multiple years, review the organic certification status of the enrolled fields each time a new contract is signed and provide any necessary updates.

Data type: List**Select multiple values:** No**Measurement unit:** Category**Allowed values:**

- Yes
- No
- I don't know

Logic: Respond if yes to 'Organic operation'**Required:** No**Data collection level:** Producer**Data collection frequency:** Initial enrollment and subsequent enrollment(s), if applicable**Producer motivation****Data element name:** Producer motivation**Reporting question:** Which of the following was the primary reason the producer enrolled in this project?**Description:** Primary operator's motivation for enrolling in the project.**Data type:** List**Select multiple values:** No**Measurement unit:** Category**Allowed values:**

- Financial benefit
- Environmental benefit
- New market opportunity
- Partnerships or networks
- Other

Logic: None – all respond**Required:** Yes**Data collection level:** Producer**Data collection frequency:** Initial enrollment



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Producer outreach**Data element name:** Producer outreach 1-3**Reporting question:** What types of outreach were provided to producers?

Description: Up to three most common types of outreach provided to producer prior to enrollment. Outreach activities are those focused on identifying and enrolling producers in the project. Outreach can come from the recipient or project partners. The worksheet provides three columns with a drop-down list of the allowed values. Choose one value for each column. If there are fewer than 3 outreach types, leave unnecessary columns blank. If "other" is chosen, use the additional column to enter other outreach types as free text.

Data type: List**Select multiple values:** Yes**Measurement unit:** Category**Allowed values:**

- Commodity organizations
- Conferences
- Cooperative extension
- Digital communications and resources
- Education workshops, field days, and town halls
- Existing partner networks
- Farm visits and one-on-one meetings
- General advertising
- Peer referrals and producer groups
- Phone calls
- Print communications and resources
- Retailers
- State agencies
- Targeted messaging using proprietary data
- Technical service providers
- Other (specify)

Logic: None – all respond**Required:** Yes**Data collection level:** Producer**Data collection frequency:** Initial enrollment**CSAF experience****Data element name:** CSAF experience**Reporting question:** Has the primary operator implemented CSAF practices in the last ten years anywhere on the farm?

Description: Has this farm implemented climate-smart agriculture or forestry (CSAF) practices anywhere on the farm in the past 10 years or since the current primary operator took control (whichever time period is shorter)? CSAF practices are included in a list in Appendix A.

Data type: List**Select multiple values:** No**Measurement unit:** Category**Allowed values:**

- Yes
- No
- I don't know

Logic: None – all respond**Required:** Yes**Data collection level:** Producer**Data collection frequency:** Initial enrollment



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CSAF federal funds**Data element name:** CSAF federal funds**Reporting question:** Were prior CSAF practices supported by federal funds?

Description: If this farm (under the primary operator) has implemented CSAF practices in the last ten years, was implementation supported by federal funds? Federal funds are defined as being from programs including, but not limited to, those from the Natural Resources Conservation Service ((NRCS), including through Environmental Quality Incentives Program (EQIP), Conservation Stewardship Program (CSP), Regional Conservation Partnership Program (RCPP), or related programs), the Farm Service Agency Conservation Reserve Program (CRP), as well as funds from other USDA programs or other federal agencies.

Data type: List**Select multiple values:** No**Measurement unit:** Category**Allowed values:**

- Yes
- No
- I don't know

Logic: Respond if yes to 'CSAF experience'**Required:** Yes**Data collection level:** Producer**Data collection frequency:** Initial enrollment**CSAF state or local funds****Data element name:** CSAF state or local funds**Reporting question:** Were prior CSAF practices supported by state or local funds?

Description: If this farm (under the primary operator) has implemented CSAF practices in the last ten years, was implementation supported by state funds? State or local funds are those from state departments of agriculture or other state agencies, local water quality districts and other local agencies.

Data type: List**Select multiple values:** No**Measurement unit:** Category**Allowed values:**

- Yes
- No
- I don't know

Logic: Respond if yes to 'CSAF experience'**Required:** Yes**Data collection level:** Producer**Data collection frequency:** Initial enrollment**CSAF nonprofit funds****Data element name:** CSAF nonprofit funds**Reporting question:** Were CSAF practices supported by nonprofit funds?

Description: If this farm (under the primary operator) has implemented CSAF practices in the last ten years, was implementation supported by nonprofit funds? Nonprofit funds are those offered directly from a nonprofit organization to a producer.

Data type: List**Select multiple values:** No**Measurement unit:** Category**Allowed values:**

- Yes
- No
- I don't know

Logic: Respond if yes to 'CSAF experience'**Required:** Yes**Data collection level:** Producer**Data collection frequency:** Initial enrollment



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CSAF market incentives**Data element name:** CSAF market incentives**Reporting question:** Were CSAF practices supported by market incentives?**Description:** If this farm (under the primary operator) has implemented CSAF practices in the last ten years, was implementation supported by market incentives? Market incentives include premiums paid by a commodity buyer or by a consumer based on branding or labeling as a climate-smart commodity.**Data type:** List**Select multiple values:** No**Measurement unit:** Category**Allowed values:**

- Yes
- No
- I don't know

Logic: Respond if yes to 'CSAF experience'**Required:** Yes**Data collection level:** Producer**Data collection frequency:** Initial enrollment



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Field Enrollment**Unique IDs**

Farm ID	Unique Farm ID assigned by FSA
Tract ID	Unique Tract ID assigned by FSA
Field ID	Unique Field ID assigned by FSA
State or territory of field	State name (must match FSA farm enrollment data)
County of field	County name (must match FSA farm enrollment data)
Prior Field ID, if applicable	Prior Field ID assigned by FSA if there has been reconstitution of the farm resulting in a new Field ID during the field's enrollment in the project

Field data change**Data element name:** Field data change**Reporting question:** Has the information previously reported for this field changed?**Description:** Indicator that this entry is being used to report any relevant changes, such as a new Field ID number or changes to the commodity or practice combinations, for a field that has previously been enrolled in the project.**Data type:** List**Select multiple values:** No**Measurement unit:** Category**Allowed values:**

- Yes
- No

Logic: None – all respond**Required:** Yes**Data collection level:** Field**Data collection frequency:** Re-enrollment**Contract start date****Data element name:** Contract start date**Reporting question:** What is the start date of the contract with the producer that includes this field?**Description:** Start date listed on the contract that enrolls the field in the project.**Data type:** Date**Select multiple values:** NA**Measurement unit:** MM/DD/YYYY**Allowed values:** 01/01/2023 – 12/31/2030**Logic:** None – all respond**Required:** Yes**Data collection level:** Field**Data collection frequency:** Initial enrollment**Total field area****Data element name:** Total field area**Reporting question:** What is the total size of the enrolled field?**Description:** Total size of the field enrolled with the project.**Data type:** Decimal**Select multiple values:** No**Measurement unit:** Acres**Allowed values:** .01-500**Logic:** None – all respond**Required:** Yes**Data collection level:** Field**Data collection frequency:** Initial enrollment



Partnerships for Climate-Smart Commodities Data Dictionary for Recipients

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Commodity category**Data element name:** Commodity category**Reporting question:** What category of commodity(ies) is (are) produced from this field?**Description:** Category of commodity(ies) produced in field enrolled in the project**Data type:** List**Select multiple values:** No**Measurement unit:** Category**Allowed values:**

- Crops
- Livestock
- Trees
- Crops and livestock
- Crops and trees
- Livestock and trees
- Crops, livestock and trees

Logic: None – all respond**Required:** Yes**Data collection level:** Field**Data collection frequency:** Initial enrollment**Commodity type****Data element name:** Commodity type**Reporting question:** What type of commodity is produced from this field?**Description:** Type of commodity produced in field enrolled in the project. See full list in Appendix B. The worksheet provides a drop-down list of the allowed values. Choose the appropriate value. Enter additional commodities in subsequent rows.**Data type:** List**Select multiple values:** No**Measurement unit:** Category**Allowed values:** FSA commodity list**Logic:** None – all respond**Required:** Yes**Data collection level:** Field**Data collection frequency:** Initial enrollment**Baseline yield****Data element name:** Baseline yield**Reporting question:** What is the baseline yield of this field?**Description:** Average annual yield of commodity in 3 years prior to enrollment. Provide yield for the enrolled field if possible. If not at field level, provide average annual yield for the specific commodity for the operation.**Data type:** Decimal**Select multiple values:** No**Measurement unit:** Production per acre or animal**Allowed values:** .01-100,000**Logic:** None – all respond**Required:** Yes**Data collection level:** Field**Data collection frequency:** Initial enrollment



Partnerships for Climate-Smart Commodities Data Dictionary for Recipients

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Baseline yield unit**Data element name:** Baseline yield unit**Reporting question:** Baseline yield unit

Description: Unit of average annual yield of commodity in enrolled field in 3 years prior to enrollment. The worksheet provides a drop-down list of choices for this data element. If "other" is chosen, use the additional column to enter the appropriate yield unit as free text.

Data type: List**Select multiple values:** No**Measurement unit:** Category**Allowed values:**

- Animal units per acre
- Bushels per acre
- Carcass pounds per animal
- Head per acre
- Hundred-weights (or pounds) per head
- Linear feet per acre
- Liveweight pounds per animal
- Pounds per acre
- Tons per acre
- Other (specify)

Logic: None – all respond**Required:** Yes**Data collection level:** Field**Data collection frequency:** Initial enrollment**Baseline yield location****Data element name:** Baseline yield location**Reporting question:** For what portion of the operation is the baseline yield being reported?

Description: Location of the reported average annual yield of commodity in 3 years prior to enrollment. If "other" is chosen, use the additional column to enter the appropriate location as free text.

Data type: List**Select multiple values:** No**Measurement unit:** Category**Allowed values:**

- Enrolled field
- Whole operation
- Other (specify)

Logic: None – all respond**Required:** Yes**Data collection level:** Field**Data collection frequency:** Initial enrollment**Field land use****Data element name:** Field land use**Reporting question:** What is this field's land use history?

Description: Prior to enrollment, what was the most common land use for this field in the past 3 years?

Data type: List**Select multiple values:** No**Measurement unit:** Category**Allowed values:**

- Crop land
- Forest land
- Non-agriculture
- Other agricultural land
- Pasture
- Range

Logic: None – all respond**Required:** Yes**Data collection level:** Field**Data collection frequency:** Initial enrollment



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Field irrigated**Data element name:** Field irrigated**Reporting question:** What is this field's irrigation history?**Description:** Prior to enrollment, what was the most common irrigation practice on this field the past 3 years?**Data type:** List**Select multiple values:** No**Measurement unit:** Category**Allowed values:**

- No irrigation
- Center pivot
- Drip-subsurface
- Drip-surface
- Flood/border
- Furrow/ditch
- Lateral/linear sprinklers
- Micro-sprinklers
- Seepage
- Side roll
- Solid set sprinklers
- Supplemental
- Surface
- Traveling gun/towline
- Wheel Line
- Other

Logic: None – all respond**Required:** Yes**Data collection level:** Field**Data collection frequency:** Initial enrollment**Field tillage****Data element name:** Field tillage**Reporting question:** What is this field's tillage history?**Description:** Prior to enrollment, what was the most common tillage approach during the past 3 years?**Data type:** List**Select multiple values:** No**Measurement unit:** Category**Allowed values:**

- None
- Conventional, inversion
- Conventional, vertical
- No-till, direct seed
- Reduced till, inversion
- Reduced till, vertical
- Strip till
- Other

Logic: None – all respond**Required:** Yes**Data collection level:** Field**Data collection frequency:** Initial enrollment



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Practice past extent - farm**Data element name:** Practice past extent - farm**Description:** Prior to enrollment, on what portion of the whole farm had this (these) CSAF practice(s) ever been used by the primary operator? If multiple practices are planned to be implemented in this field, enter the value that best corresponds to the farm's prior experience with the planned set of practices.**Data type:** List**Measurement unit:** Category**Reporting question:** What percent of the farm has implemented this CSAF practice (combination) previously?**Select multiple values:** No**Allowed values:**

- Never used
- Used on less than 25% of operation
- Used on 25-50% of operation
- Used on 51-75% of operation
- Used on more than 75% of operation

Required: Yes**Logic:** None – all respond**Data collection level:** Field**Data collection frequency:** Initial enrollment**Field any CSAF practice****Data element name:** Field any CSAF practice**Description:** Prior to enrollment, have any CSAF practice or practices been used in this field in the past 3 years? CSAF practices are included in a list in Appendix A.**Data type:** List**Measurement unit:** Category**Reporting question:** What is this field's prior experience with CSAF practices?**Select multiple values:** No**Allowed values:**

- Yes
- No
- I don't know

Required: Yes**Logic:** None – all respond**Data collection level:** Field**Data collection frequency:** Initial enrollment**Practice past use - this field****Data element name:** Practice past use - this field**Description:** Prior to enrollment, had this (these) CSAF practice(s) been used in this field in the in the past 3 years? Enter yes if all of the practices had been used previously in this field; enter some if multiple practices are being implemented and one or more, but not all of the practices had been used previously in this field; and enter no if none of the practices had been used previously in this field.**Data type:** List**Measurement unit:** Category**Reporting question:** Have this CSAF practice (combination) been implemented previously in this field?**Select multiple values:** No**Allowed values:**

- Yes
- Some
- No
- I don't know

Required: Yes**Logic:** None – all respond**Data collection level:** Field**Data collection frequency:** Initial enrollment



Partnerships for Climate-Smart Commodities Data Dictionary for Recipients

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Practice type**Data element name:** Practice type 1-7**Reporting question:** What CSAF practice is being implemented in this field through the project?

Description: Which CSAF practice or practices will be implemented on this field as part of enrollment in the project? CSAF practices are included in a list in Appendix A. The worksheet provides seven columns for this data element. Enter one value for each column. If there are fewer than 7 practices being implemented on this field through enrollment in the project, leave unnecessary columns blank.

Data type: List**Select multiple values:** No**Measurement unit:** Category**Allowed values:** See list in Appendix A**Logic:** None – all respond**Required:** Yes**Data collection level:** Field**Data collection frequency:** Initial enrollment**Practice standard****Data element name:** Practice standard 1-7**Reporting question:** What standard does the CSAF practice follow?

Description: Is the CSAF practice being implemented on the field as part of enrollment in the project following a defined practice standard? The worksheet provides seven columns for this data element. Enter one value for each column, corresponding to the practice types entered in the previous columns. If there are fewer than 7 practices being implemented on this field through enrollment in the project, leave unnecessary columns blank.

Data type: List**Select multiple values:** No**Measurement unit:** Category**Allowed values:**

- NRCS
- Other (specify)

Logic: None – all respond**Required:** Yes**Data collection level:** Field**Data collection frequency:** Initial enrollment**Planned practice implementation year****Data element name:** Practice 1-7 implementation year**Reporting question:** What year is the CSAF practice planned to be implemented?

Description: Year that the CSAF practice is planned to be implemented on the field. Use 2022 for early adopters, defined as fields that have the practice actively implemented in 2022 (prior to contract being signed for this project). The worksheet provides seven columns for this data element. Enter one value for each column, corresponding to the practice types entered in the previous columns. If there are fewer than 7 practices being implemented on this field through enrollment in the project, leave unnecessary columns blank.

Data type: Integer**Select multiple values:** No**Measurement unit:** Year**Allowed values:** 2022-2030**Logic:** None – all respond**Required:** Yes**Data collection level:** Field**Data collection frequency:** Initial enrollment**Practice extent****Data element name:** Practice 1-7 extent**Reporting question:** To what extent is the practice implemented?

Description: Total area, length, or head where the practice is being implemented in the field specified by the contract.

Data type: Decimal**Select multiple values:** No**Measurement unit:** Extent**Allowed values:** .01-100,000**Logic:** None – all respond**Required:** Yes**Data collection level:** Field**Data collection frequency:** Initial enrollment



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Practice extent unit**Data element name:** Practice 1-7
extent unit**Reporting question:** Unit for extent of practice implementation**Description:** Unit for extent of practice implementation on the field specified by the contract. If "other" is chosen, use the additional column to enter the appropriate unit.**Data type:** List**Select multiple values:** No**Measurement unit:** Category**Allowed values:**

- Acres
- Head of livestock
- Linear feet
- Square feet
- Other (specify)

Logic: None – all respond**Required:** Yes**Data collection level:** Field**Data collection frequency:** Initial enrollmentCSAF Practice Sub-questions

For certain practices, additional questions are asked that provide information necessary to estimate greenhouse gas benefits from implementation of the practice. See Table 11 in the *CSAF Practice Sub-questions* section for descriptions of individual questions to be answered depending on the CSAF practices selected.



Partnerships for Climate-Smart Commodities Data Dictionary for Recipients

February 2023

Farm Summary**Unique IDs**

Farm ID	Unique Farm ID assigned by FSA
State or territory	State name (must match FSA farm enrollment data)
County of residence	County name (must match FSA farm enrollment data)

Producer TA received

Data element name: Producer TA received
1-3

Reporting question: What types of technical assistance were provided to this producer?

Description: Did the recipient or any partner provide technical assistance (TA) to the producer this year? Technical assistance is any training, education, capacity building or other support provided by any project partner(s) directly to producers enrolled in the project. List up to the top three most common types of TA provided to this producer. The worksheet provides three columns with a drop-down list of the allowed values. Choose one value for each column. If there are fewer than 3 TA types, leave unnecessary columns blank. If "other" is chosen, use the additional column to enter other TA types as free text.

Data type: List

Select multiple values: No

Measurement unit: Category

Allowed values:

- Demonstration plots
- Equipment demonstrations
- Group field days or in-person field workshops
- Hotline
- One-on-one enrollment assistance
- One-on-one field visits
- One-on-one producer mentorship
- Producer networks and peer-to-peer groups
- Retailer consultation
- Social media/digital tools
- Train-the-trainer opportunities
- Virtual meetings or field days
- Webinars and videos
- Written materials
- None
- Other (specify)

Logic: None – all respond

Required: Yes

Data collection level: Producer

Data collection frequency: Quarterly

Producer incentive amount

Data element name: Producer incentive amount

Reporting question: What is the total value of financial incentives provided to this producer?

Description: Total incentive payment received by the producer from USDA project funds for the year (non-cumulative). Do not include incentive payments made with partner match funds.

Data type: Decimal

Select multiple values: NA

Measurement unit: Dollars

Allowed values: \$0-\$5,000,000

Logic: None – all respond

Required: Yes

Data collection level: Producer

Data collection frequency: Quarterly



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Incentive reason

Data element name: Incentive reason 1-4 **Reporting question:** Why were incentives provided to this producer?

Description: List up to four reasons for producer incentive payments. List the top 4 based on total value of the incentive for each reason. The worksheet provides four columns with a drop-down list of the allowed values. Choose one value for each column. If there are fewer than 4 reasons, leave unnecessary columns blank. If "other" is chosen, use the additional column to enter other reasons as free text.

Data type: List

Select multiple values: No

Measurement unit: Category

Allowed values:

- Avoided conversion
- Conference or training attendance
- Demographics/equity payment
- Enrollment
- Foregone revenue
- Historic data collection
- Identity preservation (supply chain tracing)
- Implementation of practices
- MMRV (e.g., data collection, reporting)
- Passing audit
- Price premium on output
- Yield change
- Other (specify)

Logic: None – all respond

Required: Yes

Data collection level: Producer

Data collection frequency: Quarterly

Incentive structure

Data element name: Incentive structure 1-4 **Reporting question:** What are the units for the financial incentives provided to this producer?

Description: List the structures (units) corresponding to the top 4 (by dollar value) incentive payments to producers. Production unit is weight or volume (bushel, kilogram, ton). The worksheet provides four columns with a drop-down list of the allowed values. Choose one value for each column. If there are fewer than 4 structure types, leave unnecessary columns blank. If "other" is chosen, use the additional column to enter other structure types as free text.

Data type: List

Select multiple values: No

Measurement unit: Category

Allowed values:

- Flat rate
- Per animal head
- Per area
- Per length
- Per production unit
- Per ton GHG
- Per tree
- Other (specify)

Logic: None – all respond

Required: Yes

Data collection level: Producer

Data collection frequency: Quarterly



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Incentive type**Data element name:** Incentive type 1-4**Reporting question:** What type of incentives were provided to each producer?

Description: List the top 4 types of incentive payments to producers (based on dollar value). The worksheet provides four columns with a drop-down list of the allowed values. Choose one value for each column. If there are fewer than 4 incentive types, leave unnecessary columns blank. If "other" is chosen, use the additional column to enter other incentive types as free text.

Data type: List**Select multiple values:** No**Measurement unit:** Category**Allowed values:**

- Cash payment
- Equipment loan
- Guaranteed commodity premium payment
- Inputs and supplies
- Land rental
- Loan
- Paid labor
- Post-harvest transportation
- Tuition or fees for training
- Other (specify)

Logic: None – all respond**Required:** Yes**Data collection level:** Producer**Data collection frequency:** Quarterly**Payment on enrollment****Data element name:** Payment on enrollment**Reporting question:** What portion of the financial incentive is provided to the producer upon enrollment in the project?

Description: Any incentive payment provided to the producer upon enrollment/signing a contract, and not related to any implementation, MMRV or sales activities. Full payment means the full incentive amount for any contract held by the producer is paid upon enrollment. Partial payment means that only part of the full incentive amount for any contract held by the producer is paid upon enrollment. No payment means that none of the full incentive amount for any contract held by the producer is paid upon enrollment.

Data type: List**Select multiple values:** No**Measurement unit:** Category**Allowed values:**

- Full payment
- Partial payment
- No payment

Logic: None – all respond**Required:** Yes**Data collection level:** Producer**Data collection frequency:** Quarterly**Payment on implementation****Data element name:** Payment on implementation**Reporting question:** What portion of the financial incentive is provided to the producer upon implementation of the practices?

Description: Any incentive payment provided to the producer upon implementing the practices included in the contract. Full payment means the full incentive amount for any contract held by the producer is paid upon implementation. Partial payment means that only part of the full incentive amount for any contract held by the producer is paid upon implementation. No payment means that none of the full incentive amount for any contract held by the producer is paid upon implementation.

Data type: List**Select multiple values:** No**Measurement unit:** Category**Allowed values:**

- Full payment
- Partial payment
- No payment

Logic: None – all respond**Required:** Yes**Data collection level:** Producer**Data collection frequency:** Quarterly



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Payment on harvest**Data element name:** Payment on harvest**Reporting question:** What portion of the financial incentive is provided to the producer upon harvest of the commodity?

Description: Any incentive payment provided to the producer upon harvesting or slaughtering the commodity included in the contract. Full payment means the full incentive amount for any contract held by the producer is paid upon harvest. Partial payment means that only part of the full incentive amount for any contract held by the producer is paid upon harvest. No payment means that none of the full incentive amount for any contract held by the producer is paid upon harvest.

Data type: List**Select multiple values:** No**Measurement unit:** Category**Allowed values:**

- Full payment
- Partial payment
- No payment

Logic: None – all respond**Required:** Yes**Data collection level:** Producer**Data collection frequency:** Quarterly**Payment on MMRV****Data element name:** Payment on MMRV**Reporting question:** What portion of the financial incentive is provided to the producer upon completing MMRV requirements?

Description: Any incentive payment provided to the producer upon completing the annual MMRV requirements included in the contract. Full payment means the full incentive amount for any contract held by the producer is paid upon MMRV being complete. Partial payment means that only part of the full incentive amount for any contract held by the producer is paid upon MMRV being complete. No payment means that none of the full incentive amount for any contract held by the producer is paid upon MMRV being complete.

Data type: List**Select multiple values:** No**Measurement unit:** Category**Allowed values:**

- Full payment
- Partial payment
- No payment

Logic: None – all respond**Required:** Yes**Data collection level:** Producer**Data collection frequency:** Quarterly**Payment on sale****Data element name:** Payment on sale**Reporting question:** What portion of the financial incentive is provided to producer upon sale of the commodity?

Description: Any incentive payment provided to the producer upon sale of the commodity included in the contract. Full payment means the full incentive amount for any contract held by the producer is paid upon sale. Partial payment means that only part of the full incentive amount for any contract held by the producer is paid upon sale. No payment means that none of the full incentive amount for any contract held by the producer is paid upon sale.

Data type: List**Select multiple values:** No**Measurement unit:** Category**Allowed values:**

- Full payment
- Partial payment
- No payment

Logic: None – all respond**Required:** Yes**Data collection level:** Producer**Data collection frequency:** Quarterly



Partnerships for Climate-Smart Commodities Data Dictionary for Recipients

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Field Summary**Unique IDs**

Farm ID	Unique Farm ID assigned by FSA
Tract ID	Unique Tract ID assigned by FSA
Field ID	Unique Field ID assigned by FSA
State or territory of field	State name (must match FSA farm enrollment data)
County of field	County name (must match FSA farm enrollment data)

Commodity type

Data element name: Commodity type **Reporting question:** What type of commodity is produced from this field?

Description: Type of commodity produced in field enrolled in the project. See full list in Appendix B. The worksheet provides multiple columns with a drop-down list of the allowed values. Choose one value for each column. Leave unnecessary columns blank.

Data type: List

Select multiple values: No

Measurement unit: Category

Allowed values: FSA commodity list

Logic: None – all respond

Required: Yes

Data collection level: Field

Data collection frequency: Quarterly

Practice type

Data element name: Field practice type 1-7 **Reporting question:** What CSAF practice is being implemented in this field through the project?

Description: Which climate-smart agriculture or forestry (CSAF) practice or practices are being implemented in this project? CSAF practices are included in a list in Appendix A. The worksheet provides seven columns for this data element. Enter one value for each column. If there are fewer than 7 practices being implemented on this field through enrollment in the project, leave unnecessary columns blank.

Data type: List

Select multiple values: No

Measurement unit: Category

Allowed values: See list in Appendix A

Logic: None – all respond

Required: Yes

Data collection level: Field

Data collection frequency: Quarterly

Date practice complete

Data element name: Date practice complete **Reporting question:** When did the project certify CSAF practice implementation as complete?

Description: Date that the project certifies that implementation of the CSAF practice is complete on the field. Use January of the year prior to contract year for early adopters, defined as fields that have the practice actively implemented in the year prior to a contract associated with this project is signed). The worksheet provides seven columns for this data element. Enter one value for each column, corresponding to the practice types entered in the previous columns. If there are fewer than 7 practices being implemented on this field through enrollment in the project, leave unnecessary columns blank.

Data type: Date

Select multiple values: No

Measurement unit: MM/DD/YYYY

Allowed values: 01/01/2023 – 12/31/2030

Logic: None – all respond

Required: Yes

Data collection level: Field

Data collection frequency: Quarterly



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Contract end date**Data element name:** Contract end date**Reporting question:** Contract end date**Description:** End date listed on the contract that enrolls the field in the project. If contract end date changes, submit updated end date during the next quarter's reporting.**Data type:** Date**Select multiple values:** No**Measurement unit:** MM/DD/YYYY**Allowed values:** 01/01/2023 – 12/31/2030**Logic:** None – all respond**Required:** Yes**Data collection level:** Field**Data collection frequency:** Quarterly**MMRV assistance provided****Data element name:** MMRV assistance provided**Reporting question:** Was MMRV assistance provided?**Description:** Was any MMRV assistance provided to the primary operator for this field? MMRV assistance includes in-field support for the use of technologies, consultation on data collection and input, and other support related to MMRV. MMRV is defined a measurement (calculations or estimations of GHG emissions), monitoring (ongoing review and confirmation that the climate-smart practice has been implemented according to the agreed upon standard and documentation of any changes in the site, implementation, or GHG emissions impacts over time), reporting (documenting and sharing monitoring and measurement results with project partners, the recipient, and any third-party verification organization), and verification (independent confirmation that measurement, monitoring and reporting information are complete, accurate and reliable).**Data type:** List**Select multiple values:** No**Measurement unit:** Category**Allowed values:**

- Yes
- No
- I don't know

Logic: None – all respond**Required:** Yes**Data collection level:** Field**Data collection frequency:** Quarterly**Marketing assistance provided****Data element name:** Marketing assistance provided**Reporting question:** Was marketing assistance provided?**Description:** Was any marketing assistance provided to the primary operator for the commodity(ies) produced from this field? Marketing assistance includes guaranteeing the sale of the commodity(ies), providing a platform for the sale of the commodity(ies), providing a label, branding, or other support related to marketing.**Data type:** List**Select multiple values:** No**Measurement unit:** Category**Allowed values:**

- Yes
- No
- I don't know

Logic: None – all respond**Required:** Yes**Data collection level:** Field**Data collection frequency:** Quarterly**Incentive per acre or head****Data element name:** Incentive per acre or head**Reporting question:** Is this field receiving a per-acre or per-head incentive?**Description:** Is this field receiving an incentive payment to implement a specific CSAF practice or set of practices on a per-acre or per-head (livestock) basis?**Data type:** List**Select multiple values:** No**Measurement unit:** Category**Allowed values:**

- Yes
- No
- I don't know

Logic: None – all respond**Required:** Yes**Data collection level:** Field**Data collection frequency:** Quarterly



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Field commodity value

Data element name: Field commodity value	Reporting question: What is the value of the commodity produced on the enrolled field?
Description: The dollar value of the commodity produced on the enrolled field.	
Data type: Decimal	Select multiple values: No
Measurement unit: Dollars	Allowed values: \$1-\$10,000,000
Logic: None – all respond	Required: Yes
Data collection level: Field	Data collection frequency: Quarterly

Field commodity volume

Data element name: Field commodity volume	Reporting question: What is the volume of commodity produced on the enrolled field?
Description: The volume of the commodity produced on the enrolled field	
Data type: Decimal	Select multiple values: No
Measurement unit: Number	Allowed values: 1-10,000,000
Logic: None – all respond	Required: Yes
Data collection level: Field	Data collection frequency: Quarterly

Field commodity volume unit

Data element name: Field commodity volume unit	Reporting question: What is the unit of volume?
Description: The unit associated with the volume of the commodity produced on the enrolled field. If “other” is chosen, enter the appropriate value in the additional column.	
Data type: List	Select multiple values: No
Measurement unit: Category	Allowed values: <ul style="list-style-type: none"> • Bushels • Carcass weight pounds • Gallons • Head • Linear feet • Liveweight pounds • Pounds • Tons • Other (specify)
Logic: None – all respond	Required: Yes
Data collection level: Field	Data collection frequency: Quarterly

Cost of implementation

Data element name: Cost of implementation	Reporting question: What is the cost of practice implementation in the field?
Description: Total annual estimated cost per unit of implementing the practice(s) in the enrolled field.	
Data type: Decimal	Select multiple values: No
Measurement unit: Dollars	Allowed values: \$1-\$10,000,000
Logic: None – all respond	Required: Yes
Data collection level: Field	Data collection frequency: Quarterly



Partnerships for Climate-Smart Commodities Data Dictionary for Recipients

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Cost unit**Data element name:** Cost unit**Reporting question:** What is the unit for cost?**Description:** The unit associated with the cost of implementing CSAF practices in the field. If "other" is chosen, enter the appropriate value in the additional column.**Data type:** List**Select multiple values:** No**Measurement unit:** Category**Allowed values:**

- Per acre
- Per bushel
- Per head
- Per linear foot
- Per pound
- Per ton
- Other (specify)

Logic: None – all respond**Required:** Yes**Data collection level:** Field**Data collection frequency:** Quarterly**Cost coverage****Data element name:** Cost coverage**Reporting question:** What percent of the practice cost is covered by the incentive?**Description:** Estimated proportion of total annual cost of implementing the practice(s) that is covered by project incentives.**Data type:** Integer**Select multiple values:** No**Measurement unit:** Percent**Allowed values:** 0-100**Logic:** None – all respond**Required:** Yes**Data collection level:** Field**Data collection frequency:** Quarterly**Field GHG monitoring****Data element name:** Field GHG monitoring 1-3**Reporting question:** How were GHG impacts monitored in this field?**Description:** Up to the top three forms of monitoring GHG benefits as part of MMRV requirements. Monitoring is defined as ongoing review and confirmation that the climate-smart practice has been implemented according to the agreed upon standard and documentation of any changes in the site, implementation, or GHG emissions impacts over time. Include up to 3 methods, based on which methods are most commonly used for this field. The worksheet provides three columns with a drop-down list of the allowed values. Choose one value for each column. If fewer than 3 GHG monitoring methods are used, leave unnecessary columns blank. If "other" is chosen, use the additional column to enter other GHG monitoring methods as free text.**Data type:** List**Select multiple values:** No**Measurement unit:** Category**Allowed values:**

- Drones
- Ground-level photos and videos
- On-farm inspection
- Plot-based sampling (e.g., soil, water)
- Producer records or attestation
- Satellite monitoring or remote sensing
- Soil metagenomics
- Soil sensors
- Water sensors
- Other (specify)

Logic: None – all respond**Required:** Yes**Data collection level:** Field**Data collection frequency:** Quarterly



Partnerships for Climate-Smart Commodities Data Dictionary for Recipients

February 2023

Field GHG reporting**Data element name:** Field GHG reporting 1-3**Reporting question:** How were GHG benefits reported for this field?

Description: Up to the top three forms of reporting on GHG benefits as part of MMRV requirements. Reporting is defined as documenting and sharing monitoring and measurement results with project partners, the recipient, and any third-party verification organization. Include up to 3 methods, based on which methods are most commonly used for this field. The worksheet provides three columns with a drop-down list of the allowed values. Choose one value for each column. If fewer than 3 GHG reporting methods are used, leave unnecessary columns blank. If "other" is chosen, use the additional column to enter other GHG reporting methods as free text.

Data type: List**Select multiple values:** No**Measurement unit:** Category**Allowed values:**

- Automated devices
- Email
- Mobile app
- Paper
- Third-party actors
- Website
- Other (specify)

Logic: None – all respond**Required:** Yes**Data collection level:** Field**Data collection frequency:** Quarterly**Field GHG verification****Data element name:** Field GHG verification 1-3**Reporting question:** How was implementation of practices to reduce GHG emissions verified for this field?

Description: Up to the top three of verification of GHG benefits as part of MMRV requirements. Verification is defined as independent confirmation that measurement, monitoring and reporting information are complete, accurate and reliable. Include up to 3 methods, based on which methods are most commonly used for this field. The worksheet provides three columns with a drop-down list of the allowed values. Choose one value for each column. If fewer than 3 GHG verification methods are used, leave unnecessary columns blank. If "other" is chosen, use the additional column to enter other GHG verification methods as free text.

Data type: List**Select multiple values:** No**Measurement unit:** Category**Allowed values:**

- Artificial intelligence
- Computer modeling
- Recipient audit
- Photos
- Record audit
- Satellite imagery
- Site or field visit
- Third-party audit
- Other (specify)

Logic: None – all respond**Required:** Yes**Data collection level:** Field**Data collection frequency:** Quarterly



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Field GHG calculations**Data element name:** Field GHG calculations**Reporting question:** What methods are used to calculate GHG benefits in this field?**Description:** List the method(s) used to calculate GHG benefits in this field. If yes to direct physical measurements, submit result reports (see *Supplemental Data Submission – Field direct GHG measurement results*).**Data type:** List**Select multiple values:** No**Measurement unit:** Category**Allowed values:**

- Models
- Direct field measurements
- Both

Logic: None – all respond**Required:** Yes**Data collection level:** Field**Data collection frequency:** Quarterly**Field official GHG calculation****Data element name:** Field official GHG calculation**Reporting question:** What method was used to calculate the official GHG benefits in this field?**Description:** List the method used to calculate the official GHG benefits in this field that are reported as part of the project's aggregate impact.**Data type:** List**Select multiple values:** No**Measurement unit:** Category**Allowed values:**

- Models
- Direct field measurements

Logic: None – all respond**Required:** Yes**Data collection level:** Field**Data collection frequency:** Quarterly**Field official GHG ER****Data element name:** Field official GHG emission reductions**Reporting question:** What are the estimated total GHG emission reductions (CO₂eq) in this field?**Description:** Estimated greenhouse gas emission reductions from practice implementation in this field that are reported as part of the project's aggregate impact. This data element must be entered upon practice completion or annually, as appropriate.**Data type:** Decimal**Select multiple values:** No**Measurement unit:** Metric tons CO₂eq**Allowed values:** 0-10,000,000**Logic:** None – all respond**Required:** Yes**Data collection level:** Field**Data collection frequency:** Quarterly**Field official carbon stock****Data element name:** Field official carbon stock**Reporting question:** How much carbon has been sequestered in this field?**Description:** Estimated total change in carbon stock based on practice implementation in this field. This data element can be reported in any quarter and is cumulative for the year. Conversion rate is one ton of carbon = 3.67 tons of CO₂eq.**Data type:** Decimal**Select multiple values:** No**Measurement unit:** Metric tons CO₂eq**Allowed values:** 0-10,000,000**Logic:** None – all respond**Required:** Yes**Data collection level:** Field**Data collection frequency:** Quarterly



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Field official CO2 ER**Data element name:** Field official CO2 emission reductions**Reporting question:** What are the estimated total CO2 emission reductions in this field?**Description:** Estimated total carbon dioxide emission reductions based on practice implementation in this field that are reported as part of the project's aggregate impact. This data element must be entered upon practice completion or annually, as appropriate.**Data type:** Decimal**Select multiple values:** No**Measurement unit:** Metric tons CO₂**Allowed values:** 0-10,000,000**Logic:** None – all respond**Required:** Yes**Data collection level:** Field**Data collection frequency:** Quarterly**Field official CH4 ER****Data element name:** Field official CH4 emission reductions**Reporting question:** What are the estimated total CH4 emission reductions in this field?**Description:** Estimated total methane emission reductions based on practice implementation in this field that are reported as part of the project's aggregate impact. This data element must be entered upon practice completion or annually, as appropriate. Conversion rate is one ton of CH₄ = 25 tons of CO₂eq.**Data type:** Decimal**Select multiple values:** No**Measurement unit:** Metric tons CH4 reduced in CO₂eq**Allowed values:** 0-10,000,000**Logic:** None – all respond**Required:** Yes**Data collection level:** Field**Data collection frequency:** Quarterly**Field official N2O ER****Data element name:** Field official N2O emission reductions**Reporting question:** What are the estimated total N2O emission reductions in this field?**Description:** Estimated total nitrous oxide emission reductions based on practice implementation in this field that are reported as part of the project's aggregate impact. This data element must be entered upon practice completion or annually, as appropriate. Conversion rate is one ton of N₂O = 298 tons of CO₂eq.**Data type:** Decimal**Select multiple values:** No**Measurement unit:** Metric tons N2O reduced in CO₂eq**Allowed values:** 0-10,000,000**Logic:** None – all respond**Required:** Yes**Data collection level:** Field**Data collection frequency:** Quarterly**Field offsets produced****Data element name:** Field offsets produced**Reporting question:** How many carbon offsets have been produced in this field?**Description:** Total carbon offsets produced in the field during the quarter (not cumulative). Offsets are defined as having been verified and certified using an accepted standard and sold into the carbon marketplace.**Data type:** Decimal**Select multiple values:** No**Measurement unit:** Metric tons CO₂eq**Allowed values:** 0-10,000,000**Logic:** None – all respond**Required:** Yes**Data collection level:** Field**Data collection frequency:** Quarterly



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Field insets produced

Data element name: Field insets produced **Reporting question:** How many carbon insets have been produced in this field?

Description: Total carbon insets produced in the field during the quarter (not cumulative). Insets are defined as having been verified and certified using an accepted standard and accounted for within Scope 3 emissions for a firm.

Data type: Decimal

Select multiple values: No

Measurement unit: Metric tons CO₂eq

Allowed values: 0-10,000,000

Logic: None – all respond

Required: Yes

Data collection level: Field

Data collection frequency: Quarterly

Other field measurement

Data element name: Other field measurement **Reporting question:** Were data collected from the field for reasons other than GHG benefit estimation?

Description: Direct physical measurements or data collection taken in the field for any reason other than GHG benefits estimation. These reasons could include calibration of GHG estimation tools or models, tracking other environmental benefits (see Field environmental benefits report), and other reasons. If yes, submit corresponding reports (see *Supplemental data submission - Field direct measurement results*).

Data type: List

Select multiple values: No

Measurement unit: Category

Allowed values:

- Yes
- No
- I don't know

Logic: None – all respond

Required: Yes

Data collection level: Field

Data collection frequency: Quarterly



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GHG Benefits - Alternate Modeled**Unique IDs**

Farm ID	Unique Farm ID assigned by FSA
Tract ID	Unique Tract ID assigned by FSA
Field ID	Unique Field ID assigned by FSA
State or territory of field	State name (must match FSA farm enrollment data)
County of field	County name (must match FSA farm enrollment data)

Commodity type**Data element name:** Commodity type 1-6**Reporting question:** What type of commodity(ies) is produced from this field?

Description: Type of commodity(ies) produced in field enrolled in the project. See full list of commodity options in Appendix B. The worksheet provides multiple columns with drop-down lists of the allowed values. Choose one value for each column. Leave unnecessary columns blank

Data type: List**Select multiple values:** No**Measurement unit:** Category**Allowed values:** FSA commodity list**Logic:** None – all respond**Required:** If project calculates GHG benefits using multiple methods**Data collection level:** Field**Data collection frequency:** Annual**Practice type****Data element name:** Practice type 1-7**Reporting question:** What CSAF practice is being implemented by this project?

Description: Which CSAF practice or practices are being implemented in this project? CSAF practices are included in a list in Appendix A. The worksheet provides seven columns for this data element. Enter one value for each column. If there are fewer than 7 practices being implemented by the project, leave unnecessary columns blank.

Data type: List**Select multiple values:** No**Measurement unit:** Category**Allowed values:** See list in Appendix A**Logic:** None – all respond**Required:** If project calculates GHG benefits using multiple methods**Data collection level:** Field**Data collection frequency:** Annual



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GHG model**Data element name:** GHG model **Reporting question:** What model was used for alternate calculation of GHG benefits?**Description:** Select the model used for the alternate calculation of the field's GHG benefits.**Data type:** List**Select multiple values:** No**Measurement unit:** Category**Allowed values:**

- ACC Calculator
- Agriculture, Forestry and Other Land Use (AFOLU) Carbon Calculator
- AIRES
- APEX
- Bowen Ratio Energy Balance
- Carat-Calculator
- CArPE
- CDFA web-based calculator
- COMET-Farm
- COMET-Planner
- CoolFarm
- Cover Crop Explore
- CropTrak
- CultivateAI's FMIS
- DayCent-CR
- DNDC
- DSSAT
- Earth Optics
- EcoPractices
- EPIC
- Extrapolation based on literature
- FieldPrint
- Granular
- GREET
- gTIR
- IFSM
- IPCC default emissions factors & models
- itree
- Nitrogen Balance
- Nutrient Tracking Tool (NTT)
- RCD Project Tracker
- Revised Universal Soil Loss equation 2 (RUSLE2)
- RuFaS
- SAFE-Link
- SALUS (CIBO)
- SNAPGRAZE
- SquareRoots
- SWAT-C
- SYMFONI
- Truterra Sustainability Tool
- Verra
- WEPP
- YardStick
- Other (specify)

Logic: None – all respond**Required:** If project calculates GHG benefits using multiple methods**Data collection level:** Field**Data collection frequency:** Annual



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Model start date**Data element name:** Model start date**Reporting question:** For what time period are the GHG benefits modeled (model start date)?**Description:** Date that the model parameters begin.**Data type:** Date**Select multiple values:** NA**Measurement unit:** MM/DD/YYYY**Allowed values:** 01/01/1950 – 12/31/2030**Logic:** None – all respond**Required:** If project calculates GHG benefits using multiple methods**Data collection level:** Field**Data collection frequency:** Annual**Model end date****Data element name:** Model end date**Reporting question:** For what time period are the GHG benefits modeled (model end date)?**Description:** Date that the model parameters end.**Data type:** Date**Select multiple values:** NA**Measurement unit:** MM/DD/YYYY**Allowed values:** 01/01/2023– 12/31/2030**Logic:** None – all respond**Required:** If project calculates GHG benefits using multiple methods**Data collection level:** Field**Data collection frequency:** Annual**Total GHG benefits estimated****Data element name:** Total GHG benefits estimated**Reporting question:** What is the alternate estimate of the field's total GHG emission reductions?**Description:** Total greenhouse gas emission reductions from practice implementation in the field estimated using an alternate model.**Data type:** Decimal**Select multiple values:** No**Measurement unit:** Metric tons CO₂eq**Allowed values:** 0-10,000,000**Logic:** None – all respond**Required:** If project calculates GHG benefits using multiple methods**Data collection level:** Field**Data collection frequency:** Annual**Total carbon stock estimated****Data element name:** Total carbon stock estimated**Reporting question:** What is the alternate estimate of how much carbon has the field has sequestered?**Description:** Total change in carbon stock based on practice implementation in the field estimated using an alternate model. Conversion rate is one ton of carbon = 3.67 tons of CO₂eq.**Data type:** Decimal**Select multiple values:** No**Measurement unit:** Metric tons CO₂eq**Allowed values:** 0-10,000,000**Logic:** None – all respond**Required:** If project calculates GHG benefits using multiple methods**Data collection level:** Field**Data collection frequency:** Annual**Total CO₂ estimated****Data element name:** Total CO₂ estimated**Reporting question:** What is the alternate estimate of the field's total CO₂ emission reductions?**Description:** Total carbon dioxide emission reductions based on practice implementation in the field estimated using an alternate model.**Data type:** Decimal**Select multiple values:** No**Measurement unit:** Metric tons CO₂**Allowed values:** 0-10,000,000**Logic:** None – all respond**Required:** If project calculates GHG benefits using multiple methods**Data collection level:** Field**Data collection frequency:** Annual



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February 2023

Total CH4 estimated**Data element name:** Total CH4 estimated**Reporting question:** What is the alternate estimate of the field's total CH4 emission reductions?**Description:** Total methane emission reductions based on practice implementation in the field estimated using an alternate model. Conversion rate is one ton of CH₄ = 25 tons of CO₂eq.**Data type:** Decimal**Select multiple values:** No**Measurement unit:** Metric tons CH4 reduced in CO₂eq**Allowed values:** 0-10,000,000**Logic:** None – all respond**Required:** If project calculates GHG benefits using multiple methods**Data collection level:** Field**Data collection frequency:** Annual**Total field N2O estimated****Data element name:** Total N2O estimated**Reporting question:** What is the alternate estimate of the field's total N2O emission reductions?**Description:** Total nitrous oxide emission reductions based on practice implementation in the field estimated using an alternate method. Conversion rate is one ton of N₂O = 298 tons of CO₂eq.**Data type:** Decimal**Select multiple values:** No**Measurement unit:** Metric tons N2O reduced in CO₂eq**Allowed values:** 0-10,000,000**Logic:** None – all respond**Required:** If project calculates GHG benefits using multiple methods**Data collection level:** Field**Data collection frequency:** Annual



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GHG Benefits - Measured**Unique IDs**

Farm ID	Unique Farm ID assigned by FSA
Tract ID	Unique Tract ID assigned by FSA
Field ID	Unique Field ID assigned by FSA
State or territory of field	State name (must match FSA farm enrollment data)
County of field	County name (must match FSA farm enrollment data)

GHG measurement method**Data element name:** GHG measurement method**Reporting question:** What measurement method is used to calculate GHG benefits?**Description:** Field-based measurement method used to calculate GHG benefits. If “other” is chosen, enter the appropriate value as free text in the additional column.**Data type:** List**Measurement unit:** Category**Select multiple values:** No**Allowed values:**

- Emissions measurement unit
- Flux towers
- Litterbags
- Plant measurements
- Portable emissions analyzers
- Soil flux chambers
- Soil samples
- Soil sensors
- Vehicle-mounted sensors
- Other (specify)

Required: If a project conducts soil samples or takes carbon stock or greenhouse gas emission measurements in this field**Logic:** None – all respond**Data collection level:** Field**Data collection frequency:** Annual**Lab name****Data element name:** Lab name**Reporting question:** What is the name of the lab that processed the measurement samples?**Description:** Name of entity that received data and conducted analysis of samples.**Data type:** Text**Select multiple values:** No**Measurement unit:** NA**Allowed values:** Free text**Logic:** None – all respond**Required:** If applicable**Data collection level:** Field**Data collection frequency:** Annual



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Measurement start date**Data element name:** Measurement start date**Reporting question:** On what date did the measurement start?**Description:** Date that the measurements began. If it was a single point in time, use the same date for start date and end date. If multiple measurements took place over a time period, use the date that the measurements first began.**Data type:** Date**Select multiple values:** No**Measurement unit:** MM/DD/YYYY**Allowed values:** 01/01/2023 – 12/31/2030**Logic:** None – all respond**Required:** If a project conducts soil samples or takes carbon stock or greenhouse gas emission measurements in this field**Data collection level:** Field**Data collection frequency:** Annual**Measurement end date****Data element name:** Measurement end date**Reporting question:** On what date did the measurement end?**Description:** Date that the measurements began. If it was a single point in time, use the same date for start date and end date. If multiple measurements took place over a time period, use the date that the measurements were completed.**Data type:** Date**Select multiple values:** No**Measurement unit:** MM/DD/YYYY**Allowed values:** 01/01/2023– 12/31/2030**Logic:** None – all respond**Required:** If a project conducts soil samples or takes carbon stock or greenhouse gas emission measurements in this field**Data collection level:** Field**Data collection frequency:** Annual**Total CO2 reduction calculated****Data element name:** Total CO2 reduction calculated**Reporting question:** What are the total measured CO2 emission reductions?**Description:** Total annual CO2 emission reductions based on practice implementation in the field calculated from in-field measurements.**Data type:** Decimal**Select multiple values:** No**Measurement unit:** Metric tons CO₂**Allowed values:** 0-10,000,000**Logic:** None – all respond**Required:** If a project takes carbon stock or greenhouse gas emission measurements in this field**Data collection level:** Field**Data collection frequency:** Annual**Total field carbon stock measured****Data element name:** Total field carbon stock measured**Reporting question:** What is the total amount of carbon sequestered based on repeat measurements in this field?**Description:** Change in carbon stock based on practice implementation in the field calculated from repeat soil sampling in this field. (Results for initial field soil samples should be reported in the 'Soil sample result' and 'Measurement type' columns.) Conversion rate is one ton of carbon = 3.67 tons of CO₂eq.**Data type:** Decimal**Select multiple values:** No**Measurement unit:** Metric tons CO₂eq**Allowed values:** 0-10,000,000**Logic:** None – all respond**Required:** If a project conducts soil samples or takes carbon stock measurements in this field**Data collection level:** Field**Data collection frequency:** Annual



Partnerships for Climate-Smart Commodities Data Dictionary for Recipients

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Total CH4 reduction calculated**Data element name:** Total CH4 reduction calculated**Reporting question:** What are the total measured CH4 emission reductions?**Description:** Total annual methane emission reductions based on practice implementation in the field calculated from in-field measurements. Conversion rate is one ton of CH₄ = 25 tons of CO₂eq.**Data type:** Decimal**Select multiple values:** No**Measurement unit:** Metric tons CH4 reduced in CO₂eq**Allowed values:** 0-10,000,000**Logic:** None – all respond**Required:** If a project conducts soil samples or takes carbon stock or greenhouse gas emission measurements in this field**Data collection level:** Field**Data collection frequency:** Annual**Total N2O reduction calculated****Data element name:** Total N2O reduction calculated**Reporting question:** What are the total measured N2O emission reductions?**Description:** Total annual nitrous oxide emission reductions based on practice implementation in the field calculated from in-field measurements. Conversion rate is one ton of N₂O = 298 tons of CO₂eq.**Data type:** Decimal**Select multiple values:** No**Measurement unit:** Metric tons N2O reduced in CO₂eq**Allowed values:** 0-10,000,000**Logic:** None – all respond**Required:** If a project conducts soil samples or takes carbon stock or greenhouse gas emission measurements in this field**Data collection level:** Field**Data collection frequency:** Annual**Soil sample result****Data element name:** Soil sample result**Reporting question:** What is the numeric result from this soil sample?**Description:** Results of measurement(s) taken to determine the carbon stock of a soil (the tons of carbon found in a specified volume of soil).**Data type:** Decimal**Select multiple values:** No**Measurement unit:** Amount**Allowed values:** .00001-100,000**Logic:** None – all respond**Required:** If a project conducts soil samples in this field**Data collection level:** Field**Data collection frequency:** Annual



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Soil sample result unit**Data element name:** Soil sample result unit **Reporting question:** What is unit for the soil sample result?**Description:** Unit for the corresponding soil sample result. The worksheet provides a drop-down list of choices for this data element. If "other" is chosen, use the additional column to enter the appropriate yield unit as free text.**Data type:** List**Select multiple values:** No**Measurement unit:** Category**Allowed values:**

- Percent
- Ppm
- Grams
- Grams per cubic centimeter
- Other (specify)

Logic: None – all respond**Required:** If a project conducts soil samples in this field**Data collection level:** Field**Data collection frequency:** Annual**Measurement type****Data element name:** Measurement type**Reporting question:** What type of analysis was conducted for this soil sample?**Description:** Type of soil analysis conducted. The worksheet provides a drop-down list of choices for this data element. If "other" is chosen, use the additional column to enter the appropriate yield unit as free text.**Data type:** List**Select multiple values:** No**Measurement unit:** Category**Allowed values:**

- Organic matter
- Total organic carbon
- Bulk density
- Other (specify)

Logic: None – all respond**Required:** If a project conducts soil samples in this field**Data collection level:** Field**Data collection frequency:** Annual



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Additional Environmental Benefits**Unique IDs**

Farm ID	Unique Farm ID assigned by FSA
Tract ID	Unique Tract ID assigned by FSA
Field ID	Unique Field ID assigned by FSA
State or territory of field	State name (must match FSA farm enrollment data)
County of field	County name (must match FSA farm enrollment data)

Environmental benefits

Data element name: Environmental benefits

Reporting question: Are environmental benefits other than GHGs being tracked in the field?

Description: Tracking of environmental benefits other than greenhouse gas emission reductions and carbon sequestration in the enrolled field. Tracking means at a minimum using some form of monitoring and reporting that can quantify benefits.

Data type: List

Select multiple values: No

Measurement unit: Category

Allowed values:

- Yes
- No
- I don't know

Logic: None – all respond

Required: Yes

Data collection level: Field

Data collection frequency: Annual

Reduction in nitrogen loss

Data element name: Reduction in nitrogen loss

Reporting question: Are reductions in nitrogen losses being tracked in the field?

Description: Tracking reductions in nitrogen losses in the enrolled field. Tracking means at a minimum using some form of monitoring and reporting that can quantify benefits.

Data type: List

Select multiple values: No

Measurement unit: Category

Allowed values:

- Yes
- No
- I don't know

Logic: Respond if yes to 'Environmental benefits'

Required: Yes

Data collection level: Field

Data collection frequency: Annual

Reduction in nitrogen loss amount

Data element

name: Reduction in nitrogen loss amount

Reporting question: How much reduction in nitrogen losses have been measured in the field?

Description: Total amount of reduction in nitrogen losses that is measured and reported in the enrolled field.

Data type: Decimal

Select multiple values: No

Measurement unit: Amount

Allowed values: 0-1,000,000

Logic: Respond if yes to 'Reduction in nitrogen loss'

Required: Yes

Data collection level: Field

Data collection frequency: Annual



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Reduction in nitrogen loss amount unit**Data element name:** Reduction in nitrogen loss amount unit**Description:** Unit for the total amount of reduction in nitrogen losses that is measured and reported in the enrolled field. If "other" is chosen, enter the appropriate value as free text in the additional column.**Data type:** List**Measurement unit:** Category**Reporting question:** What is the unit for how much reduction in nitrogen losses have been measured in the field?**Select multiple values:** No**Allowed values:**

- Kilograms
- Metric tons
- Pounds
- Other (specify)

Required: Yes**Logic:** Respond if yes to 'Reduction in nitrogen loss'**Data collection level:** Field**Data collection frequency:** Annual**Reduction in nitrogen loss purpose****Data element name:** Reduction in nitrogen loss purpose**Description:** Purpose of tracking reduction in nitrogen losses in the enrolled field. If "other" is chosen, enter the appropriate value as free text in the additional column.**Data type:** List**Measurement unit:** Category**Reporting question:** What is the purpose of tracking reduction in nitrogen losses?**Select multiple values:** No**Allowed values:**

- Commodity marketing
- Producing insets
- Producing offsets
- I don't know
- Other (specify)

Required: Yes**Logic:** Respond if yes to 'Reduction in nitrogen loss'**Data collection level:** Project**Data collection frequency:** Annual**Reduction in phosphorus loss****Data element name:** Reduction in phosphorus loss**Description:** Tracking of reductions in phosphorus losses in the enrolled field. Tracking means at a minimum using some form of monitoring and reporting that can quantify benefits.**Data type:** List**Measurement unit:** Category**Reporting question:** Are reductions in phosphorus losses being tracked in the field?**Select multiple values:** No**Allowed values:**

- Yes
- No
- I don't know

Required: Yes**Logic:** Respond if yes to 'Environmental benefits'**Data collection level:** Field**Data collection frequency:** Annual**Reduction in phosphorus loss amount****Data element name:** Reduction in phosphorus loss amount**Description:** Total amount of reduction in phosphorus losses that is measured in the field.**Data type:** Decimal**Measurement unit:** Amount**Reporting question:** How much reduction in phosphorus losses have been measured in the field?**Select multiple values:** No**Allowed values:** 0-1,000,000**Required:** Yes**Logic:** Respond if yes to 'Reduction in phosphorus loss'**Data collection level:** Field**Data collection frequency:** Annual



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Reduction in phosphorus loss amount unit**Data element name:** Reduction in phosphorus loss amount unit**Description:** Unit for the total amount of reduction in phosphorus losses that is measured in the enrolled field. If "other" is chosen, enter the appropriate value as free text in the additional column.**Data type:** List**Measurement unit:** Category**Reporting question:** What is the unit for the reduction in phosphorus losses measured in the field?**Select multiple values:** No**Allowed values:**

- Kilograms
- Metric tons
- Pounds
- Other (specify)

Required: Yes**Logic:** Respond if yes to 'Reduction in phosphorus loss'**Data collection level:** Field**Data collection frequency:** Annual**Reduction in phosphorus loss purpose****Data element name:** Reduction in phosphorus loss purpose**Description:** Purpose of tracking reduction in phosphorus losses in the enrolled field. If "other" is chosen, enter the appropriate value as free text in the additional column.**Data type:** List**Measurement unit:** Category**Reporting question:** What is the purpose of tracking reductions in phosphorus losses?**Select multiple values:** No**Allowed values:**

- Commodity marketing
- Producing insets
- Producing offsets
- I don't know
- Other (specify)

Required: Yes**Logic:** Respond if yes to 'Reduction in phosphorus loss'**Data collection level:** Field**Data collection frequency:** Annual**Other water quality****Data element name:** Other water quality**Reporting question:** Are other water quality metrics being tracked in the field?**Description:** Project tracking of other water quality metrics in the enrolled field. Tracking means at a minimum using some form of monitoring and reporting that can quantify benefits.**Data type:** List**Measurement unit:** Category**Select multiple values:** No**Allowed values:**

- Yes
- No
- I don't know

Required: Yes**Logic:** Respond if yes to 'Environmental benefits'**Data collection level:** Field**Data collection frequency:** Annual



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Other water quality type**Data element name:** Other water quality type**Description:** Type of other water quality metric (besides nitrogen loss and phosphorus loss reductions) that is measured in the field. If "other" is chosen, enter the appropriate value as free text in the additional column.**Data type:** List**Measurement unit:** Category**Logic:** Respond if yes to 'Other water quality'**Data collection level:** Field**Reporting question:** What type of other water quality metric have been measured in the field?**Select multiple values:** No**Allowed values:**

- Sediment load reduction
- Temperature
- Other (specify)

Required: Yes**Data collection frequency:** Annual**Other water quality amount****Data element name:** Other water quality amount**Description:** Total amount of reduction in other water quality metrics that is measured in the enrolled field.**Data type:** Decimal**Measurement unit:** Amount**Logic:** Respond if yes to 'Other water quality'**Data collection level:** Field**Reporting question:** How much reduction in other water quality metrics have been measured in the field?**Select multiple values:** No**Allowed values:** 0-1,000,000**Required:** Yes**Data collection frequency:** Annual**Other water quality amount unit****Data element name:** Other water quality amount unit**Description:** Unit for the total amount of reduction in other water quality metrics that is measured in the enrolled field. If "other" is chosen, enter the appropriate value as free text in the additional column.**Data type:** List**Measurement unit:** Category**Logic:** Respond if yes to 'Other water quality'**Data collection level:** Field**Reporting question:** What is the unit for the reduction in other water quality metrics measured in the field?**Select multiple values:** No**Allowed values:**

- Degrees F
- Kilograms
- Kilograms per liter
- Metric tons
- Pounds
- Other (specify)

Required: Yes**Data collection frequency:** Annual



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Other water quality purpose**Data element name:** Other water quality purpose**Description:** Purpose of tracking other water quality benefits in the enrolled field. If "other" is chosen, enter the appropriate value as free text in the additional column.**Data type:** List**Measurement unit:** Category**Reporting question:** What is the purpose of tracking other water quality benefits?**Select multiple values:** No**Allowed values:**

- Commodity marketing
- Producing insets
- Producing offsets
- I don't know
- Other (specify)

Required: Yes**Logic:** Respond if yes to 'Other water quality'**Data collection level:** Field**Data collection frequency:** Annual**Water quantity****Data element name:** Water quantity**Reporting question:** Is water conservation being tracked in the field?**Description:** Tracking of water conservation or reduction in use in the enrolled field. Tracking means at a minimum using some form of monitoring and reporting that can quantify benefits.**Data type:** List**Measurement unit:** Category**Select multiple values:** No**Allowed values:**

- Yes
- No
- I don't know

Required: Yes**Logic:** Respond if yes to 'Environmental benefits'**Data collection level:** Field**Data collection frequency:** Annual**Water quantity amount****Data element name:** Water quantity amount**Reporting question:** How much water conservation has been measured in the field?**Description:** Total amount of water conservation or reduction that is measured in the field.**Data type:** Decimal**Measurement unit:** Amount**Select multiple values:** No**Allowed values:** 0-1,000,000**Logic:** Respond if yes to 'Water quantity'**Required:** Yes**Data collection level:** Field**Data collection frequency:** Annual**Water quantity amount unit****Data element name:** Water quantity amount unit**Reporting question:** What is the unit for the amount of water conservation measured in the field?**Description:** Unit for the total amount of water conservation or reduced use that is measured and reported in the enrolled field. If "other" is chosen, enter the appropriate value as free text in the additional column.**Data type:** List**Measurement unit:** Category**Select multiple values:** No**Allowed values:**

- Acre-feet
- Cubic feet
- Other (specify)

Required: Yes**Logic:** Respond if yes to 'Water quantity'**Data collection level:** Field**Data collection frequency:** Annual



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Water quantity purpose**Data element name:** Water quantity purpose**Description:** Purpose of tracking water conservation or reductions in water use in the enrolled field. If "other" is chosen, enter the appropriate value as free text in the additional column.**Data type:** List**Measurement unit:** Category**Reporting question:** What is the purpose of tracking water conservation?**Select multiple values:** No**Allowed values:**

- Commodity marketing
- Producing insets
- Producing offsets
- I don't know
- Other (specify)

Logic: Respond if yes to 'Water quantity'**Required:** Yes**Data collection level:** Field**Data collection frequency:** Annual**Reduced erosion****Data element name:** Reduced erosion**Reporting question:** Is reduced soil erosion being tracked in the field?**Description:** Tracking of reduced soil erosion in the enrolled field. Tracking means at a minimum using some form of monitoring and reporting that can quantify benefits.**Data type:** List**Select multiple values:** No**Measurement unit:** Category**Allowed values:**

- Yes
- No
- I don't know

Logic: Respond if yes to 'Environmental benefits'**Required:** Yes**Data collection level:** Field**Data collection frequency:** Annual**Reduced erosion amount****Data element name:** Reduced erosion amount**Reporting question:** How much erosion reduction has been measured in the field?**Description:** Total amount of erosion reduction that is measured in the enrolled field.**Data type:** Decimal**Select multiple values:** No**Measurement unit:** Amount**Allowed values:** 0-1,000,000**Logic:** Respond if yes to 'Reduced erosion'**Required:** Yes**Data collection level:** Field**Data collection frequency:** Annual**Reduced erosion amount unit****Data element name:** Reduced erosion unit**Reporting question:** What is the unit for the amount of erosion reduction measured?**Description:** Unit for the total amount of erosion reduction from enrolled fields that is measured and reported by the project. If "other" is chosen, enter the appropriate value as free text in the additional column.**Data type:** List**Select multiple values:** No**Measurement unit:** Category**Allowed values:**

- Tons
- Other (specify)

Logic: Respond if yes to 'Reduced erosion'**Required:** Yes**Data collection level:** Field**Data collection frequency:** Annual



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Reduced erosion purpose**Data element name:** Reduced erosion purpose**Description:** Purpose of tracking reduced erosion the enrolled field. If "other" is chosen, enter the appropriate value as free text in the additional column.**Data type:** List**Measurement unit:** Category**Reporting question:** What is the purpose of tracking reduced erosion in the field?**Select multiple values:** No**Allowed values:**

- Commodity marketing
- Producing insets
- Producing offsets
- I don't know
- Other (specify)

Logic: Respond if yes to 'Reduced erosion'**Required:** Yes**Data collection level:** Field**Data collection frequency:** Annual**Reduced energy use****Data element name:** Reduced energy use**Reporting question:** Is reduced energy use being tracked in the field?**Description:** Tracking of reduced energy use in the enrolled field. Tracking means at a minimum using some form of monitoring and reporting that can quantify benefits.**Data type:** List**Select multiple values:** No**Measurement unit:** Category**Allowed values:**

- Yes
- No
- I don't know

Logic: Respond if yes to 'Environmental benefits'**Required:** Yes**Data collection level:** Field**Data collection frequency:** Annual**Reduced energy use amount****Data element name:** Reduced energy use amount**Reporting question:** How much energy use reduction has been measured in the field?**Description:** Total amount of energy use reduction that is measured in the enrolled field.**Data type:** Decimal**Select multiple values:** No**Measurement unit:** Amount**Allowed values:** 0-1,000,000**Logic:** Respond if yes to 'Reduced energy use'**Required:** Yes**Data collection level:** Field**Data collection frequency:** Annual**Reduced energy use amount unit****Data element name:** Reduced energy use unit**Reporting question:** What is the unit for the energy use reduction measured in the field?**Description:** Unit for the total amount of energy use reduction that is measured in the enrolled field. If "other" is chosen, enter the appropriate value as free text in the additional column.**Data type:** List**Select multiple values:** No**Measurement unit:** Category**Allowed values:**

- Kilowatt hours
- Other (specify)

Logic: Respond if yes to 'Reduced energy use'**Required:** Yes**Data collection level:** Field**Data collection frequency:** Annual



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Reduced energy use purpose**Data element name:** Reduced energy use purpose**Description:** Purpose of tracking reduced energy use in the enrolled field. If "other" is chosen, enter the appropriate value as free text in the additional column.**Data type:** List**Measurement unit:** Category**Logic:** Respond if yes to 'Reduced energy use'**Data collection level:** Field**Reporting question:** What is the purpose of tracking reduced energy use in the field?**Select multiple values:** No**Allowed values:**

- Commodity marketing
- Producing insets
- Producing offsets
- I don't know
- Other (specify)

Required: Yes**Data collection frequency:** Annual**Avoided land conversion****Data element name:** Avoided land conversion**Description:** Tracking of avoided land conversion in the enrolled field. Tracking means at a minimum using some form of monitoring and reporting that can quantify benefits. Land conservation means land use changing from agricultural uses to non-agricultural uses.**Data type:** List**Measurement unit:** Category**Logic:** Respond if yes to 'Environmental benefits'**Data collection level:** Field**Reporting question:** Is avoided land conversion being tracked in the field?**Select multiple values:** No**Allowed values:**

- Yes
- No
- I don't know

Required: Yes**Data collection frequency:** Annual**Avoided land conversion amount****Data element name:** Avoided land conversion amount**Description:** Total amount of avoided land conversion that is measured in the enrolled field.**Data type:** Decimal**Measurement unit:** Amount**Logic:** Respond if yes to 'Avoided land conversion'**Data collection level:** Field**Reporting question:** How much avoided land conversion has been measured in the field?**Select multiple values:** No**Allowed values:** 0-1,000,000**Required:** Yes**Data collection frequency:** Annual**Avoided land conversion amount unit****Data element name:** Avoided land conversion unit**Description:** Unit for the total amount of avoided land conversion that is measured in the enrolled field. If "other" is chosen, enter the appropriate value as free text in the additional column.**Data type:** List**Measurement unit:** Category**Logic:** Respond if yes to 'Avoided land conversion'**Data collection level:** Field**Reporting question:** What is the unit for the amount of avoided land conversion measured in the field?**Select multiple values:** No**Allowed values:**

- Acres
- Other (specify)

Required: Yes**Data collection frequency:** Annual



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Avoided land conversion purpose**Data element name:** Avoided land conversion purpose**Description:** Purpose of tracking avoided land conversion in the enrolled field. If "other" is chosen, enter the appropriate value as free text in the additional column.**Data type:** List**Measurement unit:** Category**Reporting question:** What is the purpose of tracking avoided land conversion in the field?**Select multiple values:** No**Allowed values:**

- Commodity marketing
- Producing insets
- Producing offsets
- I don't know
- Other (specify)

Required: Yes**Logic:** Respond if yes to 'Avoided land conversion'**Data collection level:** Field**Data collection frequency:** Annual**Improved wildlife habitat****Data element name:** Improved wildlife habitat**Description:** Tracking of improvements to wildlife in and around the enrolled field. Tracking means at a minimum using some form of monitoring and reporting that can quantify benefits.**Data type:** List**Measurement unit:** Category**Reporting question:** Are improvements to wildlife habitat being tracked in the field?**Select multiple values:** No**Allowed values:**

- Yes
- No
- I don't know

Required: Yes**Logic:** Respond if yes to 'Environmental benefits'**Data collection level:** Field**Data collection frequency:** Annual**Improved wildlife habitat amount****Data element name:** Improved wildlife habitat amount**Description:** Total amount of improved wildlife habitat that is measured in and around the enrolled fields.**Data type:** Decimal**Measurement unit:** Amount**Reporting question:** How much improved wildlife habitat has been measured in the field?**Select multiple values:** No**Allowed values:** 0-1,000,000**Logic:** Respond if yes to 'Improved wildlife habitat'**Required:** Yes**Data collection level:** Field**Data collection frequency:** Annual**Improved wildlife habitat amount unit****Data element name:** Improved wildlife habitat unit**Description:** Unit for the total amount of improved wildlife habitat that is measured in and around enrolled fields. If "other" is chosen, enter the appropriate value as free text in the additional column.**Data type:** List**Measurement unit:** Category**Reporting question:** What is the unit for the amount of improved wildlife habitat measured in the field?**Select multiple values:** No**Allowed values:**

- Acres
- Linear feet
- Other (specify)

Required: Yes**Logic:** Respond if yes to 'Improved wildlife habitat'**Data collection level:** Field**Data collection frequency:** Annual



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Improved wildlife habitat purpose**Data element name:** Improved wildlife habitat purpose**Description:** Purpose of tracking improved wildlife habitat in the enrolled field. If "other" is chosen, enter the appropriate value as free text in the additional column.**Data type:** List**Measurement unit:** Category**Reporting question:** What is the purpose of tracking improved wildlife habitat in the field?**Select multiple values:** No**Allowed values:**

- Commodity marketing
- Producing insets
- Producing offsets
- I don't know
- Other (specify)

Logic: Respond if yes to 'Improved wildlife habitat'**Required:** Yes**Data collection level:** Field**Data collection frequency:** Annual



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CSAF Practice Sub-questions

For some CSAF practices, there is an additional set of questions that are unique to each practice. Responses to these questions are needed to verify estimated GHG benefits of these practices. If a field is implementing a CSAF practice with an NRCS CPS code in Table 11, answer the follow-up questions listed next to the relevant practice name in the table. Use the *Supplemental Reporting Workbook – CSAF Practice Sub-questions* to report the required information.

Table 11. Follow-on questions for select CSAF practices

Practice name and code	Follow-up question	Options (select one)
Alley Cropping (CPS 311)	Species category (select most common/extensive type if using more than one)	Coniferous trees Deciduous trees Shrubs
	Species density (number of trees planted per acre)	1-10,000
Anaerobic Digester (CPS 366)	Waste storage system prior to installing anaerobic digester	Aerobic lagoon Anaerobic digester (complex mix) with energy generation Anaerobic digester (plug flow) with energy generation Anaerobic lagoon Composting Covered lagoon (no energy generation or flaring) Covered lagoon with energy generation Covered lagoon with flaring Daily spread Deep bedding pack Deep pit Dry lot Dry stacking/solid storage Pasture/range/paddock Poultry with bedding Poultry without bedding (e.g., high rise) Slurry tank/basin
		Covered lagoon with energy generation Covered lagoon with flaring Covered lagoon (no energy generation or flaring) Complex mix with energy generation Plug flow with energy generation Other (specify)
		Food waste Straw or bedding Wastewater Other (specify)



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Combustion System Improvement (CPS 372)	Fuel type before installation	Coal
		Diesel
	Fuel type after installation	Electricity
		Gasoline
		Kerosene
		Liquified petroleum gas (LPG)
		Natural gas
		Propane
		Wood
		Other (specify)
	Fuel amount before installation	0-1,000,000
	Fuel amount unit before installation	Cubic feet (natural gas)
		Gallons (diesel, gasoline, propane, LPG, kerosene)
		Kilowatt-hours (electricity)
		Pounds (wood, coal)
		Other (specify)
	Fuel type before installation	Coal
		Diesel
	Fuel type after installation	Electricity
		Gasoline
		Kerosene
		Liquified petroleum gas (LPG)
		Natural gas
		Propane
		Wood
		Other (specify)
	Fuel amount after installation	0-1,000,000
	Fuel amount unit after installation	Cubic feet (natural gas)
		Gallons (diesel, gasoline, propane, LPG, kerosene)
		Kilowatt-hours (electricity)
		Pounds (wood, coal)
		Other (specify)
Conservation Cover (CPS 327)	Species category (select most common/extensive type if using more than one)	Brassicas
		Grasses
		Legumes
		Non-legume broadleaves
		Shrubs



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Conservation Crop Rotation (CPS 328)	Conservation crop type	Brassica Broadleaf Cool season Grass Legume Warm season
	Change implemented	Added perennial crop Reduced fallow period Both
	Conservation crop rotation tillage type	Conventional (plow, chisel, disk) No-till, direct seed Reduced till Strip till None Other (specify)
	Total conservation crop rotation length in days	1-120
Contour Buffer Strips (CPS 332)	Strip width (feet)	1-100
	Species category	Grasses Forbs Mix
Cover Crop (CPS 340)	Species category (select most common/extensive type if using more than one)	Brassicas Forbs Grasses Legume Non-legume broadleaves
	Cover crop planned management	Grazing Haying Termination
	Cover crop termination method	Burning Herbicide application Incorporation Mowing Rolling/crimping Winter kill/frost
Critical Area Planting (CPS 342)	Species category (select most common/extensive type if using more than one)	Grass Grass legume/forb mix Herbaceous woody mix Perennial or reseeding Shrubs Trees
Feed Management (CPS 592)	Crude protein (percent)	0-100
	Fat (percent)	0-100
	Feed additives/supplements	Chemical Edible oils/fats Seaweed/kelp Other (specify)
Field Border (CPS 386)	Species category (select most common/extensive type if using more than one)	Forbs Grasses Mix Shrubs



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	Strip width (feet)	20-1,000
Filter Strip (CPS 393)	Species category (select most common/extensive type if using more than one)	Forbs Grasses Mix Shrubs
Forest Farming (CPS 379)	Land use in previous year	Forest Multi-story cropping Pasture/grazing land Row crops Other agroforestry
Forest Stand Improvement (CPS 666)	Purpose for implementation	Maintain or improve forest carbon stocks Maintain or improve forest health and productivity Maintain or improve forest structure and composition Maintain or improve wildlife, fish, and pollinator habitat Manage natural precipitation more efficiently Reduce forest pest pressure Reduce forest wildfire hazard
Grassed Waterway (CPS 412)	Species category (select most common/extensive type if using more than one)	Flowering Plants Forbs Grasses
Hedgerow Planting (CPS 422)	Species category (select most common/extensive type if using more than one)	Grasses Shrubs Trees
	Species density (number of trees planted per acre)	1-10,000
Herbaceous Wind Barriers (CPS 603)	Species category (select most common/extensive type if using more than one)	Forbs Grasses Mix Shrubs
	Barrier width (feet)	1-1,000
	Number of rows	1-100
Mulching (CPS 484)	Mulch type	Gravel Natural Synthetic Wood
	Mulch cover (percent of field)	0-100



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Nutrient management (CPS 590)	Nutrient type with CPS 590	Biosolids Commercial fertilizers Compost EEf (nitrification inhibitor) EEf (slow or controlled release) EEf (urease inhibitor) Green manure Liquid animal manure Organic by-products Organic residues or materials Solid/semi-solid animal manure Wastewater
	Nutrient application method with CPS 590	Banded Broadcast Injection Irrigation Surface application Surface application with tillage Variable rate
	Nutrient application method in the previous year	Banded Broadcast Injection Irrigation Surface application Surface application with tillage Variable rate
	Nutrient application timing with CPS 590	Single pre-planting Single post-planting Split pre- and post-planting Split post-planting
	Nutrient application timing in the previous year	Single pre-planting Single post-planting Split pre- and post-planting Split post-planting
	Nutrient application rate with CPS 590	0-20,000
	Nutrient application rate unit with CPS 590	Gallons per acre Pounds per acre
	Nutrient application rate change	Decrease compared to previous year Increase compared to previous year No change
	Species category (select most common/extensive type if using more than one)	Cool-season broadleaf Cool-season grass Warm-season broadleaf Warm-season grass
	Termination process	Grazing Haying (i.e., cutting and baling) Other (specify)
Prescribed Grazing (CPS 528)	Grazing type	Cell grazing Deferred rotational Management intensive Rest-rotation



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Range Planting (CPS 550)	Species category (select most common/extensive type if using more than one)	Forbs Grasses Legumes Shrubs Trees
Residue and Tillage Management – No-till (CPS 329)	Surface disturbance	None Seed row only
Residue and Tillage Management – Reduced Till (CPS 345)	Surface disturbance	None Seed row/ridge tillage for planting Shallow across most of the soil surface Vertical/mulch
Riparian Forest Buffer (CPS 391)	Species category (select most common/extensive type if using more than one)	Coniferous trees Deciduous trees Shrubs
	Species density (number of trees planted per acre)	1-10,000
Riparian Herbaceous Cover (CPS 390)	Species category (select most common/extensive type if using more than one)	Ferns Forbs Grasses Legumes Rushes Sedges
Roofs and Covers (CPS 367)	Roof/cover type	Concrete Flexible geomembrane Metal Timber Other (specify)
Silvopasture (CPS 381)	Species category (select most common/extensive type if using more than one)	Coniferous trees Deciduous trees Forage Shrubs
	Species density (number of trees planted per acre)	1-10,000
	Strip width (feet)	1-1,000
Stripcropping (CPS 585)	Crop category (select most common/extensive type if using more than one)	Erosion resistant crops Fallow Sediment trapping crops
	Number of strips	2-100
Tree/Shrub Establishment (CPS 612)	Species category (select most common/extensive type if using more than one)	Coniferous trees Deciduous trees Shrubs
	Species density (number of trees planted per acre)	1-10,000
Vegetative Barrier (CPS 601)	Species category (select most common/extensive type if using more than one)	Grasses Grass forb mix Grass legume mix
	Barrier width (feet)	3-1,000



Partnerships for Climate-Smart Commodities Data Dictionary for Recipients

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Waste Separation Facility (CPS 632)	Separation type	Chemical (e.g., salts, polymers) Mechanical (e.g., screens, presses) Settling basin
	Most common use of solids	Bedding Field applied Other (specify)
Waste Storage Facility (CPS 313)	Waste storage system prior to installing your waste storage facility	Aerobic lagoon Anaerobic digester (complex mix) with energy generation Anaerobic digester (plug flow) with energy generation Anaerobic lagoon Composting Covered lagoon (no energy generation or flaring) Covered lagoon with energy generation Covered lagoon with flaring Daily spread Deep bedding pack Deep pit Dry lot Dry stacking/solid storage Pasture/range/paddock Poultry with bedding Poultry without bedding (e.g., high rise) Slurry tank/basin
Waste Treatment (CPS 629)	Treatment type	Biological Chemical Mechanical
Waste Treatment Lagoon (CPS 359)	Waste storage system prior to installing waste treatment lagoon	Aerobic lagoon Anaerobic digester (complex mix) with energy generation Anaerobic digester (plug flow) with energy generation Anaerobic lagoon Composting Covered lagoon (no energy generation or flaring) Covered lagoon with energy generation Covered lagoon with flaring Daily spread Deep bedding pack Deep pit Dry lot Dry stacking/solid storage Pasture/Range/Paddock Poultry with bedding Poultry without bedding (e.g., high rise) Slurry tank/basin
	Is there a lagoon cover/crust?	Yes No
	Is there lagoon aeration?	Yes No



Partnerships for Climate-Smart Commodities Data Dictionary for Recipients

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Windbreak/Shelterbelt Establishment and Renovation (CPS 380)	Species category (select most common/extensive type if using more than one)	Coniferous trees Deciduous trees Shrubs
	Species density (number of trees planted per acre)	1-10,000



Appendix A: Climate-smart Agriculture and Forestry Practices

All NRCS Practice Standards (not limited to climate-smart practices)

309, Agrichemical Handling Facility	390, Riparian Herbaceous Cover
311, Alley Cropping	391, Riparian Forest Buffer
313, Waste Storage Facility	393, Filter Strip
314, Brush Management	394, Firebreak
315, Herbaceous Weed Treatment	395, Stream Habitat Improvement and Management
316, Animal Mortality Facility	396, Aquatic Organism Passage
317, Composting Facility	397, Aquaculture Pond
318, Short Term Storage of Animal Waste and By-Products	398, Fish Raceway or Tank
319, On-Farm Secondary Containment Facility	399, Fishpond Management
320, Irrigation Canal or Lateral	400, Bivalve Aquaculture Gear and Biofouling Control
324, Deep Tillage	402, Dam
325, High Tunnel System	410, Grade Stabilization Structure
326, Clearing and Snagging	412, Grassed Waterway
327, Conservation Cover	420, Wildlife Habitat Planting
328, Conservation Crop Rotation	422, Hedgerow Planting
329, Residue and Tillage Management, No Till	423, Hillside Ditch
330, Contour Farming	428, Irrigation Ditch Lining
331, Contour Orchard and Other Perennial Crops	428A, Irrigation Water Conveyance, Ditch and Canal Lining, Plain Concrete
332, Contour Buffer Strips	428B, Irrigation Water Conveyance, Ditch and Canal Lining, Flexible Membrane
333, Amending Soil Properties with Gypsum Products	428C, Irrigation Water Conveyance, Ditch and Canal Lining, Galvanized Steel
334, Controlled Traffic Farming	430, Irrigation Pipeline
336, Soil Carbon Amendment	432, Dry Hydrant
338, Prescribed Burning	436, Irrigation Reservoir
340, Cover Crop	441, Irrigation System, Microirrigation
342, Critical Area Planting	442, Sprinkler System
345, Residue and Tillage Management, Reduced Till	443, Irrigation System, Surface and Subsurface
348, Dam, Diversion	447, Irrigation and Drainage Tailwater Recovery
350, Sediment Basin	449, Irrigation Water Management
351, Well Decommissioning	450, Anionic Polyacrylamide (PAM) Application
353, Monitoring Well	453, Land Reclamation, Landslide Treatment
355, Groundwater Testing	455, Land Reclamation, Toxic Discharge Control
356, Dike and Levee	457, Mine Shaft and Adit Closing
359, Waste Treatment Lagoon	460, Land Clearing
360, Waste Facility Closure	462, Precision Land Forming and Smoothing
362, Diversion	464, Irrigation Land Leveling
366, Anaerobic Digester	466, Land Smoothing
367, Roofs and Covers	468, Lined Waterway or Outlet
368, Emergency Animal Mortality Management	472, Access Control
371, Air Filtration and Scrubbing	484, Mulching
372, Combustion System Improvement	490, Tree/Shrub Site Preparation
373, Dust Control on Unpaved Roads and Surfaces	500, Obstruction Removal
374, Energy Efficient Agricultural Operation	511, Forage Harvest Management
375, Dust Management for Pen Surfaces	512, Pasture and Hay Planting
376, Field Operations Emissions Reduction	516, Livestock Pipeline
378, Pond	520, Pond Sealing or Lining, Compacted Soil Treatment
379, Forest Farming	521, Pond Sealing or Lining, Geomembrane or Geosynthetic Clay Liner
380, Windbreak/Shelterbelt Establishment and Renovation	521A, Pond Sealing or Lining, Flexible Membrane
381, Silvopasture	521B, Pond Sealing or Lining, Soil Dispersant
382, Fence	521C, Pond Sealing or Lining, Bentonite Sealant
383, Fuel Break	
384, Woody Residue Treatment	
386, Field Border	
388, Irrigation Field Ditch	



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521D, Pond Sealing or Lining, Compacted Clay Treatment	632, Waste Separation Facility
522, Pond Sealing or Lining - Concrete	633, Waste Recycling
527, Sinkhole Treatment	634, Waste Transfer
528, Prescribed Grazing	635, Vegetated Treatment Area
533, Pumping Plant	636, Water Harvesting Catchment
543, Land Reclamation, Abandoned Mined Land	638, Water and Sediment Control Basin
544, Land Reclamation, Currently Mined Land	640, Waterspreading
548, Grazing Land Mechanical Treatment	642, Water Well
550, Range Planting	643, Restoration of Rare or Declining Natural Communities
554, Drainage Water Management	644, Wetland Wildlife Habitat Management
555, Rock Wall Terrace	645, Upland Wildlife Habitat Management
557, Row Arrangement	646, Shallow Water Development and Management
558, Roof Runoff Structure	647, Early Successional Habitat Development-Mgt
560, Access Road	649, Structures for Wildlife
561, Heavy Use Area Protection	650, Windbreak/Shelterbelt Renovation
562, Recreation Area Improvement	654, Road/Trail/Landing Closure and Treatment
566, Recreation Land Improvement and Protection	655, Forest Trails and Landings
570, Stormwater Runoff Control	656, Constructed Wetland
572, Spoil Disposal	657, Wetland Restoration
574, Spring Development	658, Wetland Creation
575, Trails and Walkways	659, Wetland Enhancement
576, Livestock Shelter Structure	660, Tree-Shrub Pruning
578, Stream Crossing	666, Forest Stand Improvement
580, Streambank and Shoreline Protection	670, Energy Efficient Lighting System
582, Open Channel	672, Energy Efficient Building Envelope
584, Channel Bed Stabilization	736, Crop By-Product Transfer, interim
585, Stripcropping	724, Water Treatment Facility, interim
587, Structure for Water Control	735, Waste Gasification Facility, interim
588, Crosswind Ridges	737, Reduced Water and Energy Coffee Conveyance System, interim
589, Cross Wind Trap Strips	740, Pond Sealing and Lining, Soil Cement, interim
590, Nutrient Management	751, Individual Terrace, interim
591, Amendments for Treatment of Agricultural Waste	753, Infiltration Ditch, interim
592, Feed Management	755, Well Plugging, interim
595, Pest Management Conservation System	770, Livestock Confinement Facility, interim
600, Terrace	775, Drainage Ditch Covering, interim
601, Vegetative Barrier	782, Phosphorus Removal System, interim
602, Equitable Relief	800, Controlling Existing Flowing Wells, interim
603, Herbaceous Wind Barriers	803, Water Well Disinfection, interim
604, Saturated Buffer	805, Amending Soil Properties with Lime, interim
605, Denitrifying Bioreactor	808, Soil Carbon Amendment, interim
606, Subsurface Drain	809, Conservation Harvest Management, interim
607, Surface Drain, Field Ditch	810, Annual Forages for Grazing Systems, interim
608, Surface Drain, Main or Lateral	812, Raised Beds, interim
609, Surface Roughening	815, Groundwater Recharge Basin or Trench, interim
610, Salinity and Sodic Soil Management	817, On-Farm Recharge, interim
612, Tree/Shrub Establishment	818, Water Conservation System, interim
614, Watering Facility	821, Low Tunnel Systems, interim
620, Underground Outlet	823, Organic Management, interim
629, Waste Treatment	
630, Vertical Drain	



Partnerships for Climate-Smart Commodities Data Dictionary for Recipients
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Other CSAF Practices

Traditional or cultural practices

Microbial products

Solar power generation

Grain bin construction

Pre-season drainage



Appendix B: Commodity List

CROPS

ALFALFA
ALMONDS
AMARANTH GRAIN
APPLES
APRICOTS
ARONIA (CHOKEBERRY)
ARTICHOKES
ASPARAGUS
ATEMOYA
AVOCADOS
BAMBOO SHOOTS
BANANAS
BARLEY
BEANS
BEETS
BIRDSFOOT/TREFOIL
BLUEBERRIES
BREADFRUIT
BROCCOFLOWER
BROCCOLI
BROCCOLINI
BRUSSEL SPROUTS
BUCKWHEAT
CABBAGE
CACAO
CACTUS
CAIMITO
CALABAZA MELON
CALALOO
CAMELINA
CANARY MELON
CANARY SEED
CANEERRIES
CANISTEL
CANOLA
CANTALOUPE
CARAMBOLA (STAR FRUIT)
CARROTS
CASHEW
CASSAVA
CAULIFLOWER
CELERIAC
CELERY
CHERIMOYA
CHERRIES
CHESTNUTS
CHICORY/RADICCHIO
CHINESE BITTER MELON
CHRISTMAS TREES
CHUFAS

CINNAMON
CLOVER
COCONUTS
COFFEE
CORN
COTTON ELS
COTTON UPLAND
CRANBERRIES
CRENSHAW MELON
CRUSTACEAN
CUCUMBERS
CURRANTS
DASHEEN
DATES
DURIAN
EGGPLANT
EINKORN
ELDERBERRIES
EMMER
FIGS
FINFISH
FLAX
FLOWERS
FORAGE SOYBEAN/SORGHUM
GAILON
GARLIC
GENIP
GINGER
GINSENG
GOOSEBERRIES
GOURDS
GRAPEFRUIT
GRAPES
GRASS
GREENS
GROUND CHERRY
GUAMABANA/SOURSOP
GUAR
GUAVA
GUAVABERRY
GUAYULE
HAZEL NUTS
HEMP
HERBS
HESPERALOE
HONEY
HONEYBERRIES
HONEYDEW
HOPS
HORSERADISH
HUCKLEBERRIES

HYBRID POPLAR TREES
IDLE
INDIGO
ISRAEL MELONS
JACK FRUIT
JERUSALEM ARTICHOKES
JICAMA
JOJOBA
JUJUBE
JUNEERRIES
KENAF
KHORASAN
KIWIBERRY
KIWIFRUIT
KOCHIA (PROSTRATA)
KOHLRABI
KOREAN GOLDEN MELON
KUMQUATS
LAMBS EAR
LEEKS
LEMONS
LENTILS
LESPEDEZA
LETTUCE
LIMES
LONGAN
LOQUATS
LYCHEE
MANGOS
MANGOSTEEN
MAPLE SAP
MAYHAW BERRIES
MEADOWFOAM
MILKWEED
MILLET
MIXED FORAGE
MOHAIR
MOLLUSK
MORINGA
MULBERRIES
MUSHROOMS
MUSTARD
NECTARINES
NIGER SEED
NONI
OATS
OKRA
OLIVES
ONIONS
ORANGES
PAPAYA



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PARSNIP	STRAWBERRIES	
PASSION FRUITS	SUGAR BEETS	
PAWPAW	SUGARCANE	<u>LIVESTOCK</u>
PEACHES	SUNFLOWERS	ALPACAS
PEANUTS	SUNN HEMP	BEEF COWS
PEARS	TANGELOS	BEEFALO
PEAS	TANGERINES	BUFFALO OR BISON
PECANS	TANGORS	CHICKENS (BROILERS)
PENNYCRESS	TANGOS	CHICKENS (LAYERS)
PEPPERS	TANNIER	DAIRY COWS
PERENNIAL PEANUTS	TARO	DEER
PERIQUE TOBACCO	TEA	DUCKS
PERSIMMONS	TEFF	ELK
PINE NUTS	TI	EMUS
PINEAPPLE	TOBACCO CIGAR WRAPPER	EQUINE
PISTACHIOS	TOBACCO BURLEY	GEESE
PITAYA/DAGONFRUIT	TOBACCO BURLEY 31V	GOATS
PLANTAIN	TOBACCO CIGAR BINDER	HONEYBEES
PLUMCOTS	TOBACCO CIGAR FILLER	LLAMAS
PLUMS	TOBACCO CIGAR FILLER BINDER	REINDEER
POMEGRANATES	TOBACCO DARK AIR CURED	SHEEP
POTATOES	TOBACCO FIRE CURED	SWINE
POTATOES SWEET	TOBACCO FLUE CURED	TURKEYS
PRUNES	TOBACCO MARYLAND	
PSYLLIUM	TOBACCO VIRGINIA FIRE CURED	
PUMMELO	TOMATILLOS	
PUMPKINS	TOMATOES	
QUINCES	TREES TIMBER	
QUINOA	TRITICALE	
RADISHES	TRUFFLES	
RAISINS	TURNIPS	
RAMBUTAN	VETCH	
RAPESEED	WALNUTS	
RHUBARB	WAMPEE	
RICE	WASABI	
RICE SWEET	WATERMELON	
RICE WILD	WAX JAMBOO FRUIT	
RUTABAGA	WHEAT	
RYE	WILLOW SHRUB	
SAFFLOWER	WINTER MELON	
SAPODILLA	WOLFBERRY/GOJI	
SAPOTE	YAM	
SCALLIONS		
SESAME		
SHALLOTS		
SORGHUM		
SORGHUM DUAL PURPOSE		
SORGHUM FORAGE		
SOYBEANS		
SPELT		
SQUASH		
STAR GOOSEBERRY		

Partnerships for Climate-Smart Commodities

Additional Specific Terms and Conditions

February 2023

I. Overarching Statement

The following award terms and conditions are applicable to Partnerships for Climate-Smart Commodities agreements and are in addition to the USDA FPAC General Terms and Conditions. The award recipient must abide by all terms of this grant including, but not limited to, the General Terms and Conditions, the terms in the Funding Opportunity and associated Frequently Asked Questions, and this addendum. The recipient must also deliver on the planned objectives in the project narrative and budget narrative associated with this grant.

II. Eligibility and Highly Erodible Lands and Wetlands Compliance

In order to be eligible for an incentive payment as a part of the Partnerships for Climate-Smart Commodities, a producer must:

- Establish Farm Records with the Farm Service Agency (FSA) (have farm, tract, and field numbers in place);
- Complete an AD-2047 (Customer Data Worksheet to facilitate the collection of customer data for Business Partner Record);
- Certify highly erodible land conservation (HEL) and wetland conservation (WC) compliance via Form AD-1026, Highly Erodible Land Conservation (HELC) and Wetland Conservation (WC) Certification; and
- Certify that they are not a foreign person or entity.

Farm, tract, and field numbers are required for the producer, and ultimately the Partnerships for Climate-Smart Commodities recipient, to report climate-smart practice implementation to USDA, as well as to certify and maintain HELC/WC compliance. This will require that some producers who do not already have these numbers, like perennial crop growers or feedlots, establish these records with USDA's FSA. Farm, tract, field numbers, producer name, and Core Customer I.D. (CCID) will be provided by the recipient to the National Program Officer as a part of routine grant reporting. Recipients must ensure that producers receiving financial assistance or incentives through this project use the same name as is included in the relevant FSA Business File for that Farm ID in any contracts or similar documentation kept by the recipient.

Producers are not bound by the payment limitations and the adjusted gross income (AGI) limitations that are in place for other USDA programs.

In order to demonstrate HELC/WC compliance for Partnerships for Climate-Smart Commodities incentive payments, producers will need to request a copy of their subsidiary print from their

USDA FSA field office. The Subsidiary Print includes print year specific eligibility related information about a selected producer. The producer will then provide this documentation to the Partnerships for Climate-Smart Commodities recipients as proof of compliance. A current year subsidiary print will be required for each crop year that the producer receives a payment, and HELC/WC eligibility information is provided under the AD-1026 and Conservation Compliance sections of subsidiary (determined by year, which can change at any time during the year or in a subsequent year). As is the case already, field offices will not be expected to provide documentation to anyone besides the producer themselves (and must always comply with Section 1619 limitations if they ever do provide documentation to third parties). Producers must have control of the land for the term of their beneficiary contract.

Recipients are responsible for determining producer eligibility within the funding opportunity requirements. Recipients must inform producers of eligibility requirements and direct them to local USDA offices for requested information as necessary, including but not limited to, farm and tract establishment and Highly Erodible Land and Wetland Compliance determinations. Privacy of producers is a priority throughout this process, and recipients are responsible for maintaining producer privacy in the process.

At minimum, the recipient will collect and review subsidiary reports from participating producers. They will ensure that the producer is listed as “compliant” in all sections of the conservation compliance portion of subsidiary and “certified” for AD-1026 before an incentive payment is made. If payments to a producer span more than one Federal fiscal year, the recipient will review an updated subsidiary print each fiscal year to ensure that the status is still compliant.

III. Other Environmental and Cultural Resources Reviews

A Finding of No Significant Impact (FONSI) was signed by USDA NRCS on August 26, 2022. A copy of the Programmatic Environmental Assessment for Partnerships for Climate-Smart Commodities is available at www.usda.gov/climate-smart-commodities. USDA may determine that additional environmental and cultural resources review is needed for any particular action under Partnerships for Climate-Smart Commodities. The recipient must not execute any beneficiary contracts under this grant agreement prior to receipt of a letter from USDA that specifically details:

- 1) further procedures deemed appropriate by the Agency to ensure a completed National Environmental Policy Act (NEPA) review and all appropriate consultation requirements are met, and
- 2) additional instructions for any unanticipated discoveries or conditions.

A resolution of support is required for projects on Tribal lands from the governing body of the Tribe with jurisdiction over that land, if the applicant is not the Tribe nor an entity owned or

operated by that Tribe. USDA may approve alternative documentation for resolutions when USDA deems necessary and legally sufficient.

IV. Producer Benefits

USDA encourages the recipient to disclose to participating producers the manner and amount for which any market premiums derived from the development of the relevant climate-smart commodity will be shared between participating parties, including producers. USDA will be monitoring producer benefits, in particular those to small and underserved producers, throughout the grant period. Recipients agree that their project(s) will implement a plan for engaging small and underserved producers as laid out in this agreement.

V. Producer Data Protection and Disclosure

Recipients must ensure each producer has convenient access to any data collected from that producer or the producer's land and any associated modeling as part of the project. The recipient must provide each producer applying for benefits under this grant a description in writing of how their information, including but not limited to data about their farm and commodities, will be utilized, protected and shared as applicable.

VI. Other Data and Reporting Requirements

In addition to the reporting information provided in the statement of work and General Terms and Conditions, USDA will provide a template for the Detailed Progress Report, also known as the Partnerships for Climate-Smart Commodities (PSCS) Project Reporting Workbook. Within 30 calendar days of execution of this grant, a copy of this workbook will be posted at www.usda.gov/climate-smart-commodities or an alternative location provided to the recipient by the National Program Officer. USDA may provide updates to the PCSC Project Reporting Workbook or submission methods to streamline the data collection process and/or reduce the burden on the recipient throughout the grant period. Generally, these updates will be provided at least 3 months in advance of any required changes. The recipient must not transfer any data to foreign governments or foreign entities without prior approval from USDA.

USDA will provide a Technical Contact for this grant. The Technical Contact will have the responsibility of technical oversight for USDA for the project. The recipient is responsible for providing the technical assistance required to successfully implement and complete the project. The recipient must comply with any requests for information from the Technical Contact. The Technical Contact for this award is the National Program Officer assigned to this grant.

Prior to execution of this grant, the recipient must provide a shapefile depicting the project boundary for enrollment under this grant. Producer enrollment may not occur outside this boundary without modification of this grant.

Within 30 calendar days of execution of this grant, the recipient must provide to the National Program Officer a website address where enrollment information will be posted for producers for the project associated with this grant. Recipients will be responsible for the following reports:

- Submit quarterly performance reports that include a written progress report, as well as additional reporting on specific data elements contained in the most up-to-date version of the Partnerships for Climate-Smart Commodities Project Reporting Workbook. Additional information about each reported element is described in the Data Dictionary.
- Submit supplemental reports required to validate greenhouse gas (GHG) benefit data, including: (1) an initial project MMRV plan, (2) field-modeled GHG benefit reports, and (3) field-direct GHG measurement results, as applicable. Additional information about these reports is included in the Data Dictionary.
- Submit copies of project outputs and deliverables (e.g., fact sheets, reports) as attachments in ezFedGrants along with quarterly performance reports.
- Report the version of COMET-Planner used to estimate GHG benefits of the project within each quarterly performance report. As COMET-Planner is updated, recipients must adopt the latest version of the tool as directed by USDA for use in performance reports.

Recipients must designate an individual as a member of the USDA Partnerships for Climate-Smart Commodities Learning Network (Partnerships Network); this representative should be identified in the Project Narrative for this grant. Each project includes a plan for up to two Partnerships Network virtual meetings and two in-person meetings a year during the project duration. Dates and other details on events will be posted at www.usda.gov/climate-smart-commodities or an alternative location provided to the recipient by the National Program Officer.

The Partnerships Network will be co-chaired by representative from the USDA Office of the Chief Economist and the Farm Production and Conservation Mission Area. The Partnerships Network will inform synthesis reports to be assembled by USDA on a range of topics related to the implementation of Partnerships for Climate-Smart Commodities projects, including:

- Lessons-learned as projects are implemented;
- Options for providing technical assistance;
- Procedures for measurement/quantification, monitoring, reporting, and verifying GHG benefits;
- Options for tracing climate-smart commodities through the supply chain;
- Mechanisms for reducing costs of implementation;
- A forum for discussion and learning regarding approaches to climate-smart agriculture and forestry implementation (including but not limited to deployment and

measurement/quantification, monitoring, reporting, tracking, and verification of associated greenhouse gas benefits and marketing of climate-smart commodities).

- Synthesis of outcomes; and
- Opportunities for USDA and others to inform future approaches to generating new and expanded markets for climate-smart commodities.

The Partnerships Network topics to be discussed will cover at minimum the areas described in previous FAQs and will evolve with USDA's ongoing project data analysis efforts and with input from the project recipients on the kinds of sessions that will be most helpful to them in building the diverse climate-smart markets associated with their projects. Participation may include at least one interview a year and include questions related to the following areas:

- Technical assistance approaches, methods, and successes and/or challenges
- Producer outreach approaches, methods, and successes and/or challenges
- Monitoring, measurement, reporting, and verification (MMRV) approaches, methods, and successes and/or challenges
- Marketing approaches, methods, and successes and/or challenges
- Partnership approaches, methods, and successes and/or challenges
- Data collection and storage approaches, methods, and successes and/or challenges
- Supply chain approaches, methods and successes and/or challenges, including approaches to traceability
- Supply chain benefits and demand for climate-smart commodities
- Perspectives on program design, climate-smart commodity definitions, and future approaches or opportunities
- Project successes and stories

USDA may also request producer exit reports at a later date. Additional marketing and branding-related requirements may be provided by USDA, including signage related to Partnerships for Climate-Smart Commodities.

VII. Competition and Anti-Competitive Practices

In connection with this grant, recipients may not prohibit or otherwise limit a producer from changing the provider of other services or materials not included as part of this grant.

Recipients may not condition, limit, steer, or discriminate in their provision or sale of non-project business functions or products to producers based on their participation or non-participation in or use of any services provided as part of this grant. Additionally, funds in this agreement shall not be used for purposes or activities related to mergers or acquisitions.

VIII. Suspension and Disbarment

The provisions governing Suspension and Disbarment in subsection 1.a.8 shall also apply to fraud, embezzlement, theft, forgery, bribery, falsification, or destruction of records, making false statements, or violations of the Federal civil antitrust or unfair trade practice laws.

IX. Special provisions for awards to for-profit entities as recipients

This section contains provisions that apply to awards to for-profit entities. These provisions are in addition to other applicable provisions of these terms and conditions, or they make exceptions from other provisions of the terms and conditions for awards to for-profit entities. For-profit entities that receive awards have two options regarding audits:

- 1) A financial related audit of a particular award in accordance with Generally Accepted Government Auditing Standards issued by the Comptroller General of the United States, in those cases where the for-profit entity receives awards under only one USDA program; or, if awards are received under multiple USDA programs, a financial related audit of all awards in accordance with Generally Accepted Government Auditing Standards issued by the Comptroller General of the United States; or
- 2) An audit that meets the requirements contained in 2 CFR 200 subpart F.

For-profit entities that receive annual awards totaling less than the audit requirement threshold in 2 CFR 200 subpart F are exempt from USDA audit requirements for that year, but records must be available for review by appropriate officials of Federal agencies or the Government Accountability Office.

X. Non-Disparagement

Recipients may not engage in any advertising deemed by USDA as disparaging to another agricultural commodity or competing product, or in violation of the prohibition against false and misleading advertising. Disparagement is defined as anything that depicts other commodities in a negative or unpleasant light via overt or subjective video, photography, or statements. Comparative advertising is allowable, provided the presentation of facts is truthful, objective, not misleading, and supported by a reasonable basis.