

NOTICE OF GRANT AND AGREEMENT AWARD

4 Americal Identifican Number	0 1	a a a t Ni cash a a	O Assessed (Duralis at David	24	A Time of according to the control
Award Identifying Number	2. Amenar	ment Number	3. Award /Project Peri	oa	Type of award instrument:
NR233A750004G063			Upon final signature - 0	7/14/2028	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 7. NRCS Program Contact 8. NRCS Administrative Contact		vision 6 AD@usda.gov Administrative ontact	6. Recipient Organization (Name and Address) THE USA RICE FEDERATION 2101 WILSON BLVD STE 610 ARLINGTON VA 22201-3040 UEI Number / DUNS Number: EYU5HKUS9JF5 / 081051849 EIN: 9. Recipient Program Contact 10. Recipient Administrative Contact		
Name: ERIC HANSEN	Name: Me	lanie Krizmanich	Name: Josh Hankins		Name: Emily Woodall
(b)(6)					
11. CFDA	12. Author	n.x	13. Type of Action		14. Program Director
10.937	15 USC 7	14 et seq	New Agreement	8	Name: Josh Hankins
					(b)(6)
15. Project Title/ Description: Expands markets for climate-sma implementation and monitoring of climate-smart practices		t rice in AR, CA, IL, LA	, MO, MS	and TX and supports farmer	
16. Entity Type: N = Nonprofit v	vithout 5010	C3 IRS Status (Other	than Institution of High	er Educati	on)
17. Select Funding Type					
Select funding type:		⋉ Federal		⊠ Non-Federal	
Original funds total		80,000,000.000		\$752,852.00	
Additional funds total		\$0.00		\$0.00	
Grand total		80,000,000.000		\$752,852.00	
18. Approved Budget	"	•	*		

Personnel	\$2,231,625.00	Fringe Benefits	\$0.00
Travel	\$39,158.00	Equipment	\$0.00
Supplies	\$0.00	Contractual	\$2,496,223.19
Construction	\$0.00	Other	\$75,232,993.81
Total Direct Cost	\$79,570,365.00	Total Indirect Cost	\$429,635.00
		Total Non-Federal Funds	\$752,852.00
		Total Federal Funds Awarded	\$80,000,000.00
		Total Approved Budget	\$80,752,852.00

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 Digitally signed KATINA HANSO Date: 2023.07.2 15:21:49 -05'00'	ON Sales
Name and Title of Authorized Recipient Representative	Signature Betsy Ward (Jul 19, 2023 11:43 EDT)	Date 7/19/2023

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 USA Rice Federation, 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

TOTAL BUDGET: \$80,756,052

PERSONNEL: \$2,028,750 FRINGE BENEFITS: \$-0-TRAVEL: \$35,598

EQUIPMENT: \$-0-SUPPLIES: \$-0-

CONTRACTUAL: \$2,285,523 CONSTRUCTION: \$-0-

OTHER: \$75,220,494 (includes \$63,401,188 PRODUCER INCENTIVES)

TOTAL DIRECT COSTS: \$79,570,365

INDIRECT COSTS: \$429,635

TOTAL FEDERAL FUNDS: \$80,000,000

PERSONNEL: \$224,148 FRINGE BENEFITS: \$-0-

TRAVEL: \$3,125 EQUIPMENT: \$-0-SUPPLIES: \$-0-CONTRACTUAL: \$-0-CONSTRUCTION: \$-0-OTHER: \$485,000

PRODUCER INCENTIVES: \$-0-TOTAL DIRECT COSTS: \$712,273

INDIRECT COSTS: \$40,579

TOTAL NON-FEDERAL FUNDS: \$752,852

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

Page 006	
Withheld pursuant to exemption	
(b)(4)	
of the Freedom of Information and Privacy Act	

Page 007	
Withheld pursuant to exemption	
(b)(4)	
of the Freedom of Information and Privacy Act	

Page 008	
Withheld pursuant to exemption	
(b)(4)	
of the Freedom of Information and Privacy Act	

Page 009	
Withheld pursuant to exemption	
(b)(4)	
of the Freedom of Information and Privacy Act	

Page 010	
Withheld pursuant to exemption	
(b)(4)	
of the Freedom of Information and Privacy Act	

Page 011	
Withheld pursuant to exemption	
(b)(4)	
of the Freedom of Information and Privacy Act	

e 012	
nheld pursuant to exemption	
4)	
he Freedom of Information and Privacy Act	

Page 013	
Withheld pursuant to exemption	
(b)(4)	
of the Freedom of Information and Privacy Act	

Page 014	
Withheld pursuant to exemption	
(b)(4)	
of the Freedom of Information and Privacy Act	

Page 015	
Withheld pursuant to exemption	
(b)(4)	
of the Freedom of Information and Privacy Act	

Page 016	
Withheld pursuant to exemption	
(b)(4)	
of the Freedom of Information and Privacy Act	

Page 017	
Withheld pursuant to exemption	
(b)(4)	
of the Freedom of Information and Privacy Act	

Page 018
Withheld pursuant to exemption
(b)(4)
of the Freedom of Information and Privacy Act

Page 019	
Withheld pursuant to exemption	
(b)(4)	
of the Freedom of Information and Privacy Act	

ige 020	
ithheld pursuant to exemption	
)(4)	
the Freedom of Information and Privacy Act	

Page 021	
Withheld pursuant to exemption	
(b)(4)	
of the Freedom of Information and Privacy Act	

Page 022	
Withheld pursuant to exemption	
(b)(4)	
of the Freedom of Information and Privacy Act	



Rice Stewardship Partnership for Climate-Smart Commodities Project Narrative

i. Executive Summary of Pilot Project

jhankins@usarice.com

- A. Josh Hankins USA Rice; Director, Grower Relations and Rice Stewardship Partnership 2101 Wilson Blvd; Suite 610 Arlington, VA 22201 501-398-6671
- B. Project Partners: National Black Growers Council; Warehouses4Good; Entergy Corporation; Ducks Unlimited, Inc.; USA Rice; California Rice Commission; Delta F.A.R.M.; Walmart Corporation; Walmart Foundation; Nestle' Purina PetCare Company; The Mosaic Company; RiceTec, Inc.; Anheuser-Busch; Riceland Foods; Delta Plastics; Corteva Agriscience; Field to Market; Arva Intelligence; Regrow; University of Arkansas; Mars; Kellogg's.
- C. Underserved/Minority-Focused Project Partners: National Black Growers Council; Warehouses4Good; Entergy Corporation; Ducks Unlimited, Inc.; USA Rice.
- D. Compelling Need for the Project: Rice (Oryza sativa), in its many sizes and shapes, is one of the world's most important foods. Rice is the world's 3rd largest crop commodity, measured by metric tons annually (FAO. 2020) and provides 20% of the calories consumed by mankind each and every day (Fukagawa and Ziska, 2019). Because rice is grown under flooded conditions, rice cultivation in the United States contributes 15.7 million metric tons of carbon dioxide equivalents (MTCO₂e) of methane (CH₄) annually (EPA, 2022). This project will reduce these emissions on 240,000 acres of working ricelands through irrigation strategies of alternate-wetting and drying (AWD), furrow irrigation, and efficiencies in use of fertilizer, crop protectants, and energy. These actions address more than 90% of the GHG footprint of rice production (Figure 1), which will result in emission reductions greater than 265,500 MTCO₂e with an average cost of \$233/MTCO₂e. Studies of practice persistence among producers demonstrate >80% continue these conservation practices following contract expiration; therefore, we anticipate continued GHG reductions beyond the life of this project. This project will support historically underserved (HU) producers on an additional 80,000 acres by improving critical infrastructure necessary to implement climate-smart practices in the future. Field to Market's FieldPrint Calculator is the primary measurement platform. USA Rice, the global advocate for all segments of the industry, maintains domestic and international market access and will lead this projects' marketing efforts.

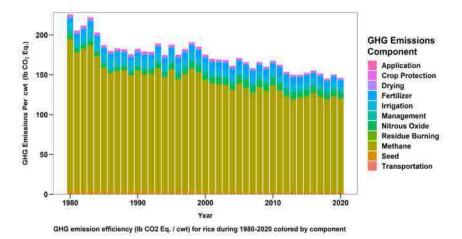


Figure 1. Greenhouse gas emissions breakdown of rice production. Field to Market National Indicators Report

For a more in-depth view of the compelling need of the project, over 3 million rice acres are produced in the U.S. each year covering 3 important regions; the Lower Mississippi Alluvial Valley, Gulf Coast, and California's Central Valley. In 2015, following the last full economic analyses, the value of U.S. rice production was \$2.40 billion (Richardson and Outlaw, 2017). Rice farming alone was estimated to have a total output effect on the U.S. economy of \$5.65 billion while providing more than 31,700 jobs. Rice milling constitutes a significant sector of the U.S. rice industry, and economic contributions of rice milling were estimated to be \$9.34 billion in 2016. Nearly 50% of the U.S. rice crop is exported to more than 120 countries worldwide. And all the while, this commodity-driven economic engine upholds and revitalizes some of the most challenged rural communities in the U.S.

In addition to feeding the world and supporting rural economies, the 3 million acres of rice play another critical role across the continent, and that is working wetlands for waterfowl and other wildlife. More than half of North America's waterfowl depend on the 3 rice-growing regions. Rice farmers manage approximately 750,000 (25%) acres of winter-flooded habitats each year providing 35% of all food energy needed during the migration/wintering season. The estimated cost of replacing the food energy currently provided via alternate managed natural wetlands would total nearly \$3.5 billion (Petrie et al. 2014).

To strengthen the natural partnership between rice agriculture and waterfowl conservation, USA Rice (global advocate for the industry) and Ducks Unlimited (continental conservation organization) formed the Rice Stewardship Partnership in 2013 (hereafter Partnership). Working together allows both organizations to magnify conservation impacts that are vital to the future of rice production and wetland habitat. The Partnership has implemented 15 different grants or awards from diverse USDA sources including NRCS's Regional Conservation Partnership Program (RCPP), special initiatives under the Environmental Quality Incentives Program (EQIP), and Deepwater Horizon remediation through the Gulf Ecosystems Benefit Fund. Since 2013, the Partnership has deployed over \$100M in conservation investment, to impact over 800,000 acres of rice and rotation lands, across all rice regions. They have a proven success of working with producers, partners, and USDA to scale conservation delivery.

- E. Approach to minimize transaction costs associated with project activities: Of the full funding amount of \$80M, 78% represents financial and 16% technical assistance directly to producers for on-farm climate-smart practices. Only 6% will be invested in monitoring, measurement, reporting, and verification (MMRV), marketing, and administrative indirect costs. Keeping the USDA investment focused on producers while minimizing other associated costs will be accomplished by the following Partnership capacity contributions:
 - USA Rice (lead) and DU (primary subaward recipient) will divide fiscal responsibilities to manage budgets and cash flow. Both organizations conduct an annual Single Audit (OMB Circular A-133) to provide assurance to USDA that they have adequate internal controls and are in compliance with all federal program requirements.
 - USA Rice, DU, and a host of supply chain partners will invest \$752,852 cash to support the project.
 - All environmental market benefits generated by project producers and their implementation of climate-smart practices stay with that producer and his/her harvested crop.
 - The Partnership has the technical assistance capacity already established to deliver this
 proposal and project; agronomists, biologists, engineers, and more. Furthermore, this
 includes vehicles, field equipment, supplies, and all other operational support needed to
 initiate work immediately upon notification of award.
 - USA Rice will use the *de minimis* rate of 10% while DU will use their NICRA for indirect costs on staff and travel and apply this rate only on the first \$25,000 of all subawardees.
 - This project will use Field to Market's publicly available FieldPrint Platform to measure the GHG and other environmental impacts of rice production and identify opportunities for continuous improvement.
- F. Approach to reduce producer barriers to implementing CSAF practices for the purpose of marketing climate-smart commodities: A 2018 survey conducted by USDA's National Agricultural Statistics Service (NASS) demonstrated that the cost of implementing practices, such as those to reduce energy or water use, was the number one barrier (see Figure 2). To reduce this barrier, the project is dedicating 78% of the total investment for financial assistance to producers for climate-smart practices. Technical assistance is also required, especially to ensure long-term and wide-spread adoption of practices. In response, the Partnership has 23 staff dedicated to deliver this proposed effort in coordination with other NRCS activities ongoing across the 6 states. Many of these staff are recently retired NRCS employees with a combined 120 years of agency service. Experience shows that technical assistance by partners is most beneficial on what is called "both sides of the contract". In other words, program outreach and promotion, upfront conservation planning, and producer application leading to a conservation contract has proven to be very beneficial. Followed by project design, on-the-ground implementation, and check-out files leading to contract close. NRCS maintains control of eligibility determination and compliance. Partnership staff cover National Environmental Protection Act (NEPA) clearances.

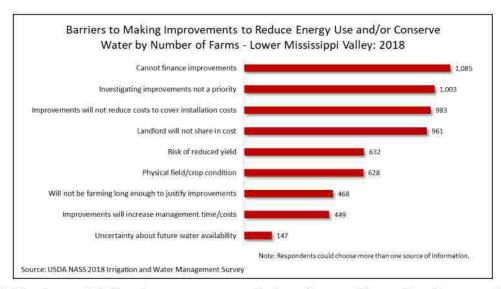


Figure 2. Barriers to Making Improvements to Reduce Energy Use and/or Conserve Water.

- G. Geographic Focus: Please see RSP CSC_ Project Map attachment. Lower Mississippi Alluvial Valley (Arkansas, northeast Louisiana, Mississippi, Missouri) Gulf Coast (southwest Louisiana, Texas) California's Central Valley (California)
- H. Project management capacity of partners, including a description of existing relationship with and/or prior experience working with producers or landowners, promoting climate-smart activities and marketing climate-smart commodities: USA Rice (proposal lead) is the global advocate for all segments of the U.S. rice industry and works to gain and maintain domestic and international market access for all U.S. rice production. In 2018, USA Rice released a 36-year study of the rice industry's sustainability record that clearly showed a commodity dedicated to the principles of sustainability and progress in reducing GHG emissions by 41% (U.S. Rice Industry Sustainability Report, 2018). Determined to do more, a panelist of scientists and other experts from all rice-producing states were engaged to set reduction targets by the year 2030, developed with research-based assumptions about continued improvements, including reducing GHG emissions by an additional 13%. This pilot will extend the opportunity for producers to participate in this goal and expand supply chain member and conservation partner support.

Ducks Unlimited also has extensive experience with the design and implementation of infrastructure projects on agricultural lands and wetland habitats. The DU engineering team is respected for their expertise, innovation, and efficiency when delivering agricultural and wetland restoration projects. Engineers work with Partnership staff to provide cutting-edge services for project designs, enhancing and refining the function and maintenance of agricultural lands and wetlands. Surveying crews lend accuracy and efficiency using state-of-the-art GPS and Total Station equipment to develop detailed topographic surveys. And DU has a working knowledge of permitting, NEPA clearances, and other state regulatory requirements.

ii. A plan to pilot climate-smart agriculture practices on a large scale.

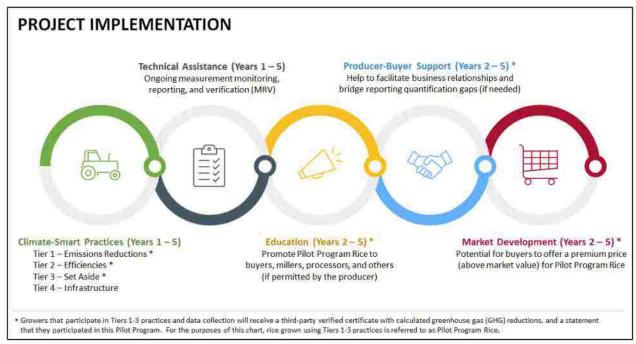


Figure 3. Diagram of pilot timeline.

A. Description of CSAF practices to be deployed (see Figure 3): The majority of the GHG footprint of rice production is from methane emissions during the growing season. Here, summer heat, fertilizer applications, plant metabolism, and flood irrigated soils result in anerobic soil conditions that favor a microbial community that emits methane (methanogenesis). The next significant contributor to rice's GHG footprint is analogous to other crops, and includes fertilizer and crop protectant products, diesel and electrical power for irrigation, farm implements, grain dryers, and more. Therefore, reductions in emissions through the irrigation methods of AWD and furrow irrigated rice will be prioritized, as well as nutrient management for fertilizer efficiencies, irrigation water management for energy and water-use efficiencies, and integrated pest management for crop protectant use efficiencies. These account for more than 90% of the GHG footprint of rice production (Figure 1) and are compatible with today's farm operations. Rotation lands, usually fallow or soybeans, will not be pulled into the implementation and measurement efforts, as they represent a much smaller GHG footprint of the overall rice production system.

Reflecting the priorities above, a NRCS Climate-Smart Practice table has been developed with Tiers designed to organize and support project delivery (see RSP _ Practice Tier Table attachment). Here there are over 60 practices and scenarios to fit any farm operation. Tier I is the methane emissions reduction practices of AWD and furrow irrigated rice. Tier II is the host of practices and scenarios for nutrient management, irrigation water management, and integrated pest management. Tier III represents the numerous short-term set asides. This includes shallow flooding rice fields, which offer many of the same benefits for soil health as cover crops, while also providing critical habitat. Then Tier IV represents on-farm infrastructure improvements such as land leveling, and irrigation systems with climate-smart technology.

Affordable access to fresh, quality water is the lifeline of the rice industry. Proper management of water is critical for overall profitability, efficiency of nutrient use, dealing with weeds, insects, and disease, and improving the quality of the water coming off the fields. This project's core focus on water management encourages irrigation techniques that, when performed at the most advanced level, will decrease GHG emissions. Yet, this project is built on a multi-step staged platform that encourages all levels of farmers to implement climate-smart practices that advance irrigation management, increase farm efficiency, conserve water, and improve water quality.

Rice farms targeted will have varying types of soil and land forming (contour levee, precision grade, furrow, and zero grade rice fields). As the landforms change, so do the irrigation management techniques. AWD and Furrow Irrigated Rice, without the proper infrastructure (pumping capacity, precision leveled fields, pipes and pads) is often too risky for the crop, and large investments in infrastructure are the most significant hurdles to performing these irrigation methods.

Without the infrastructure improvement practices, the GHG-reducing irrigation management practices will only be viable to those that have previously made those investments – eliminating a very important targeted group of producers in this project.

Tier IV is the strategy to support the underserved, as was explained by participating HU partners (see ii.E). Producers will have the flexibility to select the individual practices that will be of the greatest benefit to their operation. The four tiers outlined in this project are not exclusive to each other and applicants that select Tier IV practices will combine them with practices from Tiers I, II and III. Many climate-smart management practices are a natural and necessary fit with infrastructure improvements. A few examples include nutrient management CP 590 on precision leveled fields or agriculture energy assessment CP 228 on irrigation systems and/or grain bins. Additionally, we are predicting this award ceiling amount will not fund the number of applications submitted. It is anticipated that all applicants will be required to complete ranking questions, with higher scores awarded to those that will be coupling some level of Tier I & II management practice with Tier IV.

B. Plan to recruit producers and landowners, including estimated scale of the project:

The following are proven outreach and recruitment avenues by the Partnership.

- USA Rice Membership Producers, millers, merchants, and allied businesses.
- Affiliated State Rice Grower Associations example Louisiana Rice Growers Association.
- Rice Stewardship Partnership past project participants >1,000 producers.
- The numerous supply chain supporters listed herein.
- State Land Grant and Historically Black Colleges and Universities example Alcorn State.
- State FSA and NRCS public announcements and newsletters.

Estimated scale of project if funded in full:

- Total number of projects (producer contracts) 500
- Total acres impacted 320,000 (100%)
- Tier I Emissions reductions 121,600 acres (38%)

- Tier II/III Efficiencies/Short Term Set-Aside 121,600 acres (38%)
- Tier IV Infrastructure for Underserved 76,800 acres (24%)
- Project Timeline 5 calendar years 1 Feb. 2023 / 31 Jan. 2028 (+1-year NC extension)
- C. Plan to provide technical assistance, outreach, and training, including who will be conducting these activities, qualifications, and projected timeline: The Partnership has a team of trained and operating specialists deployed across rice country to deliver this climate-smart proposal. The majority of these technical staff are employed by DU including the engineering team. Additional technical assistance is provided by California Rice Commission and Delta F.A.R.M. (Mississippi). USA Rice will lead outreach, administration, and management of the project.

Within these ranks are also regional rice agronomists and breeders who have shaped the U.S. rice industry over the years. This includes Drs. Merle Anders (Lower Miss), Steve Linscombe (Gulf Coast), and Bruce Linquist (California), who will provide insights and training on the rice production side of the project. Ducks Unlimited's Drs. Ellen Herbert and Scott Manley will provide insights and training on linking practice implementation to MMRV aspects, especially deployment of the FieldPrint Platform, the primary measurement tool.

The supply chain partners from the production end, who have invested cash in additional technical assistance capacity, are also providing additional advisory and educational capacity. These partners include The Mosaic Company, Entergy Corporation, RiceTec, Delta Plastics, and Corteva Agriscience. With Partnership staff already in place and operating across rice country, the timeline to launch this project could start today. The team is ready and able to hold round one of project sign-ups in summer 2023 with first climate-smart practice implementation in winter 2023/24. Training for MMRV would also follow notification of award and begin immediately thereafter. Marketing aspects would follow harvest in fall 2024 and continue in successive years (above Figure 3).

- D. Plan to provide financial assistance to producers/landowners to implement CSAF practices: Following are key points on the financial assistance structure from the NRCS Climate-Smart Practice Tiers presented above (see ii.A).
 - All practices are currently available under USDA programs, including NRCS Environmental Quality Incentives Program (EQIP) and NRCS Conservation Stewardship Program (CSP).
 - USA Rice (lead) and DU (as primary subaward recipient) will divide fiscal responsibilities
 and mobilize existing financial administrative capacity to manage budgets and cash flow.
 Both organizations conduct an annual Single Audit to provide assurance to USDA that they
 have adequate internal controls in place and follow all federal program requirements.
 - Public sign-ups will be held each of the first 3 years of the project and the resulting 500 climate-smart incentive contracts will last for 3 years. The Partnership has extensive experience creating mechanisms such as screening and ranking tools to equitably deliver competitive conservation programs.
 - Financial assistance funding will be allocated to regions and therefore states in proportion to the rice acres harvested over the last 5 years. On average, that is 70% Lower Mississippi Alluvial Valley, 15% Gulf Coast, and 15% California's Central Valley.

- Then, financial assistance will be evenly divided across Climate-Smart Practice Tiers I, II/III, and IV resulting in an approximate \$20M investment in each GHG reduction pathway.
- The financial assistance rates for EQIP practices are at HU levels equating to full cost of implementing practices as determined by NRCS. The rate for CSP is standardized full cost of implementing enhancements (no HU level). Then, these financial assistance rates are increased 25% to cover the added data and monitoring efforts borne by the producers. Tier IV on-farm infrastructure improvements for HU will be capped at \$250,000 per climate-smart practice incentive contract. Additionally, HU participants will be eligible for voluntary Producer Targeted Pilot Project Grain Marketing Assistance. This marketing incentive will give flexibility post-harvest to enter marketplaces that might otherwise be inaccessible by extending grain storage options available to the participating producers.
- In addition to financial assistance for climate-smart practice implementation an innovative pay-per-performance incentive plan has also been added. Here, it is planned to pay a bonus to Tier I and II participants when they successfully collect all data necessary for the FieldPrint Calculator. The bonus will be higher if FieldPrint scores for GHG footprint are better than the participant average. The highest bonus budgeted per contract is \$7,000 which equates to 2% premium on market price for 320 acres of annual rice production. The bonus structure would decrease from there. Producers will be eligible for this incentive each year they grow rice under the project. The entire pay-per-performance aspect is budgeted at ≤2% of the full proposal amount, and while a relatively small investment, is an innovative way to focus on the goals of the project.
- It is incumbent upon the Partnership to ensure that payments are not provided to a producer or landowner for the same practice or system implementation on the same land for which the producer or landowner has already received, or is contracted to receive, funding through another USDA program. To accomplish this the Partnership will: (a) as part of the conservation planning determine ongoing practices and avoid duplication; and (b) as part of the final conservation plan have the applicant verify and sign an affidavit declaring no overlap.
- E. Plan to enroll underserved and small producers, including estimated number of participants and associated dollar amounts anticipated to go directly to producers, in the form of technical and financial assistance: The Partnership takes participation by the historically underserved sincerely and proactively. The National Black Grower Council and Warehouses4Good leadership outlined practices that would be most beneficial to their constituents. Most minority, low-income, and small producers simply do not have the on-farm improvements to implement modern day climate-smart practices. What is needed are infrastructure upgrades such as land shaping and leveling for runoff and irrigation control, pumping plants and pipelines for water delivery, and most noted was grain storage and drying facilities to preserve the harvest for marketing; some of the very basics for modern day climate-smart production. In response, Tier IV Infrastructure for Underserved was built and added to the project offerings. While this investment in basic land improvements does not result in immediate and measurable reductions in one's GHG footprint, it does empower the producer to advance quickly and implement climate-smart practices tomorrow and into the future. The National Black Grower Council, Warehouses4Good, and their membership, will remain

important partners in this climate-smart proposal, through outreach, producer participation, and this valuable advisory role.

- Historically Underserved Participants Tier IV 125 (≈25% of all participants).
- Financial assistance budgeted at $21.4M \approx 34\%$ of full financial assistance).
- Technical assistance budgeted at \$4.2M (≈34% of full technical assistance).
- Total assistance \$25.6M (32% of all assistance).
- Historically Underserved will also be recruited and prioritized in project ranking for Tiers I, II/III, increasing overall participation to reach President Biden's Justice40 Initiative goals.

In past Partnership efforts, it has been possible to amplify HU participation. With the first RCPP that just ended in 2020, there were 57 EQIP HU participants out of 230 conservation contracts, representing 25% of this initial effort. In this climate-smart proposal, the Partnership will continue their proactive efforts to seek out and work with the historically underserved. Below are some more personal and proven strategies that will continue:

- Face-to-face visits with local agricultural retailers and lenders who can pin-point and lead staff to historically underserved producers who may be interested in climate-smart efforts.
- Peer-to-peer efforts where current project participants pinpoint and lead staff to additional historically underserved producers such as those within the National Black Growers Council.

The 20% reduction in Climate Smart award funds does result in the original Tier 4 budgeted financial assistance to producers going from \$26.8M to \$21.4M (≈\$5.4M). But with assurance that Tier 4 infrastructure practices will be in conjunction with additive climatesmart management practices under Tiers 1-3 (stated above), and importantly, numerous historically underserved producers will be participating solely in Tier 1-3 climate-smart practices, this gap will be greatly reduced and likely eliminated.

iii. Measurement/ quantification, monitoring, reporting, and verification plan.

A. Approach to GHG benefit quantification: Because of its small footprint, complex biogeochemistry and complicated and diverse cultivation system, the incorporation of rice into COMET Farm and other Entity-Scale Method estimation tools has lagged behind other crops. To realize the high potential for permanent GHG reductions in rice systems, producers need decision support and measurement tools that can robustly account for potential and realized GHG reductions. The proposed pilot project will utilize a combination of Intergovernmental Panel on Climate Change (IPCC) Level 2 (state/regional sequestration/emissions factors combine with practice data) and IPCC Level 3 (models that include ancillary data alongside emission factors and practice data or process-based models) emissions reductions estimates for MMRV. The Field to Market FieldPrint Platform will be used for IPCC Level 2 emission reductions that can be compared against Entity-Scale Methods developed using IPCC Level 3 GHG reduction estimates from both DayCent (Parton et al. 1993) modeling by Arva Intelligence and Denitrification Decomposition (DNDC; http://www.dndc.sr.unh.edu/) modeling by Regrow. Furthermore, it is proposed to leverage ongoing eddy-flux covariance tower data collection, remote sensing-model fusion and advanced model development to improve IPCC Level 2 (FieldPrint) and 3 (DayCent & DNDC model) estimates over the course of the project.

Dr. Benjamin Runkle (University of Arkansas) and a panel of technical experts (Dr. Linquist, Dr. Anders, and Dr. Linscombe) will oversee a pre-competitive working group among MMRV partners to establish best practices, needs for data collection, technological improvement, model sensitivity analysis and model calibration standards. Runkle will also undertake independent sensitivity and uncertainty analysis for MMRV platforms and perform an MMRV platform intercomparison. Ultimately, this project proposes to develop robust quantifications of GHG benefits as well as bringing to market three independent GHG reduction platforms for rice producers and the rice supply chain to promote a flexible and competitive market.

For this proposal, "entity" is defined as the land a producer has chosen to enroll in this project, which will include rice but may also include rotations of soybeans, fallow, or aquaculture (crawfish). For each producer, a "baseline" GHG emission/sequestration rate will be established following the Field to Market Scope 3 Emissions Guidance (Gold Standard's Value Change) using 1-3 years of data on rice production history. Changes in GHG emissions/sequestration rates due to practices implemented by the producer will then be evaluated against this baseline. This project will also utilize the Field to Market National Indicators Report data to compare producer GHG metrics against state and national benchmarks. The GHG benefits will be calculated on a CO₂e/yield basis (kg CO₂e/cwt) to facilitate supply chain tracing calculations.

All project producers (100% of the 320,000 acres) will be enrolled in IPCC Level 2 data collection for baseline and GHG benefits leveraging Field to Market's FieldPrint Platform. This will allow GHG benefit calculation for producers enrolled in Tier I-III practices (240,000 acres) and establish a baseline for HU producers under Tier IV (80,000 acres) to ready them to enter the market. Rice specialists will work with growers to enter location, rotation, yield, climate-smart practices and other management data for each enrolled field. The FieldPrint Platform then utilizes a combination of linkages to existing USDA-supported models, including an interface with COMET-Planner to estimate GHG intensity of crop production, soil conditioning index, energy use, water quality, biodiversity and other metrics. The FieldPrint Platform is widely accepted among industry partners and is a particularly good option for rice given that rice is not available in COMET Farm or Planner. Currently, based on the recommendations of technical experts Runkle, Linquist, Anders and others (Marcos et al. 2018) the platform relies on IPCC Level 2 estimate of rice GHGs based on a USA Rice funded metanalysis of practice and region-specific emissions scaling factors (Linquist et al. 2018). FieldPrint Platform also utilizes the GREET model to estimate energy and associated GHG from management and input application activities. Based on a recent application and sensitivity analysis of FieldPrint Platform by Runkle (Moreno-García et al. 2021) there are significant improvements that can be made to this tool to better reflect rice sustainability that will be pursued with Field to Market as part of this proposed work. The FieldPrint Platform calculates the most significant GHG emissions reduction potential in rice, those associated with methane and nitrous oxide emission rates, emissions based on fossil fuel energy use, and the embodied energy of crop inputs (Figure 1) and is therefore very useful in communicating with producers (Moreno-Garcia et al. 2021). However, it does not conform fully to the Entity Scale Method, therefore, supplemental data and comparisons against Entity-Scale Methods will require additional approaches.

Using both DayCent and DNDC approaches to model GHG benefit estimates will serve two purposes in this proposal: (1) to calibrate and cross-validate models; and (2) develop GHG benefit estimates consistent with the Entity-Scale Methods and COMET-Planner. While rice systems carbon GHG balances have been modeled successfully using both DNDC (Simmondes et al. 2015, Salas et al. 2007) and DayCent (Cheng et al. 2013) and has been incorporated into some versions of COMET Farm, rice is currently not available in the rotation builder of the publicly available COMET Farm tool. Modeling rice emissions using DNDC and DayCent in U.S. rice systems is promising but has been met with mixed results. Therefore, this project will leverage ongoing and past eddy-flux covariance, soil, and producer data to improve model calibration and validation. DayCent (Arva) and DNDC (Regrow) will be used to model approximately 10% (32,000 acres) of total acres. These will be compared with the results from the FieldPrint Platform. Regrow has developed advanced remote sensing models that track rice production practices relevant to estimating GHG benefits including irrigation, crop rotations, tillage, cover cropping and winter flooding for migratory birds. Similarly, Arva relies on remotely sensed data sets alongside publicly available data to refine their DayCent model. Runkle will conduct an uncertainty analysis of all 3 platforms to inform future improvements. At the end of the proposed project period, it is anticipated these 3 platforms will be publicly available, parameterized and validated for rice, and ready for inclusion in COMET Farm and Planner.

- B. Approach to monitoring of practice implementation: From a MMRV point of view, there are two classifications of practices under this proposed implementation plan: (1) "visible practices" that are detectable though remote-sensing (e.g. cover crops or water management); and (2) operational practices that will require producer confirmation. Geospatial records of contracts will be maintained in the Enterprise GIS System developed and maintained by DU. The Partnership staff has over a decade of experience managing these large and complex data sets. These geospatial data can then be overlain with remote sensing data developed by Arva and Regrow for "visible practice" monitoring as described above in iii.A. "Operational data" will be confirmed through producer interviews and data collection. Overall, 500 producers will be targeted, and 320,000 acres enrolled in project activities, 100% of which will be monitored using surveys related to operational data alone, and 10% (32,000 acres) of total acres will also be evaluated with either Arva or Regrow platforms. Enrollment in Arva or Regrow platforms is anticipated to increase with supply chain demand as described in the Expanded Markets section iv.
- C. Approach to reporting and tracking of GHG benefits: Practices and their associated GHGs will be tracked though the methods described above (FieldPrint Calculator for 100% of the 320,000 acres, Arva and Regrow platforms for 10% of total acres). USA Rice will lead the development of a method for tracking benefits through the MMRV partners to the supply chain that ensures no double counting of GHG benefits. As a condition of participating in the project, producers must attest that they will not market or sell GHG benefits outside of the context of the proposed pilot project without express permission to do so, in which case the benefits will be ineligible. To enable volume proxy and/or mass balance approaches to supply chain tracing, alongside yield data, producers will be asked to indicate the first aggregation point for their harvested rice. As described in the Marketing section below, USA

Rice will facilitate data gathering and tracking amongst supply chain partners to enable credible volume accounting methodologies.

Based on simplistic assumptions that a producer's contracted acres grow rice every other year and extrapolating from published literature (Linquist et al. 2018), the anticipated GHG benefits per farm from AWD, furrow irrigation, nutrient management, and irrigation water management were calculated based on the anticipated Tier 1 and Tier II/III practice implementation. It is estimated that 265,485.6 MTCO₂e reductions in GHGs will be achieved over the course of the project at an average cost of \$233/MTCO₂e. Based on average farm size (640 acres), this is approximately 691 MTCO₂e per farm. This equates to a reduction of 0.18 MTCO₂e/MT rice. The estimates of GHG reductions are considered to be conservative based on the fact that only GHG emissions reductions resulting from three key practices that represent the majority of emissions reductions have been included. It is also conservatively assumed there will be no change in yield or land use efficiency, though continued improvement in those metrics is anticipated.

Considering that the majority of GHG benefits derived from practices implemented in this pilot are emissions reductions that are immediate with no risk of reversal, the GHG benefits achieved under this 5-year pilot accumulate quickly. Furthermore, as detailed in section iv.D. detailed producer surveys from past projects show that >80% of producers enrolled in these practices will adopt them even when contract payments cease. Thus, not only are the GHG benefits achieved durable, it is anticipated that future GHG benefits will be realized post-project, reducing the long-term cost per MTCO2e reduced.

- D. Approach to verification of GHG benefits: Verification of greenhouse gas benefits will encompass three distinct aspects: (1) practice verification; (2) GHG benefits estimate/modeling verification; and (3) verification of project processes. Practice verification will build on monitoring described in the iii.B. and will rely on remotely sensed verification of practices as well as requesting supporting documentation from producers. The GHG benefit estimates and modeling will be verified though Runkle's independent assessment of modeling techniques. Finally, as described in the Marketing section, the Partnership will work with supply chain partners and MMRV partners to establish standards for verification and upon request enable independent third-party audits. The Partnership's technical advisory and MMRV partners have led protocol development with voluntary carbon standards and carbon verification and validation through Climate Action Reserve, Verra, and SustainCERT. As discussed in the Marketing section (iv) the Partnership wants to offer flexibility and a broad range of standards for their diverse group of supply chain partners.
- E. Agreement to participate in the Partnerships Network: We agree to participate in the Partnership Network as reinforced in our letters of collaboration.
- iv. Plan to develop and expand markets for climate-smart commodities generated.
- A. Any partnerships designed to market resulting climate-smart commodities: USA Rice is the global advocate for all segments of the U.S. rice industry. Coming together under the umbrella of USA Rice; producers, millers, merchants, end users, and other allied partners have a strong, united voice as well as a forum for effective program development to support

the growth and profitability of the entire U.S. rice industry. USA Rice is unlike most agriculture associations in that they are vertically integrated, whose members go from seed and farmer to miller, food processor, end-user, and exporter. The unification of USA Rice's diverse membership along with the very different rice-growing regions for this initiative is a testament that, if funded, USA Rice has the unique opportunity to scale advancement at the farm and in market development as desired by this program.

Of the 20 billion pounds of rice produced in the U.S. annually, approximately half of that is exported to more than 120 countries worldwide and the other half stays here for food, beverages, pet and animal feed, and many other uses. USA Rice domestically has ongoing promotional programs in consumer/retail, nutrition, and foodservice and internationally conducts marketing activities in 21 different markets across the globe. Not only is USA Rice's membership broad and all-encompassing, so are their markets, therefore a successful, industry-wide campaign to advance climate-smart market development must be the same.

The U.S. rice industry has many progressive entities across the supply chain. The industry's producers, processors, and food and beverage companies have already made great strides in advancing their GHG-reducing rice activities, and some have successfully deployed a rice-growing, processing, and marketing strategy. If this pilot is to be successful and broadly adopted, it must not disrupt those investments that have been made but build a program that supports and advances those ongoing efforts and encourages the development of new ones. Because the Partnership has assembled such a diverse group of partners, flexibility has deliberately been built into the MMRV and GHG benefits reduction framework. While standards and unifying frameworks for Scope 3 supply chain emissions reductions exist, the Partnership has observed a wide variety of approaches to the application of these with each supply chain partner establishing different requirements and intensities of MMRV. USA Rice will build a flexible framework that supports diverse needs of partners and brings maximum value to growers, a framework with multiple pathways to establish GHG reductions based on market demands.

B. Plan to track climate-smart commodities through the supply chain: As described in the Monitoring section (iii), detailed farm operations data will be captured to calculate GHG benefits and verified using our MMRV partners. USA Rice will work with MMRV partners to issue a certificate stating the grain participated in this pilot with quantified reductions (those producers participating in Tier I-III practices). For those underserved producers in Tier IV that are preparing infrastructure, this pilot will enable them on a path of continuous improvement by providing both the physical infrastructure and their baseline GHG emissions, as well as introducing them to the climate-smart rice marketplace.

This proposal includes an introductory phase before the pilot grain's marketing journey. Year one of implementation will be for the participating producer to get familiar with the practices, manage the time commitment of the data collection, lean on Partnership staff for problem resolution in the field, and understand how the reductions are calculated and verified. After year one, with the permission of the producer, USA Rice's broad network of members and partners will be used to create a regional-based network around that grain to educate all buyers and processors that it exists, then help establish a business relationship between the producer and buyer.

For years two and beyond, USA Rice will assist with the promotion to the surrounding industry that the pilot grain exists, which will vary dependent on the organization interested in purchasing the grain, which is why multiple MMRV partners have been brought in. If that buyer already has a methodology in place for GHG quantification, and it is different from what this pilot has implemented in year one, or requires other practices to be implemented alongside what that producer completed in year one, Partnership staff and MMRV partners will help the producer bridge the reporting, practice, and quantification gaps. This strategy keeps the producer in control and allows options, keeping this pilot flexible and scalable while protecting the integrity of the independent methodology. The one year of implementation before entering into a commitment with a buyer also gives the producer an understanding of the risks and costs of the practices as well as a better grasp of the quantification results.

- C. Estimated economic benefits for participating producers including market returns: These markets currently exist in the rice industry, though they vary for each distinct growing region; some desire identity-preserved grain that is tracked through the entire supply chain, others utilize a mass balance sourcing method, some grain is marketed as sustainable products, while other is procured with verified emission reductions solely to achieve the sourcing company's sustainability goals. USA Rice members consist of 88 industry-leading rice millers and merchants, allied industry, and international food and beverage companies. The Partnership believes the flexibility in this strategy will encourage the market to determine where the value lies for the participating producer, in their distinct region, and help expand what has been started. Industry leaders who have invested in these processes include above-market prices to the participating producers. The economic benefits to the producers in this pilot will come from the reductions of energy and irrigation efficiencies, but also from expanding the market opportunities that are already in place and facilitating new ones. The pilot partners will be inclusive to all members of USA Rice, as well as the organizations that have supported and excelled the Partnership's programs to date by expanding their advisory role into climate-smart rice market development opportunities where possible. Consumerfacing partners and investors in this project include; Walmart Corporation, Walmart Foundation, Nestle' Purina PetCare Company, Anheuser-Busch, and Riceland Foods.
- D. Post-project potential, including anticipated ability to scale project activities, likelihood of long-term viability beyond project period, and ability to inform future USDA actions to encourage climate-smart commodities: The Partnership has been working in these regions deploying these same practices as proposed in this pilot with the assistance of NRCS and RCPP incentives since 2014. A recent study conducted by the Partnership through the University of Arkansas Monticello (Figure 4) shows that with an appropriate level of technical assistance, conservation practices like irrigation water management and nutrient management are retained or adopted at an ≥80% rate, even after financial assistance is over. It has been shown that with practice adoption assistance alone, these emission-reducing practices are scalable with long-term viability beyond the project period. The market development component with the additional incentives to the producer will only reinforce the positive economics at the farm level to advance adoption and scalability.



Figure 4. Producer intentions to adopt practices on acres compared to conservation contracts.

In summary, rice is the world's 3rd largest crop commodity, measured by metric tons annually, and provides 20% of the calories consumed by mankind every day. Rice is also one of the most important food resources for waterfowl. Winter flooded rice fields act as surrogate wetlands for over 200 species of birds in the major migratory flyways of North America, and one acre of rice provides two-thirds of the waterfowl food found in an acre of a natural wetland. The value of recreating such habitat without rice farming is estimated at nearly \$3.5 billion. The habitat co-benefits from working ricelands are irreplaceable and necessary to maintain and enhance wetland wildlife populations.

Rice is **the** environmental crop, but cultivation produces GHGs and consumes water, resource challenges that can be improved upon. This project will reduce GHG emissions on 240,000 acres of working ricelands through irrigation strategies of alternate-wetting and drying (AWD) and furrow irrigation. It will also increase efficiencies in the use of fertilizers, crop protectants, and energy. These actions address more than 90% of the GHG footprint of rice production and will result in a total project emissions reduction of ≥265,500 MTCO₂e, at an average cost of \$233/MTCO₂e. Studies of practice persistence among producers demonstrate that >80% continue these practices after contract expiration, therefore continued GHG reductions beyond the life of the pilot project are expected. This project will support the historically underserved on an additional 80,000 acres by improving critical infrastructure necessary to implement climate-smart practices. USA Rice, the global advocate for all segments of the industry, maintains domestic and international market access and will lead this project's marketing efforts. For our project, 34% will be invested in historically underserved communities to support President Biden's Justice40 Initiative.

Citations:

FAO. 2020. World Food and Agriculture - Statistical Yearbook 2020. Rome. https://doi.org/10.4060/cb1329en

Fukagawa, Naomi & Ziska, Lewis. (2019). Rice: Importance for Global Nutrition. Journal of Nutritional Science and Vitaminology. 65. S2-S3. 10.3177/jnsv.65.S2.

EPA (2022) Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2020. U.S. Environmental Protection Agency, EPA 430-R-22-003.

https://www.epa.gov/ghgemissions/draft-inventory-us-greenhouse-gas-emissionsand-sinks-1990-2020.

Richardson, J. W., Outlaw, J. L. (2017). Economic Contribution of US Rice Production to the US Economy. Agricultural and Food Policy Center, Texas A&M University, *Research Report* 17-2, P. 8. College Station, Texas.

Petrie, M., M. Brasher, and D. James. (2014). Estimating the biological and economic contributions that rice habitats make in support of North American Waterfowl. The Rice Foundation, Stuttgart, Arkansas, USA.

U.S. Rice Industry Sustainability Report - Impressive History Bright Future. 2018. Rice Foundation, Arlington, VA. 64 pp.

Parton, W.J. J.M.O. Scurlock, D.S. Ojima, T.G. Gilmanov, R.J. Scholes, D.S. Schimel, et al. 1993. Observations and modeling of biomass and soil organic-matter dynamics for the grassland biome worldwide. Global Biogeochem. Cycles. 7:785-809.

Marcos, M., B. Lidquist, M. Anders, D. Harrell, B. Runkle, M. Reba, A. Adviento-Borbe, and A. Thomson. 2018. Field to Market Greenhouse Gas Emissions Metric: Estimating Methane Emissions from US Rice Production Systems. Field to Market.

Linquist, B.A., M. Marcos, M. Arlene Adviento-Borbe, M. Anders, D. Harrell, S. Linscombe, M. Reba, B. Runkle, L. Tarpley, and A. Thompson. 2018. Greenhouse Gas Emissions and Management Practices that Affect Emissions in US Rice Systems. J. Env. Qual. 47: 395-409.

Moreno-Garcia Beatriz Moreno-García, Eric Coronel, Colby W. Reavis, Kosana Suvočarev, Benjamin R.K. Runkle. 2021. Environmental sustainability assessment of rice management practices using decision support tools. Journal of Cleaner Production, 315: 128135.

Simmonds, M.B., C. Li, J. Six, C. van Kessel, and B.A. Linquist. 2015. Modeling methane and nitrous oxide emissions from direct seeded rice systems. J. Geophys. Res. Biogeosci. 120:2011-2035.

Salas, W., Boles, S., Li, C., Yeluripati, J. B., Xiao, X., Frolking, S. and Green, P. (2007), Mapping and modelling of greenhouse gas emissions from rice paddies with satellite radar observations and the DNDC biogeochemical model. Aquatic Conserv: Mar. Freshw. Ecosyst., 17: 319–329. doi: 10.1002/aqc.837

Cheng, K., S.M. Ogle, W.J. Parton and G. Pan. 2013 Predicting methanogenesis from rice paddies using the DAYCENT ecosystem model. Ecol. Modell. 261-262:19-31.

Page 039	
Withheld pursuant to exemption	
(b)(4)	
of the Freedom of Information and Privacy Act	

Page 040	
Withheld pursuant to exemption	
(b)(4)	
of the Freedom of Information and Privacy Act	

Attachment - Benchmarks Table

RICE STEWARDSHIP PARTNERSHIP CLIMATE SMART MILESTONES	FFY	2023	,	FY 20	24		ĵ	FY 20	25		FF	Y 202	6	9
(022723)	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Required Quantitative Targets (Cumulative) 1 Number of Producers Involved 2 Number of Acres Involved 3 Financial Assistance to Producers Number of Underserved Producers 4 Involved Number of Underserved Acres 5 Involved Financial Assistance to Underserved 6 Producers GHG Benefits - MT CO2e			100 61,250 30 18,750 \$ 5,468,750			66,500	200 122,500 \$ 10,156,250 65 37,500 \$ 10,937,500		3778	133,000	300 183,750 \$ 20,312,500 95 56,250 \$ 16,406,250			
7 Reduced/Sequestered Number of New Marketing Channels 8 Established Number of Marketing Channels 9 Expanded Number of Measurement Tools 10 Untilized						1		1		2		2		3
Other Required Benchmarks - Qualatative or Quantitative (Cumulative) Outreach, training, technical 11 assistance events 12 MMRV comparison progress reports Specific engagement by 13 implementation partners		1				2 1 2				3 2 3				4 3 4
Marketing, training, product 14 promotion events						9		1				2		

F	FY 20	27) i	FY 20	28		FINAL
Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	TOTAL
375 245,000 \$ 30,468,750 125				\$ 40,625,000				375 245,000 \$ 40,625,000
75,000 \$ 21,875,000							vander erese	75,000 \$ 21,875,000
	3		199,500		4		266,000	266,000 4
	3		4		4			4
			5 4					5
	3		5		4			5

Climate-Smart Practices and Limitations

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

NRCS Practice Code	Practice Name
CEMA 228	Agricultural Energy Assessment
327	Conservation Cover
328	Conservation Crop Rotation
329	Residue and Tillage Management, No Till
340	Cover Crop
E340B	Intensive cover cropping to increase soil health and soil organic matter content
345	Residue and Tillage Management, Reduced Till
E374A	Install variable frequency drive(s) on pump(s)
386	Field Border
391	Riparian Forest Buffer
393	Filter Strip
410	Grade Stabilization Structure
422	Hedgerow Planting
430	Irrigation Pipeline*
436	Irrigation Reservoir*
443	Irrigation System, Surface and Subsurface*
449	Irrigation Water Management
E449A	Complete pumping plant evaluation for water savings
E449B	Alternated Wetting and Drying (AWD) of rice fields
E449E	Convert from Cascade to Furrow Irrigated Rice Production – reduce irrigation water
	consumption
464	Irrigation Land Leveling
533	Pumping Plant
587	Structure for Water Control
590	Nutrient Management
E590A	Improving nutrient uptake efficiency and reducing risk of nutrient losses
E590B	Reduce risks of nutrient loss to surface water by utilizing precision agriculture technologies
595	Pest Control Conservation System
E595A	Reduce risk of pesticides in surface water by utilizing precision pesticide application
	techniques
E595B	Reduce risk of pesticides in surface water and air by utilizing IPM PAMS techniques
645	Upland Wildlife Habitat Management
E646A	Close structures to capture and retain rainfall for waterfowl and wading bird winter habitat*
E646B	Extend retention of captured rainfall for migratory waterfowl and wading bird late winter habitat*
E646C	Manipulate vegetation and maintain closed structures for shorebirds mid-summer habitat*
E646D	Manipulate vegetation and maintain closed structures for shorebird late summer habitat*

^{*}Only as needed to produce climate-smart rice

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



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



Table of Contents

0	verview of Reporting Requirements	2
	Project Summary	3
	Partner Activities	4
	Marketing Activities	5
	Producer Enrollment	6
	Field Enrollment	7
	Farm Summary	8
	Field Summary	9
	GHG Benefits - Alternate Modeled	. 10
	GHG Benefits - Measured	. 11
	Additional Environmental Benefits	.12
	Supplemental Data Submission	. 13
D	ata Descriptions	. 14
	Unique IDs	. 14
	Project Summary	. 15
	Partner Activities	. 20
	Marketing Activities	. 25
	Producer Enrollment	. 30
	Field Enrollment	. 38
	CSAF Practice Sub-questions	.44
	Farm Summary	. 45
	Field Summary	
	GHG Benefits - Alternate Modeled	.57
	GHG Benefits - Measured	. 61
	Additional Environmental Benefits	. 65
	CSAF Practice Sub-questions	. 75
Αį	opendix A: Climate-smart Agriculture and Forestry Practices	.83
	All NRCS Practice Standards (not limited to climate-smart practices)	. 83
	Other CSAF Practices	. 85
۸.	anondiy D. Commodity List	00



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."

Version 1.0 Page 2 of 87



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 (CO2e) emission reductions	Quarterly
Cumulative carbon stock	Whole project estimate of total carbon sequestration	Quarterly
Cumulative CO2 benefit	Whole project estimate of total CO2 emission reductions	Quarterly
Cumulative CH4 benefit	Whole project estimate of total CH4 emission reductions	Quarterly
Cumulative N2O benefit	Whole project estimate of total N2O 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

Version 1.0 Page 3 of 87



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

Version 1.0 Page 4 of 87



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

Version 1.0 Page 5 of 87



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

Version 1.0 Page 6 of 87



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)

Version 1.0 Page 7 of 87



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

Version 1.0 Page 8 of 87



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 CO2 ER	Official estimate of total CO2 emission reductions for field	Quarterly
Field official CH4 ER	Official estimate of total CH4 emission reductions for field	Quarterly
Field official N2O ER	Official estimate of total N2O 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

Version 1.0 Page 9 of 87



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	202
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

Version 1.0 Page **10** of **87**



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 CO2 reduction calculated	Calculation of total CO2 reduction	Annual
Total carbon stock change calculated	Calculation of change in carbon stock	Annual
Total CH4 reduction calculated	Calculation of total CH4 reduction	Annual
Total N2O reduction calculated	Calculation of total N2O reduction	Annual
Soil sample result	Numeric result from soil sample	Annual
Measurement type	Type of analysis conducted	Annual

Version 1.0 Page **11** of **87**



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
Туре	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

Version 1.0 Page **12** of **87**



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.

Version 1.0 Page **13** of **87**



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

Version 1.0 Page **14** of **87**



Project Summary

Data collection level: Project

rioject Summary			
Commodity type			
Data element name: Commodity type	Reporting question: What climate-smart commodity types are produced by this project?		
Description: Type of commodity incentivi	zed by the project. These commodities include those for whom		
	or other types of marketing support. See full list of commodity options		
in Appendix B. List one commodity per ro			
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?		
(7)	dity(ies) related to project activities. If sales are reported, complete the		
[[[[10] - 10] [[10] [[10] [10] [[10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10] [10]	as part of the quarterly performance report.		
Data type: List	Select multiple values: No		
Measurement unit: Category	Allowed values:		
	• Yes		
Logie: None all respond	No Postuired: Voc		
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?		
	rolled producers or fields. If enrollment activities occurred this quarter eld Enrollment worksheets (Tables 4 and 5) as part of the quarterly		
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 ben	efits are being measured and calculated by the project this quarter.		
Data type: List	Select multiple values: No		
Measurement unit: Category	Allowed values:		
7	Models		
	 Direct field measurements 		
	Both		
Logic: None – all respond	Required: Yes		
Data callection level, Deciset	5-4		

Version 1.0 Page **15** of **87**

Data collection frequency: Quarterly

GHG cumulative calculation

Data element name: GHG cumulative Reporting question: What method(s) was used to calculate the

calculation total cumulative GHG benefits reported here?

Description: List the method(s) that was used to calculate the total cumulative GHG benefits reported 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

Cumulative GHG benefits

Data element name: Cumulative GHG Reporting question: What are the project's estimated total GHG

benefits emission reductions (CO2eq) to date?

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 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

Cumulative carbon stock

Data element name: Cumulative carbon Reporting question: How much carbon has the project

stock sequestered to date?

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 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

Cumulative CO2 benefit

Data element name: Cumulative CO2 Reporting question: What are the project's estimated total

benefit cumulative CO2 emission reductions to date?

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 Select multiple values: No

Measurement unit: Metric tons CO₂ Allowed values: 0-10,000,000

Logic: None – all respond Required: Yes

Data collection level: Project Data collection frequency: Quarterly

Cumulative CH4 benefit

Data element name: Cumulative CH4 benefit Reporting question: What are the project's estimated total

CH4 emission reductions to date?

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 Select multiple values: No

Measurement unit: Metric tons CH4 reduced in Allowed values: 0-10,000,000

CO₂eq

Logic: None – all respond Required: Yes

Data collection level: Project Data collection frequency: Quarterly

Version 1.0 Page **16** of **87**



Cumulative N20 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 $N_2O = 298$ tons of CO_2eq .

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

Version 1.0 Page 17 of 87

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: DecimalSelect multiple values: NoMeasurement unit: DollarsAllowed 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

Version 1.0 Page 18 of 87

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

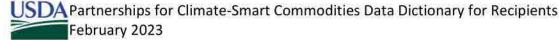
Measurement unit: Category Allowed values:

- 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

Version 1.0 Page 19 of 87



Partner Activities

					-
	nı	~		0	Ds
u		ч	u	_	$\boldsymbol{\nu}$

Partner ID Unique Project ID for each partner

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:

Commodity groups (501c5)

For-profitIndividualNonprofit

State or local agency

Tribal agency
 University
 Required: Yes

Data collection level: Partner Data collection frequency: Partnership initiation

Partner POC

Logic: None - all respond

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

Version 1.0 Page 20 of 87



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?		
working relationship (under contract or on a grant) Data type: List	prior to the start of the project. Select multiple values: No		
Measurement unit: Category	Allowed values:		
	• Yes		
	• No		
Landa, No company for applicant	I don't know Partired: Ver		
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?		
Data element name: Partner total requested			
Data element name: Partner total requested Description: Cumulative (total) amount of funds tha recipient from the start of the partnership to the en	funding the partner has requested to date from this project? It the partner has requested reimbursement for from the d of the reporting quarter. For each quarter's data entry, the		
Data element name: Partner total requested Description: Cumulative (total) amount of funds tha recipient from the start of the partnership to the envalue must be the sum of all previous entries plus the	funding the partner has requested to date from this project? It the partner has requested reimbursement for from the d of the reporting quarter. For each quarter's data entry, the me amount of funds requested in the reporting quarter. If		
Data element name: Partner total requested Description: Cumulative (total) amount of funds tha recipient from the start of the partnership to the envalue must be the sum of all previous entries plus the there are no changes, report the value from the previous entries.	funding the partner has requested to date from this project? It the partner has requested reimbursement for from the d of the reporting quarter. For each quarter's data entry, the ne amount of funds requested in the reporting quarter. If vious quarter.		
Data element name: Partner total requested Description: Cumulative (total) amount of funds tha recipient from the start of the partnership to the envalue must be the sum of all previous entries plus the there are no changes, report the value from the previous to the previous entries plus the same of the previous entries plus the plus the previous entries plus the previous entries plus the previous entries plus the plus the plus the plus the plus the plus	funding the partner has requested to date from this project? It the partner has requested reimbursement for from the d of the reporting quarter. For each quarter's data entry, the me amount of funds requested in the reporting quarter. If vious quarter. Select multiple values: NA		
Description: Cumulative (total) amount of funds that recipient from the start of the partnership to the envalue must be the sum of all previous entries plus the there are no changes, report the value from the previous type: Decimal Measurement unit: Dollars	funding the partner has requested to date from this project? It the partner has requested reimbursement for from the d of the reporting quarter. For each quarter's data entry, the ne amount of funds requested in the reporting quarter. If vious quarter. Select multiple values: NA Allowed values: \$0-\$100,000,000		
Description: Cumulative (total) amount of funds that recipient from the start of the partnership to the envalue must be the sum of all previous entries plus the there are no changes, report the value from the previous type: Decimal	funding the partner has requested to date from this project? It the partner has requested reimbursement for from the d of the reporting quarter. For each quarter's data entry, the ne amount of funds requested in the reporting quarter. If vious quarter. Select multiple values: NA		

Version 1.0 Page **21** of **87**



Total	match	ntri	hutian
lota	match	contri	button

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

Allowed values: \$0-\$100,000,000 Measurement unit: Dollars

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

Logic: None - all respond

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)

Required: Yes

Data collection level: Partner Data collection frequency: Quarterly

Version 1.0 Page 22 of 87



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

Allowed values: Measurement unit: Category

- 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 frequency: Quarterly Data collection level: Partner

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

Page 23 of 87 Version 1.0



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

Version 1.0 Page 24 of 87



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 Reporting question: What type of marketing channel is used to

ype 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:

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

Version 1.0 Page 25 of 87



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 Reporting question: What is the primary geography of the

geography 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.

Logic: None - all respond

Data type: List Select multiple values: No

Measurement unit: Category Allowed values:

LocalRegionalNational

Global
 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

Version 1.0 Page 26 of 87

		Marketon and			Same Life	
•	10	ume	200	14	III	•
		unic	: 3U	ıu	un	

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

Logic: None - all respond

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)

Required: Yes

Data collection level: Project Data collection frequency: Quarterly

Version 1.0 Page 27 of 87



Price premium to producer

Data element name: Price premium to Reporting question: What percent of the price premium is

producer 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 Allowed values: 0-100 Measurement unit: Percent

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

Logic: None - all respond

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

Allowed values: Measurement unit: Category

- 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) Required: Yes

Data collection level: Project Data collection frequency: Quarterly

Version 1.0 Page 28 of 87



Marketing channe	l 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) Required: Yes

Data collection level: Project Data collection frequency: Quarterly

Traceability method

Logic: None - all respond

Data element name: Traceability method

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

Page 29 of 87 Version 1.0



SDA Partnerships for Climate-Smart Commodities Data Dictionary for Recipients February 2023

Producer Enrollment

					-	
11	nı	M	ue	211		c
v	***	ч	uc	2.0	•	Э

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

Description: Indicates that there is new or updated information for a producer who had previously enrolled in

the project and is re-enrolling.

Select multiple values: No Data type: List

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.

Select multiple values: NA Data type: Text

Measurement unit: NA Allowed values: Text

Logic: None - all respond Required: Yes

Data collection level: Producer Data collection frequency: Initial enrollment

Version 1.0 Page 30 of 87



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

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

Logic: None - all respond

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 acres500 to 999 acres
- 1,000 to 1,999 acres
- 2,000 to 4,999 acres
- 5,000 or more acres

Logic: None – all respond

Data collection level: Producer

Required: Yes

Data collection frequency: Initial enrollment and subsequent

enrollment(s), if applicable

Version 1.0 Page 31 of 87



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 Reporting question: What amount of the current operation is used for

area 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

Version 1.0 Page 32 of 87



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

Jerest marcipie variaesi mo

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)

Required: Yes

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

Livestock head

Data element name: Livestock head 1-3

Logic: Respond if 'Total livestock area' >0

Data collection level: Producer

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

Version 1.0 Page 33 of 87



-			lane.		
Mr	O3	nı	•	ta	rm
01	5,0	ш	•	10	

Data element name: Organic farm

Reporting question: Is any part of the farm currently USDAcertified 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

Allowed values: Measurement unit: Category

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.

Select multiple values: No Data type: List

Measurement unit: Category

Allowed values:

Financial benefit

Environmental benefit

New market opportunity

Partnerships or networks

Other

Required: Yes Logic: None - all respond

Data collection level: Producer Data collection frequency: Initial enrollment

Version 1.0 Page 34 of 87



_			
Drad	HARM	a.itraa	-
PIUU	ucer	outrea	CH

Data element name: Producer outreach 1- 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?

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

Version 1.0 Page **35** of **87**



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 Reporting question: Were prior CSAF practices supported by

unds 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

Version 1.0 Page **36** of **87**



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

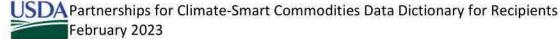
I don't know

Logic: Respond if yes to 'CSAF experience'

Required: Yes

Data collection level: Producer Data collection frequency: Initial enrollment

Version 1.0 Page 37 of 87



Field Enrollment

	ue	

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:

YesNo

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

Version 1.0 Page 38 of 87



Commodity category	
Data element name: Commodity category	Reporting question: What category of
MOVE ON DIRECT SECTION MADE OF MADE OF ME AN INC.	commodity(ies) is (are) produced from this field
Description: Category of commodity(ies) produced in fie	ld 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
2 2 17 W	 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
water with the second	produced from this field?
Description: Type of commodity produced in field enroll	
worksheet provides a drop-down list of the allowed valucommodities in subsequent rows.	es. Choose the appropriate value. Enter additional
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
	Data conection frequency. Initial enformment
Baseline yield	Demanting acception. What is the benefit willed
Data element name: Baseline yield	Reporting question: What is the baseline yield of this field?
Description: Average annual yield of commodity in 3 year	rs prior to enrollment. Provide yield for the enrolled
	valuiald for the appoint a paramediturianth a properties
field if possible. If not at field level, provide average annu	ver and a supply for the company of
	Select multiple values: No
field if possible. If not at field level, provide average annu	ver and a company of the company of
field if possible. If not at field level, provide average annu Data type: Decimal	Select multiple values: No

Version 1.0 Page **39** of **87**



Baseline	vield	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 acreTons per acreOther (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 fieldWhole operationOther (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

Version 1.0 Page **40** of **87**



Fiel	d	ırrı	ga	te	d

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?

Select multiple values: No Data type: List

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

Required: Yes

Data collection level: Field Data collection frequency: Initial enrollment

Field tillage

Logic: None - all respond

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

Allowed values: Measurement unit: Category

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

Version 1.0 Page 41 of 87



Practice	past	extent	-	farm
----------	------	--------	---	------

Data element name: Practice past extent - Reporting question: What percent of the farm has

farm implemented this CSAF practice (combination) previously?

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 Select multiple values: No

Measurement unit: Category 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

been implemented previously in this field?

Logic: None – all respond Required: Yes

Data collection level: Field Data collection frequency: Initial enrollment

Field any CSAF practice

Data element name: Field any CSAF practice Reporting question: What is this field's prior experience with

CSAF practices?

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 Select multiple values: No

Measurement unit: Category Allowed values:

Yes
 No

I don't know
 Required: Yes

Data collection level: Field Data collection frequency: Initial enrollment

Practice past use - this field

Logic: None - all respond

Data element name: Practice past use - this Reporting question: Have this CSAF practice (combination)

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 Select multiple values: No

Measurement unit: Category Allowed values:

YesSome

• No

I don't know

Logic: None – all respond Required: Yes

Data collection level: Field Data collection frequency: Initial enrollment

Version 1.0 Page **42** of **87**



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 Reporting question: What year is the CSAF practice planned to

implementation year 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

Version 1.0 Page 43 of 87



Practice extent unit

Data element name: Practice 1-7 Reporting question: Unit for extent of practice implementation

extent unit

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 enrollment

CSAF 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.

Version 1.0 Page 44 of 87



SDA 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.

Select multiple values: No Data type: List

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) Required: Yes

Logic: None - all respond Data collection level: Producer

Data collection frequency: Quarterly

Producer incentive amount

Data element name: Producer incentive

Reporting question: What is the total value of financial

amount

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

Version 1.0 Page 45 of 87



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.

Select multiple values: No Data type: List

Allowed values: Measurement unit: Category

- 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)

Required: Yes

Data collection level: Producer Data collection frequency: Quarterly

Incentive structure

Logic: None - all respond

Reporting question: What are the units for the financial Data element name: Incentive structure 1-4 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

Allowed values: Measurement unit: Category

- 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

Version 1.0 Page 46 of 87



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 paymentPartial 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

Logic: None - all respond

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 Required: Yes

Data collection level: Producer Data collection frequency: Quarterly

Version 1.0 Page 47 of 87



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

Full payment
 Partial payment

 No payment Required: Yes

Data collection level: Producer Data collection frequency: Quarterly

Payment on MMRV

Logic: None - all respond

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 paymentPartial paymentNo paymentRequired: Yes

Logic: None – all respond

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 paymentPartial paymentNo payment

Logic: None – all respond

Required: Yes

Data collection level: Producer Data collection frequency: Quarterly

Version 1.0 Page 48 of 87



Field Summary

U	ni	a	u	e	1	D	S

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

Version 1.0 Page **49** of **87**

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

Version 1.0 Page **50** of **87**

USDA Partnerships for Climate-Smart Commodities Data Dictionary for Recipients February 2023

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 Reporting question: What is the unit of volume?

unit

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:

Bushels

Carcass weight pounds

GallonsHead

Linear feet

Liveweight pounds

PoundsTons

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

Version 1.0 Page 51 of 87

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

Reporting question: What percent of the practice cost is Data element name: Cost coverage

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 Allowed values: 0-100 Measurement unit: Percent

Logic: None - all respond Required: Yes

Data collection level: Field Data collection frequency: Quarterly

Field GHG monitoring

Data element name: Field GHG monitoring Reporting question: How were GHG impacts monitored in this 1-3 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

Version 1.0 Page 52 of 87



Field GHG reporting

Data element name: Field GHG reporting Reporting question: How were GHG benefits reported for this

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
- **Fmail**
- 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 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.

Select multiple values: No Data type: List

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

Page 53 of 87 Version 1.0



Field GHG calculations

Data element name: Field GHG Reporting question: What methods are used to calculate GHG

calculations 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 Reporting question: What method was used to calculate the

calculation 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 Reporting question: What are the estimated total GHG emission

emission reductions 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 Reporting question: How much carbon has been sequestered in

stock 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

Version 1.0 Page **54** of **87**



Field official CO2 ER

Data element name: Field official CO2 Reporting question: What are the estimated total CO2 emission

emission reductions 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 Reporting question: What are the estimated total CH4

reductions 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

Allowed values: 0-10,000,000

Allowed values: 0-10,000,000

completion or annually, as appropriate. Conversion rate is one ton of $CH_4 = 25$ tons of CO_2 eq.

Data type: Decimal Select multiple values: No

Measurement unit: Metric tons CH4 reduced in

CO₂eq

Logic: None – all respond Required: Yes

Data collection level: Field Data collection frequency: Quarterly

Field official N20 ER

Data element name: Field official N2O emission Reporting question: What are the estimated total N2O

reductions 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 $N_2O = 298$ tons of CO_2eq .

Data type: Decimal Select multiple values: No

Measurement unit: Metric tons N2O reduced in

CO₂eq

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

Version 1.0 Page 55 of 87



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 Reporting question: Were data collected from the field for

measurement 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

Version 1.0 Page **56** of **87**



GHG Benefits - Alternate Modeled

Jnique 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)	
edulity of field	county name (mast mater 15) talm emounteredately	

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

Version 1.0 Page 57 of 87

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
- CultivateAl'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

Data collection level: Field

Required: If project calculates GHG benefits using multiple methods

Data collection frequency: Annual

Version 1.0 Page 58 of 87



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 parameter		
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 parameter	s 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 using an alternate model.	reductions from practice implementation in the field estimated	
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		
alternate model. Conversion rate is one ton	어머니 성명성 있는 대학생 (대학생 문제) 등 아니라 학생에 나타 학생 등 다시 생생 등 다시 아니라	
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 rusing an alternate model.	eductions based on practice implementation in the field estimated	
Data type: Decimal	Select multiple values: No	
Measurement unit: Metric tons CO ₂	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	

Version 1.0 Page **59** of **87**



Total CH4 estimated		
Data element name: Total CH4 estimated	Reporting question: What is the alternat estimate of the field's total CH4 emission reductions?	
Description: Total methane emission reductions based on praction an alternate model. Conversion rate is one ton of CH ₄ = 25 tons		
Data type: Decimal	Select multiple values: No	
Measurement unit: Metric tons CH4 reduced in CO ₂ eq	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	
otal field N20 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 using an alternate method. Conversion rate is one ton of N_2O =	N	
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	

Version 1.0 Page **60** of **87**



SDA Partnerships for Climate-Smart Commodities Data Dictionary for Recipients February 2023

GHG Benefits - Measured

u	nic	IIIe	IDs
·		uc	103

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

Logic: None - all respond

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 Select multiple values: No

Allowed values: Measurement unit: Category

> **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

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

Version 1.0 Page 61 of 87



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 Reporting question: What is the total amount of

measured 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

Version 1.0 Page 62 of 87



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 b from in-field measurements. Conversion rate is one ton or			
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 N20 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 reductio	ns based on practice implementation in the field		
calculated from in-field measurements. Conversion rate is	S S S		
Data type: Decimal	Select multiple values: No		
Measurement unit: Metric tons N2O reduced in CO ₂ eq	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 in a specified volume of soil).	ne the carbon stock of a soil (the tons of carbon found		
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		

Version 1.0 Page 63 of 87



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:

PercentPpmGrams

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 densityOther (specify)

Logic: None – all respond Required: If a project conducts soil samples in this field

Data collection level: Field Data collection frequency: Annual

Version 1.0 Page 64 of 87



SDA Partnerships for Climate-Smart Commodities Data Dictionary for Recipients February 2023

Additional Environmental Benefits

	10
Unique II	,,

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 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.

Select multiple values: No Data type: List

Allowed values: Measurement unit: Category

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 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

Allowed values: Measurement unit: Category

> 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

Reporting question: How much reduction in nitrogen losses Data element

name: Reduction in nitrogen loss amount 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 Allowed values: 0-1,000,000 Measurement unit: Amount

Logic: Respond if yes to 'Reduction in

nitrogen loss'

Required: Yes

Data collection level: Field Data collection frequency: Annual

Version 1.0 Page 65 of 87

Data element name: Reduction in nitrogen Repor

loss amount unit

Reporting question: What is the unit for how much reduction in

nitrogen losses have been measured in the field?

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 Select multiple values: No

Measurement unit: Category Allowed values:

KilogramsMetric tonsPounds

Other (specify)
 Required: Yes

Logic: Respond if yes to 'Reduction in

nitrogen loss'

Data collection level: Field

950

Data collection frequency: Annual

Reduction in nitrogen loss purpose

Data element name: Reduction in nitrogen

loss purpose

Reporting question: What is the purpose of tracking reduction in

nitrogen losses?

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 Select multiple values: No

Measurement unit: Category Allowed values:

Commodity marketing

Producing insets

Producing offsetsI don't know

Other (specify)

Logic: Respond if yes to 'Reduction in

nitrogen loss'

phosphorus loss

Required: Yes

Data collection frequency: Annual

Data collection level: Project Reduction in phosphorus loss

Data element name: Reduction in

Reporting question: Are reductions in phosphorus losses being

tracked in the field?

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 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 frequency: Annual

Reduction in phosphorus loss amount

Data collection level: Field

Data element name: Reduction in

Reporting question: How much reduction in phosphorus losses

phosphorus loss amount have been measured in the field?

Description: Total amount of reduction in phosphorus losses that is measured in the field.

Data type: Decimal Select multiple values: No

Measurement unit: Amount Allowed values: 0-1,000,000

Logic: Respond if yes to 'Reduction in

phosphorus loss'

Required: Yes

Data collection level: Field Data collection frequency: Annual

Version 1.0 Page **66** of **87**



benefits'

Data collection level: Field

production and a second	
Reduction in phosphorus loss amount unit	
Data element name: Reduction in	Reporting question: What is the unit for the reduction in
phosphorus loss amount unit	phosphorus losses measured in the field?
다른 사람들은 사람들은 사람들은 다른 사람들이 보고 있다면 하는데 하는데 하는데 보고 있다면 되었다면 하는데 보고 있다면 하는데 보고 있다면 되었다면 하는데 보고 있다면 없는데 하는데 보고 있다면 하는데 보다면 하는데 보고 있다면 하는데 보다면 하는데 보고 있다면 하는데 보고 있다면 하는데 보다면 하는데 보다면 하는데 보다면 하는데 보고 있다면 하는데 보다면 하는데 보고 있다면 하는데 보다면 하는데 보다면 하는데 보다면 하는데 보다면 하는데 보다면 하는데 보다면 되었다면 하는데 보다면 하는데 보다면 하는데 보다면 하는데 보다면 되었다면 되었다면 되었다면 하는데 보다면 되었다면 하는데 보다면 되었다면 되었다면 되었다면 되었다면 되었다면 되었다면 되었다면 되었	duction in phosphorus losses that is measured in the enrolled field. If
"other" is chosen, enter the appropriate val	
Data type: List	Select multiple values: No
Measurement unit: Category	Allowed values:
	 Kilograms
	Metric tons
	 Pounds
	Other (specify)
Logic: Respond if yes to 'Reduction in	Required: Yes
phosphorus loss'	
Data collection level: Field	Data collection frequency: Annual
Reduction in phosphorus loss purpose	
Data element name: Reduction in	Reporting question: What is the purpose of tracking reductions
phosphorus loss purpose	in phosphorus losses?
Description: Purpose of tracking reduction i	in phosphorus losses in the enrolled field. If "other" is chosen, enter
the appropriate value as free text in the add	ditional column.
Data type: List	Select multiple values: No
Measurement unit: Category	Allowed values:
	Commodity marketing
	 Producing insets
	 Producing offsets
	I don't know
	Other (specify)
Logic: Respond if yes to 'Reduction in	Required: Yes
phosphorus loss'	
Data collection level: Field	Data collection frequency: Annual
Other water quality	Some of the southern production of the forest agency of the south many
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 reportir	ng that can quantify benefits.
Data type: List	Select multiple values: No
Measurement unit: Category	Allowed values:
The first time to the control of the	• Yes
	• No
	I don't know
Logic: Respond if yes to 'Environmental	Required: Yes
TOTAL STREET, LAND STREET, STR	ಆರ್. ಷ ರುಗರಾಸ್ಕರ್ನನ್

Version 1.0 Page **67** of **87**

Data collection frequency: Annual



Data collection level: Field

Other water quality type	
Data element name: Other water quality	Reporting question: What type of other water quality metric
type	have been measured in the field?
- North Mall Control (1987) - 10 - 10 - 10 - 10 - 10 - 10 - 10 - 1	etric (besides nitrogen loss and phosphorus loss reductions) that is
The state of the s	enter the appropriate value as free text in the additional column.
Data type: List	Select multiple values: No
Measurement unit: Category	Allowed values:
	 Sediment load reduction
	Temperature
	Other (specify)
Logic: Respond if yes to 'Other water quality'	Required: Yes
Data collection level: Field	Data collection frequency: Annual
Other water quality amount	
Data element name: Other water quality	Reporting question: How much reduction in other water quality
amount	metrics have been measured in the field?
Description: Total amount of reduction in o	ther water quality metrics 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 'Other water quality'	Required: Yes
Data collection level: Field	Data collection frequency: Annual
Other water quality amount unit	
Data element name: Other water quality	Reporting question: What is the unit for the reduction in other
amount unit	water quality metrics measured in the field?
	duction in other water quality metrics that is measured in the appropriate value as free text in the additional column.
Data type: List	Select multiple values: No
Measurement unit: Category	Allowed values:
	 Degrees F
	 Kilograms
	 Kilograms per liter
	Metric tons
	• Pounds
	Other (specify)
Logic: Respond if yes to 'Other water quality'	Required: Yes

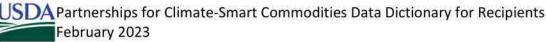
Version 1.0 Page **68** of **87**

Data collection frequency: Annual



Other water quality purpose			
Data element name: Other water quality	Reporting question: What is the purpose of tracking other water		
purpose	quality benefits?		
appropriate value as free text in the addition	r quality benefits in the enrolled field. If "other" is chosen, enter the		
Data type: List	Select multiple values: No		
53 (F) (F)			
Measurement unit: Category	Allowed values: Commodity marketing		
	Producing insets		
	Producing disets Producing offsets		
	I don't know		
	Other (specify)		
Logic: Respond if yes to 'Other water quality'	Required: Yes		
Data collection level: Field	Data collection frequency: Annual		
Nater quantity	8 8		
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 an	d 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		
Water quantity amount			
Data element name: Water quantity	Reporting question: How much water conservation has been		
amount	measured in the field?		
- Table 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1	ation or reduction that is measured in the field.		
Data type: Decimal	Select multiple values: No		
Measurement unit: Amount	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?		
- 공사장으로 교육하다는 맛있다면 가능한 맛있다면 처럼 하나는 하는 것이 없었다	the appropriate value as free text in the additional column. Select multiple values: No		
Measurement unit: Category	Allowed values:		
The state of the s	Acre-feet		
	Cubic feet		
	Other (specify)		
Logic: Respond if yes to 'Water quantity'	Required: Yes		
The state of the s	Data collection frequency: Annual		

Version 1.0 Page **69** of **87**



Water quantity purpose Data element name: Water quantity Reporting question: What is the purpose of tracking water conservation? 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 Select multiple values: No Measurement unit: Category 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 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 Required: Yes

benefits'

Data collection level: Field Data collection frequency: Annual

Reduced erosion amount

Data element name: Reduced erosion Reporting question: How much erosion reduction has been

amount measured in the field?

Description: Total amount of erosion reduction that is measured in the enrolled field.

Data type: Decimal Select multiple values: No Allowed values: 0-1,000,000 Measurement unit: Amount

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

Version 1.0 Page 70 of 87

Reporting question: What is the purpose of tracking reduced erosion in the field? osion the enrolled field. If "other" is chosen, enter the appropriate		
Select multiple values: No		
Allowed values:		
Commodity marketing		
Producing insets		
Producing offsets		
 I don't know 		
Other (specify)		
Required: Yes		
Data collection frequency: Annual		
Reporting question: Is reduced energy use being tracked in the field?		
in the enrolled field. Tracking means at a minimum using some uantify benefits. Select multiple values: No		
Allowed values:		
• Yes		
• No		
I don't know		
Required: Yes		
Data collection frequency: Annual		
* "		
Reporting question: How much energy use reduction has been measured in the field?		
luction that is measured in the enrolled field.		
Select multiple values: No		
Allowed values: 0-1,000,000		
Required: Yes		
Data collection frequency: Annual		

Reduced	energy	use	amount unit
---------	--------	-----	-------------

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

Version 1.0 Page 71 of 87



Reduced energy use purpose

Data element name: Reduced energy use Reporting question: What is the purpose of tracking reduced

ourpose energy use in the field?

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 Select multiple values: No

Measurement unit: Category Allowed values:

Commodity marketingProducing insets

Producing offsets

I don't knowOther (specify)

Logic: Respond if yes to 'Reduced energy

use'

Required: Yes

Data collection level: Field Data collection frequency: Annual

Avoided land conversion

Data element name: Avoided land Reporting question: Is avoided land conversion being tracked in

conversion the field?

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

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

Avoided land conversion amount

Data element name: Avoided land Reporting question: How much avoided land conversion has

conversion amount been measured in the field?

Description: Total amount of avoided land conversion 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 'Avoided land

conversion'

Required: Yes

Data collection level: Field Data collection frequency: Annual

Avoided land conversion amount unit

Data element name: Avoided land Reporting question: What is the unit for the amount of avoided

conversion unit land conversion measured in the field?

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 Select multiple values: No

Measurement unit: Category Allowed values:

Acres

Other (specify)

Logic: Respond if yes to 'Avoided land

conversion'

Required: Yes

Data collection level: Field Data collection frequency: Annual

Version 1.0 Page 72 of 87

Avoided land	conversion	purpose
--------------	------------	---------

Data element name: Avoided land Reporting question: What is the purpose of tracking avoided

conversion purpose land conversion in the field?

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 Select multiple values: No

Measurement unit: Category Allowed values:

Commodity marketing

Producing insetsProducing offsets

I don't knowOther (specify)

Logic: Respond if yes to 'Avoided land

conversion'

Required: Yes

Data collection level: Field Data collection frequency: Annual

Improved wildlife habitat

Data element name: Improved wildlife Reporting question: Are improvements to wildlife habitat being

habitat tracked in the field?

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 Select multiple values: No

Measurement unit: Category Allowed values:

YesNo

I don't know

Logic: Respond if yes to 'Environmental

benefits'

Required: Yes

Data collection level: Field Data collection frequency: Annual

Improved wildlife habitat amount

Data element name: Improved wildlife Reporting question: How much improved wildlife habitat has

habitat amount been measured in the field?

Description: Total amount of improved wildlife habitat that is measured in and around the enrolled fields.

Data type: Decimal Select multiple values: No

Measurement unit: Amount 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 Reporting question: What is the unit for the amount of improved

habitat unit wildlife habitat measured in the field?

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 Select multiple values: No

Measurement unit: Category Allowed values:

AcresLinear feet

Other (specify)

Logic: Respond if yes to 'Improved wildlife

habitat'

Required: Yes

Data collection level: Field Data collection frequency: Annual

Version 1.0 Page **73** of **87**



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

Version 1.0 Page **74** of **87**



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
	Digester type	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)
	Additional feedstock source (select most common if using more than one)	Food waste Straw or bedding Wastewater Other (specify)

Version 1.0 Page **75** of **87**

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

Version 1.0 Page **76** of **87**

		Brassica
		Broadleaf
Conservation Crop Rotation	Conservation crop type	Cool season
	Sensition provided 1.50 Market blooder filtred from Mexico 4 Mexicos	Grass
		Legume
	-	Warm season
	50 5	Added perennial crop
	Change implemented	Reduced fallow period Both
(CPS 328)	# <u></u>	Conventional (plow, chisel, disk)
		No-till, direct seed
		Reduced till
	Conservation crop rotation tillage type	Strip till
		None
		Other (specify)
	Total conservation crop rotation length in	Other (specify)
	days	1-120
	Strip width (feet)	1-100
Contour Buffer Strips (CPS		Grasses
332)	Species category	Forbs
		Mix
		Brassicas
	Species category (select most	Forbs
	common/extensive type if using more	Grasses
	than one)	Legume
		Non-legume broadleaves
		Grazing
Cover Crop (CPS 340)	Cover crop planned management	Haying
cover crop (cr 3 340)	5	Termination
		Burning
		Herbicide application
	Cover crop termination method	Incorporation
		Mowing
		Rolling/crimping
		Winter kill/frost
		Grass
	Species category (select most	Grass legume/forb mix
Critical Area Planting (CPS	common/extensive type if using more	Herbaceous woody mix
342)	than one)	Perennial or reseeding
	AND THE PROPERTY OF THE PROPER	Shrubs
		Trees
	Crude protein (percent)	0-100
	Fat (percent)	0-100
Feed Management (CPS 592)		Chemical
reco management (e, o ooz)	Feed additives/supplements	Edible oils/fats
		Seaweed/kelp
		Other (specify)
	Species category (select most	Forbs
Field Border (CPS 386)	common/extensive type if using more	Grasses
	than one)	Mix
	shall one;	Shrubs

Version 1.0 Page **77** of **87**

USDA Partnerships for Climate-Smart Commodities Data Dictionary for Recipients February 2023

	Strip width (feet)	20-1,000
Filter Strip (CPS 393)	C	Forbs
	Species category (select most	Grasses
	common/extensive type if using	Mix
	more than one)	Shrubs
		Forest
		Multi-story cropping
Forest Farming (CPS 379)	Land use in previous year	Pasture/grazing land
		Row crops
		Other agroforestry
		Maintain or improve forest carbon stocks Maintain or improve forest health and
		productivity
		Maintain or improve forest structure and
Forest Stand Improvement (CPS 666)	Purpose for implementation	composition
		Maintain or improve wildlife, fish, and
		pollinator habitat
		Manage natural precipitation more efficientl
		Reduce forest pest pressure
		Reduce forest wildfire hazard
Grassed Waterway (CPS	Species category (select most common/extensive type if using	Flowering Plants
		Forbs
412)	more than one)	Grasses
	Species category (select most	Grasses
Hadasaw Blanting ICDS	common/extensive type if using	Shrubs
Hedgerow Planting (CPS	more than one)	Trees
422)	Species density (number of trees planted per acre)	1-10,000
	Species category (select most	Forbs
		Grasses
Herbaceous Wind	common/extensive type if using	Mix
Barriers (CPS 603)	more than one)	Shrubs
	Barrier width (feet)	1-1,000
	Number of rows	1-100
	Mulch type	Gravel
		Natural
Mulching (CPS 484)		Synthetic
		Wood
	Mulch cover (percent of field)	0-100
		9-000-0

Version 1.0 Page **78** of **87**

BETT-TOWNS		
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
Pasture and Hay Planting (CPS 512)	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

Version 1.0 Page **79** of **87**

USDA Partnerships for Climate-Smart Commodities Data Dictionary for Recipients February 2023

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

Version 1.0 Page **80** of **87**

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

Version 1.0 Page **81** of **87**

USDA Partnerships for Climate-Smart Commodities Data Dictionary for Recipients February 2023

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

Version 1.0 Page **82** of **87**



Appendix A: Climate-smart Agriculture and Forestry Practices

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

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

412, Grassed Waterway 326, Clearing and Snagging 420, Wildlife Habitat Planting 327, Conservation Cover 328, Conservation Crop Rotation 422, Hedgerow Planting 423, Hillside Ditch

329, Residue and Tillage Management, No Till

330, Contour Farming 428, Irrigation Ditch Lining

331, Contour Orchard and Other Perennial Crops 428A, Irrigation Water Conveyance, Ditch and Canal Lining, 332, Contour Buffer Strips Plain Concrete

333, Amending Soil Properties with Gypsum Products 428B, Irrigation Water Conveyance, Ditch and Canal Lining,

334, Controlled Traffic Farming Flexible Membrane 336, Soil Carbon Amendment 428C, Irrigation Water Conveyance, Ditch and Canal Lining, 338, Prescribed Burning Galvanized Steel

340, Cover Crop 430, Irrigation Pipeline 342, Critical Area Planting 432, Dry Hydrant 345, Residue and Tillage Management, Reduced Till 436, Irrigation Reservoir

348, Dam, Diversion 441, Irrigation System, Microirrigation

350, Sediment Basin 442, Sprinkler System

443, Irrigation System, Surface and Subsurface 351, Well Decommissioning 447, Irrigation and Drainage Tailwater Recovery 353, Monitoring Well

355, Groundwater Testing 449, Irrigation Water Management

356, Dike and Levee 450, Anionic Polyacrylamide (PAM) Application 359, Waste Treatment Lagoon 453, Land Reclamation, Landslide Treatment 360, Waste Facility Closure 455, Land Reclamation, Toxic Discharge Control

362, Diversion 457, Mine Shaft and Adit Closing

460, Land Clearing 366, Anaerobic Digester

367, Roofs and Covers 462, Precision Land Forming and Smoothing

368, Emergency Animal Mortality Management 464, Irrigation Land Leveling 371, Air Filtration and Scrubbing 466, Land Smoothing

468, Lined Waterway or Outlet 372, Combustion System Improvement

373, Dust Control on Unpaved Roads and Surfaces 472, Access Control 374, Energy Efficient Agricultural Operation 484, Mulching

375, Dust Management for Pen Surfaces 490, Tree/Shrub Site Preparation 376, Field Operations Emissions Reduction 500, Obstruction Removal

378, Pond 511, Forage Harvest Management 379, Forest Farming 512, Pasture and Hay Planting

380, Windbreak/Shelterbelt Establishment and Renovation 516, Livestock Pipeline

520, Pond Sealing or Lining, Compacted Soil Treatment 381, Silvopasture

382, Fence 521, Pond Sealing or Lining, Geomembrane or

383, Fuel Break Geosynthetic Clay Liner

384, Woody Residue Treatment 521A, Pond Sealing or Lining, Flexible Membrane 386, Field Border 521B, Pond Sealing or Lining, Soil Dispersant 388, Irrigation Field Ditch 521C, Pond Sealing or Lining, Bentonite Sealant

Version 1.0 Page 83 of 87

USDA Partnerships for Climate-Smart Commodities Data Dictionary for Recipients February 2023

521D, Pond Sealing or Lining, Compacted Clay Treatment

522, Pond Sealing or Lining - Concrete

527, Sinkhole Treatment 528, Prescribed Grazing 533, Pumping Plant

543, Land Reclamation, Abandoned Mined Land 544, Land Reclamation, Currently Mined Land 548, Grazing Land Mechanical Treatment

550, Range Planting

554, Drainage Water Management

555, Rock Wall Terrace 557, Row Arrangement 558, Roof Runoff Structure

560, Access Road

561, Heavy Use Area Protection 562, Recreation Area Improvement

566, Recreation Land Improvement and Protection

570, Stormwater Runoff Control

572, Spoil Disposal 574, Spring Development 575, Trails and Walkways 576, Livestock Shelter Structure

578, Stream Crossing

580, Streambank and Shoreline Protection

582, Open Channel

584, Channel Bed Stabilization

585, Stripcropping

587, Structure for Water Control

588, Crosswind Ridges 589, Cross Wind Trap Strips 590, Nutrient Management

591, Amendments for Treatment of Agricultural Waste

592, Feed Management

595, Pest Management Conservation System

600, Terrace

601, Vegetative Barrier 602, Equitable Relief

603, Herbaceous Wind Barriers

604, Saturated Buffer 605, Denitrifying Bioreactor 606, Subsurface Drain 607, Surface Drain, Field Ditch

608, Surface Drain, Main or Lateral

609, Surface Roughening

610, Salinity and Sodic Soil Management

612, Tree/Shrub Establishment

614, Watering Facility 620, Underground Outlet 629, Waste Treatment 630, Vertical Drain 632, Waste Separation Facility

633, Waste Recycling 634, Waste Transfer

635, Vegetated Treatment Area 636, Water Harvesting Catchment 638, Water and Sediment Control Basin

640, Waterspreading 642, Water Well

643, Restoration of Rare or Declining Natural Communities

644, Wetland Wildlife Habitat Management 645, Upland Wildlife Habitat Management

646, Shallow Water Development and Management 647, Early Successional Habitat Development-Mgt

649, Structures for Wildlife

650, Windbreak/Shelterbelt Renovation

654, Road/Trail/Landing Closure and Treatment

655, Forest Trails and Landings 656, Constructed Wetland 657, Wetland Restoration 658, Wetland Creation 659, Wetland Enhancement 660, Tree-Shrub Pruning 666, Forest Stand Improvement

670, Energy Efficient Lighting System 672, Energy Efficient Building Envelope 736, Crop By-Product Transfer, interim 724, Water Treatment Facility, interim 735, Waste Gasification Facility, interim

737, Reduced Water and Energy Coffee Conveyance

System, interim

740, Pond Sealing and Lining, Soil Cement, interim

751, Individual Terrace, interim 753, Infiltration Ditch, interim 755, Well Plugging, interim

770, Livestock Confinement Facility, interim 775, Drainage Ditch Covering, interim 782, Phosphorus Removal System, interim 800, Controlling Existing Flowing Wells, interim

803, Water Well Disinfection, interim

805, Amending Soil Properties with Lime, interim

808, Soil Carbon Amendment, interim

809, Conservation Harvest Management, interim 810, Annual Forages for Grazing Systems, interim

812, Raised Beds, interim

815, Groundwater Recharge Basin or Trench, interim

817, On-Farm Recharge, interim

818, Water Conservation System, interim

821, Low Tunnel Systems, interim 823, Organic Management, interim

Version 1.0 Page 84 of 87



Other CSAF Practices

Traditional or cultural practices Microbial products Solar power generation Grain bin construction Pre-season drainage

Version 1.0 Page **85** of **87**

Appendix B: Commodity List

CROPS CINNAMON HYBRID POPLAR TREES

ALFALFA CLOVER IDLE ALMONDS COCONUTS INDIGO

AMARANTH GRAIN COFFEE ISRAEL MELONS
APPLES CORN JACK FRUIT

APRICOTS COTTON ELS JERUSALEM ARTICHOKES

ARONIA (CHOKEBERRY) **COTTON UPLAND JICAMA ARTICHOKES CRANBERRIES JOJOBA ASPARAGUS** CRENSHAW MELON JUJUBE **ATEMOYA** CRUSTACEAN **JUNEBERRIES AVOCADOS CUCUMBERS** KENAF **CURRANTS BAMBOO SHOOTS** KHORASAN **BANANAS** DASHEEN **KIWIBERRY** BARLEY DATES **KIWIFRUIT**

BEANS DURIAN KOCHIA (PROSTRATA)

BEETS EGGPLANT KOHLRABI

BIRDSFOOT/TREFOIL EINKORN KOREAN GOLDEN MELON

BLUEBERRIES ELDERBERRIES KUMQUATS BREADFRUIT EMMER LAMBS EAR BROCCOFLOWER FIGS LEEKS BROCCOLI **FINFISH LEMONS** BROCCOLINI FLAX **LENTILS BRUSSEL SPROUTS FLOWERS LESPEDEZA** FORAGE SOYBEAN/SORGHUM BUCKWHEAT LETTUCE CABBAGE GAILON LIMES GARLIC CACAO LONGAN **CACTUS GENIP** LOQUATS CAIMITO **GINGER** LYCHEE CALABAZA MELON GINSENG MANGOS **CALALOO** GOOSEBERRIES **MANGOSTEEN** CAMELINA **GOURDS** MAPLE SAP

CANARY MELON GRAPEFRUIT MAYHAW BERRIES
CANARY SEED GRAPES MEADOWFOAM
CANEBERRIES GRASS MILKWEED
CANISTEL GREENS MILLET

CANOLA **GROUND CHERRY** MIXED FORAGE **CANTALOUPES** GUAMABANA/SOURSOP MOHAIR CARAMBOLA (STAR FRUIT) **GUAR** MOLLUSK **CARROTS GUAVA** MORINGA **CASHEW GUAVABERRY MULBERRIES CASSAVA GUAYULE MUSHROOMS** CAULIFLOWER HAZEL NUTS MUSTARD CELERIAC **HEMP NECTARINES CELERY HERBS** NIGER SEED NON CHERIMOYA **HESPERALOE**

CHERRIES HONEY OATS CHESTNUTS **HONEYBERRIES** OKRA CHICORY/RADICCHIO HONEYDEW **OLIVES** ONIONS CHINESE BITTER MELON HOPS HORSERADISH CHRISTMAS TREES **ORANGES CHUFAS HUCKLEBERRIES PAPAYA**

Version 1.0 Page **86** of **87**

TURKEYS

USDA Partnerships for Climate-Smart Commodities Data Dictionary for Recipients February 2023

PARSNIP STRAWBERRIES PASSION FRUITS SUGAR BEETS **PAWPAW** SUGARCANE LIVESTOCK **PEACHES SUNFLOWERS ALPACAS PEANUTS BEEF COWS** SUNN HEMP **PEARS TANGELOS BEEFALO**

PEARS TANGELOS BEEFALO
PEAS TANGERINES BUFFALO OR BISON
PECANS TANGORS CHICKENS (BROILERS)
PENNYCRESS TANGOS CHICKENS (LAYERS)
PEPPERS TANNIER DAIRY COWS

PERENNIAL PEANUTS TARO DEER TEA **DUCKS** PERIQUE TOBACCO TEFF **PERSIMMONS ELK** PINE NUTS TI **EMUS PINEAPPLE** TOBACCO CIGAR WRAPPER **EQUINE PISTACHIOS TOBACCO BURLEY GEESE**

PITAYA/DRAGONFRUIT **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 PRUNES TOBACCO MARYLAND

PSYLLIUM TOBACCO VIRGINIA FIRE CURED

PUMMELO TOMATILLOS PUMPKINS TOMATOES QUINCES TREES TIMBER QUINOA TRITICALE **TRUFFLES** RADISHES **RAISINS TURNIPS RAMBUTAN** VETCH RAPESEED WALNUTS RHUBARB WAMPEE RICE WASABI RICE SWEET WATERMELON WAX JAMBOO FRUIT RICE WILD

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

Version 1.0 Page 87 of 87

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:

- 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 in 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:

- 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.

NR233A750004G063 REC

Final Audit Report 2023-07-19

Created: 2023-07-19

By: Sarah Moran (smoran@usarice.com)

Status: Signed

Transaction ID: CBJCHBCAABAAJ9r_-BhJMGD6p4LSVGqAw14kbQ9Kk6Hr

"NR233A750004G063 REC" History

Document created by Sarah Moran (smoran@usarice.com) 2023-07-19 - 3:28:05 PM GMT- IP address: 68.100.126.116

Document emailed to Betsy Ward (bward@usarice.com) for signature 2023-07-19 - 3:28:42 PM GMT

Email viewed by Betsy Ward (bward@usarice.com) 2023-07-19 - 3:43:19 PM GMT- IP address: 96.255.177.81

Document e-signed by Betsy Ward (bward@usarice.com)

Signature Date: 2023-07-19 - 3:43:51 PM GMT - Time Source: server- IP address: 96.255.177.81

Agreement completed. 2023-07-19 - 3:43:51 PM GMT