



Agricultural Marketing Service

U.S. DEPARTMENT OF AGRICULTURE

AWARD YEARS 2021 AND PRIOR

This annual Performance Progress Report (PPR) must illustrate the progress made toward the completion of your project. If this project is completed at the time of the annual PPR submission, the project report should be marked as final. Please note character limits (abbreviated "char.") throughout.

PROJECT INFORMATION

Project Title (250 char.)	Enhanced Consumer Adoption Techniques for Stimulating Wholesale Markets for Specialty Crops in Rapid City's Institutional Food Kitchens
Organization Name (250 char.)	South Dakota School of Mines and Technology
Project Start Date	9/30/2020
Project End Date	9/29/2023

ORGANIZATION POINT OF CONTACT

Full Name	Saurav Kumar Dubey
Phone Number	605-394-5171
Email Address	saurav.kumardubey@sdsmt.edu

BACKGROUND INFORMATION

PROJECT PROGRESS

Please provide the total percentage of work completed on the project.	100%
Is this a final report? Please select the box to the right if the answer is "yes".	☐

PROJECT BACKGROUND (REQUIRED FOR FINAL REPORTS)

Provide enough information for the reader to understand the importance or context of the project and any key findings. This section may draw from the background and justification contained in the accepted project plan. As the project has been completed, write this section in past tense. If this is an annual report, please skip this section. (1200 char.)

The entire project was focused on the incubation of a Wholesale Market at Black Hills Farmers Market (BHFH). As a result of this grant, following objectives were accomplished that aided in the development of a wholesale market at BHFH.

1. A wholesale Marketing Division at the BHFH which did not exist before grant.
2. Training and Development of local food farmers market vendor advocate called Wholesale Customer Relationship specialist.
3. Website for conducting purchase and sale of high volume produce sales known as Online Local Food Market Place.
4. Youth and Family Services increased accessibility of local foods to young adults and children.
5. Initiated Local Food Initiative at SD Mines with food provider Aramark.
6. A publication of a paper to the American Society of Engineering Management entitled "Understanding Manufacturer and Supplier Order Alignment in a Single Sourcing Strategy."
7. Food Supply Contracts with Meade County Schools and YFS.
8. A directed marketing approach which can be seen at the website and a face book-based social media strategy to promote & advertise local food

<https://blackhillsfarmersmarket.org/>
<https://www.facebook.com/BlackHillsFarmersMarket/>

OBJECTIVE(S) (REQUIRED)

Please provide the approved project's objectives from the accepted project plan. Use the boxes to indicate if the objective is in progress, has been completed, or is not (and will not be) completed. At the final report, if "no" is selected for any of the listed objectives, you must expand upon this in the Challenges and Developments Section. Additional objectives may be added as needed.

+	#	Objective (2,000 char.)	Objective Completed?
-	1	Create a webpage with GAP/GHP food safety related information on BHFM main website.	Yes
-	2	Conduct a workshop and develop training materials such as a sample food safety plan along with sample records, policy procedures and standard operating procedures.	Yes
-	3	Establish a financial framework for tracking sales revenue and develop farmer capacity to bid for procurement contracts.	Yes
-	4	Design Special Nutrition Science-based Dining Menu with 100% Local Food Options.	Yes
-	5	Assist two Local Farmers with obtaining four large volume food supply contracts from Youth and Family Services.	Yes
-	6	Develop a Multi-Platform Advertising Campaign for BHFM's Wholesale Markets in Rapid City.	Yes
-	7	Assist two Local Farmers with obtaining four food supply contracts from Restaurants located in the Rapid City Area.	Yes
-	9	Assist two Local Farmers with obtaining four food supply contracts from Cafeterias located in the Rapid City Area.	Yes

OUTCOMES

Please only report on the outcomes and indicators that are selected and approved for this project. Use the check boxes to indicate which outcomes and indicators are selected. Select the "N/A" box for any indicators that are not applicable.

1. ENHANCE THE COMPETITIVENESS OF SPECIALTY CROPS THROUGH INCREASED SALES



Please provide data on the sales increased as a result of marketing and/or promotion activities for this reporting period.

Indicators	Value	N/A
Dollar value of sales increased from initial (original) sales amount	\$0.00	☐
Dollar value of estimated final (resulted) sales amount (in dollars)	\$20,656.00	☐

2. ENHANCE THE COMPETITIVENESS OF SPECIALTY CROPS THROUGH INCREASED CONSUMPTION



Please provide the total number of children and youth reached and select the applicable indicators for this reporting period.

Indicators	Value	N/A
1. Total number of children and youth	70	☐
1.a. Of the total number in 1, enter the number of children and youth that gained knowledge about eating more specialty crops	64	☐
1.b. Of the total number in 1, enter the number of children and youth that reported an intention to eat more specialty crops	66	☐
1.c. Of the total number in 1, enter the number of children and youth that reported eating more specialty crops	70	☐

Please provide the total number of adults reached and select the applicable indicators for this reporting period.

Indicators	Value	N/A
2. Total number of adults reached	193	☐
2.a. Of the total number in 2, enter the number of adults that gained knowledge about eating more specialty crops	156	☐
2.b. Of the total number in 2, enter the number of adults that reported an intention to eat more specialty crops	182	☐
2.c. Of the total number in 2, enter the number of adults that reported eating more specialty crops	193	☐

Please provide the number of new and improved technologies and processes to enhance the nutritional value and consumer acceptance of specialty crops (excluding patents) for this reporting period.

Indicators	Value	N/A
3. Number of new and improved technologies and processes	1	☐

Please provide the number of new specialty crops and/or specialty crop products introduced to consumers this reporting period.

Indicators	Value	N/A
4. Number of new specialty crops and/or specialty crop products	1	☐

3. ENHANCE THE COMPETITIVENESS OF SPECIALTY CROPS THROUGH INCREASED ACCESS AND AWARENESS ☐

4. ENHANCE THE COMPETITIVENESS OF SPECIALTY CROPS THROUGH GREATER CAPACITY OF SUSTAINABLE PRACTICES OF SPECIALTY CROP PRODUCTION RESULTING IN INCREASED YIELD, REDUCED INPUTS, INCREASED EFFICIENCY, INCREASED ECONOMIC RETURN, AND/OR CONSERVATION OF RESOURCES ☐

5. ENHANCE THE COMPETITIVENESS OF SPECIALTY CROPS THROUGH MORE SUSTAINABLE, DIVERSE, AND RESILIENT SPECIALTY CROP SYSTEMS ☐

6. ENHANCE THE COMPETITIVENESS OF SPECIALTY CROPS THROUGH INCREASING THE NUMBER OF VIABLE TECHNOLOGIES TO IMPROVE FOOD SAFETY ☒

Please select the applicable indicators from the list and provide the data for this reporting period.

Indicators	Value	N/A
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Indicators	Value	N/A
1. Number of viable technologies developed or modified for the detection and characterization of specialty crop supply contamination from food-borne threats		☒
2. Number of viable prevention, control, and intervention strategies for all specialty crop production scales for food-borne threats along the production continuum		☒
3. Number of individuals who learn about prevention, detection, control, and intervention food safety practices and number of those individuals who increase their food safety skills and knowledge	1	☐
4. Number of improved prevention, detection, control, and intervention technologies		☒
5. Number of reported changes in prevention, detection, control, and intervention strategies	1	☐

7. ENHANCE THE COMPETITIVENESS OF SPECIALTY CROPS THROUGH INCREASED UNDERSTANDING OF THREATS TO FOOD SAFETY FROM MICROBIAL AND CHEMICAL SOURCES

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8. ENHANCE THE COMPETITIVENESS OF SPECIALTY CROPS THROUGH ENHANCING OR IMPROVING THE ECONOMY AS A RESULT OF SPECIALTY CROP DEVELOPMENT

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ADDITIONAL APPROVED OUTCOME (IF APPLICABLE)

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OUTCOME REMARKS (REQUIRED)

Please explain any quantifiable results, along with an update on their progress and data collection efforts for each of the outcomes and indicators selected in the accepted project plan. It is understood that the results may not yet be final at the time that this report is submitted; however, please provide an update on progress to date. If you do not have any data on the indicator(s) listed above, you must explain why in this section. (2,000 char.)

Outcome 1- These were the total volume of sales from Year 0 to Year 2.
Additional Information about following outcomes have been provided below:
Outcome 1-(1a,1b,1c)
Outcome 2-(2a,2b,2c)
1. Reports of sales for Outcome 1 were generated from the Software Platform known as Online Food Marketplace.
2. The data reported in Outcome 1 (1a,1b and 1c) and Outcome 2 (2a,2b and 2c) were collected by WCRS. The WCRS (Ms. Mellissa Stanfil and Ms. Ann Eads) collected these data using Google forms. BHFM maintains a mailing accumulated over a period of multiple year where they are able to reach out to families and young adults.
4. An undergraduate student research assistant developed an executive summary for USDA GAP/GHP checklist for sections 1, 2, 3, 4, and 7. In addition, we conducted an extensive literature review to determine if any university extensions have already developed standard documentation that could be provided to the farmers. The research team utilized standardized examples of log sheets, standard operating procedures and documents pertaining to practices of record keeping pertaining established norms of food safety regimen. These materials were obtained from Cornell University's Cornell Cooperative Extension (CCE) division website. They had developed these documents as training materials for farmers interested in adhering to farming protocols as established by USDA's GAP/GHP program.
However, at the time of submission of this final report, we do not know how many vendors/farmers at BHFM have viewed the executive summary and adopted the practices outlined in the standardized documentation for implementing the GAP program at the farm site.

NARRATIVE

ACCOMPLISHMENTS (REQUIRED)

If this is an annual report, list your accomplishments for this reporting period. If this is a final report, your accomplishments should be cumulative and include all accomplishments previously reported on and updated to include activities conducted this past reporting period. Indicate how these accomplishments associated with each of your project's objective(s), outcome(s), and/or indicator(s). This listing should identify your project's partners and their contributions. Additional accomplishments can be added as needed.

+	#	Accomplishment (1,200 char.)	Related to (Objective/ Outcome)
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-	1	We have completed the creation of content for the USDA food safety program. This information has been attached and also provided to the Ms. Callie Stainbrook for dissemination among the farmers at the BHFM.	Objective 1: Create a webpage with GAP/GHP food safety related information on BHFM main website
-	2	As stated above, the research team has provided standard documentation containing logsheets, SOPs and records pertaining to maintaining highest standards of food safety at a farm site to the marketing manager.	Objective 2: Conduct a workshop and develop training materials such as a sample food safety plan along with sample records, policy procedures and standard operating procedures.
-	3	The marketing manager and the WCRS are using a software that is known as the Online food market place. This software tracks specific orders made by buyers and the total value of the transaction. This software has greatly aided the Black Hills Farmers Market to have a formalized system of tracking finances occurring from the sales of wholesale commodities at the farmers market. All transactions can be printed into a PDF file for paper record keeping. Please see Appendix 1 as an example of revenue tracking from the 2nd annual report for examples. Appendix 2 and 3 in the 2nd annual report summarize tracking of Year 1 and Year 2.	Objective 3: Establish a financial framework for tracking sales revenue and develop farmer capacity to bid for procurement contracts
-	4	The Year 2 partnership with Youth and Family Services was completed successfully. They used the funding from the grant to allow a chef to dedicate hours towards increasing accessibility of local foods to young adults and children participating in YFS's several nutrition programs. YFS purchased specialized food processing equipment for chef who developed unique menu items that would make the local food palatable to the youth.	Objective 4: Design Special Nutrition Science-based Dining Menu with 100% Local Food Options
-	5	This connected with Number #4. YFS has specific requirements about what food items gets served at their facility. Two farmers have already sold food items worth \$4,006.76 to YFS during the project period. Food items include Honey, banana and Zucchini bread and squash.	Objective 5: Assist two Local Farmers with obtaining four large volume food supply contracts from Youth and Family Services
-	6	Black Hills Farmers Market has a strong social media presence and local community support. Their Facebook page and the main BHFM Website can be found at the site below. During the project period, they also released an advertising video which can be found at their website. https://blackhillsfarmersmarket.org/	Objective 6: Develop a Multi-Platform Advertising Campaign for BHFM's Wholesale Markets in Rapid City
-	7	We have gotten supply contracts with many organic grocery stores but not as many restaurants as we had hoped initially. Please Page 10 of the 2nd annual report for additional explanation for this from the wholesale customer relationship specialist.	Objective 7: Assist two Local Farmers with obtaining four food supply contracts from Restaurants located in the Rapid City Area

-	8	The BHFM have determined that most institution based cafeterias require GAP certification which has been verified by an independent third part such as USDA, NSF. This has been difficult for farmers to obtain. Nevertheless, their is a notable success to report here. Several vendors from the BHFM were able to supply contracts for the school cafeteria located within the Meade School District. This entailed working directly with the food service director at Meade County Schools resulting in purchases of sweet corn, cherry tomatoes, and watermelons. In addition, as an alternative to USDA GAP, the food service director had her own questionnaire that she asked farmers to fill out as part of verifying food safety.	Objective 8: Assist two Local Farmers with obtaining four food supply contracts from Cafeterias located in the Rapid City Area
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CHALLENGES AND DEVELOPMENTS (REQUIRED)

Provide any challenges to the completion of your project or any positive developments outside of the project's original intent that you experienced during this reporting period. Also, provide the corrective actions you took to address these issues. If you did not attain an approved objective, outcome(s), and/or indicator(s), provide an explanation in the Corrective Actions column. For developments, you may put "N/A" under Corrective Actions. Additional challenges/developments may be added as needed.

+	#	Challenge or Development (1,200 char.)	Corrective Action
-	1	Challenge #1: The primary point of Contact for this project for the past three year was Ms. Barb Cromwell who was the marketing manager at the Black Hills Farmers Market from 2016-2023. She has now moved to Minnesota. Therefore, during the final months of this project, the research team had to work with a new marketing manager Ms. Callie Stainbrook who is less familiar with this project. She has had a steep learning curve to climb in order to understand the objectives and outcomes for this project. In addition, we had allocated some funds for developing a website/webpage where all the USDA food safety information would have been publicly available. However, due to the transition among the two marketing manager's at BHFM. The research team was not able to use the grant funds in order to work with a IT consultant in order post this information to the BHFM website. Consequently, some contractual services funds for this purpose remain unused from the 2020-2023.	The research team is currently working with Ms. Callie Stainbrook in order to develop a plan for disseminating information pertaining to meeting the GAP/GHP requirements. The research team will hand-off documents pertaining to USDA executive summary and standardized GAP/GHP documentation
-	2	Challenge #2: For Outcome 6, Indicator 3 and 5, the research team provided the food safety information to the marketing manager at BHFM who eventually assured the research team that they would placed on the BHFM website However, due to the transition between Ms. Barb Cromwell and Ms. Callie Stainbrook. This process got delayed. Consequently, we do not know if any of the farmers adopted these new recommended practices.	The research team is currently working with the new marketing manager Ms. Callie Stainbrook who has received the new content for food safety created by the research team. Ms. Callie Stainbrook is planning to load this information onto the BHFM website and is planning to reach out to existing 60+ vendors to verify they have adopted or at least seen the new procedures and protocols as a result of these documents. Basically, our dissemination plan involves bringing awareness to the existence of such documents developed by the research team.
-	3	Challenge #3: A portion of this project was undertaken during COVID-19 pandemic. This significantly impacted the progress towards completing outcomes and indicators. More specifically, an undergraduate student Anthony Nelson who worked on this project graduated and it took the PI some time to find another undergraduate student who was equally devoted and interested in this project. This resulted in less expenditure on student labor than initially proposed.	Towards the last year of the project, David Robbins, an undergraduate Mechanical Engineering Student made significant contribution by developing an executive summary for how to satisfy the USDA GAP/ GHP checklist. This has been attached in the report.

-	1	Development #1: Additional buyers of specialty crops due to grant related marketing activities: Nell's Gourmet To Go Meade County Schools Timmons Market/RV & BE Staple & Spice Market	
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UPCOMING ACTIVITIES (REQUIRED FOR ANNUAL REPORTS)

Provide a description of the activities that you are planning to complete during the next reporting period. Additional activities can be added as needed. Please note, if this is a final report there should be no upcoming activities associated with the project, and this section should be left blank.

+	#	Activity (600 char.)	Anticipated Completion
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-			

LESSON LEARNED (REQUIRED FOR FINAL REPORTS)

The recipient or subrecipient is required to provide recommendations or advice that others may use to improve their performance in implementing similar projects. If this is an annual report, please skip this section. (1200 char.)

1. The research team comprised of a university and a non-profit called the Black Hills Farmers Market. The WCRS position was based on-site at the Black Hills Farmers Market. And so, it is critical to have a project personnel that is interacting directly with growers and buyers and the research personnel who are working at the university.
2. The research team at SD Mines was ambitious in hoping that several farmers at BHFM would be open to working towards USDA GAP/ GHP certification. However, we determined that GAP certification is cost prohibitive to obtain and expensive to maintain after the 1st year for a small-to-medium sized farmer. In addition, farmers are not able to generate sufficient revenue in order to cover the cost of certification by effectuating large volume sales.
3. Data collection for outcome and indicators was a challenge for the research team but we were eventually able to use appropriate survey tools to capture data. And so, a recommendation would be to make sure that the project scope of the proposal can be adequately captured by USDA's standard outcome and indicators.

CONTINUATION AND DISSEMINATION OF RESULTS (REQUIRED FOR FINAL REPORTS)

Describe your plans for continuing the project (sustainability; capacity building) and/or disseminating the project results. If this is an annual report, please skip this section. (1200 char.)

We already currently have a self-sufficient fully functional wholesale marketing division. This never existed prior to the grant. In addition, we have sufficient number of recurrent wholesale buyers who purchase from a small group of vendors who have the capacity to partake in wholesale marketing which is to grow and harvest in bulk and so we expect this project to continue into the next few years naturally. The current role of WCRS position is being completed by Ms. Cori DeGeest. BHFM has been able to obtain some funds via sponsorship in order financially sustain the WCRS beyond using the grant funds. In addition, the research team at SD Mines will continue to assist the BHFM in order to develop a long-term user fee and sponsorship based strategy for making the WCRS position financially self-sustaining. In addition, the market for local foods will continue to exist in the Rapid City Area and vision for BHFM will be taken forward by the Marketing Manager and the WCRS person at BHFM. Ms. Callie Stainbrook is the new marketing manager at BHFM and the project PI will continue the work of project result dissemination among the vendors via participation in local food conferences.

PROJECT BENEFICIARIES (REQUIRED FOR FINAL REPORTS)

Provide the number of project beneficiaries. If this is an annual report, please skip this section. (12 char.)

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FEDERAL PROJECT EXPENDITURE

EXPENDITURE (REQUIRED)

You must respond to at least one cost category. Please note, the subtotal and total rows include formulas to auto-calculate totals. The approved budget should come from the accepted project plan or any approved budget amendments.

Cost Category	Amount Approved in Budget	Actual Federal Expenditures (Federal Funds Only)
Personnel	\$58,773.00	\$44,458.48
Fringe Benefits	\$1,925.00	\$3,601.57
Travel	\$924.00	\$265.44
Equipment	\$0.00	\$0.00
Supplies	\$3,204.00	\$2,892.20
Contractual	\$4,784.00	\$0.00
Other	\$1,000.00	\$1,000.00
Direct Costs Sub-Total	\$70,610.00	\$52,217.69
Indirect Costs	\$6,140.00	\$4,540.30
Project Expenditure Total Federal Costs	\$76,750.00	\$56,757.99

DISCUSSION OF EXPENDITURES (REQUIRED)

For 1st Annual Reports, if total project expenditures is less than 30 percent, and for 2nd Annual Reports, if total project expenditures is less than 60 percent, include a statement explaining how the grant funds will be expended and project activities completed as planned by the end date on the grant agreement. Any state approved budget amendments should be included here; Include the line item that the funds are coming from and going to and when the state approved the budget amendment. (1,200 char.)

This is a final report for this project. No further expenditures are expected.

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PROGRAM INCOME (IF APPLICABLE)

If program income was earned on the project, grant recipients are required to report on the source, amount, and how funds were expended. Program income is gross income --earned by a recipient or subrecipient under a grant --directly generated by the grant-supported activity or earned only because of the grant agreement during the grant period of performance. Program income includes, but is not limited to, income from fees for services performed; the sale of commodities or items fabricated under an award (this includes items sold at cost if the cost of producing the item was funded in whole or partially with grant funds); registration fees for conferences, etc.

+	Source/Nature of Program Income (100 char.)	Amount Approved in Budget	Actual Amount Earned
-		\$0.00	\$0.00

USE OF PROGRAM INCOME (IF APPLICABLE)

Describe how the earned program income was used to further the objectives of this project during the performance period. Any income generated must be reinvested back into the project and not set aside or reserved for future expenses after the grant ends. (1,200 char.)

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PPR ATTACHMENTS DESCRIPTION (IF APPLICABLE)

Grantors will rely on the data that is submitted in this form when they report to congress. However, if you think additional documents are necessary to support PPR, please attach then and provide a document name and description of document below.

+	Document Name	Document Description
-	USDA GAP/GHP Executive Summary	Developed by the research team comprising of a faculty and an undergraduate research student assistant at SD Mines. This documentation was supported by standardized documents of log sheets, records and SOPs available on the Cornell Cooperative Extension GAP/GHP program.