**Brief Outline: Utilizing USDA data for a project for students in Fall 2024**

**Introduction**

This project aims to leverage the USDA database (like the Quick Stats database) to provide students with hands-on experience in agricultural data analysis. The project will involve analyzing various agricultural parameters such as crop yield, livestock inventory, economic data, and land use patterns. By engaging with real-world data, students will gain valuable skills in data handling, statistical analysis, and data visualization.

**Project Objectives**

1. **Data Analysis**: Students will learn to extract and analyze agricultural data (for example, from the Quick Stats database). They will use this data to study trends, compare regions, and understand the factors affecting agricultural productivity.
2. **Data Visualization**: Students will create visual representations of the data, including charts, graphs, and maps. These visualizations will help in understanding complex data and communicating findings effectively.
3. **Comparative Studies**: The project will involve comparing agricultural data between different states or counties. This will help students understand regional differences and the factors contributing to these differences.
4. **Practical Application**: Students will try to apply their findings to real-world agricultural issues, providing recommendations for improving productivity and sustainability.

**Expected Outcomes**

1. **Enhanced Data Skills**: Students will develop skills in data extraction, cleaning, and analysis using statistical software.
2. **Improved Understanding of Agriculture**: Students will gain insights into agricultural practices, economic factors, and environmental impacts affecting agriculture.
3. **Effective Communication**: Students will improve their ability to communicate complex data through visualizations and reports.

**Role of NASS Employees**

To ensure the success of this project, we request the involvement of NASS employees in the following ways:

1. **Biweekly (or Monthly) Class Visits**: We request a NASS representative to visit the class biweekly or monthly to monitor student progress, provide guidance, and address any challenges faced by the students.
2. **Expert Advice**: NASS employees can offer expert advice on data handling, interpretation, and best practices in agricultural data analysis.
3. **Resource Sharing**: Providing additional resources or references that can aid in understanding the data better.
4. **Feedback and Evaluation**: Periodic feedback on student work to ensure they are on the right track and to help them refine their analysis.

**Note:** These activities can be conducted during your class visit. We appreciate your time and aim to be as efficient as possible.

**Project Timeline**

* **Week 1-2**: Introduction to the Quick Stats database and project overview.
* **Week 3-4**: Data extraction and initial analysis.
* **Week 4-6**: Comparative analysis between states/counties.
* **Week 7-8**: Data visualization and interpretation.
* **Week 9-10**: Application of findings to real-world issues.
* **Week 11-12**: Final project presentation and report submission.

**Conclusion**

This project offers a unique opportunity for students to engage with real-world agricultural data, enhancing their analytical skills and understanding of the agricultural sector. The involvement of NASS employees will be instrumental in guiding students and ensuring the project's success. We look forward to a fruitful collaboration that will benefit both the students and the agricultural community.

**Contact Information**

For any questions or further details, please contact:

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