

U.S. Department of Agriculture
AD-416 Research Work Unit/Project Description -- Research Resume
U.S. Dept. of Agriculture, State Agricultural Experiment Stations and Other Institutions

Goals/Objectives/Outputs

Provide a clear, concise statement of the goals and objectives of the project as stated in the approved application or as approved by CSREES. The goals and objectives should be specific and attainable within the duration of the project and with the available resources. If the application lists milestones/target dates for important activities or phases of the project, include this information. Include a description of the expected **outputs** (or deliverables) from the project. For multistate projects, enter the objective(s) exactly as defined in the multistate project outline.

- Only keyboard characters are allowed. Do not use degree symbols, math symbols, Greek letters, italics, boldface, super- or sub-scripts, or underlines (substitute suitable words or alternate characters).
- Do not include tabs, blank lines, or any formatting of text.
- Limit to 3200 characters and spaces.

Outputs are **activities, events, services, and products** that reach people.

Activities include conducting and analyzing experiments or surveys; assessments; facilitating; teaching; or mentoring.

Events include conferences, demonstration sites, field days, symposia, workshops, and trainings.

Services include consulting, counseling, and tutoring.

Products include: new fundamental or applied knowledge; audio or video products; curricula; data or databases; equipment or instruments; invention, patent application and/or license; models; networks and/or collaborations fostered by the project or activity; physical collections or resources such as new plant varieties, new animal germplasm, or genetic maps; software; technology, methods, or techniques; train-the-trainer manuals; website(s) with the appropriate URL(s); information, skills, and technology for individuals, communities, and programs; or students graduated in agricultural sciences.

Dissemination refers to outreach activities that were undertaken to reach intended audiences for the purpose of advancing knowledge, encouraging positive actions, or changing conditions. Include any outreach activities to current and potential partners and collaborators. If educational materials and resources were distributed, describe the distribution method and the intended audience(s). □

Methods

Describe the ways in which the project will be conducted with emphasis on the general scientific methods and any unique aspects or significant departures from usual methods. Include a description of how the results will be analyzed, evaluated, or interpreted. Describe the efforts¹ that will be used to cause a change in knowledge, actions, or conditions of a target audience. Include a description of how the output(s) will be evaluated² and/or quantified for its impact on the intended audience(s).

¹**Efforts** include acts or processes that deliver science-based knowledge to people through formal or informal educational programs. Examples include: formal classroom instruction, laboratory instruction, or practicum experiences; development of curriculum or innovative teaching methodologies; workshops; experiential learning opportunities; extension and outreach.

²Describe the plan to be used to **evaluate** the success of the project. Include evaluation studies planned and types of data collected emphasizing key milestones and measurable or quantitative indicators of success. The project evaluation plan should relate milestones and indicators of success to expected project outcomes and impacts.

- Only keyboard characters are allowed. Do not use degree symbols, math symbols, Greek letters, italics, boldface, super- or sub-scripts, or underlines (substitute suitable words or alternate characters).
- Do not include tabs, blank lines, or any formatting of text.
- Limit to 3200 characters and spaces.

Non-Technical Summary

Describe the situation that creates a need for this project as well as the purpose or rationale for the project. Also include general statements describing the methods to be used, the expected outcomes/impacts*, and the anticipated benefits. Provide information at a level that most citizens can understand. This nontechnical summary is designed to enhance the usefulness of the information in the database, especially to legislative and other public audiences.

- Use full sentences and non-technical language.
- Only keyboard characters are allowed. Do not use degree symbols, math symbols, Greek letters, italics, boldface, super- or sub-scripts, or underlines (substitute suitable words or alternate characters).
- Do not include tabs, blank lines, or any formatting of text.
- Limit to 3200 characters and spaces.

*CSREES defines **outcomes/impacts** as a **change in knowledge, actions, or conditions**.

A **change in knowledge** occurs when the participant (scientist, trainee, or citizen) learns or becomes aware. Examples of a change in knowledge include: new fundamental or applied knowledge (such as results of sampling, surveying, laboratory or data analysis); methods and techniques; policy knowledge; improved skills; or increased knowledge of decision-making, life skills, and positive life choices among youth and adults.

A **change in actions** occurs when there is a change in behavior or the participants act upon what they have learned (adoption of techniques and methods or a change in practice). Examples of a change in actions include: application and actual use of fundamental or applied knowledge; adoption of new or improved skills; direct application of information from publications; adoption and use of new methods or improved technologies; use of skills by youth and adults in making informed choices; or adoption of practical policy and use of decision-making knowledge.

Examples of a **change in conditions** occurs when a societal condition is changed due to a participant's action. Examples of a change in conditions include: development of the principal discipline(s) of the project or other disciplines; development of human resources; physical, institutional, and information resources that improve infrastructure; technology transfer; management and behavioral changes and adjustments; quantified changes in descriptive statistics (trade balance, export sales, etc.); better and less expensive animal health; changes in conditions (e.g., wages, health care benefits, etc.) of the agricultural workforce; higher productivity in food provision; quantified changes in quality-of-life for youth and adults in rural communities; safer food supply; reduced obesity rates and improved nutrition and health; or higher water quality (e.g., increased water clarity) and a cleaner environment (e.g., measurably reduced pollution).