

2014 Alcorn State University Combined Research and Extension Plan of Work

Status: Accepted

Date Accepted: 05/22/2013

I. Plan Overview

1. Brief Summary about Plan Of Work

The Joint Extension and Research Plan of Work (POW) for the Alcorn State University (ASU) School of Agriculture, Research, Extension, and Applied Sciences (AREAS) draws upon the organization's unique strengths and its comprehensive delivery system in conducting original research and delivering educational programs targeted to limited-resource clientele. The joint planned programs reflected in the Plan of Work (POW) are implemented by research and extension professionals to facilitate positive change in the Capital River, Delta, and Coastal regions of Mississippi.

The Alcorn State University state-level extension and research staff consists of two groups: (1) Researchers who conduct studies to address relevant issues and situations facing the state's limited-resource citizens, and (2) Extension specialists who draw upon research-based information to design, develop, and implement educational programs to deliver new knowledge to limited-resource clientele, enabling those clientele to develop skills that will improve their quality of life. At the county level, members of the Extension Program Area staff will implement educational programs, events, and activities that will enable limited-resource clientele to acquire and apply new research-based information and to develop new or expanded skills. Research and education programs are enriched and enhanced by the Model Farm on the Alcorn State University campus, two off-campus demonstration centers located in Mound Bayou and Preston, and the Natchez Farmers Market located in Natchez, MS. These programs are designed to address issues relevant to specific geographic areas of the state. The Natchez Farmers Market was developed in the southwestern part of the state through a partnership between the Alcorn State University Extension Program (ASUEP) and the City of Natchez. Accessible marketing opportunity will be provided to limited-resource farmers and businesswomen, who are able to sell vegetables and other produce, as well as value-added products such as jam and jellies to consumers. In the North Delta Region, the Marks Processing Center provides limited-resource farmers an opportunity to observe research and extension demonstrations on the processing of various crops to produce value-added products that can increase income.

The Experiment Station, through its own research programs as well as collaborative partnerships with state universities and other related state agencies, conducts research and information interchange on key issues of importance to limited-resource citizens. Located on the ASU campus, the Experiment Station emphasizes research on vegetable and fruit production and collaborates in the research efforts of the Departments of Human Sciences and Advanced Technologies. Ongoing research at the Experiment Station focuses on the technical feasibility of new crops and on techniques of cultivation, weed control, and pest management to optimize crop yield.

The Small Farm Development Center (SFDC), a unique entity within the School of AREAS, provides farm loans to limited-resource farmers who otherwise would not have access to the capital needed to pursue innovative alternative enterprises. The Extension Program's 2501 project, conducted in collaboration with the Farm Service Agency (FSA), provides vendor borrowing training to educate farmers in the requirements for accessing capital available from that agency. The project staff collaborates with other USDA agencies to better connect limited-resource farmers with the services they need to improve the profitability of their farming operations.

The Mississippi River Research Center (MRRC) focuses on major concerns in the Southern Mississippi River Valley of the United States, such as nonpoint-source pollution of ground and surface waters from agricultural activities. The mission of the MRRC is to conduct research that will protect and enhance the region's water resources while sustaining agricultural production and income for farmers. Studies include evaluation of climate factors, such as temperature and rainfall events that will affect crop production. Research will be conducted in conjunction with other studies performed at the ASU Experiment Station.

At the Church Hill Swine Center in the southwestern region of the state, research is conducted on swine production and management. The Swine Development Center is supported by state funds supplemented by a USDA-NIFA Capacity Building Grant. The Center has the following objectives: (1) to develop production systems that will enhance swine productivity across the state while conserving air, soil, and water resources; (2) to improve the quality, safety, and composition of pork products; (3) to provide knowledge to enhance the international competitiveness of U.S. animal agriculture; (4) to generate information to enhance the socioeconomic well-being of rural communities; (5) to evaluate new and sustainable swine production systems for small producers; and (6) to conduct research that provides training for graduate and undergraduate students. Current research is focused on nutritional manipulation of gestating sows to increase their productivity. Trials are conducted to increase baby pig survival and litter size in sows through lysine and/or chromium picolinate supplementation of the maternal diet. Other research projects are exploring the use of underutilized plants to enhance the quality of pork products. Purslane and waterleaf plants, known to be rich in omega-3 fatty acids and pectin, are being tested for efficacy in reducing cholesterol in swine as well as in humans. The Center conducts outreach programs collaboratively with the Extension Program, including field days, workshops and demonstrations, and 4-H animal judging contests for junior and senior high school teams.

After careful review, of the effectiveness of implementation of seven planned programs in the 2011 and 2012 Joint Plan of Work between Extension and Research, various concerns and issues were evident which indicated a need to narrow our planned program scope from seven planned programs to five planned programs. We carefully reviewed where there were a great demand for programs, and where both Extension and our research efforts could be most effectively coordinated across the School of AREAS. Also, stakeholders' input was considered in reducing the number of planned programs. The reduced programming scope of programs will allow both Extension and Research to more effectively address high priority issues facing limited-resource clientele in the Delta, Coastal and Capital River targeted regions of the state of Mississippi. The five planned programs are as follows: 1) Global Food Security and Hunger, 2) Food Safety, 3) Youth, Family, Nutrition, Health, Fitness, and Wellness, 4) Small Family Farm and Marketing, and 5) Community Resource Development and Economic Planning.

Food security can be addressed within the framework of availability, utilization, stability, and access. As defined by the Food and Agriculture Organization (FAO), food security is a situation that exists when all people, at all times, have physical, social, and economic access to sufficient, safe, and nutritious food that meets their dietary needs and food preferences for an active and healthy life. The types of research and outreach activities conducted at Alcorn State University will not only help address the needs of limited-resource households in Mississippi, but will help find solutions to problems in the global economy. The research and outreach activities in progress at Alcorn State deal specifically with animal production systems, forestry, plant production systems, nutrition, human and family well-being, and youth-at-risk. All these activities will contribute to addressing issues related to global food security and hunger.

In recent years, there has been an increase in food-borne illnesses that correlates with increased consumption of fresh fruits and vegetables. This has been sparked partly by increased awareness of the health benefits associated with fresh produce, year-round importation, changes in production and

processing methods, and the emergence of new pathogens associated with fresh produce. Methods to detect contamination on fresh produce are less advanced compared to beef and chicken. The effectiveness of testing and detecting contamination on fresh produce is further limited by the sporadic nature of the contamination. The lack of an effective antimicrobial treatment for fresh produce means there is a high chance that pathogens introduced at any point in the production process may be present in the final consumable products. In 1998 the USDA established good agricultural practices (GAP) based on the guidelines developed by the Food and Drug Administration (FDA) to increase awareness of the potential for food-borne hazards among domestic and foreign producers, packers and shippers of fresh fruits and vegetables. Alcorn State will conduct extension and research activities to increase awareness and adoption of these guidelines among limited-resource farmers. Non-judicious use of pesticides leaves harmful levels of residues on food crops that can have severe effects on human and animal health in the short run or over an extended period of continuous exposure. ASU will conduct extension and research activities to educate farmers on judicious use of pesticides and develop biological control methods.

Decreasing the prevalence of obesity among adolescent and young children in Mississippi requires focusing on key issues that address increasing physical activity, nutrition education programs, and risk factors associated with childhood obesity. There is a strong need for more prevention at a very young age, since an obese child will probably become an obese adolescent, and ultimately, an obese adult. However, if overweight/obesity risk factors are already present, then appropriate interventions should be readily available to prevent further weight gain as well as weight-related co-morbidity. Alcorn State University will develop extension and research programs to mitigate childhood obesity in the state. We envision that activities to be conducted in this priority area will help reduce the prevalence of obesity in children and adults and its associated chronic diseases.

Estimated Number of Professional FTEs/SYs total in the State.

| Year | Extension | | Research | |
|------|-----------|------|----------|------|
| | 1862 | 1890 | 1862 | 1890 |
| 2014 | 0.0 | 36.0 | 0.0 | 36.0 |
| 2015 | 0.0 | 36.0 | 0.0 | 38.0 |
| 2016 | 0.0 | 36.0 | 0.0 | 36.0 |
| 2017 | 0.0 | 36.0 | 0.0 | 36.0 |
| 2018 | 0.0 | 36.0 | 0.0 | 34.0 |

II. Merit Review Process

1. The Merit Review Process that will be Employed during the 5-Year POW Cycle

- Combined External and Internal University Panel
- Combined External and Internal University External Non-University Panel
- Expert Peer Review

2. Brief Explanation

A combined internal and external university and external non-university panel will be selected every two years consisting of individuals to provide a merit review process of the Joint Extension/Research Plan of Work (POW) to establish the merit of the planned programs in the Plan of Work. Selected individuals will include ASUEP state program leaders, specialists and researchers from both the internal and external land-grant universities within and outside of the state of Mississippi, and others as deemed necessary by the state. Additionally, non-and-university panel members will consist of various partnering agencies with similar types of research and extension priorities in the state. The merit review process will focus on the five planned programs.

A comprehensive and detailed program review will be conducted by the panel of the planned programs in the Plan of Work (POW) at least every other year. The Alcorn State University Extension and Research unit of the School of AREAS will initiate program reviews of all planned programs at various intervals over the next five years. These reviews will be conducted by review panels selected specifically for the purpose of the review. Input obtained from local and state stakeholders from the environmental scanning system, as well as from faculty in the respective areas of the plan will be shared in order to assess the merit of planned programs in the POW. The detailed review of the planned program is anticipated to be conducted every other year. This review, conducted by a combined internal and external university and external non- university panel of professionals will result in a review to be used to direct the course of major changes and /or updates in program and research.

Also, peer review processes will consist of state program reviews by internal and external Extension and Research professionals from both land-grant universities of the state. Also, local county program reviews conducted by advisory groups at the county level will be used to guide the program and research direction of the planned programs of the POW. Local program reviews will be conducted in targeted counties by ASUEP each year by regional coordinators, advisory councils and program committees for review to conduct a merit review and provide comments on the effectiveness of program impact.

The research program will be reviewed annually by scientific peers and stakeholder groups to evaluate the relevance of research priorities, the thoroughness of research procedures in individual projects, project outcomes, publications, direct and indirect impact of the project on the stakeholders. Internal evaluators will consist of administrators and School of AREAS' scientists not directly associated with the planned programs. Expert reviewers and peer review participants will be selected from governmental agencies (state and federal), other universities, and local officials directly related to the commodities or other outputs of the research.

III. Evaluation of Multis & Joint Activities

1. How will the planned programs address the critical issues of strategic importance, including those identified by the stakeholders?

The proposed planned programs will address the strategic issues identified by the stakeholders by achieving goals in response to high priority issues to each of the five planned programs as listed below: 1) Global Food Security and Hunger, 2) Food Safety, 3) Youth, Family, Nutrition, Health, Fitness and Wellness, 4) The Small Family Farm and Marketing, 5) Community Resource Development and Economic Planning, and 6) Human Nutrition, Food Safety, and Human Health and Well-Being.

Global Food Security and Hunger Planned Program ultimate goals are to improve the profitability of livestock and poultry produced by limited-resource farmers; improve the quality of meats through research and appropriate educational programs; enhance income potential of limited-resource farmers through sustainable production of food and fiber; and to develop community-based approaches to sustainable food production and overall security.

Food Safety Planned Program ultimate goal is to deploy non-chemical methods of control and preserving natural enemies of the insect pests to encourage the utilization of non-chemical management tactics.

Youth, Family, Nutrition, Health, Fitness and Wellness Planned Program ultimate goal is to enhance coping skills of youth by developing decision-making, communication and refusal skills; to help youth resist risky behaviors and to have the ability to address relevant issues in their daily lives.

The Small Family Farm and Marketing Planned Program ultimate goal is to enhance the economic viability of small-and-limited-resource farm families by strengthening their technical knowledge and skills and economic decision making, so that they can contribute fully to the agricultural economy.

The Community Resource Planning & Economic Development Planned Program is formulated with a unifying goal to better understand the problems and issues that rural and urban communities encounter in southwest Mississippi. A collaborative effort between the Extension and Research staff will promote best community and economic development practices that will reduce problems in rural and urban communities. This methodology will strengthen the capacity of communities while developing their skills in the areas of leadership development, business development, non-profit development, cooperative development, and workforce (career) development.

The Human Nutrition, Food Safety, and Human Health and Well-Being Planned Program will utilize an integrated approach to address relevant issues facing youth and families. The planned program focus on programs to provide information about nutrition, healthy lifestyles and physical fitness.

2. How will the planned programs address the needs of under-served and under-represented populations of the State(s)?

The six planned programs of the Joint Extension and Research Plan of Work (POW) the School of AREAS address the needs of the underserved primarily through the implementation of its mission to address issues for improving the quality of their lives of people in targeted

regions of Mississippi. The stakeholder input highlighted priority issues that the seven planned programs are in response regarding issues being experienced by limited-resource citizens of the Capital River, Coastal and Delta regions of the state.

The planned programs are addressing issues of the underserved population focusing on youth-at-risk, single parents and families and limited-resource families. The six planned programs will constantly explore ways to modify its programming efforts by expanding it into different formats to make adjustments to various cultural and socio-economic realities of rural Mississippi, and to facilitate the involvement of diverse under-represented populations. Alcorn State University Extension Programs (ASUEP) has identified regions of Mississippi where there is a concentration of under-represented populations within the state. These regions have been of considerable interests to our programs in the past and will receive significant attention in the future.

3. How will the planned programs describe the expected outcomes and impacts?

The expected outcomes and impacts of all planned programs are outlined in terms of short, mid-term and long-term outcomes. The outcomes will take into consideration the various inputs and outputs of Extension and Research within the School of AREAS.

The short-term outcomes were described in terms of the expected knowledge to be gained and increased awareness of information related to key issues of the five planned programs of the POW being experienced by limited-resource audiences.

The mid-term outcomes will focus on the development, adoption and use of information related to key issues facing limited-resource citizens. Finally, the long-term outcomes of the six planned programs are described through the documentation of changes; increases and decreases observed regarding key issues affected by limited-resource citizens. (See outcomes of planned program of the POW).

4. How will the planned programs result in improved program effectiveness and/or

The planned programs are designed to respond to the needs of limited-resource citizens of Mississippi. The implementation of the planned program within the School of AREAS carries out both its mission and how the vision will be achieved. Additionally, the planned programs have been logically designed through combined Research and Extension Programs to address key issues of limited-resource citizens, and to determine expected outcomes of the planned programs utilizing FTE and SYS resources of Extension and Research within the School of AREAS. These planned programs include adding new resources to satisfy the objectives of the POW. Also, various assumptions of the planned programs have been identified that allow Extension and Research to enhance our efficiency in addressing key issues of limited-resource citizens of the state of Mississippi. These key issues are to be proactive rather than reactive which should enhance our efficiency in addressing key issues of limited-resource citizens of the state of Mississippi.

IV. Stakeholder Input

1. Actions taken to seek stakeholder input that encourages their participation

- Use of media to announce public meetings and listening sessions
- Targeted invitation to non-traditional stakeholder groups
- Targeted invitation to non-traditional stakeholder individuals
- Survey of traditional stakeholder groups

- Survey specifically with non-traditional groups
- Survey specifically with non-traditional individuals

Brief explanation.

The use of local and regional print, broadcast and interactive media through existing communications vehicles will be explored to establish Extension and Research as a relevant, practical and comprehensive information resource for Mississippi residents, as will as seek stakeholders input to encourage their participation. The School of AREAS' Research and Extension efforts will increase the exposure to seven planned programs through various media outlets to increase involvement and participation.

Local planning committees will be formed in each county to recruit, plan and implement public interaction, (e.g., town hall meetings, and focus groups sessions). Several of these activities are ongoing. Invitations will be distributed at public meetings and listening session; utilizing press releases, letters, flyers. These publications will be provided to targeted traditional and non-traditional stakeholder individuals and groups, elected and governmental officials, local institutions, organizations, and agencies to seek diverse stakeholders in limited-resource communities. Efforts will be made during town hall meetings and focus group sessions to increase awareness of the mission of AREAS. In addition, to sharing our capacity and collaborative, the primary goal is to facilitate greater access to our limited-resource customers and to communicate about the planned programs.

The Media and Communications Unit will publicize and market research efforts and educational programs, events and activities that are conducted at the state and county levels. One-on-one contact with target clientele of the planned programs will be conducted through an Individual Client Survey Plan to seek input from stakeholders. Stakeholder input is, also, obtained in collaboration between Extension and Research, with active participation of extension professionals and researchers who will participate in future meetings.

The data of the client survey plan outcome will be used in designing research projects and educational programs events and activities that address stakeholders' needs. Some research projects of the planned program requires the administration of surveys to non-traditional groups (e.g., cooperatives) or farmers, rural families, and other affected by the research program of the School of AREAS at Alcorn State University. Survey instruments are carefully designed to examine characteristics directly related to specific objectives of the project. These survey instruments are tested for validity and evaluated to ensure that they contain questions safeguarding the dignity and respect of survey participants. While research projects of planned program are designed so that experiments are conducted on farmers' land, and the farmers participate in the research. This allows the individual farmer to provide input and observe the outcomes of the research.

2(A). A brief statement of the process that will be used by the recipient institution to identify individuals and groups stakeholders and to collect input from them

1. Method to identify individuals and groups

- Use Advisory Committees
- Use External Focus Groups
- Open Listening Sessions
- Needs Assessments
- Use Surveys

Brief explanation.

Multiple approaches will be taken to seek stakeholder input. The approaches include formal surveys, focus groups, key informant approaches, advisory councils (collaborating groups, agencies, and organizations) and combinations of the preceding methods. Efforts will be made to ensure that the stakeholders involved were representatives of the limited-resources households in terms of geographic location, family status, income level, age, gender, disability status, and users or non-users of existing educational programs.

Guideline manuals were designed for collecting data from stakeholders to accomplish the program priorities within ASU Extension Program and Research. The manuals were used to train ASU Extension Program county and campus-based educators and staff. The guidelines provide instructions on how to conduct public surveys, meetings, collect data and summarize the issues for future action plans. The materials were, also, used with county government oversight committees and advisory committees to help them better understand the importance of seeking a broad base of stakeholder input at the community level.

Some of the environment scanning tools that will be used (and have been used in the past) by ASU Extension Program to collect stakeholder input data and its subsequent analysis include the following groups. Advisory councils assist Area Extension Educators with identifying and engaging local advisory councils to gather information about the needs and issues in local counties. The Extension Advisory council provides recommendations and identifies issues for educational programming. The Research Advisory committee will include researchers from USDA and state agencies, business representation and commodity groups.

The Town Hall meeting was implemented to identify issues or needs of limited-resource citizens in counties targeting the general public. Information from the analysis of the issues facilitates programming and research efforts through an action-based team response to the critical issue identified from the analysis. Open listening sessions and need assessments will be conducted jointly between research and extension.

A series of focus groups sessions will be implemented to further prioritize the issues identified in the public hearings (e.g., town hall meeting). The focus group session was convened at different timeframes in targeted counties to maximize input from a broad participant base.

The Individual Client Service Plan (ICSP) is an individual or family need assessment instrument to collect information on relevant needs and issues of limited-resource clientele to enable state researchers and extension specialists and county staff to provide educational programs, information and activities and appropriate technical assistance regarding issues. These four data input components granted the Alcorn State University Extension Program (ASUEP) the means to access, analyze issues and needs, and implement programs appropriate to issues of limited-resource citizens. A computation of the findings was converted into a county cluster matrix to enhance the issue identification processes of limited-resource communities.

2(B). A brief statement of the process that will be used by the recipient institution to identify individuals and groups who are stakeholders and to collect input from them

1. Methods for collecting Stakeholder Input

- Meeting with the general public (open meeting advertised to all)
- Meeting specifically with non-traditional groups
- Survey specifically with non-traditional groups
- Meeting specifically with non-traditional individuals
- Survey specifically with non-traditional individuals
- Meeting with invited selected individuals from the general public

Brief explanation.

The Town Hall Meetings will be structured to provide a simplistic means of collecting data. The meetings are planned in detail and executed to facilitate the gathering of pertinent information that would assist the ASUEP in identifying the critical needs/issues of limited-resource communities as the populace of the communities viewed them. These meetings are a platform created for the residents in limited-resource and disadvantage communities to give voice to their needs and concerns. The setup and conducting of the meetings were handled in a manner that made them feel comfortable expressing their thoughts. The role of the program was to listen and support the open discussion of their expressed issues and perspectives in a way that promoted engagement of all participants.

The ASUEP developed the Individual Client Service Plan (ICSP) as a proactive approach to assess and determine the most effective method in allocating limited personnel and resources, (technical and practical) in address the increasing critical needs of the citizens in the state of Mississippi. The major objective was the development of a comprehensive assessment instrument, and the implementation of the correct recommendation of educational activities. The approach of the ASUEP ICSP is five-fold 1.) a comprehensive assessment of resources and limited-resource clientele needs; 2) analysis of data collected on individual families; 3) rapid response to the urgency of the individual families and/or clientele; 4) resource persons required to implement recommendations, and 5) implementing the ICSP activities to achieve outcomes.

The Extension Advisory Council provides useful information on the Extension education process. The principles of program building involve group action, or organization, and individual action. The Extension Advisory Council makes recommendations and helps build the Extension educational program. Program building is not a ritual we go through for its own sake. Involving local people in planning, implementing, and evaluating educational programs is essential to the Extension mandate. County advisory groups are the basis of a grassroots organization and are the source of leadership for the county. The number and type of advisory councils, or committees in counties, are determined by the variety of committee and social conditions.

3. A statement of how the input will be considered

- In the Budget Process
- To Identify Emerging Issues
- Redirect Extension Programs

- Redirect Research Programs
- In the Staff Hiring Process
- In the Action Plans
- To Set Priorities

Brief explanation.

The stakeholder input process is very helpful in refocusing and reaffirming priorities on an ongoing basis. The process is, also, critical in identifying emerging issues; however, some stakeholder groups have had difficulty seeing beyond the critical issues they face today. As a result, the ASUEP team will compile and disseminate trend analysis to help stakeholders identify issues and pitfalls of the future. The environmental scanning system, a grassroots information gathering approach, determines how ASU Extension and Research directs or redirects its research and programming efforts and set priorities. The aim of data gathering is to set aside preconceptions about the high priority issues of limited-resources audiences. The data collected from various environmental scanning tools as mentioned-above adopted by ASU Extension and Research was used to identify local issues, concerns and programming gaps. The local issues, concerns and programming gaps were gathered on a statewide basis and made available for review by all county and campus-based extension educators and other staff within the ASU Extension and Research Program. Finally, the issues were prioritized by the state and county staff and ASUEP/ Leadership and Management Committee.

The Leadership and Management committee developed a restructuring plan for ASUEP based on stakeholder input findings. Prioritization of issues in program areas: Agriculture/Environment- Lack of farm financial management- Limited knowledge of production, management, and marketing practices for alternative enterprises Nutrition and Health- High rate of obesity (adult/childhood)- High incidence of chronic disease. Youth Development- High incidence of risky behavior engaged in by youth such as tobacco, drugs and alcohol abuse-High rate of teen pregnancy. Child and Family Development- High rate of single parent families- Limited parenting skills. Community and Economic Development- Lack of jobs (youth and adult)-Limited community leadership skills. Additionally, the geographic focus of extension and research efforts will focus primary on the aforementioned issues in the Capital River, Delta, and, Coastal. Less emphasis will be placed on other regions of the state and will be served through other delivery mechanisms. Staffing arrangements and budgetary considerations were based on incidence of programming factors, and where the greatest need of the limited-resource population existed. Action plans will be developed and shared with stakeholders concerning action to be taken to address issues and to form partnerships with local leaders and other agencies and organizations,also, action plans that will be develop to respond to issues identified from the analysis of data gathered through various processes of the environmental scanning system.

V. Planned Program Table of Content

| S. No. | PROGRAM NAME |
|--------|---|
| 1 | Global Food Security and Hunger |
| 2 | Small Family Farm Management and Marketing |
| 3 | Youth and Family Well-being |
| 4 | Food Safety |
| 5 | Community Resource Development and Economic Planning |
| 6 | Human Nutrition, Food Safety, and Human Health and Well-Being |

V(A). Planned Program (Summary)

Program # 1

1. Name of the Planned Program

Global Food Security and Hunger

2. Brief summary about Planned Program

The planned program is formulated with a unifying goal to better understand the problems and issues on global food security. A multi-disciplinary team of agricultural scientists and professionals have assembled develop and promote best practices that are likely to help resolve the problems of hunger and food insecurity. Partnerships among researchers in plant science, animal science, and agricultural economics will explore strategies to strengthen the capacity of communities to have access to sufficient, safe, and nutritious food to meet the needs of people and improve their quality of life.

The interdisciplinary team will work towards the achievement of specific objectives which include: (1) promoting reproductive efficiency and nutrient utilization of livestock; (2) enhancement of healthcare management and genetic improvement of animals for proper selection of breeding stock; (3) development of technologies to improve the production of alternative crops, maximize their economic value while minimizing adverse impact on the environment; and (4) utilization of research tools and economic models in agricultural production, farm management, marketing, finance, and community development to create policies designed to achieve long term food security. The program will serve to consolidate and complement food policy by engaging related disciplines into identifying ideas and strategies that can be of long-term benefit to communities. All collaborators have committed themselves to work with this program to ensure that it complements their work in different areas of agriculture.

3. Program existence : Intermediate (One to five years)

4. Program duration : Medium Term (One to five years)

5. Expending formula funds or state-matching funds : Yes

6. Expending other than formula funds or state-matching funds : No

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

| KA Code | Knowledge Area | %1862 Extension | %1890 Extension | %1862 Research | %1890 Research |
|----------------|---|------------------------|------------------------|-----------------------|-----------------------|
| 102 | Soil, Plant, Water, Nutrient Relationships | | 10% | | 10% |
| 205 | Plant Management Systems | | 15% | | 15% |
| 211 | Insects, Mites, and Other Arthropods Affecting Plants | | 10% | | 15% |
| 213 | Weeds Affecting Plants | | 5% | | 5% |
| 301 | Reproductive Performance of Animals | | 10% | | 10% |
| 302 | Nutrient Utilization in Animals | | 10% | | 5% |
| 303 | Genetic Improvement of Animals | | 5% | | 5% |
| 308 | Improved Animal Products (Before Harvest) | | 5% | | 5% |
| 311 | Animal Diseases | | 10% | | 10% |
| 501 | New and Improved Food Processing Technologies | | 5% | | 5% |
| 602 | Business Management, Finance, and Taxation | | 5% | | 5% |
| 604 | Marketing and Distribution Practices | | 10% | | 10% |
| | Total | | 100% | | 100% |

V(C). Planned Program (Situation and Scope)**1. Situation and priorities**

Estimated prevalence rates of food insecurity from 2006 to 2008 ranged from 6.9 percent in North Dakota and the highest rate of 17.4 percent in Mississippi (USDA-ERS, 2008). A majority of Mississippians are reported to have to choose between paying for food and paying for utilities or medical care. Furthermore, increases in the number of clients who come to emergency food program sites are prevalent in the state. A great number of counties in Mississippi are largely socio-economically depressed, and faces other problems that contribute to further deterioration of social and physical infrastructure as well as economic decline. These are factors that have, no doubt severely constrained economic development throughout the state. Plant and livestock research scientists in the Department of Agriculture at Alcorn State University have identified constraints such as poor breeding system and veterinary management, insufficient utilization of feedstuff and weakness of the marketing system. Limited-resource farmers often grow and market fresh fruits and vegetables (alternative crops); however, because of the lack of knowledge on new production and distribution techniques, they are not able to maximize the yield per acre, increase income and enhance quality of life.

2. Scope of the Program

- In-State Extension

- In-State Research
- Integrated Research and Extension

V(D). Planned Program (Assumptions and Goals)

1. Assumptions made for the Program

It is assumed that the planned program will work successfully because its objectives are grounded in science and research. The mandate of the program is agriculture which encompasses a synergy among crop production, animal production, and community resource development programs. The collaboration among scientists in the School of AREAS recognizes the strength of people and programs working together in the achievement of common goals to create solutions toward global food security. The attainment of planned programs and activities are within the realm of achievement for our experienced and committed scientists and professionals at Alcorn State University. Researchers in the Department of Agriculture at Alcorn assume that limited-resource livestock and alternative crop producers are not fully aware of the management practices that may help to maximize their operations for economic viability and sustainability. With contributions from the School of AREAS, appropriate production practices will be identified and utilized for the profitable production of food and fiber. This program assumes full participation of the research units, limited-resource farmers, extension workers, concerned groups and organizations, as well as members of the community in the attempt to understand the factors affecting food security.

2. Ultimate goal(s) of this Program

The ultimate goals are: (1) to improve the profitability of livestock and poultry produced by limited-resource farmers; (2) to improve the quality of meats through research and appropriate educational program; (3) to enhance income potential of limited-resource farmers through sustainable production of food and fiber; and (4) to develop community-based approaches to sustainable food production and overall security.

V(E). Planned Program (Inputs)

1. Estimated Number of professional FTE/SYs to be budgeted for this Program

| Year | Extension | | Research | |
|------|-----------|------|----------|------|
| | 1862 | 1890 | 1862 | 1890 |
| 2014 | 0.0 | 22.0 | 0.0 | 30.0 |
| 2015 | 0.0 | 22.0 | 0.0 | 30.0 |
| 2016 | 0.0 | 22.0 | 0.0 | 30.0 |
| 2017 | 0.0 | 22.0 | 0.0 | 30.0 |
| 2018 | 0.0 | 22.0 | 0.0 | 30.0 |

V(F). Planned Program (Activity)

1. Activity for the Program

The program will utilize an interdisciplinary team in agriculture to explore food insecurity issues, and

identify strategies to find solutions as a means of impacting the community through research and educational programs. Research in plant and animal production as well as in agricultural economics will be conducted to identify ways by which hunger and food insecurity can be alleviated and eventually eradicated. Research will be conducted by synthesizing existing knowledge and new findings in agricultural sciences. The educational program will provide a wide range of demonstrations, farm tours, group meetings, seminars, applied research, and one-to-one intervention. The indirect activities will include public service announcements, dissemination of newsletters, development of websites, research publication reports, information sheets, and publications in scientific journals. These activities will be geared towards increased food production, availability, and access.

2. Type(s) of methods to be used to reach direct and indirect contacts

Extension

| Direct Methods | Indirect Methods |
|---|--|
| <ul style="list-style-type: none"> ● Workshop ● Group Discussion ● One-on-One Intervention ● Demonstrations ● Other 1 (Curriculum Development) | <ul style="list-style-type: none"> ● Public Service Announcement ● Newsletters ● Web sites other than eXtension ● Other 1 (Reports) ● Other 2 (Patents) |

3. Description of targeted audience

This program will be designed specifically for the limited-resource farmers and rural dwellers within the State of Mississippi. We hope to provide the farmers and dwellers in Mississippi and the nation with findings related to sustainable production, preservation and utilization of identified alternative crops.

V(G). Planned Program (Outputs)

NIFA no longer requires you to report target numbers for standard output measures in the Plan of Work. However, all institutions will report actual numbers for standard output measures in the Annual Report of Accomplishments and Results. The standard outputs for which you must continue to collect data are:

- Number of contacts
 - Direct Adult Contacts
 - Indirect Adult Contacts
 - Direct Youth Contacts
 - Indirect Youth Contact
- Number of patents submitted
- Number of peer reviewed publications

Clicking this box affirms you will continue to collect data on these items and report the data in the Annual Report of Accomplishments and Results.

V(H). State Defined Outputs

1. Output Measure

- Development of research papers and publications on the findings of studies focusing on plant systems.
- Conduct educational field days for limited-resource farm families on sustainable crop production practices.
- Conduct educational tours for limited-resource farm families on sustainable crop production practices.
- Conduct educational programs on sustainable horticulture production practices to limited-resources farm families.
- Develop educational fact sheets on sustainable horticulture production practices to limited-resources farm families.
- Conduct research projects on sustainable crop production practices.
- Conduct educational workshop for limited-resource farm families on forest soil erosion/management.
- Conduct educational demonstrations for limited-resource farm families on best management practices and best available technologies for livestock production.
- Conduct educational programs, activities or events on forage production practices for limited-resource farm families
- Conduct educational programs, activities or events to improve herd genetics for limited-resource farm families.
- Conduct educational programs, activities or events on pastured livestock production practices for limited- resource farm families.
- Conduct educational programs, activities or events on reproduction performance, nutrient utilization in animals to decrease livestock production cost for limited-resource farm families.
- Conduct educational programs, activities or events on alternative livestock production practices for limited- resource farm families.
- Develop research publications related to animal/meat production.
- Develop research based reader friendly pamphlets and fact sheets on livestock production for Extension educators and farm families.
- Develop M.S. thesis on animal production systems.
- Conduct educational programs and demonstrations on alternative crop production.
- Conduct educational programs and demonstrations on community and container gardening.
- Conduct educational programs of food safety and sanitation practices.
- Conduct educational programs and demonstrations on Direct Marketing of Alternative Agriculture

Enterprises

- Clicking this box affirms you will continue to collect data on these items and report the data in the Annual Report of Accomplishments and Results.

V(I). State Defined Outcome

| O. No | Outcome Name |
|-------|---|
| 1 | Increase number of program participants to adopt integrated nutrient management to increase crop production. |
| 2 | Increase number of program participants to utilize integrated pest management to improve the quality of vegetable production. |
| 3 | Increase number of producers to adopt new crop systems to improve crop yield and quality. |
| 4 | Increase number of participants to improve product handling and sanitation. |
| 5 | Increase number of participants to use recommended cultivar and other production practices to enhance productivity and profitability. |
| 6 | Increase number of program participants to improve production livestock production efficiency through best management practices. |
| 7 | Increase number of producers that will improve pasture grass fed to livestock. |
| 8 | Increase number of farmers to utilize artificial insemination and/or embryo transfer to decrease the need to purchase quality male animals and improve herd genetics. |
| 9 | Increase number of farmers to adopt pasture or alternative livestock systems as an alternative enterprise. |
| 10 | Increase the number of communities establishing community and container gardens to increase the availability of fresh and locally grown produce. |
| 11 | Increase the number of farmers and vendors that gain knowledge on Direct Marketing of Alternative Agriculture Enterprises. |

Outcome # 1

1. Outcome Target

Increase number of program participants to adopt integrated nutrient management to increase crop production.

2. Outcome Type : Change in Action Outcome Measure

3. Associated Knowledge Area(s)

- 102 - Soil, Plant, Water, Nutrient Relationships

4. Associated Institute Type(s)

- 1890 Extension
- 1890 Research

Outcome # 2

1. Outcome Target

Increase number of program participants to utilize integrated pest management to improve the quality of vegetable production.

2. Outcome Type : Change in Action Outcome Measure

3. Associated Knowledge Area(s)

- 102 - Soil, Plant, Water, Nutrient Relationships
- 205 - Plant Management Systems
- 211 - Insects, Mites, and Other Arthropods Affecting Plants

4. Associated Institute Type(s)

- 1890 Extension
- 1890 Research

Outcome # 3

1. Outcome Target

Increase number of producers to adopt new crop systems to improve crop yield and quality.

2. Outcome Type : Change in Action Outcome Measure

3. Associated Knowledge Area(s)

- 102 - Soil, Plant, Water, Nutrient Relationships
- 205 - Plant Management Systems

4. Associated Institute Type(s)

- 1890 Extension
- 1890 Research

Outcome # 4

1. Outcome Target

Increase number of participants to improve product handling and sanitation.

2. Outcome Type : Change in Action Outcome Measure

3. Associated Knowledge Area(s)

- 501 - New and Improved Food Processing Technologies

4. Associated Institute Type(s)

- 1890 Extension
- 1890 Research

Outcome # 5

1. Outcome Target

Increase number of participants to use recommended cultivar and other production practices to enhance productivity and profitability.

2. Outcome Type : Change in Action Outcome Measure

3. Associated Knowledge Area(s)

- 205 - Plant Management Systems
- 501 - New and Improved Food Processing Technologies

4. Associated Institute Type(s)

- 1890 Extension
- 1890 Research

Outcome # 6

1. Outcome Target

Increase number of program participants to improve production livestock production efficiency through best management practices.

2. Outcome Type : Change in Action Outcome Measure

3. Associated Knowledge Area(s)

- 301 - Reproductive Performance of Animals
- 302 - Nutrient Utilization in Animals
- 303 - Genetic Improvement of Animals
- 308 - Improved Animal Products (Before Harvest)
- 311 - Animal Diseases

4. Associated Institute Type(s)

- 1890 Extension
- 1890 Research

Outcome # 7

1. Outcome Target

Increase number of producers that will improve pasture grass fed to livestock.

2. Outcome Type : Change in Action Outcome Measure

3. Associated Knowledge Area(s)

- 205 - Plant Management Systems
- 308 - Improved Animal Products (Before Harvest)

4. Associated Institute Type(s)

- 1890 Extension
- 1890 Research

Outcome # 8

1. Outcome Target

Increase number of farmers to utilize artificial insemination and/or embryo transfer to decrease the need to purchase quality male animals and improve herd genetics.

2. Outcome Type : Change in Action Outcome Measure

3. Associated Knowledge Area(s)

- 303 - Genetic Improvement of Animals

4. Associated Institute Type(s)

- 1890 Extension
- 1890 Research

Outcome # 9

1. Outcome Target

Increase number of farmers to adopt pasture or alternative livestock systems as an alternative enterprise.

2. Outcome Type : Change in Action Outcome Measure

3. Associated Knowledge Area(s)

- 308 - Improved Animal Products (Before Harvest)

4. Associated Institute Type(s)

- 1890 Extension
- 1890 Research

Outcome # 10

1. Outcome Target

Increase the number of communities establishing community and container gardens to increase the availability of fresh and locally grown produce.

2. Outcome Type : Change in Action Outcome Measure

3. Associated Knowledge Area(s)

- 102 - Soil, Plant, Water, Nutrient Relationships
- 205 - Plant Management Systems
- 211 - Insects, Mites, and Other Arthropods Affecting Plants
- 213 - Weeds Affecting Plants

4. Associated Institute Type(s)

- 1890 Extension
- 1890 Research

Outcome # 11

1. Outcome Target

Increase the number of farmers and vendors that gain knowledge on Direct Marketing of Alternative Agriculture Enterprises.

2. Outcome Type : Change in Knowledge Outcome Measure

3. Associated Knowledge Area(s)

- 604 - Marketing and Distribution Practices

4. Associated Institute Type(s)

- 1890 Extension

V(J). Planned Program (External Factors)

1. External Factors which may affect Outcomes

- Natural Disasters (drought, weather extremes, etc.)
- Economy
- Public Policy changes
- Government Regulations
- Populations changes (immigration, new cultural groupings, etc.)
- Other (Personnel availability)

Description

Natural disasters such as drought and hurricanes are external factors which can negatively impact the planned program area. Agricultural enterprises operate in a complex and volatile environment, involving susceptibility to weather which prevents or delays planting and drought conditions that reduces yield and quality of the crop.

Public policy changes- Another constraint that may affect outcomes is public policy, especially those relating to comparative prices of inputs and harvested crops. If it is politically feasible to provide farmers a high price for their product while holding down input cost, farmers will utilize the inputs as they accept the new technology.

Government Regulations-changing government regulations such as competitive land uses,

shifting development patterns and global market influence is a third constraint that may affect outcome. Populations changes (immigration, new cultural groupings, etc.)- Population changes in farming communities can lead to producer/neighbor issues that influence choice of production practices.

Agricultural/horticultural enterprises operate in a complex and volatile context involving susceptibility to weather extremes, changing governmental policies and regulations, competitive land uses and shifting development patterns, evolving consumer demands, and globally influenced markets. Fundamental change is occurring in the state and regional economies within which agricultural and horticultural enterprises operate. The specific implications of these external factors vary greatly by locale and across commodities and business forms. Population and land use changes in farming communities can lead to producer/neighbor issues that influence choice of production practices.

Legislative policies and variations in appropriation priorities may affect funding. This shift will hamper funding for community and economic development projects. Federal and local government policies may change which would constrain some of our programs. Local community and municipalities may enact laws and regulations in certain communities that would likely counter some of the programs and policies articulated by the project. Laws in the area of interest change, public policy changes, social, economic and demographic changes in various communities may force certain authorities to modify their public priorities. Pending changes in immigration laws may affect migration and other demographic issues, public policies and program priorities.

Livestock enterprises operate in a complex and volatile context involving susceptibility to weather extremes, changing governmental policies and regulations, competitive land uses and shifting developmental patterns, evolving consumer demands, and globally influenced markets. Fundamental change is occurring in the state and regional economies within which agricultural and horticultural enterprises operate. The specific implications of these external factors vary greatly by locale and across commodities and business forms. Population and land use changes in farming communities can lead to producer/neighbor issues that influence choice of production practices. The outcome of this problem will be influenced mainly by such external factors as variations in climate during each growing season, inadequate appropriations, public policy changes, and governmental regulations. The ability or willingness of younger men and women to become involved in production agriculture will enhance productivity and profitability.

V(K). Planned Program - Planned Evaluation Studies

Description of Planned Evaluation Studies

Comparison of crop performances under improved production practices wto those produced under the conventional production practices. Comparisons of quality of crops produced and additional income to be generated by the farmers who adopted such resources/program, with those still using conventional production practices. The outcome of this problem will be influenced mainly by such external factors as variations in climate during each growing season, inadequate appropriations, public policy changes, and government regulations. The ability or willingness of younger men and women to become involved in production agriculture will enhance productivity and profitability.

Research will be evaluated according to its relevance to Mississippi and the nation. Productivity will be a measure of the number of publications in refereed journals and other delivery methods. It will, also, be measured by the extent to which the farmers are switching to alternative crop production through sustainable agronomic production practices. The extent to which our findings will enhance scientific studies in other institutions will serve as another evaluation measure of our efforts.

The success and accomplishments of this project will be evaluated based on the following

measures: (a) the number of communities and county officials showing interest in and wanting to continue support for the project in consecutive years; (b) degree of improvement in the attitudes and experiences of the residents in terms of social consciousness and appreciation for community life and the needs of the poor. These are critical criteria for testing the effectiveness and accomplishments of a project of this nature. No matter how elaborate a behavioral research/extension project associated with a educational institution is, or how enthusiastic the faculty and extension staff are, unless in the end, communities of reference benefit, and the experiences of the residents are changed so that attitudes, participation and outreach outcomes are better than before, the work cannot be considered successful. (c) The amount of additional financial support received and the number of cooperating organizations involved each year, over the life of the project. (d). Participants of all community resource development activities will be requested to evaluate, submit comments and reflections for the relevance of the educational programs, and (e) Peer reviews will be done on an ongoing basis by researchers, sociologists and extension professionals within the extension and academic communities. Effort will be made to ensure that peer reviews are done through area professional publications both internally and externally. The evaluation of the plan and best practices will be ongoing and the assessment by stakeholders and clients will address final impact at the conclusion of the projects.

Research will be evaluated according to its relevance to the needs of limited-resource clientele in Mississippi. The documentation and dissemination of research results in this area will be evaluated through publications, presentation and adoption of animal production practices based on the results of research. Evaluation instruments will be developed and utilized by participants in extension programs. An evaluation form will be used to assess program effectiveness with limited-resource audiences. Finally, input will be solicited from stakeholders for use in planning future programs.

V(A). Planned Program (Summary)

Program # 2

1. Name of the Planned Program

Small Family Farm Management and Marketing

2. Brief summary about Planned Program

The Small Family Farm Management and Marketing Planned Program addresses financial management, analysis, and marketing in target counties with high concentration of socially disadvantaged farmers/ranchers in Mississippi. The Small Family Farm Management and Marketing staff collaborates with the Mississippi Small Farm Development Center (MSFDC), Farm Service Agency (FSA), Natural Resources Conservation Services (NRCS), Rural Development (RD), other federal and state agencies, and Community Based Organizations (CBO's) to provide technical assistance to socially-disadvantaged farmers/ranchers in the following areas: (a) farm record keeping (manual and computerized), (b) financial analysis, (c) computer adoption, (d) marketing of agriculture and added-value, and (e) technical assistance in establishing farmers markets. Socially-disadvantaged farmers/ranchers will receive training via small group meetings, one-on-one technical assistance, farm visits, field days, tours, certification sessions, demonstrations and conferences.

3. Program existence : Mature (More than five years)

4. Program duration : Long-Term (More than five years)

5. Expending formula funds or state-matching funds : Yes

6. Expending other than formula funds or state-matching funds : No

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

| KA Code | Knowledge Area | %1862 Extension | %1890 Extension | %1862 Research | %1890 Research |
|---------|--|-----------------|-----------------|----------------|----------------|
| 601 | Economics of Agricultural Production and Farm Management | | 30% | | 0% |
| 602 | Business Management, Finance, and Taxation | | 40% | | 0% |
| 604 | Marketing and Distribution Practices | | 30% | | 0% |
| | Total | | 100% | | 0% |

V(C). Planned Program (Situation and Scope)

1. Situation and priorities

According to the 2007 Census of Agriculture, limited-resource and socially-disadvantaged farmers/ranchers generate less than \$100,000 in gross annual sales. Approximately 37,400 farmers in Mississippi earn less than \$100,000 in gross annual sales. Agriculture and forestry contributes more than \$5 billion to the state economy. Income derived from agriculture and forestry exceeds \$20 billion. These

farmers/ranchers are engaged in diverse agricultural enterprises including traditional field crops, beef cattle, and new alternative enterprises that support niche markets (farmers markets).

2. Scope of the Program

- In-State Extension

V(D). Planned Program (Assumptions and Goals)

1. Assumptions made for the Program

An assumption of the planned program is that by providing technical assistance in financial management,

the farmers' profit will increase; the farmers' debt will decrease and their quality of life will improve. A second assumption is that farmers will adapt the best business management practices to increase their chances of getting a loan and other assistance made available by both federal and state agencies. The planned program is expected to increase the knowledge of small-and-limited-resource and socially-disadvantaged farmers in farm management, business management, finance, marketing, and distribution of farm products. Also personnel/FTE allocation and funding are internal variables that will negatively impact the program's ability to achieve the intended outcomes. The targeted audiences of this planned program are expected to be small-and -imited-resource and socially-disadvantaged farmers/ranchers with varying educational background and limited access to capital to start a farm business. Another assumption is that farmers/ranchers have a desire to improve their current situation but lack satisfactory management skills. The decision on how to market and at what price requires an informed understanding of how markets work and why prices move up and down. Also, farmers/ranchers must understand that a combination of marketing methods and tools helps to improve marketing decisions.

2. Ultimate goal(s) of this Program

The ultimate goal is to enhance the economic viability of small-and-limited-resource and socially disadvantaged farm families by strengthening their technical knowledge, skills and economic decision making to fully contribute to the agricultural economy.

V(E). Planned Program (Inputs)

1. Estimated Number of professional FTE/SYs to be budgeted for this Program

| Year | Extension | | Research | |
|------|-----------|------|----------|------|
| | 1862 | 1890 | 1862 | 1890 |
| 2014 | 0.0 | 4.0 | 0.0 | 0.0 |
| 2015 | 0.0 | 4.0 | 0.0 | 0.0 |
| 2016 | 0.0 | 4.0 | 0.0 | 0.0 |
| 2017 | 0.0 | 4.0 | 0.0 | 0.0 |
| 2018 | 0.0 | 4.0 | 0.0 | 0.0 |

V(F). Planned Program (Activity)

1. Activity for the Program

The development of enterprise budgets; development of models of effective strategies; and the distribution of results will be emphasized in our programs, as well as one small farmers conference presentation per year; one non-refereed publication per year; two presentations annually at meetings, and workshops for farmers. Extension Programs will consist of the development (or identification) of relevant content materials to address knowledge gaps needed by farmers. Focus groups survey instruments will be developed as well as various workshops, demonstrations, meetings, development of curricula, and other learning resources will be utilized for effective program implementation. Evaluation assessment methods will be implemented to document the impacts of our programs. In addition to marketing plans will be developed; agriculture tours of farms will be conducted; and demonstration of marketing tips and techniques will be given on how to sell to farmers markets.

2. Type(s) of methods to be used to reach direct and indirect contacts

Extension

| Direct Methods | Indirect Methods |
|--|---|
| <ul style="list-style-type: none"> ● Education Class ● Workshop ● Group Discussion ● One-on-One Intervention ● Demonstrations ● Other 1 (Field Days) ● Other 2 (Conferences) | <ul style="list-style-type: none"> ● Public Service Announcement ● Newsletters ● Web sites other than eXtension ● Other 1 (Field Days) ● Other 2 (Conferences) |

3. Description of targeted audience

The targeted audience for the Small Farm Management and Marketing planned program are limited-resource and socially-disadvantaged farmers/ranchers.

V(G). Planned Program (Outputs)

NIFA no longer requires you to report target numbers for standard output measures in the Plan of Work. However, all institutions will report actual numbers for standard output measures in the Annual Report of Accomplishments and Results. The standard outputs for which you must continue to collect data are:

- Number of contacts
 - Direct Adult Contacts
 - Indirect Adult Contacts
 - Direct Youth Contacts
 - Indirect Youth Contact
- Number of patents submitted
- Number of peer reviewed publications

Clicking this box affirms you will continue to collect data on these items and report the data in the Annual Report of Accomplishments and Results.

V(H). State Defined Outputs

1. Output Measure

- Conduct educational sessions on farm and financial management.
- Conduct educational sessions on farm legal risk.
- Conduct educational sessions to provide technical assistance on farm loans, other governments agencies requirements, and application processes
- Conduct educational sessions/demonstrations on farm record keeping.
- Conduct educational tours on direct marketing of agricultural goods and services.
- Conduct educational programs on the utilization of direct marketing techniques of agricultural goods and services.
- Development of fact sheets on direct marketing of agriculture produce/product and value-added goods and services.
- Conduct special events at the Farmers Market to bring awareness to eating healthier to youth.
- Conduct educational sessions on Farm Risk Management.

Clicking this box affirms you will continue to collect data on these items and report the data in the Annual Report of Accomplishments and Results.

V(I). State Defined Outcome

| O. No | Outcome Name |
|-------|--|
| 1 | Increase percentage of farmers and producers to gain knowledge on Farm and Financial Management. |
| 2 | Increase percentage of farmers and producers to minimize land and farm loss. |
| 3 | Increase percentage of farmers and producers to apply for farm loans. |
| 4 | Increase number of farmers and cooperatives to develop and utilize marketing plans. |
| 5 | Increase percentage of farmers and producers to keep accurate records. |
| 6 | Increase percentage of farmers and producers to minimize risk on the farm. |
| 7 | Increase number of farmers and vendors to gain knowledge in Direct Marketing to Farmers Markets. |
| 8 | Increase the number of farmers that participate in Agriculture tours to help them identify new production practices. |
| 9 | Increase the number of farmers, vendors that receive educational facts sheets. |

Outcome # 1

1. Outcome Target

Increase percentage of farmers and producers to gain knowledge on Farm and Financial Management.

2. Outcome Type : Change in Action Outcome Measure

3. Associated Knowledge Area(s)

- 602 - Business Management, Finance, and Taxation

4. Associated Institute Type(s)

- 1890 Extension

Outcome # 2

1. Outcome Target

Increase percentage of farmers and producers to minimize land and farm loss.

2. Outcome Type : Change in Knowledge Outcome Measure

3. Associated Knowledge Area(s)

- 602 - Business Management, Finance, and Taxation

4. Associated Institute Type(s)

- 1890 Extension

Outcome # 3

1. Outcome Target

Increase percentage of farmers and producers to apply for farm loans.

2. Outcome Type : Change in Condition Outcome Measure

3. Associated Knowledge Area(s)

- 601 - Economics of Agricultural Production and Farm Management

4. Associated Institute Type(s)

- 1890 Extension

Outcome # 4

1. Outcome Target

Increase number of farmers and cooperatives to develop and utilize marketing plans.

2. Outcome Type : Change in Action Outcome Measure

3. Associated Knowledge Area(s)

- 604 - Marketing and Distribution Practices

4. Associated Institute Type(s)

- 1890 Extension

Outcome # 5

1. Outcome Target

Increase percentage of farmers and producers to keep accurate records.

2. Outcome Type : Change in Action Outcome Measure

3. Associated Knowledge Area(s)

- 601 - Economics of Agricultural Production and Farm Management

4. Associated Institute Type(s)

- 1890 Extension

Outcome # 6

1. Outcome Target

Increase percentage of farmers and producers to minimize risk on the farm.

2. Outcome Type : Change in Action Outcome Measure

3. Associated Knowledge Area(s)

- 602 - Business Management, Finance, and Taxation

4. Associated Institute Type(s)

- 1890 Extension

Outcome # 7

1. Outcome Target

Increase number of farmers and vendors to gain knowledge in Direct Marketing to Farmers Markets.

2. Outcome Type : Change in Knowledge Outcome Measure

3. Associated Knowledge Area(s)

- 604 - Marketing and Distribution Practices

4. Associated Institute Type(s)

- 1890 Extension

Outcome # 8

1. Outcome Target

Increase the number of farmers that participate in Agriculture tours to help them identify new production practices.

2. Outcome Type : Change in Action Outcome Measure

3. Associated Knowledge Area(s)

- 604 - Marketing and Distribution Practices

4. Associated Institute Type(s)

- 1890 Extension

Outcome # 9

1. Outcome Target

Increase the number of farmers, vendors that receive educational facts sheets.

2. Outcome Type : Change in Knowledge Outcome Measure

3. Associated Knowledge Area(s)

- 604 - Marketing and Distribution Practices

4. Associated Institute Type(s)

- 1890 Extension

V(J). Planned Program (External Factors)

1. External Factors which may affect Outcomes

- Natural Disasters (drought, weather extremes, etc.)
- Economy
- Appropriations changes
- Public Policy changes
- Government Regulations
- Competing Public priorities
- Competing Programmatic Challenges
- Populations changes (immigration, new cultural groupings, etc.)

Description

External environmental factors that may affect the outcome of the planned program are: growth and availability of markets, domestic and international agricultural policies, USDA and state-funded program. Also, weather and related natural disasters may negatively impact crop and livestock production.

V(K). Planned Program - Planned Evaluation Studies

Description of Planned Evaluation Studies

The Small Farm Management and Marketing Planned Program area will be evaluated using surveys, farm visits, interviews, and focus groups. Surveys (traditional mail and Internet-based) will be used to determine if farmers/ranchers have improved their farm management and marketing knowledge. Also, the surveys will contain demographic data to make comparisons based on age, gender, ethnicity, and years of farming experience. Farm visits will determine if the farmers/ranchers are changing their farm management and marketing practices. Interviews and focus groups will be utilized to determine if farmers/ranchers have adopted practices and to gather input on how to improve the small farm management and marketing planned program. The farm visits, interviews, and focus groups will be conducted in different geographical areas of the state to compare different groups of farmers/ranchers.

V(A). Planned Program (Summary)

Program # 3

1. Name of the Planned Program

Youth and Family Well-being

2. Brief summary about Planned Program

Decreasing the prevalence of obesity among adolescent children in Mississippi requires focusing on the key risk factors and correcting them through behavior modification, decreasing caloric intake, increasing physical activity, and educational programs. There is a strong need for more prevention at a very young age, since an obese child will probably become an obese adolescent, and ultimately, an obese adult. However, if overweight/obesity or the risk of it is already present, then appropriate intervention should be readily available for the age group to prevent further weight gain as well as onset of hypertension, an dyslipidemia in adolescent population.

The Youth and Family Well-being Planned Program will utilize an integrated approach to address relevant issues facing youth and families. Stakeholders from our environmental scanning processes led to the integration of three planned programs into one. They identified a need for the Alcorn State University Extension Program (ASUEP) to aid youth in resisting risky behaviors such as: tobacco use, high rates of teen pregnancy and infection rate of sexually transmitted diseases, increase dropout rates and juvenile delinquency and lack of recreation activities as relevant issues facing youth in the state. Also, other issues identified were the lack of skills that youth possess to enter in leadership roles and opportunities in schools and communities; lack of job preparedness/,and career and business development. An area of the planned program with focus on youth-at-risk by exploring methods to provide support systems to aid youth in resisting risky behaviors such as teen pregnancy, STD's and tobacco use, dropouts, alcohol and drug abuse, juvenile delinquency, etc. Educational programs will develop negotiation, decision making and coping skills of youth to resist risky behaviors. Also, club development/volunteer management to facilitate the organizing and managing of community-and-school-based clubs will be implemented. Additionally, volunteers will be trained to work with youth in clubs to provide a variety of educational, cultural and citizenship opportunities. Youth leadership will be another emphasis of the program to enhance leadership competencies and the necessary personal, social and cognitive skills to become leaders in school and communities. Additionally, an emphasis will be on increasing limited-resource youth participation in leadership opportunities. Another focused area of youth development is on career development/workforce preparedness to develop job readiness skills to assist youth in the job searches, increased awareness of career options, and youth business opportunities.

Additionally, the planned program will emphasize many issues facing the "Family," educational programs will implemented on providing an understanding of the social, cognitive, emotional, and physical development of children and families. Providing educational programs on Sudden Infant Death, Shaking Baby Syndrome and other educational program empower parents with the knowledge to provide quality learning environments for children. Creating healthy families will consist of developing parenting skills and quality child care and afterschool programs that promote quality learning environments. Family Resource Management will. also, be explored strategies to assist youth and adults in families to obtain and manage money and financial resources effectively to meet present needs and future goals. Our stakeholders, also, identified the lack of parenting and money management skills; the lack of child care training and facilities and high rate of obesity among children, youth and adults.

Another area of the planned program focuses on Nutrition, Health, Fitness Wellness and Obesity programs to provide information about nutrition, healthy lifestyles and physical fitness. Current trends in

obesity among African-American children, youth and adults remains the highest among all ethnic groups in Mississippi. Since obesity starts early in childhood and extends into the adolescent years and possibly into adulthood, intervention and or prevention strategies are necessary to addressing this issue. Nutrition behavior modification with healthy eating and increased physical activity are contributing factors to the prevention and management of obesity in all population groups. Also, research conducted will be translated into practical application and dissemination of nutrition, health, physical fitness, wellness and obesity for youth and families in communities.

3. Program existence : Mature (More than five years)

4. Program duration : Long-Term (More than five years)

5. Expending formula funds or state-matching funds : Yes

6. Expending other than formula funds or state-matching funds : No

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

| KA Code | Knowledge Area | %1862 Extension | %1890 Extension | %1862 Research | %1890 Research |
|---------|---|-----------------|-----------------|----------------|----------------|
| 703 | Nutrition Education and Behavior | | 20% | | 25% |
| 724 | Healthy Lifestyle | | 20% | | 25% |
| 801 | Individual and Family Resource Management | | 20% | | 25% |
| 802 | Human Development and Family Well-Being | | 20% | | 25% |
| 806 | Youth Development | | 20% | | 0% |
| | Total | | 100% | | 100% |

V(C). Planned Program (Situation and Scope)

1. Situation and priorities

In Mississippi youth are faced with staggering issues such as pregnancy, sexually transmitted diseases, and substance use. Mississippi has the one of the highest percentages of birth to teens in the nation of 16.1 percent. Of 214,190 girls between the ages 10 to 19, 7,095 became pregnant in 2010. Also in 2010, \$155 billion dollars were spent on teen childbearing.

In 2010, Mississippi State Department of Health (MSDH) indicated there were 21,422 cases of chlamydia, 6,196 cases of gonorrhea, and 843 cases of syphilis. There were 390 new cases of HIV and 554 cases of AIDS. Fifteen percent of youth in Mississippi are in unsupervised care after school each day and these youth are more likely to become involved in risky behavior.

Youth of limited-resource families experience fewer opportunities to become leaders and gain skills to enhance their own development to build their self-confidence within their schools and in communities. Also, due to limited financial resources they experience fewer chances to develop skills through involvement in school and community activities and events.

According to the Office of Adolescent Health, 26 percent of Mississippi's high schools consumed

alcohol. Eleven percent of high school students drove while under the influence of alcohol and 29 percent rode with a driver who had been drinking.

According to the 2010 State Youth Tobacco Survey (YTS), 24% of Mississippi's high school student's smoke and 17 percent of high school males use tobacco. Also, 7,000 students under the age 18 became smokers each year and 192,000 youth under 18 are exposed to secondhand smoke at home annually. Twenty percent of the youth surveyed reported that they had smoked cigarettes; nine percent had used chewing tobacco or snuff. Thirty-five percent had used marijuana one or more times; two percent had used some form of cocaine (powder, crack, or freebase); and five percent had used pain relievers for nonmedical reasons.

According to the Mississippi Labor Market Data, the unemployment rate of youth is 17 percent. Half of the graduating seniors in Mississippi will leave high school lacking the skills necessary to secure a job. Career/workforce development and business programs will prepare youth for the workforce and sustain rural communities. According to Annie E. Casey Foundation (2010), one in six children in Mississippi spend part of their childhood in poverty and reside in a single parent household. One in eight lack adequate health insurance and one in six becomes a teenage parent.

Mississippi continues to have the highest obesity rate in the nation. Overweight children significantly miss more school days and their academic performance lower than non-overweight children. The risk factors for heart disease (such as high cholesterol and high blood pressure) and type-2 diabetes occur more frequently in overweight children.

Parents are faced with a significant number of issues in raising their families today. Annie E. Casey Foundation (2006) states that Mississippi statistics for children are alarming: one in four children spend part of their childhood in poverty, lives in a single parent household and are latch key children. One in six lack adequate health insurance, and one in five become a teenage parent. According to the 2000 US Census, more than 2.4 million grandparents indicate they are responsible for meeting the basic needs of their grandchildren. Difficult situations such as poverty and violent communities or a lack of positive parenting techniques in the parents' backgrounds impede healthy family functioning. As a result of the lack of parenting education, child care, in the area of human development and family well-being, the emotional, physical and social welfare of individuals and family members are threatened.

Also, individual and family resource management research findings describe a challenging financial situation for many individuals and families. Consumer credit indebtedness is rampant and the number of personal bankruptcies continues to rise. The personal savings rate is lower than in any other industrialized nation. Few limited-resource individuals and families have adequately prepared to achieve financial goals and their basic personal financial management skills are at an all time low (Economic and Commerce, 2006).

Also, quite alarming is children, youth and adults in Mississippi suffer from an alarming rate of overweight and obesity that continues to rise. Overweight children significantly miss more school days and perform less academically than healthy weight children. The risk factors for heart disease (such as high cholesterol and high blood pressure) and type-2 diabetes occur more frequently in overweight children, youth and adults. In the past ten years there has been a dramatic increase in the prevalence of type 2 diabetes in youth and adults. In addition to the health consequences, there are risks of developing potentially life-threatening psychological problems, such as, depression, eating disorders, discrimination and stigmatization, negative self-image, and passivity and withdrawal from peers.

Mississippi is leading the nation in obesity and obesity related health conditions. Living conditions, behavioral factors, and lifestyles have been identified as some of the major factors responsible for

excessive weight gain and obesity, and the lack of physical activity (J.P. Peter, 2002). In 2005, 66.7% of Mississippi adults were overweight. Obesity has been linked to the increased risk of chronic disease such as hypertension, type-2 diabetes, heart disease, stroke, gallbladder disease, osteoarthritis, sleep apnea and colon cancer. The goal of the Youth, Family Nutrition, Fitness, Wellness and Obesity Planned Program is to plan and deliver educational programs, activities and events that will enable at-risk limited-resource children, youth and families to address high priority issues they are facing as stated above.

2. Scope of the Program

- In-State Extension
- In-State Research
- Multistate Extension
- Integrated Research and Extension

V(D). Planned Program (Assumptions and Goals)

1. Assumptions made for the Program

Situational barriers, lack of income and time can be possible barriers that prevent caregivers from participating in nutrition education programs on a regular basis. Aggressive recruitment strategies will be implemented to increase program participation. With innovative, non-traditional promotional advertisement of planned program, rural communities will welcome the opportunity to participate and volunteer to help with improving health conditions within their communities. Enhancement of program attendance will result in improved dietary status and maintaining proper management of chronic diseases.

Training and implementation of nutrition health educational programs will slow down excess weight gain and prevent and/or delay the onset of nutrition-related chronic diseases. Disparities in the prevalence of overweight and obesity exist in many segments of the population based on race, ethnicity, gender, age and socioeconomic status. For example, overweight and obesity are particularly common among minority groups and those with a lower family income. Research will reveal the culturally appropriate health and nutrition promotion, prevention and treatment of obesity in underserved and underrepresented population groups. Furthermore, research efforts will uncover emerging technologies to provide access to nutrition therapies to treat related problems/diseases and evaluate intervention success.

2. Ultimate goal(s) of this Program

The ultimate goals of the proposed plan is to enhance coping skills of youth by developing decision-making, communication and refusal skills; to help youth resist risky behaviors, and to have the ability to address relevant issues in their daily lives. The proposed plan will include knowledge and awareness concerning career development/workforce preparedness, and development of job readiness skills of at-risk, limited-resource youth to obtain employment or pursue a career in a desirable workplace. This plan will, also, develop a healthy and well-nourished physically fitness population through the dissemination of new and innovative delivery methods, practices, and products that will result in increased public awareness of healthy lifestyle choices. The plan will increase the capacity of family to improve parenting practices that result in better family development and relationship outcomes; improve parent/caregivers practices to increase and provide high quality, accessible, and affordable childcare, and improve financial management skills of targeted limited-resource residents to improve their financial stability.

V(E). Planned Program (Inputs)

1. Estimated Number of professional FTE/SYs to be budgeted for this Program

| Year | Extension | | Research | |
|------|-----------|------|----------|------|
| | 1862 | 1890 | 1862 | 1890 |
| 2014 | 0.0 | 9.0 | 0.0 | 0.0 |
| 2015 | 0.0 | 9.0 | 0.0 | 0.0 |
| 2016 | 0.0 | 9.0 | 0.0 | 0.0 |
| 2017 | 0.0 | 9.0 | 0.0 | 0.0 |
| 2018 | 0.0 | 9.0 | 0.0 | 0.0 |

V(F). Planned Program (Activity)

1. Activity for the Program

Area extension educators will conduct educational sessions in local schools and communities using educational programs, events and activities to aid youth in resisting risky behaviors, such as, tobacco use, alcohol and drug abuse, becoming sexual active, STD's and high school dropouts and juvenile detention, etc.

Extension educators, community volunteers, state specialists and other collaborators will plan and organize programs, summits and events that will provide additional educational information to youth. Career days/fairs will be conducted at local schools and communities, and skills will be developed, so that volunteer leaders can organize school and community-based clubs. Youth and volunteer leaders will participate in the following activities and events: 4-H Project Achievement Day; 4-H State Club Congress; 4-H State Fair Exhibit/4-H Day at Fair; National 4-H Congress; leadership camp and career days/fairs.

Additionally, educational programs, events and activities will be implemented to improve parenting practices to improve parent and child relationship. Also, information will be disseminated and programs conducted on child development for developing and enhancing after-school programs, child care and other learning environments for children. Educational workshops, tours and career days/fairs will be conducted at local schools and in communities on financial resource management. Another aspect of this planned program will focus on the implementation of educational programs, events and activities along with research to address the nutrition, health fitness wellness and obesity issues facing limited-resources families and youth in communities.

Educational programs and workshops will be conducted to promote nutrition and other factors contributing to healthy lifestyles. Activities will be implemented that focused on behavior changes needed for proper weight management. Educational programs will be implemented focusing on recipe modification, portion control, food safety and calorie reduction. The educational program in this area of the planned program will provide participants adequate knowledge and information to make wise decisions concerning nutrition, health and their lifestyles to decrease weight gain, and delay the onset of chronic diseases such as: heart disease, diabetes and hypertension.

2. Type(s) of methods to be used to reach direct and indirect contacts

Extension

| Direct Methods | Indirect Methods |
|--|---|
| <ul style="list-style-type: none"> ● Education Class ● Workshop ● Group Discussion ● One-on-One Intervention ● Demonstrations ● Other 1 (Regional Youth Summits) ● Other 2 ((Summer Camps) Mini Conference) | <ul style="list-style-type: none"> ● Public Service Announcement ● Billboards ● Newsletters ● TV Media Programs ● Web sites other than eXtension ● Other 1 (Fact Sheets) ● Other 2 (Youth Newsletters) |

3. Description of targeted audience

The target audiences are at-risk limited-resource youth age 5 to 19, adult volunteers, and families.

V(G). Planned Program (Outputs)

NIFA no longer requires you to report target numbers for standard output measures in the Plan of Work. However, all institutions will report actual numbers for standard output measures in the Annual Report of Accomplishments and Results. The standard outputs for which you must continue to collect data are:

- Number of contacts
 - Direct Adult Contacts
 - Indirect Adult Contacts
 - Direct Youth Contacts
 - Indirect Youth Contact
- Number of patents submitted
- Number of peer reviewed publications

Clicking this box affirms you will continue to collect data on these items and report the data in the Annual Report of Accomplishments and Results.

V(H). State Defined Outputs

1. Output Measure

- Conduct educational programs, events and activities on risky behaviors affecting youth.
 - Conduct career/workforce educational sessions in local schools and communities.
 - Conduct leadership development educational programs, events and activities to provide opportunities at the county, regional, state, and national levels (e.g., 4-H Achievement Day, State Club Congress, MS State Fair, National Citizenship Washington Focus and National 4-H Congress).
 - Conduct science, engineering, and technology programs events and activities to attract the interest of youth in educational fields.
 - Conduct educational programs, events and activities on family financial resource management.
 - Conduct educational programs, events and activities on effective parenting practices.
 - Conduct educational programs on nutrition, health, physical fitness and wellness for limited-resource adults.
 - Conduct educational training for volunteer leaders to organize and maintain school and community clubs.
- Clicking this box affirms you will continue to collect data on these items and report the data in the Annual Report of Accomplishments and Results.

V(I). State Defined Outcome

| O. No | Outcome Name |
|-------|--|
| 1 | Increase number of youth who resisted risky behavior that impacts their social and educational development. |
| 2 | Increase number of minority youth competing in leadership competitions, youth events, activities and community projects. |
| 3 | Increase number of trained volunteer leaders to organize and manage school and community youth clubs. |
| 4 | Increase number of limited-resource participants to adopt parenting practices to improve parent/child relationships. |
| 5 | Increase number of limited-resource families and youth to utilize their skills to analyze their financial well-being and make effective financial management decisions. |
| 6 | Increase number of limited-resource families and youth who utilize both healthy eating practices and physical fitness to manage obesity, weight and health related diseases. |
| 7 | Increase percentage of participants to utilize knowledge gained and made adjustments in their nutrition and lifestyle behaviors |
| 8 | Increase number of youth seeking and gaining employment to improve their financial well-being. |
| 9 | Increase the number of youth participating in science, engineering, and technology programs. |
| 10 | Increase the number of youth participating in career/workforce development program to prepare for the future. |

Outcome # 1

1. Outcome Target

Increase number of youth who resisted risky behavior that impacts their social and educational development.

2. Outcome Type : Change in Action Outcome Measure

3. Associated Knowledge Area(s)

- 802 - Human Development and Family Well-Being

4. Associated Institute Type(s)

- 1890 Extension

Outcome # 2

1. Outcome Target

Increase number of minority youth competing in leadership competitions, youth events, activities and community projects.

2. Outcome Type : Change in Action Outcome Measure

3. Associated Knowledge Area(s)

- 806 - Youth Development

4. Associated Institute Type(s)

- 1890 Extension

Outcome # 3

1. Outcome Target

Increase number of trained volunteer leaders to organize and manage school and community youth clubs.

2. Outcome Type : Change in Action Outcome Measure

3. Associated Knowledge Area(s)

- 806 - Youth Development

4. Associated Institute Type(s)

- 1890 Extension

Outcome # 4

1. Outcome Target

Increase number of limited-resource participants to adopt parenting practices to improve parent/child relationships.

2. Outcome Type : Change in Action Outcome Measure

3. Associated Knowledge Area(s)

- 802 - Human Development and Family Well-Being

4. Associated Institute Type(s)

- 1890 Extension

Outcome # 5

1. Outcome Target

Increase number of limited-resource families and youth to utilize their skills to analyze their financial well-being and make effective financial management decisions.

2. Outcome Type : Change in Action Outcome Measure

3. Associated Knowledge Area(s)

- 802 - Human Development and Family Well-Being

4. Associated Institute Type(s)

- 1890 Extension

Outcome # 6

1. Outcome Target

Increase number of limited-resource families and youth who utilize both healthy eating practices and physical fitness to manage obesity, weight and health related diseases.

2. Outcome Type : Change in Action Outcome Measure

3. Associated Knowledge Area(s)

- 724 - Healthy Lifestyle

4. Associated Institute Type(s)

- 1890 Extension

Outcome # 7

1. Outcome Target

Increase percentage of participants to utilize knowledge gained and made adjustments in their nutrition and lifestyle behaviors

2. Outcome Type : Change in Action Outcome Measure

3. Associated Knowledge Area(s)

- 703 - Nutrition Education and Behavior

4. Associated Institute Type(s)

- 1890 Extension

Outcome # 8

1. Outcome Target

Increase number of youth seeking and gaining employment to improve their financial well-being.

2. Outcome Type : Change in Action Outcome Measure

3. Associated Knowledge Area(s)

- 806 - Youth Development

4. Associated Institute Type(s)

- 1890 Extension

Outcome # 9

1. Outcome Target

Increase the number of youth participating in science, engineering, and technology programs.

2. Outcome Type : Change in Knowledge Outcome Measure

3. Associated Knowledge Area(s)

- 806 - Youth Development

4. Associated Institute Type(s)

- 1890 Extension

Outcome # 10

1. Outcome Target

Increase the number of youth participating in career/workforce development program to prepare for the future.

2. Outcome Type : Change in Action Outcome Measure

3. Associated Knowledge Area(s)

- 806 - Youth Development

4. Associated Institute Type(s)

- 1890 Extension

V(J). Planned Program (External Factors)

1. External Factors which may affect Outcomes

- Natural Disasters (drought, weather extremes, etc.)
- Economy
- Appropriations changes
- Public Policy changes
- Competing Programmatic Challenges
- Other (Relocation of youth)

Description

External factors that may affect the outcome of these programs are the shift or change in staffing patterns and resources available to conduct the various educational session activities and events. Natural disasters such as: hurricanes, tornados and floods that cause families to relocate and cause economic distress. Youth and families participating in the program can leave programs because of relocation of the family (youth leaving the school district, parent relocating because of employment). Parents or guardians not giving youth permission to participate in the program (lack of parental consent). Policy changes in local and state public and private schools counties and the availability of transportation for participants could affect program implementation.

V(K). Planned Program - Planned Evaluation Studies

Description of Planned Evaluation Studies

The evaluation plan for the programs will be evaluated before and after the program using appropriate evaluation instruments and tools for the educational curriculum, events and activities as it relate to the Youth and Family Well-Being planned program.

V(A). Planned Program (Summary)

Program # 4

1. Name of the Planned Program

Food Safety

2. Brief summary about Planned Program

This planned program will target research on various scientific disciplines to ensure food safety. The program will encourage judicious use of chemicals on agricultural crops by measuring toxic residues. Analytical detection methods including sensors will be developed to detect and quantify pathogens and chemical residues in food. Improved methods for produce handling, processing activities and storage will be developed. New biopesticides will be discovered to ensure food crops free of toxic chemicals.

Educational sessions will be conducted in food safety, good agricultural practices, good handling practices, quality control, hazard analysis and critical control points, fresh produce packaging and value-added production. New attractants and repellents will be tested against insects affecting food crops. Biology and distribution of such insect pests will be investigated and sampling protocols will be developed by using remote sensing and other automated sampling methodologies. Predictive models for natural enemies of insect pests and improved methods of control will be developed. Integrated pest management techniques will be applied in organic production system to minimize the dependency on synthetic chemical pesticides and to ensure production of farm products free of toxic chemical residue. Research will be conducted in collaboration with the U.S. Army to convert animal waste into a slow-release and environmentally-friendly manure.

3. Program existence : New (One year or less)

4. Program duration : Medium Term (One to five years)

5. Expending formula funds or state-matching funds : Yes

6. Expending other than formula funds or state-matching funds : No

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

| KA Code | Knowledge Area | %1862 Extension | %1890 Extension | %1862 Research | %1890 Research |
|---------|---|-----------------|-----------------|----------------|----------------|
| 711 | Ensure Food Products Free of Harmful Chemicals, Including Residues from Agricultural and Other Sources | | 60% | | 60% |
| 712 | Protect Food from Contamination by Pathogenic Microorganisms, Parasites, and Naturally Occurring Toxins | | 40% | | 40% |
| | Total | | 100% | | 100% |

V(C). Planned Program (Situation and Scope)

1. Situation and priorities

Microbiological contamination and chemical residue on farm products have significant concern for the consumer. Groundwater pollution from animal waste is, also, a health concern for both humans and animals. Public health is of primary importance during cultivation, processing and storage of food products. Priority areas include: 1) discover new effective biopesticides in order to reduce dependence on synthetic chemicals for managing insect pests of food crops; 2) investigate biology, distribution and sampling protocols for insect pests of food crops to aid in successful management by non-chemical methods; thus, minimizing toxic chemical residues on food products; 3) waste treatment to prevent animal waste from carrying pathogens to fruits and vegetables; 4) educate and provide technical assistance to prepare small-farmers-and-limited-resource cooperatives for entrance into commercial markets with safe local produce; 4) administer training in food safety, good agricultural and food handling practices, quality control in fresh produce packaging and storage by utilizing the Alcorn State University Vegetable Facility, "USDA-good handling practices certified" for produce packaging and processing activities.

2. Scope of the Program

- In-State Extension
- In-State Research
- Integrated Research and Extension

V(D). Planned Program (Assumptions and Goals)

1. Assumptions made for the Program

Organic production of food crops free of toxic chemical residues largely depends upon the discovery of new effective bio-pesticides and application of integrated pest management tactics. Successful population monitoring programs of insect pests are essential to minimize and in some cases to eliminate the use of synthetic chemicals on food crops. Use of bio-pesticides is expected to minimize dependency on toxic chemicals; thus, ensuring food safety for the consumers.

Detection of new pathogens on food products requires continuous research to restore consumer confidence in the food supply. Factors, such as demand for ready-to-eat and minimally processed foods contribute to increased exposures to food-borne diseases. Application of fresh animal waste and its

unscientific composting help zoonotic enteric pathogens to get onto fruits and vegetables in sufficient numbers to result in human illness. Mishandling of food during harvesting, processing and storage may enhance hazard of food-borne illnesses. Improved education on the safe production and handling of produce crops sold fresh would help decrease the risk of contamination and prevent food-related illnesses. Detection of food-borne pathogens and chemical residues is essential to ensure that foods are safe for human consumption. Portable sensors and detectors would enable consumers to test the safety of foods prior to consumption.

2. Ultimate goal(s) of this Program

Deploying non-chemical methods of control and preserving natural enemies of the insect pests will encourage the utilization of non-chemical management tactics. The use of less expensive integrated pest management techniques will encourage organic production of farm products; thus, ensuring food safety. Improved methods of sampling and control of insect pests of food crops will provide safe and economical ways of management. Scientific composting of animal waste will permit sustainable farming, and reduce the bacterial hazard associated with handling fresh animal waste. The program will support local agriculture and provide educational and technical assistance to farmers to enter into commercial markets with safe local produce. It would contribute to the increased utilization of produce marketed directly to the public and address food safety issues.

V(E). Planned Program (Inputs)

1. Estimated Number of professional FTE/SYs to be budgeted for this Program

| Year | Extension | | Research | |
|------|-----------|------|----------|------|
| | 1862 | 1890 | 1862 | 1890 |
| 2014 | 0.0 | 2.0 | 0.0 | 2.0 |
| 2015 | 0.0 | 2.0 | 0.0 | 2.0 |
| 2016 | 0.0 | 2.0 | 0.0 | 2.0 |
| 2017 | 0.0 | 2.0 | 0.0 | 2.0 |
| 2018 | 0.0 | 0.0 | 0.0 | 0.0 |

V(F). Planned Program (Activity)

1. Activity for the Program

Improved methods for produce handling, processing and storage will be developed. New bio-pesticides will be discovered and tested. Judicious use of chemicals on agricultural crops will be encouraged. Toxic residues will be compared. Animal waste will be converted into a slow-release and environmentally-friendly manure. Educational sessions will be conducted in food safety, good agricultural practices, good handling practices, quality control, hazard analysis and critical control points, fresh produce packaging and value-added production.

The processing plant will serve as a training laboratory where limited-resource farmers will receive hands-on experience on the activities associated with value-added processing and packaging of foods. Research outcomes and recommendations will be disseminated in educational workshops, field demonstrations, printed educational materials including on-line ASU Extension publications, field days, and professional journals. Research results will be presented at annual meetings of professional societies.

2. Type(s) of methods to be used to reach direct and indirect contacts

Extension

| Direct Methods | Indirect Methods |
|---|--|
| <ul style="list-style-type: none"> ● Workshop ● Group Discussion ● One-on-One Intervention ● Demonstrations | <ul style="list-style-type: none"> ● Public Service Announcement ● Newsletters ● TV Media Programs ● Web sites other than eXtension ● Other 1 (Reports) |

3. Description of targeted audience

The target audience will consist of Area Extension educators, small limited-resource farmers, and the scientific community.

V(G). Planned Program (Outputs)

NIFA no longer requires you to report target numbers for standard output measures in the Plan of Work. However, all institutions will report actual numbers for standard output measures in the Annual Report of Accomplishments and Results. The standard outputs for which you must continue to collect data are:

- Number of contacts
 - Direct Adult Contacts
 - Indirect Adult Contacts
 - Direct Youth Contacts
 - Indirect Youth Contact
- Number of patents submitted
- Number of peer reviewed publications

Clicking this box affirms you will continue to collect data on these items and report the data in the Annual Report of Accomplishments and Results.

V(H). State Defined Outputs

1. Output Measure

- Workshops will be conducted to educate farmers on the importance of producing safe food through the use of IPM.
 - Workshops will be conducted to educate farmers on the importance of producing safe food through the use of Good Agricultural Practices (GAP).
 - Field days will be conducted to demonstrate the use of Integrated Pest Management (IPM).
 - Field days will be conducted to demonstrate the use of Good Agricultural Practices (GAP).
- Clicking this box affirms you will continue to collect data on these items and report the data in the Annual Report of Accomplishments and Results.

V(I). State Defined Outcome

| O. No | Outcome Name |
|-------|---|
| 1 | The intended target audience will gain knowledge and awareness in growing farm products with free or acceptable levels of chemical residue, and safe processing and storage of food products. |

Outcome # 1

1. Outcome Target

The intended target audience will gain knowledge and awareness in growing farm products with free or acceptable levels of chemical residue, and safe processing and storage of food products.

2. Outcome Type : Change in Knowledge Outcome Measure

3. Associated Knowledge Area(s)

- 711 - Ensure Food Products Free of Harmful Chemicals, Including Residues from Agricultural and Other Sources
- 712 - Protect Food from Contamination by Pathogenic Microorganisms, Parasites, and Naturally Occurring Toxins

4. Associated Institute Type(s)

- 1890 Extension
- 1890 Research

V(J). Planned Program (External Factors)

1. External Factors which may affect Outcomes

- Natural Disasters (drought, weather extremes, etc.)
- Economy
- Public Policy changes
- Government Regulations
- Populations changes (immigration, new cultural groupings, etc.)

Description

Research activities are susceptible to weather which prevents or delays field test activities. Fundamental change occurring in the state and regional economies within which, agricultural and horticultural enterprises operate. Public policy relating to comparative prices of inputs, harvested crops, and changes in government regulations such as competitive land uses, shifting development patterns and global market influence. Population changes in farming communities can lead to producer/neighbor issues that influence choice of production practices.

V(K). Planned Program - Planned Evaluation Studies

Description of Planned Evaluation Studies

Pre-program and post-program surveys will be compared. Certification exams will be given following technical training sessions. Questionnaires with returned mailing envelopes will be mailed to the farmers, specialists and other interested individuals and feedback will be recorded. Post training interviews will be conducted to determine the level of understanding and interest.

V(A). Planned Program (Summary)

Program # 5

1. Name of the Planned Program

Community Resource Development and Economic Planning

2. Brief summary about Planned Program

The Community Resource Planning & Economic Development Planned Program is formulated with a unifying goal to better understand the problems, situation and issues that rural and urban communities encounter in Southwest Mississippi. A collaborative effort between the Extension and Research staff will promote best community and economic development practices that will reduce problem in rural and urban communities. This approach will intentionally build and strengthen the capacity of communities while developing their skills in the areas of leadership development, business development, non-profit development, cooperative development, and workforce (career) development.

Extension staff will work toward the achievement of specific objectives which include: (a) conducting educational programs on leadership development to facilitate economic and community development opportunities in rural and urban communities; (b) conducting educational programs to facilitate workforce development opportunities for limited-resource audiences; (c) conducting educational programs on cooperative development, home-based, agricultural and non-agricultural business development to enhance economic development opportunities in rural and urban communities, (d) developing educational bulletins, manuscript, and documentation of findings and disseminate results to promote community development and empowerment of residents; and (e) develop educational community resource development curriculums and conference tracks that will further educate communities and introduce them to a better quality of life .

3. Program existence : Intermediate (One to five years)

4. Program duration : Medium Term (One to five years)

5. Expending formula funds or state-matching funds : Yes

6. Expending other than formula funds or state-matching funds : No

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

| KA Code | Knowledge Area | %1862 Extension | %1890 Extension | %1862 Research | %1890 Research |
|---------|---|-----------------|-----------------|----------------|----------------|
| 602 | Business Management, Finance, and Taxation | | 0% | | 20% |
| 603 | Market Economics | | 0% | | 30% |
| 608 | Community Resource Planning and Development | | 100% | | 20% |
| 609 | Economic Theory and Methods | | 0% | | 30% |
| | Total | | 100% | | 100% |

V(C). Planned Program (Situation and Scope)

1. Situation and priorities

A vast number of counties in Mississippi are socio-economically depressed and the region faces other problems that contribute to future deterioration of social and physical infrastructure and economic decline. The unemployment rate in the impoverished counties ranges between 10 and 20%. Most of the counties have per capita income of less than the state's average of approximately \$20,000 and others have even lower average income than \$15,000. This situation contributes to the poor quality of life that many residents experience, and is one of the reasons why they struggle to free themselves from the burden of poverty. The Association of Community and Economic Development Extension Professionals (NACDEP) have identified two barriers to community development (a) the lack of citizen participation in community and civic activities and (b) the lack of leadership among community leaders. Beaulieu (2002) argues that a vibrant rural America depends in part, on expanding the quality of human capital development and promoting broad-based involvement on individuals in civic life of communities.

2. Scope of the Program

- In-State Extension
- In-State Research
- Integrated Research and Extension

V(D). Planned Program (Assumptions and Goals)

1. Assumptions made for the Program

The mandate of this program is community development which encompasses a strong synergy between Extension and Research in socioeconomic issues, community and human resource development,

civic involvement, training and improvement in the quality of life of people and communities. The Extension and Research staff recognizes the inherent strength of people and programs working together to achieve common goals. It is imperative that we seek additional support and expertise of volunteers and professionals to work on specialized tasks in an effort to empower communities through change. The benefits of this program will be unfolded by the cooperative effort of Extension and Research staff that will seek to exploit all necessary assets, internal and external, to resolve community issues and build and strengthen capacity.

2. Ultimate goal(s) of this Program

Empower and improve the quality of life of people to promote sustainable and economic development in communities by utilizing research findings and best community and economic development practices as models.

V(E). Planned Program (Inputs)

1. Estimated Number of professional FTE/SYs to be budgeted for this Program

| Year | Extension | | Research | |
|------|-----------|------|----------|------|
| | 1862 | 1890 | 1862 | 1890 |
| 2014 | 0.0 | 2.0 | 0.0 | 4.0 |
| 2015 | 0.0 | 2.0 | 0.0 | 4.0 |
| 2016 | 0.0 | 2.0 | 0.0 | 4.0 |
| 2017 | 0.0 | 2.0 | 0.0 | 4.0 |
| 2018 | 0.0 | 0.0 | 0.0 | 0.0 |

V(F). Planned Program (Activity)

1. Activity for the Program

Extension and Research staff will collaborate with local officials and other entities in communities to explore and promote best practices in community and economic development as a means of impacting community changes through educational programs, demonstrations, and research. Extension will conduct educational sessions and disseminate information through workshops, seminars, demonstrations, and conferences. These will be geared toward building human capital and effectively empowering people to become the main asset of community and economic development.

2. Type(s) of methods to be used to reach direct and indirect contacts

| Extension | |
|----------------|------------------|
| Direct Methods | Indirect Methods |
| | |

| | |
|---|--|
| <ul style="list-style-type: none">● Education Class● Workshop● Group Discussion● One-on-One Intervention● Demonstrations● Other 1 (Community Forums)● Other 2 (Surveys) | <ul style="list-style-type: none">● Public Service Announcement● Newsletters● Web sites other than eXtension |
|---|--|

3. Description of targeted audience

The targeted audience for the Community Resource Planning and Economic Development planned program are limited-resource individuals and families, community-based organizations, non-profit organizations, cooperatives, entrepreneur, and community leaders.

V(G). Planned Program (Outputs)

NIFA no longer requires you to report target numbers for standard output measures in the Plan of Work. However, all institutions will report actual numbers for standard output measures in the Annual Report of Accomplishments and Results. The standard outputs for which you must continue to collect data are:

- Number of contacts
 - Direct Adult Contacts
 - Indirect Adult Contacts
 - Direct Youth Contacts
 - Indirect Youth Contact
- Number of patents submitted
- Number of peer reviewed publications

Clicking this box affirms you will continue to collect data on these items and report the data in the Annual Report of Accomplishments and Results.

V(H). State Defined Outputs

1. Output Measure

- Conduct educational programs, events, and activities on leadership development and E-commerce strategies to facilitate economic and community development.
 - Conduct educational programs, events, and activities to facilitate workforce development and financial management opportunities for limited-resource audiences.
 - Conduct educational programs, events, and activities on cooperative development, home-based, faith-based and agricultural and non-agricultural business development to enhance economic development opportunities in communities.
 - Conduct social, psychological, marketing, and economic impact surveys to develop profiles of communities and their economic landscape. (Number of surveys).
 - Develop educational bulletins, manuscripts, and documentation of findings and disseminate results and models to promote food security, community development, empowerment of residents (Number of special reports, newsletters, and fact sheets).
- Clicking this box affirms you will continue to collect data on these items and report the data in the Annual Report of Accomplishments and Results.

V(I). State Defined Outcome

| O. No | Outcome Name |
|-------|--|
| 1 | Increase the number and/or percent of community leaders to gain knowledge, develop leadership skills and become involved in civic activities, community, and economic development opportunities. |
| 2 | Increase the number and/or percentage of participants to utilize research data, knowledge, and skills disseminated to attract and retain businesses, encourage economic development projects, and improve food security. |
| 3 | Increase the number and/or percentage of cooperatives to improve their production, marketing, financial, and management practices. |
| 4 | Increase the number and/or percentage of individuals to gain awareness of the role of entrepreneurship in achieving economic development. |
| 5 | Increase the number and/or percent of community officials and organizations to gain awareness of local issues on food security, economic and demographic profiles of communities. |
| 6 | Increase the dissemination of high-tech business information to minority and small businesses of community resource development. |

Outcome # 1

1. Outcome Target

Increase the number and/or percent of community leaders to gain knowledge, develop leadership skills and become involved in civic activities, community, and economic development opportunities.

2. Outcome Type : Change in Knowledge Outcome Measure

3. Associated Knowledge Area(s)

- 602 - Business Management, Finance, and Taxation
- 603 - Market Economics
- 608 - Community Resource Planning and Development
- 609 - Economic Theory and Methods

4. Associated Institute Type(s)

- 1890 Extension
- 1890 Research

Outcome # 2

1. Outcome Target

Increase the number and/or percentage of participants to utilize research data, knowledge, and skills disseminated to attract and retain businesses, encourage economic development projects, and improve food security.

2. Outcome Type : Change in Action Outcome Measure

3. Associated Knowledge Area(s)

- 602 - Business Management, Finance, and Taxation
- 603 - Market Economics
- 608 - Community Resource Planning and Development
- 609 - Economic Theory and Methods

4. Associated Institute Type(s)

- 1890 Extension
- 1890 Research

Outcome # 3

1. Outcome Target

Increase the number and/or percentage of cooperatives to improve their production, marketing, financial, and management practices.

2. Outcome Type : Change in Action Outcome Measure

3. Associated Knowledge Area(s)

- 602 - Business Management, Finance, and Taxation
- 603 - Market Economics
- 608 - Community Resource Planning and Development
- 609 - Economic Theory and Methods

4. Associated Institute Type(s)

- 1890 Extension
- 1890 Research

Outcome # 4

1. Outcome Target

Increase the number and/or percentage of individuals to gain awareness of the role of entrepreneurship in achieving economic development.

2. Outcome Type : Change in Knowledge Outcome Measure

3. Associated Knowledge Area(s)

- 602 - Business Management, Finance, and Taxation
- 603 - Market Economics
- 608 - Community Resource Planning and Development
- 609 - Economic Theory and Methods

4. Associated Institute Type(s)

- 1890 Extension
- 1890 Research

Outcome # 5

1. Outcome Target

Increase the number and/or percent of community officials and organizations to gain awareness of local issues on food security, economic and demographic profiles of communities.

2. Outcome Type : Change in Knowledge Outcome Measure

3. Associated Knowledge Area(s)

- 602 - Business Management, Finance, and Taxation
- 603 - Market Economics
- 608 - Community Resource Planning and Development
- 609 - Economic Theory and Methods

4. Associated Institute Type(s)

- 1890 Extension
- 1890 Research

Outcome # 6

1. Outcome Target

Increase the dissemination of high-tech business information to minority and small businesses of community resource development.

2. Outcome Type : Change in Knowledge Outcome Measure

3. Associated Knowledge Area(s)

- 602 - Business Management, Finance, and Taxation
- 603 - Market Economics
- 608 - Community Resource Planning and Development
- 609 - Economic Theory and Methods

4. Associated Institute Type(s)

- 1890 Extension
- 1890 Research

V(J). Planned Program (External Factors)

1. External Factors which may affect Outcomes

- Natural Disasters (drought, weather extremes, etc.)
- Economy
- Appropriations changes
- Public Policy changes
- Government Regulations

- Competing Public priorities
- Competing Programmatic Challenges
- Populations changes (immigration, new cultural groupings, etc.)

Description

The unpredictable weather conditions during certain times of the year may restrict project activities such as survey administration, community meetings, workshops during projected periods of Extension and research activities. Over a period of years the local and national economies are likely to decline due to the changing business cycles and changes in funding opportunities. Legislative policies and variations in appropriation priorities may affect funding. This shift will hamper funding for community and economic development projects. Federal and local government policies may change which would constrain some of planned programs. Social, economic, and demographic changes in various communities may force certain authorities to modify their public priorities. Pending changes in immigration laws may affect migration and other demographic issues, public policies, and program priorities.

V(K). Planned Program - Planned Evaluation Studies

Description of Planned Evaluation Studies

The success and accomplishments of this project will be evaluated based on the following measures: (a) the number of communities and county officials showing interest in and wanting to continue support for the project in consecutive years; (b) degree of improvement in the attitudes and experiences of the residents in terms of social consciousness and appreciation for community life and the needs of the poor. These are critical criteria for testing the effectiveness and accomplishments of a project of this nature. No matter how elaborate a behavioral research/extension project associated with a educational institution is or how enthusiastic the faculty and extension staff are, unless in the end, communities of reference benefit, and the experiences of the residents are changed so that attitudes, participation and outreach outcomes are better than before, the work cannot be considered successful. (c) the amount of additional financial support received and the number of cooperating organizations involved each year, over the life of the project. (d). participants of all community resource development activities will be requested to evaluate, submit comments and reflections for the relevance of the educational programs and (e) peer reviews will be done on an ongoing basis by researchers.

V(A). Planned Program (Summary)

Program # 6

1. Name of the Planned Program

Human Nutrition, Food Safety, and Human Health and Well-Being

2. Brief summary about Planned Program

The Human Nutrition, Food Safety, and Human Health and Well-Being Planned Program will utilize an integrated approach to address relevant issues facing youth and families. The planned program focuses on programs to provide information about nutrition, healthy lifestyles and physical fitness. Current trends in obesity among African-American children, youth and adults remains the highest among all groups in Mississippi. Since obesity starts early in childhood and extends into the adolescent years and possibly into adulthood, intervention and or prevention strategies are necessary to addressing this issue. Nutrition, behavior modification with healthy eating, and increased physical activity are contributing factors to the prevention and management of obesity in all population groups. Also research conducted will be translated into practical application and dissemination of nutrition, health, physical fitness, wellness and obesity for youth and families in communities. This program empowers the program participants to combat obesity and live a healthier lifestyle through various delivery methods include using research-based instruction and a hands-on approach in community gardening, nutrition, and physical fitness. To assess the effectiveness of the program, evaluation will be conducted through surveys, pre- and post-testing, and assessments--capturing participant's blood pressure, Body Mass Index (BMI), physical agility, vegetable consumption and knowledge. State and Federal Extension funds will be used to develop and implement this program for planned change. ASUEP will partner with various federal, state and local agencies and communities to facilitate this program. The program participants will be our "most valued" marketing tool. The program's visibility will be demonstrated through word of mouth, meetings with church and community leaders, newspaper, and radio appearances. This program empowers the program participants to combat obesity and live a healthier lifestyle through various delivery methods. State and Federal Extension funds will be used to develop and implement this program for planned change. ASUEP will partner with various federal, state and local agencies and communities to facilitate this program. The program participants will be our "most valued" marketing tool. The program's visibility will be demonstrated through word of mouth, meetings with church and community leaders, newspaper, and radio appearances.

3. Program existence : Mature (More than five years)

4. Program duration : Long-Term (More than five years)

5. Expending formula funds or state-matching funds : Yes

6. Expending other than formula funds or state-matching funds : No

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

| KA Code | Knowledge Area | %1862 Extension | %1890 Extension | %1862 Research | %1890 Research |
|---------|---|-----------------|-----------------|----------------|----------------|
| 205 | Plant Management Systems | | 20% | | 0% |
| 703 | Nutrition Education and Behavior | | 15% | | 0% |
| 724 | Healthy Lifestyle | | 20% | | 0% |
| 801 | Individual and Family Resource Management | | 15% | | 0% |
| 802 | Human Development and Family Well-Being | | 15% | | 0% |
| 806 | Youth Development | | 15% | | 0% |
| | Total | | 100% | | 0% |

V(C). Planned Program (Situation and Scope)

1. Situation and priorities

Mississippi continues to have the highest obesity rate in the nation. Overweight children significantly miss more school days and their academic performances are lower than non-overweight children. The risk factors for heart disease (such as high cholesterol and high blood pressure) and Type 2 diabetes occur more frequently in overweight children. The good news is that we have a growing body of evidence and approaches that we know can help reduce obesity, improve nutrition and increase physical activity based on making healthier choices easier for Americans. The bad news is we're not investing anywhere near what we need to in order to bend the obesity curve and see the returns in terms of health and savings. Obesity-related conditions, include heart disease, stroke, type 2 diabetes and certain types of cancer, are some of the leading causes of preventable death.

Mississippi remains among the top five states with the highest rates of overweight and obesity, according to the August 3, 2010 Morbidity and Mortality Weekly Reports (MMWR) and the Center for Disease Control and Prevention (CDC) Data and Statistics Reports (March 3, 2011). In Mississippi, 32.5% of adults and children were found to be obese and 44.4% of children ages 10 to 17 to be classified as overweight or obese. Fayette, in Jefferson County, has a high concentration of overweight and obese people in Mississippi. The fattest county is definitely one of the poorest areas in the United States. Jefferson County, population 7,000, and Claiborne County, population 10,755, have very low average incomes and high unemployment rates. The obesity-related problems are largely due to poor diets and many residents see being overweight/obese as normal and healthy. Fewer Mississippians stick to healthy lifestyle advice about proper nutrition, consumption of fresh fruit and vegetables, and physical activity. Obesity is linked to a variety of health problems such as diabetes, heart disease, and hypertension. The state of Mississippi desperately needs help to control this obesity epidemic. Unfortunately, Southern style cooking is often rooted in deep fried foods, so it's very difficult to change cooking patterns that are deeply ingrained in Southern culture. Without fundamental level changes, the problem will only get worse. People living below the poverty line are often eating unhealthy foods and lack access to exercise facilities. Educational efforts, incorporating interactive activity with behavioral modification mentoring will empower targeted participants to better enact changed behavior relative to

improved dietary quality/physical activity, food resource management, food safety behaviors and food security and a decreased prevalence of diet-related chronic diseases among targeted family members in Claiborne and Jefferson Counties, MS.

1. Scope of the Program

2. Scope of the Program

- In-State Extension
- In-State Research
- Multistate Extension
- Integrated Research and Extension

V(D). Planned Program (Assumptions and Goals)

1. Assumptions made for the Program

Situational barriers, lack of income and time can be possible barriers that prevent caregivers from participating in nutrition education programs on a regular basis. Aggressive recruitment strategies will be implemented to increase program participation. With innovative, non-traditional promotional advertisement of planned program, rural communities will welcome the opportunity to participate and volunteer to help with improving health conditions within their communities. Enhancement of program attendance will result in improved dietary status and maintaining proper management of chronic diseases. Training and implementation of nutrition health educational programs will slow down excess weight gain and prevent and/or delay the onset of nutrition-related chronic diseases. Disparities in the prevalence of overweight and obesity exist in many segments of the population based on race, ethnicity, gender, age and socioeconomic status. For example, overweight and obesity are particularly common among minority groups and those with a lower family income. Research will reveal the culturally appropriate health and nutrition promotion, prevention and treatment of obesity in underserved and underrepresented population groups. Furthermore, research efforts will uncover emerging technologies to provide access to nutrition therapies to treat related problems/diseases and evaluate intervention success. The ASUEP Health and Wellness Program will empower its participants to live healthier lifestyles. Participants will increase their knowledge and understanding of nutrition, physical fitness, and community gardening through program such as recipe modification, fitness activities, and gardening. Participants will make healthy lifestyle changes and develop healthy weight management practices that will reduce the obesity rate and increase endurance and mobility. The participants should see a reduction in high blood pressure and medication doses, which relates to less doctor visits and economic enhancement.

2. Ultimate goal(s) of this Program

The ultimate goal is to create a healthier and vibrant community. The proposed plan is to enhance coping skills of youth by developing decision-making, communication and refusal skills; to help youth resist risky behaviors and to have the ability to address relevant issues in their daily lives. This will include knowledge and awareness concerning career development/workforce preparedness, and development of job readiness skills of at-risk, limited-resources youth to obtain employment or pursue a career in a desirable workplace. This plan will also develop a healthy and well-nourished physically fitness population through the dissemination of new and innovative delivery methods, practices, and products that will result in increased public awareness of healthy lifestyle choices. The plan will increase the capacity of family to

improve parenting practices that result in better family development and relationship outcomes; improve parent/caregivers practices to increase and provide high quality, accessible, and affordable childcare and improve financial management skills of targeted limited-resource residents to improve their financial stability.

V(E). Planned Program (Inputs)

1. Estimated Number of professional FTE/SYs to be budgeted for this Program

| Year | Extension | | Research | |
|------|-----------|------|----------|------|
| | 1862 | 1890 | 1862 | 1890 |
| 2014 | 0.0 | 6.2 | 0.0 | 0.0 |
| 2015 | 0.0 | 6.2 | 0.0 | 0.0 |
| 2016 | 0.0 | 6.2 | 0.0 | 0.0 |
| 2017 | 0.0 | 6.2 | 0.0 | 0.0 |
| 2018 | 0.0 | 6.2 | 0.0 | 0.0 |

V(F). Planned Program (Activity)

1. Activity for the Program

The Health and Wellness teams will conduct educational sessions in local schools and communities using educational programs, events and activities, along with research to address the nutrition, health fitness wellness and obesity issues facing limited-resources families and youth in communities located within Jefferson and Claiborne counties. Educational programs and workshops will be conducted to promote nutrition and other factors contributing to healthy lifestyles. Activities will be implemented that focused on behavior changes needed for proper weight management. Educational programs will be implemented focusing on recipe modification, portion control, food safety and calorie reduction. The educational program in this area of the planned program will provide participants adequate knowledge and information to make wise decisions concerning nutrition, health and their lifestyles to decrease weight gain and delay the onset of chronic diseases such as: heart disease, diabetes and hypertension. Activities will also include the collection of primary data from participants, gathering and collation of relevant secondary statistical data; development of models of effective strategies; dissemination of results. The establishment of community gardens, physical fitness exercises, and nutrition education for program participants will also be included.

2. Type(s) of methods to be used to reach direct and indirect contacts

The Health & Wellness methods include hands-on application and demonstration of community gardens, nutrition education, and physical fitness. Research methods will include surveys to obtain primary data; data analysis through cross-tabulations, analysis of variance, and input-output to evaluate impact.

Direct extension methods in this planned program will encompass workshops, educational classes, group meetings and one-on-one technical assistance sessions with participants and community groups. Additionally, participants will be reached via indirect methods, such as, public service announcements, newsletters, media programs and web sites.

2. Type(s) of methods to be used to reach direct and indirect contacts

Extension

| Direct Methods | Indirect Methods |
|--|--|
| <ul style="list-style-type: none"> ● Education Class ● Workshop ● Group Discussion ● One-on-One Intervention ● Other 1 (Regional Youth Summits) ● Other 2 (Conferences) | <ul style="list-style-type: none"> ● Public Service Announcement ● Newsletters ● Other 1 (Fact Sheets) |

3. Description of targeted audience

The target audiences are at-risk youth age 5 to 19, adults, volunteers, limited-resource families, and limited resource and socially disadvantaged communities.

V(G). Planned Program (Outputs)

NIFA no longer requires you to report target numbers for standard output measures in the Plan of Work. However, all institutions will report actual numbers for standard output measures in the Annual Report of Accomplishments and Results. The standard outputs for which you must continue to collect data are:

- Number of contacts
 - Direct Adult Contacts
 - Indirect Adult Contacts
 - Direct Youth Contacts
 - Indirect Youth Contact
 - Number of patents submitted
 - Number of peer reviewed publications
- Clicking this box affirms you will continue to collect data on these items and report the data in the Annual Report of Accomplishments and Results.

V(H). State Defined Outputs

1. Output Measure

- Conduct educational programs, events and activities on risky behaviors affecting youth.
- Conduct career/workforce educational sessions in local schools and communities
- Conduct leadership development educational programs, events and activities to provide opportunities at the county, regional, state, and national levels (e.g., Youth Leadership Academy, 4-H Achievement Day, State Club Congress, MS State Fair, National 4-H Conference, and National 4-H Congress).
- Conduct science, engineering, and technology programs events and activities to attract the interest of youth in educational fields.
- Conduct educational programs, events and activities on family financial resource management.
- Conduct educational programs, events and activities on effective parenting practices.
- Conduct research on nutrition, health, wellness, obesity and opportunities for physical fitness on youth and adult.
- Conduct educational programs on nutrition, health, physical fitness and wellness for limited-resource youth.
- Disseminate information about nutrition, chronic diseases and weight management.
- Conduct educational programs on nutrition, health, physical fitness and wellness for limited-resource adults.
- Conduct educational programs, events and activities on food safety practices to preserve food quality and food sanitation.
- Clicking this box affirms you will continue to collect data on these items and report the data in the Annual Report of Accomplishments and Results.

V(I). State Defined Outcome

| O. No | Outcome Name |
|-------|--|
| 1 | Ten percent of clientele (limited access to fresh fruit and vegetables) is expected to benefit from the research and participate in training workshops, technical assistance offered by extension service personnel. |
| 2 | Ten percent of clientele (that consume limited amount of fresh fruits and vegetables) is expected to benefit from the research and participate in training workshops, technical assistance offered by extension service personnel. |
| 3 | Ten percent of clientele (limited access to exercise equipment and facilities) is expected to benefit from the research and participate in training workshops, technical assistance offered by extension service personnel. |

Outcome # 1

1. Outcome Target

Ten percent of clientele (limited access to fresh fruit and vegetables) is expected to benefit from the research and participate in training workshops, technical assistance offered by extension service personnel.

2. Outcome Type : Change in Knowledge Outcome Measure

3. Associated Knowledge Area(s)

- 205 - Plant Management Systems
- 724 - Healthy Lifestyle
- 806 - Youth Development

4. Associated Institute Type(s)

- 1890 Extension

Outcome # 2

1. Outcome Target

Ten percent of clientele (that consume limited amount of fresh fruits and vegetables) is expected to benefit from the research and participate in training workshops, technical assistance offered by extension service personnel.

2. Outcome Type : Change in Action Outcome Measure

3. Associated Knowledge Area(s)

- 703 - Nutrition Education and Behavior

4. Associated Institute Type(s)

- 1890 Extension

Outcome # 3

1. Outcome Target

Ten percent of clientele (limited access to exercise equipment and facilities) is expected to benefit from the research and participate in training workshops, technical assistance offered by extension service personnel.

2. Outcome Type : Change in Condition Outcome Measure

3. Associated Knowledge Area(s)

- 724 - Healthy Lifestyle
- 801 - Individual and Family Resource Management
- 802 - Human Development and Family Well-Being

4. Associated Institute Type(s)

- 1890 Extension

V(J). Planned Program (External Factors)

1. External Factors which may affect Outcomes

- Natural Disasters (drought, weather extremes, etc.)
- Economy
- Appropriations changes
- Public Policy changes
- Government Regulations
- Competing Programmatic Challenges

Description

The availability of funding, personnel and other critical resources in program implementation; weather and general climatic conditions in the targeted areas, including natural disasters; domestic and international policies affecting the agricultural sector; general economic conditions affecting markets and prices; participants and recipients.

V(K). Planned Program - Planned Evaluation Studies

Description of Planned Evaluation Studies

The evaluation plan for the programs will be evaluated before and after the program using appropriate evaluation instruments and tools for the educational curriculum, events and activities as it relate to the Youth, Family, Nutrition, Health, and Wellness planned program. Baseline data will be collected (or assembled) on the clientele in year one; the data will include demographic variables, skills level, farm characteristics; acreage, crops and livestock produced, etc. Program evaluation will take place at the end of each year; summative program evaluation will be conducted yearly.