2008 Alcorn State University Combined Research and Extension Plan of Work

I. Plan Overview

1. Brief Summary about Plan Of Work

The Joint Extension and Research Plan of Work (POW) of the Alcorn State University, School of Agriculture Extension, Research and Applied Sciences (AREAS) possesses unique strengths and utilizes a comprehensive delivery system to address high priority issues facing limited resource citizens in communities throughout the state of Mississippi. The delivery system provides educational and research efforts to limited resource clientele through its staffing arrangements, Outreach centers, Experiment Station and collaborative partnerships with state universities and other related state agencies as well as through its technology and communication and media network. Delivery approaches and strategies of its research, educational programs, events, activities and information dissemination addresses relevant issues to improve the quality of life of limited resource citizens with a major emphasis on Southwest and Delta counties of Mississippi. These regions are well documented as the most impoverished and experience multi-faceted issues affecting the quality of life of the people who reside in the areas. The proposed joint planned programs of the POW will implement both research and extension educational efforts to address such issues to facilitate changes in these regions.The Alcorn State University Extension and Research staff at the state level consists of state researchers conducting studies and specialists designing, developing and implementing educational programs, events and activities to address relevant issues and situations facing limited resources citizens of the state. At the county level, its area staffing plan will implement and disseminate research based information through its educational programming in counties especially in the Capital River, Delta and Coastal regions of the state. Its three off-campus demonstration centers, the campus model farm, and a farmers market and other delivery approaches, having a multi-focus on research and extension educational demonstrations address relevant issues specific to geographic areas of the state. In the southwestern part of the state, Alcorn State University Extension Program has partnered with the City of Natchez establishing the Natchez Marketplace to provide an accessible market to limited-resource farmers and business women to sell vegetables and other produce as well as value added products such as jam and jellies to consumers. Alcorn State University, through its Model Farm Center, provides educational demonstrations focusing on conservation practices in partnership with the Natural Resource Conservation Service (NRCS) utilizing crop rotation to enhance year around production of vegetable crops on small acreage to farmer and producer income. Additionally, an Experiment Station located at the university emphasizes research on vegetable and fruit production. At the Agricultural Experiment Station, horticulturalists conduct experiments on high value agricultural enterprises, e.g., hot peppers, peanuts, sweet potatoes, Asian vegetables, muscadines, grapes, peaches, pears, pecans, and natural products. Research at the experiment station is on-going to investigate the technical feasibility of new crops, as well new techniques of cultivation, weed and pest control to optimize crop yield. Mississippi River Research Center focuses on major concerns in the Southern Mississippi River Valley of the United States such as non-point pollution of ground and surface waters resulting from agricultural activities. The goal of the Mississippi River Research Center is to conduct research that will protect and enhance the region's ground and surface water resources, while sustaining agricultural production and income of farmers. The center emphasizes collaborative linkages and external funding to achieve its goal. Currently, the center has working linkages with the Mississippi Water Resources Research Institute at Mississippi State University, The Center for Advanced Spatial Technology near Fayetteville, AR, the Wetland Geochemistry Institute at Louisiana State University, USDA Forest Service, USDA APHIS, U.S. Department of Commerce/NOAA, and the Gulf of Mexico Program.At Church Hill in the Southwest region of the state, animal research is being conducted on swine production and management. The Swine Development Center at Alcorn State University is supported by state funds, and federal funds in the form of a Center of Excellence in Swine Research (USDA-ARS) and USDA-CSREES Capacity Building Grant projects. The Mission of the Swine Development Center at Alcorn encompasses the following: (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 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 graduate and undergraduate training to students. Current research is focused on nutritional manipulation of gestation sows in order 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 working collaboratively with Extension in the form of field days, workshops and demonstrations, and 4-H animal judging contests for junior and senior high school teams.In the North Delta region, the Marks Processing Center provides limited-resource farmers opportunity to observe research and extension demonstrations with respect to the processing of various types of crops to produce valued-added products to increase their income. The Small Farm Development Center (SFDC), a unique capacity of AREAS, provides farm loans to limited resource farmers, who otherwise would not have access to capital to pursue innovative alternative enterprises, and cooperatives. In addition, the SFDC provides

educational information and opportunities to increase farmers' access to a variety of market outlets.In the East Central part of the state, the Small Farm Incubator Center enabled farmers to gain educational knowledge and training about alternative vegetable production and marketing on demonstration plots at the center. This enables them to transition their educational knowledge to their own farming operation. In collaboration with The Center for Biotechnology and Genomics Research Center of AREAS, various new varieties of vegetables and fruit production crops are being developed, and educational programs are being coordinated to educate farmers on the use of this contemporary technology for producing crops with desirable traits.In the Northwest region, the Mound Bayou Research and Extension Demonstration Center focuses on demonstration plots of alternative vegetable crops specific to this region of the state, and research-based approaches to produce maximum yields to enhance farmers' and producers' incomes. Extension and research of AREAS utilizes technological advancement and capacity along with communication and media networks to broaden our delivery of educational programs utilizing 'distance' learning strategies to address high priority issues facing limited resources citizens in Mississippi. At the center, collaborative extension and research efforts are being conducted in partnership with ARS and Mississippi State University.The Office of Global Programs became operational in FY 2006. The mission of Global Programs is to facilitate (sustainable) global engagement of the university through the infusion of up-to-date and relevant international content, activities and knowledge that enhance the global competence of stakeholders. The following is the focus of Global programs: (1) to implement study abroad for credit for students; (2) to facilitate the implementation of multidisciplinary international development technical assistance projects; (3) to facilitate scientific cooperation and faculty/staff exchanges internationally, including international scholars and visitors; (4) and to facilitate international trade capacity building. The mission of the School of Agriculture, Research Extension Applied Sciences (AREAS) is to serve families with limited resources to enable small farmers to improve their standard of living through agricultural research and extension programs. In addition to its ongoing research and extension activities in biotechnology, energy, ecology, animal science, horticulture, plant and soil science, forestry and alternative crops, the School of AREAS will constantly seek ways to broaden its research and extension activities. The School will continue to move toward advanced technologies, high value agriculture, health and nutrition in its research and extension programs. The vision of the School of Agriculture, Research, Extension and Applied Sciences (AREAS) at Alcorn State University is a premier land grant program that prepares students to meet the needs of the agriculture industry as well as serving as the center of agricultural development for southwest Mississippi through its research and extension efforts.Alcorn State University Extension Program (ASU-EP) mission is to improve the quality of life of limited-resource audiences through educational programs in a time of dynamic change. While its vision is for Alcorn State University Extension Program to be a premier Extension Center of Excellence for limited-resource audiences, ours is a proactive, responsive and collaborative learning organization, committed to the growth and development of people through life-long learning. Core values of ASU Extension and Research are learning, accessibility, collaboration, innovativeness, accountability and inclusiveness.Alcorn State University research studies and extension educational programming are made available to all residents of the State of Mississippi without regard for race, color, national origin, sex, age, religion or handicap. The ASU Extension and Research Program gathers and uses citizens' and stakeholders' input through local and state advisory committees, town hall meetings, focus groups, ICSP and a dialogue with local government officials and state agencies to set program priorities, allocate resources, and evaluate program outcomes/ impacts.Alcorn State University, Extension and Research Programs of AREAS encourage imaginative and original contributions towards the development and analysis of its research in the creation and delivery of its educational programs to address relevant issues of limited resource citizens of the state. Alcorn State University Extension and Research serves as a catalyst for change and a conduit for problem-solving by listening to its stakeholders, collecting data to identify the critical issues in the limited resource communities through implementing Town Hall meetings, Focus Groups, and Individual Client Service Plans as a part of its ongoing environmental scanning system. As a result of the analysis of the stakeholders' input, the joint plan of work (POW) of Extension and Research of AREAS is proposing nine planned programs to address the most relevant issues facing limited resource citizens of the state of Mississippi. These programs are designed to enhance the overall well-being of the under-privileged communities of Mississippi. The programs are to improve social, economic, and physical well-being. These three aspects are in many ways inter-related in the life of an individual and survival of the community. Below is a summary of the proposed plan of work defined under nine subject areas. Three of the planned programs are basically extension driven but will utilize the resources of the School of AREAS and the entities of the university as appropriate to address issues of limited resource citizens for the implementation of the Human Development and Family Well Being, Agronomy Production Systems along with the Youth-at-Risk planned programs.The ongoing challenge for the Alcorn State University Extension Program (ASUEP) over the next five years will be to deliver educational programs to help families to effectively address a broad range of family factors affecting limited resource families. The ASUEP exemplifies the basic concept of helping people identify their own problems and opportunities, and then provide practical, research-based information that helps them to overcome the problems and benefit from the opportunities. Finding those problems certainly requires the involvement and input of those who share the problems. Only by knowing the problems and creating awareness of the opportunities can we respond credibly with

immediate, sound, and comprehensive programs. The Human Development and Family Well-Being planned program will focus on providing an understanding of the social, cognitive, emotional, and physical development of individual and families over the lifespan. We realize that the consequences of not educating parents are tremendous. Poor parenting skills are linked to abuse and neglect as well as youth behavior problems including teen pregnancy, adolescence substance abuse, and youth violence. According to surveys conducted by Alcorn State University Extension Program (ASUEP), parents who participate in parenting classes report greater knowledge of child development, increased confidence in parenting, and decreased rates of abuse and neglect. Positive outcomes for children include fewer behavioral problems, greater academic achievement, and increased social development. Creating strong families serves as the foundation for community life by enhancing family relationships, parenting, child development and the community institutions that promote family well-being. In the area of Individual and Family Resource Management the program will emphasize exploring strategies to assist individuals and families to obtain and use resources of time, money, and human capital to improve their economic situation. Helping families meet future needs while keeping pace with day-to-day expenses and addressing the basics of earning, spending, saving, investing, health care, and housing issues is the primary goal of the program. The complexity of the financial products and services industry, along with the rapid changes in technology, information availability, and public policy, demands a financially literate consumer. Managing money effectively to meet present needs and future goals is a learned skill. Working as learning partners with adults and youth, as individuals and families, the ASUEP has the capacity and expertise to be key contributors to a financially literate Mississippi.While the Youth-at-Risk Planned Program of ASUEP will emphasize important issues facing youth and explore methods to provide support systems to aid youth in becoming productive individuals of society, the program will focus on club development/volunteer management to facilitate the organizing and managing community and school-based clubs to increase limited resource participation in leadership opportunities. Also, club members will gain multiple life skills, including public speaking, problem solving, goal-setting, planning, and citizenship skills. Creative skills development to demonstrate creative expression in writing and public events will be emphasized. Additionally, volunteers will be trained to work with youth in clubs to provide a variety of educational, cultural and citizenship opportunities. In community-based clubs, youth will be provided learning experiences to attain a voice and to actively engage in activities in club efforts. Tobacco education, prevention and harmful affects on the health of youth are the emphasis of the planned program. Coping skills will be developed to handle peer and other life pressures to resist the use of tobacco and tobacco products that lead to unhealthy and antisocial behaviors. Educational programs will be developed and implemented to enhance decision-making, communication skills, creativity and cultural arts of youth through adulthood. Teen pregnancy and sexually transmitted diseases will be addressed by developing negotiation, decision-making and coping skills to enable youth to resist risky behaviors. Increased awareness of harmful, present and future health affects of unprotected sexual activity and the social and economic consequences of early teen pregnancies will be a major focus of the educational programs. Youth leadership will also be an emphasis of the program to enhance leadership competencies and the necessary personal, social and cognitive skills to become leaders in schools and communities. Citizenship skills will also increase an understanding of community and cultural heritage. The planned program will focus on career development/workforce preparedness to develop job readiness skills to assist youth in job search skills. It will provide job development and vocational skills to provide an understanding and awareness of career options and the steps necessary to accomplish adequate preparation for the world of work. The goal of the Agronomy Production Systems planned program is demonstrating research based information on the agronomic practices required for producing value added and marketing of Syrup crops (Sugarcane and Sorghum). In the efforts of “Reviving the Syrup Industry in Mississippi”, the ASU-EP Agronomy program will demonstrate marketing and distribution practices that will educate sugar cane, sweet sorghum and syrup producers / processors in making their marketing and distributions more profitable. The program will also address, educate and demonstrate marketing and distribution techniques that will elevate the profit that producers and processors will obtain from their crops / products. The demonstrations will emphasizes soil, plant, water, nutrient relationships using various tilling methods (No-till and minimum tillage). Different fertilizer treatments and moisture applications will be used to produce high-income syrup crops, under selected Mississippi soils conditions. This program will demonstrate and educate new technologies suited to the needs of the small farmer. Such technologies include crop varieties that tolerate or resist natural environmental and pest management programs that utilize judicious combinations of pesticides, host resistance, and cultural methods. The impact of different plant management systems of plant density, row preparation, irrigation sources, application methods and other management practices on the growth and development of each test crop will be demonstrated. The program will increase minority land owners’ awareness of income opportunities though syrup crop management practices by developing or improving soil management, crop production, processing and marketing techniques. The program will educate limited resource producers and small farmers of the economic importance in soil fertility, nutrient sustainability and the vital role they play in crop production. Educational programs will be provided to farmers on value-added processing and marketing of their syrup crops. This new technology will also allow farmers to make additional profits from their products. New and improved Food Processing Technologies using the mobile syrup processing cooker (Mill on Wheels) will be used to educate farmer on how to

add value, package and market their syrup crops (sugar cane and sweet sorghum). Six joint planned programs through both research and extension outreach programming of the AREAS of Alcorn State University are also being proposed consisting of Sustainable Animal Production Systems; Sustainable Horticulture Production Systems; Community Resource Planning and Economic Development; Forestry Natural Resources and Preservation; Small Family Farm Enterprise Financial Analysis, Management and Marketing and Human Nutrition, Health, Wellness and Obesity. The research components of the planned program will encompass activities to discover new knowledge or to enhance the utilization of existing knowledge that would positively impact the income of small and family farmers, improve rural and community development, increase yield of crops, and discover new high value alternative enterprises, and to enhance the quality of life and health status of people. The Farm and Financial Management program will strive to serve the needs of small and limited resource farmers focusing on the Economics of Agricultural Production and Farm Management; Business Management, Finance and Taxation, Marketing and Distribution Practices. Joint Extension and Research studies and extension programming will focus on addressing problems associated with enterprise and market selection, optimal resource allocation in production and risk management. Furthermore, extension and outreach programs will be designed with the ultimate goal of enhancing the economic viability of small and limited resource farms and families. In the area of Economics of Agricultural Production and Farm Management- up-to-date economic analyses will be provided to delineate the factors that may contribute to farm profitability and sustainability. Models of profitable and sustainable operations and strategies would be developed and used in the delivery of extension programs to farmers who are experiencing financial stress. In the area of Business Management, Finance and Taxation Business, management decisions will focus on the financial situation of the farm family, their debt level, spending ability and income generating capacity. Research will be designed to uncover the situation of farmers in regards to their level of knowledge about farm record keeping, financial analysis and decision-making, effective marketing and distribution of products. Educational programs, events and activities, as well as technical assistance will be developed and implemented to address the relevant issues and needs of limited resource farm families. In the Marketing and Distribution Practices, the program will focus on local, niche and regional markets as well as an understanding of the economic environment, policy, regulatory, and global settings that are constantly changing. Joint Extension and Research efforts of AREAS at Alcorn State University, especially through its tripartite land-grant functions, has carefully formulated short and long term agenda of human capital development and service to the community. It has expanded its commitment to better understand the problems of people and communities, especially with southwest and Delta regions of Mississippi in response to stakeholder input analysis from the region, and to position itself to explore and address issues most prevalent in these regions. AREAS of the university has an agenda to utilize its expertise, strengths and resources, exploring and seeking ways by which to strengthen the capacity of rural communities to regenerate themselves and improve the quality of life for people. This makes AREAS of Alcorn State University the ideal school through which this planned program should be executed. The Community Planning, Community and Economic Development planned program has been formulated within the context of Community Resource Planning and Development (CRPD) and Economic Theory & Research Methods (ETRM). CRPD will specifically focus on economic planning and development. This planned program will collaborate with governmental officials and local school districts to plan and implement sustainable social, community and economic development that will likely create jobs, improve employment opportunities through small and home-based businesses and enhance human capital development in all forms. ETRM of the planned program will emphasize labor economic issues, research methods and data collection. Economic theory and research methods will be utilized to better understand various social, economic and demographic phenomena that are constraining limited resource citizens' social and economic well-being, quality of life and the growth of the communities within which they reside. Various research tools and socioeconomic models will be developed and targeted to specific communities to promote best socioeconomic practices that are likely to help resolve many of the existing problems. In partnership with community and faith-based organizations we will identify and explore strategies with the distinct aim of empowering people and encouraging active participation in social and economic development. Civic engagement strategies will be implemented specifically to promote people's participation in community and civic activities. Educational efforts will emphasize, identify and address impaired leadership skills among community leaders through leadership development to serve their people and communities.The Forestry Management and Preservation planned program focuses on alternative uses of land, concentrating on conservation and management practices. The emphasis here will be to inform small farmers about the benefits of good forest management practices to prevent erosion, increase timber yields, and provide recreational usage. This phase of the project will be geared to educating clientele about multi-use of their property. It will also update the targeted audiences about new methods and ideas in forest conservation and management. The duration of this program will be more than five years. The planned program will focus on soil, plant, water, and nutrient relationships; management of the forest resources; Agro-forestry; and alternative use of land. With a strong interest in forest health, these programs will benefit the Alcorn State University community and the stakeholders they serve by giving valuable knowledge to ensure a healthy and productive forested area. The soil, plant, water, and nutrient relationships will emphasize the use of manures and other organic materials as plant nutrient sources on forested lands.

Composting is a natural way to increase tree growth. Other benefits associated with composting include, but are not limited to 1) suppression of plant diseases and pests, and 2) reduction or elimination of chemical fertilizers. Management and sustainability of forest resources will highlight forest health assessments and management practices to protect forests from insect and disease infestations, and investigate native and non-native invasive species that interfere with forest management objectives. The insect of interest for this phase of the project will be the Southern Pine Beetle. Other diseases that will be investigated will include Oak Wilt and Leptographium Root Disease of Loblolly pine trees as examples. Agro-forestry will emphasize identification of new and innovative woody plant species enhancing economic returns. From Agro-forestry practices, designs will be created to emphasize floral products. The woody plant species of interest will be pine straw. Products will be produced from pine straw to improve small farmers' economic status. The Sustainable Horticulture Production Systems planned program emphasizes soil, water, nutrient relationships; plant management systems; insects, mites and other arthropods, and weeds affecting plants. Different cropping systems, fertilizer treatments and moisture applications will be used to identify high-income generating crop cultivars under selected Mississippi soils. The impact of plant density, row preparation, irrigation sources and application methods, staking and pruning techniques and other management practices on the growth and development of each test crop will be determined. Both organic and inorganic chemicals, as well as recommended cultural practices such as crop rotation, multiple cropping, resistant cultivars, and differential planting dates, and soil solarization among others will be used for plant pest control in alternative test crops. Chemical, biological, and cultural methods of weed control in alternative crop test plots will be evaluated and the most effective measure or measures recommended. The Alcorn State University vegetable processing facility in Marks, MS will be used to educate farmers on how to package and add value to harvested alternative crops. Researchers of AREAS have expertise in Community Based Participatory Research (CBPR) and are currently engaged in community-based research in other rural communities in Mississippi. Researchers also have expertise in data collection, data base design and maintenance, and statistical analysis of the data. Thus we are able to collect, synthesize and analyze assessment data, and present findings to the communities as we collaborate in the development of interventions. In addition, nutritional needs of the community will be determined by analytic research into the food commonly consumed by the local population. Educational programs have been successful in addressing health concerns identified within the rural communities. A reduction in blood pressure and glucose levels were realized among limited resource individuals and families from adopting healthy food choices. The Human Nutrition Health, Wellness and Obesity planned program in research will assess the environmental, psychological, socioeconomic and cultural determinants of obesity in SW Mississippi, identify areas for intervention and develop interventions using a community based participatory research (CBPR) approach. Communities will collaborate in all aspects of the program. Extension will stress fostering healthy lifestyles through translating current health and nutrition research conducted at ASU into practical application to improve the lifestyles of individuals, families and communities in the state of Mississippi. Research on health-related practices including preventive care, assessment of food intake and dietary patterns will be conducted. The major focus will be on nutrition education, weight management and increased physical activity. The program will emphasize lifestyle education starting at infancy throughout adolescent to enable parents and care givers to lower the risk factors of childhood obesity.The Sustainable Animal Production Systems planned program focuses on improving meat animal production, efficiency and the quality of meats. The program will focus on reproductive performance of animals including growth rate, feed efficiency, and survivability, including research aimed at reducing the prevalence and impact of infectious diseases in meat producing animals. In addition, the program will focus on the reproductive efficiency and prenatal survival of meat producing animals. The importance of developing a controlled breeding season according to market demands and trends will be stressed. The management of animals during gestation and delivery will also be emphasized. Nutrient utilization in animals will emphasize nutrient requirements of livestock and the improvement of forages for winter and summer months. Additionally, utilizing feeding and management programs to improve the quality and competitiveness of meat animal industry appropriate to regions of the state will be examined. Genetic improvement of animals will focus on proper selection of breeding stock with the aim of improving the meat quality. This planned program will evaluate the impact of traditional and non-traditional feedstuffs on meat quality, safety and consumer confidence and acceptance of meat from cattle, swine, goats and poultry. Also, the project will investigate methods of eradicating or controlling infectious diseases and methods of monitoring to ensure herds remain free of specific diseases. Additionally, the investigators will examine factors associated with early embryo viability with the view of reducing embryo mortality and explore more feasible methods of embryo transfer. Improved testing programs to accommodate genetic improvement of multiple traits, including growth performance, longevity and carcass merit/quality and shelf-life of meat will be made.

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

Year	Extension		Research	
	1862	1890	1862	1890
2008	0.0	51.5	0.0	42.4
2009	0.0	56.0	0.0	45.5
2010	0.0	56.0	0.0	45.5
2011	0.0	56.0	0.0	45.5
2012	0.0	58.0	0.0	45.5

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 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 of the plan of work. Selected individuals will include ASUEP state program leaders, specialists and researchers from the both internal and external land grant institutions in the state of Mississippi, and others as deemed necessary from other states. Additionally, non–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 appropriate planned program. A comprehensive and detailed program review will be conducted by the panel of the planned programs of the plan of work (POW) at least every 2 years. Alcorn State University Extension and Research of AREAS will initiate program reviews of all planned programs over the next five years. These reviews will be conducted by review panels selected specifically for the purpose of the review. Stakeholder 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 to assess the merit of planned programs of the POW. The first such detailed review of the planned program is anticipated to be conducted in the fall of 2008. 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 for guiding major changes and or updates in program and research directions of the planned program. Also, peer review processes will consist of state program reviews by internal and external extension and research professionals from both land grant institutions 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 all counties by ASU-EP extension educators who are required to develop Program Delivery Agreement (PDA), each year which will be shared annually and reviewed internally by Regional Coordinators and State Program Specialists of the planned program. PDA’s are also shared with the County Extension Advisory Councils and Program Committees for merit review and comment. The research program will be reviewed annually by scientific peers and stakeholder groups to evaluate the relevance of research priorities, the soundness 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 Alcorn scientists who have expertise in the given planned program, but are not directly associated with the project. Expert reviewers and peer review participants will be selected from governmental agencies, (state and federal), other universities, industries 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 planned programs as listed below:The goal of Human Development and Family Well Being is to increase the capacity of family groups and agencies to positively impact the lives of families in communities by direct and indirect contact through educational programs, events, and activities which influence the learning, planning processes, experiences, and clientele interest.The Youth-at-Risk planned program goal is to enhance leadership skills of youth to assume leadership roles in schools and communities: to develop decision-making, communication and coping skills; to help youth resist risky behaviors and to have the ability to address relevant issues in their daily lives.The Small Family Farm Enterprise Financial Analysis, Management and Marketing planned program goal is to enhance the economic viability of small and limited resource farm families by strengthening their technical knowledge, skills and economics decision-making so that they can contribute fully to the agricultural economy; better their own lives and the lives of their children or other dependents, ultimately benefiting the society as a whole in rural Mississippi.The Community Resource Planning and Economic Development planned program goal is to empower and improve the quality of life of limited resources citizens and to promote sustainable social and economic development in communities utilizing research findings and best community and economic development practices as models.The goal of Sustainable Horticulture Production Systems planned program is to enhance the income-potential of the Mississippi limited resource farmers by growing alternative crops through sustainable production practices; and in addition, improve farm profitability of small-limited resource farm families. Sustainable Animal Production Systems planned program goal is to improve the profitability of livestock and poultry produced by limited resource farmers by improving the quality of meats through research and appropriate educational programs.The goal of Human Nutrition, Health, Wellness and Obesity planned program is to develop a healthy and well-nourished population through the development interventions and dissemination of information on new and improved methods, practices, and products that will result in increased public awareness of health promoting dietary and food consumption behaviors. The Forestry Natural Resource and Preservation planned program is to educate and demonstrate to small farmers and landowners the benefits the in conservation and sustainability of the forest for enhancing income and awareness of the need for a healthy forest environment.Agronomy Production Systems planned program goal is to improve the farm profitability of small-limited resource farm families through production, value added and marketing of syrup crops.

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

The eight planned programs of the Combined Extension and Research Plan of Work (POW) of AREAS address the needs of the under-served primarily through the implementation of its mission that targets limited resource audiences, and the research and programming efforts that address issues for improving the quality of their lives in Mississippi communities. The stakeholder input highlighted priority issues that the eight planned programs are in response regarding issues being experienced by limited resource citizens of the Southwest and Delta regions of the state. The planned programs are addressing issues of the under-underserved population through focusing on youth at risk, single parents and family financial resource development issues and limited farm income in which alternative income and marketing enterprises are providing options for increasing the income of limited resource small farm families. The 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, to facilitate the involvement of diverse under-represented populations. Alcorn State University Extension Programs have identified regions of Mississippi where there is a concentration of under represented populations of the State. These regions have been of considerable interest 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, considering inputs and outputs of Extension and Research 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 eight planned programs of the POW experienced by limited resource audiences. The mid-term outcomes focus on the development, adoption and use of practices of information related to key issues facing limited resource citizens outlined in the eight planned programs of the POW. The long term outcomes of the eight planned programs are described through the documentation of changes, increases and decreases observed regarding key issues experienced 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 efficiency?

The planned program will improve program effectiveness and/or efficiency basically because all the planned programs have been designed responsive to the situations based on key issues being experienced by limited resource citizens of the state of Mississippi. The implementation of the planned program of both extension and research efforts of AREAS will facilitate the School to carry out its mission and achieving its vision.Additionally, the planned programs have been logically designed through combined research and extension programming efforts to address key issues of limited resource citizens and determined expected outcomes of the planned programs utilizing FTE and SY resources of Extension and Research of AREAS.(including adding new resources to satisfy the objectives of the POW as they evolve over the 5 year life span of the planned programs. Also, various assumptions of the planned programs have been identified that allows Alcorn Extension and Research to be proactive rather that 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
- Survey specifically with non-traditional individuals
- Targeted invitation to non-traditional stakeholder individuals
- Targeted invitation to non-traditional stakeholder groups
- Survey of traditional stakeholder groups
- Survey specifically with non-traditional groups

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 efforts of AREAS as relevant, practical and comprehensive information resource for Mississippi residents and to seek stakeholders input that encourage their participation. ASU- Research and Extension will increase the exposure to planned programs through various outlets to increase involvement and participation of limited resources stakeholders throughout the life of the plan.Local planning committees will be formed in each county to recruit, plan and implement public interaction, i.e. Town Hall meetings, and focus groups sessions. Several of these activities are ongoing. Invitations will be provided to public meetings and listening sessions utilizing letters, flyers, etc. will be provided to targeted traditional and non traditional stakeholder individuals and groups, to elected and governmental officials, local institutions, organizations and agencies to seek diverse stakeholders of the population in limited resource communities. Efforts will be made during Town Hall meetings and focus group sessions to increase awareness of the mission of AREAS, its capacity and collaborative efforts of the planned program of Extension and Research at Alcorn State University regarding addressing relevant issues of the state. The primary goal is to facilitate greater access to stakeholders of our limited resource customers to communicate about our planned programs that are in their interest and have been developed in response to evaluation of the needs of the targeted population.Media & Communication units will publicize and market research efforts and educational programs, events and activities conducted at the state and county levels. One on one contact with target clientele of the plan 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 will participate in future meetings and the 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 with non-traditional groups (e.g., cooperatives) or the survey of non-traditional farmers, rural families, and other affected by the agricultural research program at the university. Survey instruments are carefully designed to measure variables 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 and farmers participate in the research. This allows the individual farmers to provide input and observe first hand the outcome 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

- Open Listening Sessions
- Use Surveys

- Use External Focus Groups
- Needs Assessments
- Use Advisory Committees

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 representative of the limited resources, household community in terms of geographic location, family status, income level, age, gender, disability status, and users or nonusers of existing educational programs.Guideline manuals were designed for collecting data from stakeholders to accomplish the Program Priority within ASU Extension Program. The manuals were used to train ASU Extension Program county and campus-based educators and staffs. 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: Advisory Council -The process begins at the grassroots level with county agents 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, researchers from 1862 and other 1890 land grant universities, industry representation and commodity groups.The Town Hall meeting was implemented to identify issues or needs of limited resource citizens in counties targeting the public. 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 needs assessments will be conducted jointly between research and extension.A series of Focus groups sessions was implemented to further prioritize the issues identified in the public hearings (i.e. 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 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 specifically with non-traditional groups
- Survey specifically with non-traditional individuals
- Meeting with the general public (open meeting advertised to all)
- Meeting specifically with non-traditional individuals
- Meeting with invited selected individuals from the general public
- Survey specifically with non-traditional groups

Brief explanation

This grassroots information gathering approach determined how the Alcorn Extension organization directed or redirected its efforts, and promoted an action-based team response to the critical areas of concern for our targeted population. The plan allows for the prioritizing and the addressing of community issues as seen by those living with the conditions on a daily basis versus how they are perceived by observers. The aim was to set aside pre-conceptions about what limited resources people are seeking and to gain a more precise and dynamic picture of them and their existing conditions. This provides a more accurate basis for identifying those factors that impede livelihood development and poverty reduction, and general well-being.The major objective is the development of a comprehensive assessment instrument, which will allow the analysis of data collected to direct the appropriate technical assistance and to utilize and implement the correct educational activities. It also will enable us to establish a proactive approach to assess and determine the most effective method in allocating limited personnel and resources, (technical and practical) to address the increasing critical needs of the citizens of the State of Mississippi.Alcorn State University Extension Program (ASU-EP) utilizes an environmental scanning system to identify and collect input from stakeholders regarding issues/needs and educational programming to address issues of targeted audiences in planned program areas of targeted counties. The

environmental, scanning processes implemented are Town Hall and Focus Group meetings, Individual Client Survey Plans and Advisory council/Program committees to get stakeholder input concerning high priority issues/needs of limited resources targeted audiences in the targeted counties of ASU-EP and other remaining targeted counties across the state of Mississippi.Alcorn State University Extension and Research through in-depth needs assessment implemented the necessary steps to address high priority issues identified by the citizens of the state of Mississippi. An environmental scanning system has been implemented that is simple, efficient, and cost-effective. The goal of this system is to collect data on the issues and needs of the local communities at the local level. The Environmental Scanning system implements the following processes: local county advisory councils, the Individual Client Service Plan (ICSP), Town Hall Meetings and Focus Groups to identify local needs of limited resource audiences.

3. A statement of how the input will be considered

- To Identify Emerging Issues
- Redirect Research Programs
- In the Action Plans
- Redirect Extension Programs
- In the Staff Hiring Process
- In the Budget Process
- 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 is going to design a 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' high priority issues. 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 Program. Finally, the issues were prioritized by the state and county staff and ASUEP/ Management Leadership Committee. The committee developed a restructuring plan for ASUEP based on stakeholder input findings. Mississippi residents' needs for practical information have been placed in 5 programmatic areas: Prioritization of issues in program areas:Agriculture/Environment Lack of farm financial management Limited knowledge of production, management, and marketing practices for alternative enterprisesNutrition and Health High rate of obesity (adult/childhood) High incidence of chronic diseaseYouth Development High incidence of tobacco, drugs and alcohol abuse High rate of teen pregnancyCommunity and Economic Development Lack of jobs (youth and adult) Limited community leadership skillsChild and Family Development High rate of single parent families Limited parenting skillsAdditionally, the geographic focus of extension and research efforts will focus primary on the areas of the Capital River, Delta, and, Costal regions based on where limited resource resides in counties of regions of the state. 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, described as follows:Geographic focus and Incidence of Programming Factors Assessment/analysis:Extension Regions Need + Population Ranking (1 top priority)Capital Region 1Delta Region 2 TiedPine Region 2 TiedHill Region 3Coastal Region 4Action 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 organization 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

V(A). Planned Program (Summary)

1. Name of the Planned Program

Agronomy Production Systems

2. Brief summary about Planned Program

The planned program will focus on demonstrating research based information on the agronomic practices required for producing value added and marketing of Syrup crops (Sugarcane and Sorghum). In the efforts of “Reviving the Syrup Industry in Mississippi”, the ASU-EP Agronomy program will demonstrate marketing and distribution practices that will educate sugar cane, sweet sorghum and syrup producers / processors in making their marketing and distributions more profitable. The program will also provide educational programs, event and activities and demonstration on marketing and distribution techniques that will elevate the profit that producers and processors will obtain from their crops / products. The demonstrations will emphasizes soil, plant, water, nutrient relationships using various tilling methods (No-till and minimum tillage). Different fertilizer treatments and moisture applications will be used to produce high-income syrup crops, under selected Mississippi soils conditions. This program will demonstrate and educate new technologies suited to the needs of the small farmer. Such technologies include crop varieties that tolerate or resist natural environmental and pest management programs that utilize judicious combinations of pesticides, host resistance, and cultural methods. The impact of different plant management systems of plant density, row preparation, irrigation sources, application methods and other management practices on the growth and development of each test crop will be demonstrated. The program will increase minority land owners’ awareness of income opportunities though syrup crop management practices by developing or improving soil management, crop production, processing and marketing techniques. The program will educate limited resource producers and small farmers of the economic importance in soil fertility, nutrient sustainability and the vital role they play in crop production. Educational programs will be provided to farmers on value-added processing and marketing of their syrup crops. This new technology will also allow farmers to make additional profits from their products. New and improved Food Processing Technologies using the mobile syrup processing cooker (Mill on Wheels) will be used to educate farmer on how to add value, package and market their syrup crops (sugar cane and sweet sorghum).

3. Program existence : Intermediate (One to 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

- 102 32% Soil, Plant, Water, Nutrient Relationships
- 501 32% New and Improved Food Processing Technologies
- 604 36% Marketing and Distribution Practices

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

1. Situation and priorities

Small farmers in Mississippi have traditionally been concerned about conserving and sustaining their farmland. However, they have not participated in conservation programs, because of program requirements, reluctance to share privacy data and joint heirs in the property. The rich soils and long growing seasons in the state of Mississippi favor production of a wide variety of crops. Studies have shown (Cacek and Langner 1986) that low-input alternative agriculture and environmentally friendly production practices will enhance productivity without polluting the environment.Increasingly each year, a decline is being experienced in seasoned syrup makers as well as a lack of the interest of younger producers to replace seasoned producers in the industry. The lack of interest in agricultural production stems from their ability to make more profit elsewhere and to the “traditional” labor intensiveness of agricultural production. Many youth here are in need of some type of employment. With the decline in or lack of agricultural education in our school system, the majority of our youth are not being introduced to agricultural practices in general syrup making. Current syrup producers are not taking full advantage of value added marketing practices to make their efforts more profitable. The majority of cane producers are not processors, and due to the decline in processors many producers have no way to process their product.Small-scale farmers critically need help to solve many of their production problems. The potential to increase production through increased cropping intensity is high. There is no question that small farmers are underutilizing their natural resources to produce crops. Hence, more effective farming systems can be developed with the help from educators. If such

development is done in cooperation with farmers, chances to increase food production will be good. Identification of cultivars with short growth duration, good water control and pest management will help farmers solve many of their production problems. ASUEP agronomy program historically has develop mobile processing cookers and the capacity for conducted demonstrations of different agronomy practices, value added and marketing techniques for sugar cane and sweet sorghum. On-farm income can be increased by diversification through the utilization of alternative cash crops, especially value-added syrup crops. Income from traditional and alternative livestock has increased through emphasis on proper forage management and production of summer pastures and winter grazing. Small farmers produce a combination of traditional and alternative agricultural enterprises by incorporating sustainable agricultural practices into new alternative crops. These farmers are striving to increase farm income through improved production practices on existing crops and the adoption of new crop enterprises.Reference: Cacek, Terry and Linda Langner, 1986 “The economic implications of organic farming,” American Journal of Alternative Agriculture 1(1):25-29.

2. Scope of the Program

- In-State Extension

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

1. Assumptions made for the Program

o It is this planned program’s primary assumption that some producers and processors will determine the implementation or modification of their production and processing equipment to be uneconomical. However, more profitable and less labor intensive production practices will be demonstrated to limited resource farmers with contributions from our highly qualified, experienced and knowledgeable extension educators. o It is assumed that the increase cost of fertilizers, repair parts and other related items will increase the production cost of syrup producers. The program will challenge this assumption by demonstrating techniques in increasing syrup quality and profitability by 30 percent above the producers’ production cost and market value while incorporating recommended production and marketing techniques.o It is assumed that the sugar cane and sweet sorghum producers will eventually decrease due to the demolition of communities’ syrup processing mills and loose this additional source of income that would further increase economic hardship. The program efforts will generate interest in revitalizing the syrup industry by educating the benefits of farmers having membership with Cooperatives and associations that provides production and processing services to members and communities.o An assumption of this program is that the ability or willingness of younger men and women to become involved in production agriculture to enhance productivity and profitability.

2. Ultimate goal(s) of this Program

To improve the farm profitability of small-limited resource farm families through production, value added and marketing of syrup crops.

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
2008	0.0	4.0	0.0	0.0
2009	0.0	4.5	0.0	0.0
2010	0.0	4.5	0.0	0.0
2011	0.0	4.5	0.0	0.0
2012	0.0	4.5	0.0	0.0

V(F). Planned Program (Activity)

1. Activity for the Program

Educational information will be disseminated to enable farmers to Identify high yielding syrup crops suited for Mississippi will be made available to limited-resources formers for incorporation into their production plan. Production manuals elaborating on soil, plant, water and nutrient relationships will be developed as well as other information sheets will be used as guides by farmers in

their efforts to incorporate these crops, increase productivity, and enhance profitability.Educational programs, events and activities will be conducted to improved plant management systems. Cultural practices, such as crop rotation, conservation tillage, mulching, nutrient management and other factors of optimal production will be recommended.Educational workshops for farmers stressing improved syrup processing techniques by gaining hands-on experience with the mobile processing cooker. New and improved processing techniques and technologies will provide value added, opportunities with less time restraint, and commercial marketing.Conduct demonstrations at major events (fairs, festivals, farmer market and outreach center) will be preformed to “Revive the Syrup Industry in Mississippi” focusing on Sugarcane and Sorghum processing and marketing. These demonstrations will be inspire small limited resource farm producers to adopt marketing techniques for sugar cane, sweet sorghum and syrup producers / processors in making their marketing and distributions efforts with less labor intense to enhance their product for more profitable. Demonstrations on marketing and distribution techniques elevate the profit that participating producers and processors can obtain from their agronomic crops / products. Value added techniques and products from sugar cane and sorghum producers will be emphasized.

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

Extension	
Direct Methods	**Indirect Methods**
• Demonstrations • Education Class • Other 1 (Curriculum Development) • One-on-One Intervention	• Newsletters • Web sites • Other 1 (Fact Sheets) • Other 2 (Reports) • Public Service Announcement

3. Description of targeted audience

The targeted audience will consist of limited-resource farmers, land owners and part time producers / processors. The goal is to increase sustainable agronomic practices and techniques on small limited resource farms in the state of Mississippi.

V(G). Planned Program (Outputs)

1. Standard output measures

Target for the number of persons(contacts) to be reached through direct and indirect contact methods

	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Year	Target	Target	Target	Target
2008	300	400	150	250
2009	450	500	200	300
2010	500	550	250	350
2011	550	600	300	400
2012	600	650	350	450

2. (Standard Research Target) Number of Patents

Expected Patents

2008 :0 **2009 :**0 **2010 :** 0 **2011 :** 0 **2012 :** 0

3. Expected Peer Review Publications

Year	Research Target	Extension Target
2008	0	0
2009	0	0
2010	0	0
2011	0	0
2012	0	0

V(H). State Defined Outputs

1. Output Target

- Conduct educational seminars for Limited Resource farmers and youth in communities on Soil, Plant, Water, Nutrient Relationships of agronomic crops.

  2008 : 7 **2009 :** 9 **2010 :** 10 **2011 :** 12 **2012 :** 14

- Conduct educational workshop for limited Resource farm families and youth in communities on syrup crop production and marketing

  2008 : 5 **2009 :** 7 **2010 :** 9 **2011 :** 11 **2012 :** 13

- Conduct educational field days for Limited Resource farm families and youth in communities on syrup crop production and marketing

  2008 : 5 **2009 :** 5 **2010 :** 5 **2011 :** 5 **2012 :** 5

- Conduct educational tours and other activities for Limited Resource farm families and youth in communities on syrup crop production and marketing

  2008 : 5 **2009 :** 7 **2010 :** 9 **2011 :** 10 **2012 :** 12

- Conduct educational training on agronomy production to limited resources farm families on syrup crop production and marketing

  2008 : 5 **2009 :** 7 **2010 :** 9 **2011 :** 11 **2012 :** 13

- Develop and educational facts sheets on agronomy production to limited resources farm families on syrup crop production and marketing

  2008 : 2 **2009 :** 3 **2010 :** 4 **2011 :** 5 **2012 :** 6

V(I). State Defined Outcome

1. Outcome Target

Percent of program participants to gain knowledge on new production management practices, techniques will gradually increase.

2. Outcome Type : Change in Knowledge Outcome Measure

2008 : 15 **2009 :** 20 **2010 :** 25 **2011 :** 30 **2012 :** 35

3. Associated Knowledge Area(s)

- 102 - Soil, Plant, Water, Nutrient Relationships

1. Outcome Target

Increase in the percent increase in participants improving product handling of syrup crop and marketing value added products

2. Outcome Type : Change in Knowledge Outcome Measure

2008 : 20	**2009 :** 25	**2010 :** 30	**2011 :** 35	**2012 :** 40

3. Associated Knowledge Area(s)

- 604 - Marketing and Distribution Practices

1. Outcome Target

Persentage of program participants to improve production efficiency through best management practices.

2. Outcome Type : Change in Action Outcome Measure

2008 : 15	**2009 :** 20	**2010 :** 25	**2011 :** 30	**2012 :** 35

3. Associated Knowledge Area(s)

- 102 - Soil, Plant, Water, Nutrient Relationships

1. Outcome Target

Percentage of program participants for environmental impacts of their operations.

2. Outcome Type : Change in Knowledge Outcome Measure

2008 : 10	**2009 :** 15	**2010 :** 20	**2011 :** 25	**2012 :** 30

3. Associated Knowledge Area(s)

- 102 - Soil, Plant, Water, Nutrient Relationships

1. Outcome Target

Percentage of program participants pursuing opportunities to meet environmental regulations and programs on syrup crop production and marketing

2. Outcome Type : Change in Knowledge Outcome Measure

2008 : 10	**2009 :** 15	**2010 :** 20	**2011 :** 25	**2012 :** 28

3. Associated Knowledge Area(s)

- 501 - New and Improved Food Processing Technologies

1. Outcome Target

Percentage of program participants utilizing integrated nutrient management for sustainable agronomic production and environmental protection

2. Outcome Type : Change in Knowledge Outcome Measure

2008 : 10	**2009 :** 15	**2010 :** 20	**2011 :** 25	**2012 :** 30

3. Associated Knowledge Area(s)

- 102 - Soil, Plant, Water, Nutrient Relationships

1. Outcome Target

Percentage of program participants in integrated pest management for sustainable agronomic production and environmental protection.

2. Outcome Type : Change in Knowledge Outcome Measure

2008 : 15	**2009 :** 20	**2010 :** 25	**2011 :** 30	**2012 :** 35

3. Associated Knowledge Area(s)

- 102 - Soil, Plant, Water, Nutrient Relationships

1. Outcome Target

Percentage of program participants in waste management for sustainable agronomic production and environmental protection

2. Outcome Type : Change in Knowledge Outcome Measure

2008 :	**2009 :**	**2010 :**	**2011 :**	**2012 :**
10	15	18	20	24

3. Associated Knowledge Area(s)

- 102 - Soil, Plant, Water, Nutrient Relationships

1. Outcome Target

Percentage of program participants in recycling methods for sustainable agronomic production and environmental protection

2. Outcome Type : Change in Knowledge Outcome Measure

2008 :	**2009 :**	**2010 :**	**2011 :**	**2012 :**
10	15	20	22	25

3. Associated Knowledge Area(s)

- 102 - Soil, Plant, Water, Nutrient Relationships

1. Outcome Target

Percent of producers to have adopted new syrup crop production, management and marketing practices and technologies

2. Outcome Type : Change in Action Outcome Measure

2008 :	**2009 :**	**2010 :**	**2011 :**	**2012 :**
6	9	12	14	16

3. Associated Knowledge Area(s)

- 102 - Soil, Plant, Water, Nutrient Relationships
- 604 - Marketing and Distribution Practices

1. Outcome Target

Percent of producers assessed potential environmental impacts of their operations and management decisions on syrup crop production and marketing.

2. Outcome Type : Change in Knowledge Outcome Measure

2008 :	**2009 :**	**2010 :**	**2011 :**	**2012 :**
10	12	15	18	20

3. Associated Knowledge Area(s)

- 102 - Soil, Plant, Water, Nutrient Relationships
- 604 - Marketing and Distribution Practices

1. Outcome Target

Percent of producers assessed potential environmental impacts of their operations and management decisions on syrup crop production and marketing.

2. Outcome Type : Change in Knowledge Outcome Measure

2008 :	**2009 :**	**2010 :**	**2011 :**	**2012 :**
5	7	10	12	15

3. Associated Knowledge Area(s)

- 604 - Marketing and Distribution Practices

1. Outcome Target

Percent of producers responded to environmental and market variations through alternative crop or management strategies on syrup crop production and marketing.

2. Outcome Type : Change in Action Outcome Measure

2008 : 5	**2009 :** 7	**2010 :** 10	**2011 :** 12	**2012 :** 14

3. Associated Knowledge Area(s)

- 102 - Soil, Plant, Water, Nutrient Relationships
- 604 - Marketing and Distribution Practices

1. Outcome Target

Percent of producers documented best management practices in their recommendations on syrup crop production and marketing.

2. Outcome Type : Change in Action Outcome Measure

2008 : 5	**2009 :** 7	**2010 :** 10	**2011 :** 12	**2012 :** 14

3. Associated Knowledge Area(s)

- 102 - Soil, Plant, Water, Nutrient Relationships
- 604 - Marketing and Distribution Practices

1. Outcome Target

Percent of producers documented to have assessed potential environmental impacts of their operations on syrup crop production and marketing.

2. Outcome Type : Change in Action Outcome Measure

2008 : 7	**2009 :** 12	**2010 :** 15	**2011 :** 17	**2012 :** 19

3. Associated Knowledge Area(s)

- 102 - Soil, Plant, Water, Nutrient Relationships

1. Outcome Target

Percent of producers developed and implemented nutrient management plans to meet production and performance goals and meet both State & Federal regulations on syrup crop production and marketing.

2. Outcome Type : Change in Action Outcome Measure

2008 : 5	**2009 :** 7	**2010 :** 10	**2011 :** 12	**2012 :** 14

3. Associated Knowledge Area(s)

- 102 - Soil, Plant, Water, Nutrient Relationships
- 604 - Marketing and Distribution Practices

1. Outcome Target

The percentage of producers documented to have improved economic returns to agronomic profitability and vitality resulting from enhanced production management practices on syrup crop production and marketing.

2. Outcome Type : Change in Condition Outcome Measure

2008 : 2	**2009 :** 4	**2010 :** 6	**2011 :** 8	**2012 :** 10

3. Associated Knowledge Area(s)

- 102 - Soil, Plant, Water, Nutrient Relationships
- 604 - Marketing and Distribution Practices

1. Outcome Target

The percentage of producers documented to meet or exceed current environmental protection standards as a result of participating in relevant educational programs in syrup crop production and marketing.

2. Outcome Type : Change in Condition Outcome Measure

2008 :	2009 :	2010 :	2011 :	2012 :
2	4	6	8	10

3. Associated Knowledge Area(s)

- 102 - Soil, Plant, Water, Nutrient Relationships
- 604 - Marketing and Distribution Practices

1. Outcome Target

The percentage of producers reported reduced environmental concerns for participating enterprises in syrup crop production and marketing.

2. Outcome Type : Change in Condition Outcome Measure

2008 :	2009 :	2010 :	2011 :	2012 :
2	4	6	8	10

3. Associated Knowledge Area(s)

- 102 - Soil, Plant, Water, Nutrient Relationships
- 604 - Marketing and Distribution Practices

V(J). Planned Program (External Factors)

1. External Factors which may affect Outcomes

- Natural Disasters (drought,weather extremes,etc.)
- Economy
- Government Regulations
- Competing Public priorities

Description

Agricultural 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. The outcome of this problem will be influenced mainly by external factors as variations in climate during each growing season, inadequate appropriations, public policy and changes. Natural adverse conditions (natural disasters, drought, weather extremes, etc.) are major external factors that may affect the outcome of on syrup crop production and marketing. Planned Agricultural enterprises operate in a complex and volatile context involving susceptibility to weather which prevents or delays planting and drought conditions that reduces yield and quality of the crop. The fluctuation in the agricultural and global economy will determine profitability verses prices of commodities, supplies and other needed sources. Supply and demand will facilitate changes occurring in the state and regional economies within which agricultural enterprises operate. Public policy, especially those relating to comparative prices of inputs and harvested crops, is another constraint that may affect outcomes. 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.Municipal and commercial zoning such as competitive land uses, shifting development patterns and global market influence are external factors that changes government regulations and may affect outcome due to decrease in favorable agricultural land. Re-zoning can also motivate or initiate changes in a rural population due to immigration / relocation and new cultural grouping. Population changes in farming communities can lead to producer/neighbor issues that influence choice of agronomic production practices.

V(K). Planned Program (Evaluation Studies and Data Collection)

1. Evaluation Studies Planned

- Before-After (before and after program)
- Comparison between locales where the program operates and sites without program intervention

Description

Evaluation studies will be measured by the extent to which the farmers are diversifying to alternative crop production through sustainable agronomic production practices. Comparison of crop performances under improved production practices with 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.

2. Data Collection Methods

- Sampling
- Whole population
- Mail
- Telephone
- Case Study
- Observation
- Tests
- Journals

Description

o Collecting soil sample before planting crops will be used to determine nutrient requirements for crop evaluation studies.o Limited-resource producer will complete questionnaires in order to determine crop production problems with limited resources producers.o Observations will conduct to identify major crop of interests to growers and document data interpretation. Document the impact of all field management practices would be observed and findings reported.

V(A). Planned Program (Summary)

1. Name of the Planned Program

Community Resource Planning & Economic Development

2. Brief summary about Planned Program

The planned program is formulated within the context of Community resource planning and development (CRPD) and Economic Theory & Research Methods (ETRM). CRPD will specifically focus on economic planning and development. This planned program will collaborate with governmental officials and local school districts to plan and implement sustainable social, community and economic development that will likely create jobs, improve employment opportunities through small and home based businesses, enhance human capital development in all forms. ETRM of the planned program will emphasize labor economic issues, research methods and data collection. Economic theory and research methods will be utilized to better understand various social, economic and demographic phenomena that are constraining limited resource citizens' social and economic well being, quality of life and the growth of the communities within which they reside. Various research tools and socio economic models will be developed and targeted to specific communities to promote best practices that are likely to help resolve many of the existing community problems. In partnership with community and faith based organizations we will identify and explore strategies with the distinct aim of empowering people, encourage active participation in social and economic development. Civic engagement strategies will be implemented specifically to promote people's participation in community and civic activities. Educational efforts will emphasize identification and addressing impaired leadership skills among community leaders through leadership development so they can fervently serve their people and communities. Alcorn State University Extension and Research, especially through its tripartite land grant functions, has carefully formulated short and long term agenda of human capital development and service to community. It has expanded its commitment to better understand the problems of people and communities in southwest Mississippi so that as a stakeholder in the region, it can position itself to find ways by which to offer assistance. The university has an agenda of among other things, finding ways to strengthen the capacity of rural communities to constantly regenerate themselves and improve the quality of life for people. This makes Alcorn State University the ideal location through which this project should be executed, and the technical know how to deliver on its objectives.

3. Program existence : Intermediate (One to 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

- 608 50% Community Resource Planning and Development
- 609 30% Economic Theory and Methods
- 805 20% Community Institutions, Health, and Social Services

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

1. Situation and priorities

A great number of counties in Mississippi are largely socio-economically depressed and the region faces other problems that contribute to further deterioration of social and physical infrastructure and economic decline. For example, the unemployment rate in Mississippi is high, approximately 6 percent compared to the national average of 4.7 percent (US Department of commerce, 2004). Indeed, the unemployment rate in the persistently impoverished counties ranges between 9 and 19.5 percent. Most of the counties have per capita income of less than the state's average of (approximately twenty thousand dollars) and others have even lower average income than fifteen thousand (15,000) dollars. While there is no data currently available, it is evident that a large number of the employed labor force can be classified as underemployed. This situation contributes to the poor quality of life that many residents experience, and is one of the reasons why they struggle to extricate themselves from the brutality of low economic well-being. Historically, many regions of the state depended largely on small-scale agriculture. Additionally, they were attractive locations for light manufacturing and service industries such as processing of wood, textile and consumer durables because they offered low cost land and relatively cheap labor. Today, many of these advantages are being lost. Hence, per capita income has fallen to low levels in many regions; people are migrating to more prosperous areas, and unemployment is escalating, leaving many areas of the state deeply impoverished and with few signs of social and economic progress. Cursory examination and

evidence from national organizations such as the Association of Community and Economic Development Extension Professionals (NACDEP) have identified that two of the crucial constraints to community development are (a) the deficiency in citizen participation in local community and civic activities and (b) the impaired quality of leadership skills among the ranks of community leaders. The latter of these issues is of particular concern. Beaulieu (2002) argues that a vibrant rural America depends in part, on expanding the quality of human capital development and promoting broad-based involvement of individuals in civic life of communities. In this case, resources are invested in individuals today in order to significantly enhance the quality of their labor related skills, augment their future job related earnings and increase their contribution to community development (Becker 1975, Schultz 1960; Mincer 1974). A priority should be to consistently find ways by which to build the human capital base 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

An assumption of the planned program is that it will work successfully because objectives are grounded in theory and research. According to the Mississippi Economic Councils assessment report, the fundamental approaches are based on experience from many of the most affluent and progressive communities around the country and even in Mississippi. It assumes that expenditure on education, health care, supportive social services and other elements essential to high quality human resource development are available and accessible to an adequate rural response to economic change. In many of our least vibrant Mississippi communities a common belief is that leaders have been deeply entrenched in their traditional leadership methods; they are averse to innovations and they may fail to seek coalition building and new paradigm that could likely initiate social and economic progress for their people and communities. The mandate of this program is community development which encompasses a strong synergy between research and extension in socioeconomic issues, human resource development, civic involvement, training and improvement in the quality of life of people and communities. Alcorn State University Extension and Research successful alliance, which has a long history of collaboration, recognizes the inherent strength of people and programs working together to achieve common goals. These planned programs and activities at are within the realm of achievement for our experienced, committed team at Alcorn. This team has a wide range of knowledge of theory and practices of socio-economic issues. We will, at varying times, also seek to solicit additional support and expertise of volunteers and professionals to work on specialized tasks as determined by program directors. The benefits of this project will be unfolded by the cooperative effort of a collaborative research and extension staff that will seek to exploit all necessary assets, internal and external, to resolve problems and build capacity.

2. Ultimate goal(s) of this Program

Empower and improve the quality life of people to promote sustainable social 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
2008	0.0	5.0	0.0	3.4
2009	0.0	5.5	0.0	4.0
2010	0.0	5.5	0.0	4.0
2011	0.0	5.5	0.0	4.0
2012	0.0	5.5	0.0	4.0

V(F). Planned Program (Activity)

1. Activity for the Program

Research and Extension will partner with local officials and other entities in communities to explore and promote best practices in community capacity building as a means of impacting community changes through research, educational programs and demonstrations. Research will be conducted to identify the determination of factors that prevent community and economic development such as the shift in demographics, employment opportunities, education and attitudes of community leaders, etc. The research will be derived from synthesizing existing knowledge and integrated empirical data on the above factors from local residents, community organizations and institutions and other secondary sources. Various quantitative techniques will be undertaken to facilitate analysis of data collected. The analysis of research findings will be used to develop community and economic models that are appropriate to promote sustainable integrated community planning and development. The planned program will conduct educational sessions and disseminate information through workshops, seminars, lectures, training sessions, leadership development planning, demonstrations, asset mapping and other activities within communities. 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**
• Group Discussion • Other 2 (Surveying) • Education Class • Other 1 (Community Forums) • One-on-One Intervention • Demonstrations	• Web sites • Other 1 (Curriculum) • Public Service Announcement • Other 2 (Mass mailing) • TV Media Programs

3. Description of targeted audience

• Limited Resource Audiences Families.• Community-Based Organizations..• Entrepreneur.• Elected and appointed Political Officials

V(G). Planned Program (Outputs)

1. Standard output measures

Target for the number of persons(contacts) to be reached through direct and indirect contact methods

	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Year	Target	Target	Target	Target
2008	2150	1000	100	200
2009	2700	1200	150	400
2010	3350	1400	200	500
2011	3500	1600	300	600
2012	3500	1800	300	600

2. (Standard Research Target) Number of Patents

Expected Patents

2008 :0 **2009 :**0 **2010 :**0 **2011 :**0 **2012 :**0

3. Expected Peer Review Publications

Year	Research Target	Extension Target
2008	2	1
2009	0	0
2010	0	0
2011	0	0
2012	0	0

V(H). State Defined Outputs

1. Output Target

- Conduct educational programs and activities, on leadership to promote awareness and empowerment to facilitate economic and Community development opportunities.

  2008 :24 **2009 :**34 **2010 :** 40 **2011 :**44 **2012 :**46

- Conduct educational programs and job fairs to facilitate workforce development opportunities for limited resource audiences in communities.

  2008 :4 **2009 :**6 **2010 :** 8 **2011 :**10 **2012 :**12

- Conduct educational events and activities on Agro-tourism, land stewardship and management , asset mapping and home based business development.

  2008 :10 **2009 :**22 **2010 :** 23 **2011 :**25 **2012 :**26

- Conduct educational workshops on cooperative development to increase agricultural business development in communities.

  2008 :8 **2009 :**9 **2010 :** 10 **2011 :**11 **2012 :**12

- Conduct educational demonstrations and tours on Agro tourism to generate economic development opportunities for Limited Resource Audiences.

  2008 :6 **2009 :**8 **2010 :** 10 **2011 :**12 **2012 :**14

- Conduct social- psychological and economic and impact surveys and develop profiles of communities and their economic landscape. (Number of Surveys)

  2008 :1 **2009 :**1 **2010 :** 1 **2011 :**1 **2012 :**1

- Development educational bulletins, manuscripts and documentation of findings and disseminate results and models to promote community development and empowerment of residents (Number of Special Reports, News Letters and Fact sheets).

  2008 :5 **2009 :**7 **2010 :** 9 **2011 :**10 **2012 :**12

V(I). State Defined Outcome

1. Outcome Target

Percent of community leaders that will gain knowledge, develop leadership skills and become involved in civic activities and community and economic development opportunities.

2. Outcome Type : Change in Knowledge Outcome Measure

2008 :25 **2009 :** 35 **2010 :** 40 **2011 :**45 **2012 :** 50

3. Associated Knowledge Area(s)

- 608 - Community Resource Planning and Development
- 805 - Community Institutions, Health, and Social Services

1. Outcome Target

Percent of community leaders that will gain knowledge, develop leadership skills and become involved in civic activities and community and economic development opportunities.

2. Outcome Type : Change in Knowledge Outcome Measure

2008 :	**2009 :**	**2010 :**	**2011 :**	**2012 :**
20	25	30	35	40

3. Associated Knowledge Area(s)

- 608 - Community Resource Planning and Development

1. Outcome Target

Percentage of communities utilizing knowledge, research data and learned skills to retain and attract businesses and other economic development projects.

2. Outcome Type : Change in Action Outcome Measure

2008 :	**2009 :**	**2010 :**	**2011 :**	**2012 :**
10	15	20	25	28

3. Associated Knowledge Area(s)

- 608 - Community Resource Planning and Development

1. Outcome Target

Increase the percentage of cooperatives that are involved in agricultural enterprises.

2. Outcome Type : Change in Condition Outcome Measure

2008 :	**2009 :**	**2010 :**	**2011 :**	**2012 :**
4	4	5	5	6

3. Associated Knowledge Area(s)

- 608 - Community Resource Planning and Development

1. Outcome Target

Lower the unemployment rate and increase the employment rate in each county.

2. Outcome Type : Change in Condition Outcome Measure

2008 :	**2009 :**	**2010 :**	**2011 :**	**2012 :**
1	2	3	4	5

3. Associated Knowledge Area(s)

- 608 - Community Resource Planning and Development

1. Outcome Target

Increase in the percentage of infrastructures that will promote social and economic well-being

2. Outcome Type : Change in Condition Outcome Measure

2008 :	**2009 :**	**2010 :**	**2011 :**	**2012 :**
2	3	4	5	6

3. Associated Knowledge Area(s)

- 608 - Community Resource Planning and Development

1. Outcome Target

Increase the percentage of communities conducting local festivals and other events and citizen participation to enhance community development.

2. Outcome Type : Change in Condition Outcome Measure

2008 :	2009 :	2010 :	2011 :	2012 :
2	4	6	8	10

3. Associated Knowledge Area(s)

- 608 - Community Resource Planning and Development

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
- Competing Public priorities
- Populations changes (immigration,new cultural groupings,etc.)
- Other (Annexation)

Description

Organizing communities may be discouraged due to annexation that will likely affect proposed plans.Over a period of years the local and national economies are likely to decline due to the inevitably of changing business cycles and changes in funding opportunities.The unpredictable weather conditions during certain times of the year may restrict project activities such as survey administration, community meetings, workshops, etc, during projected periods for research and extension activities. These include periods of drought, ice storm, etc).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 planned 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 intern affect program priorities.

V(K). Planned Program (Evaluation Studies and Data Collection)

1. Evaluation Studies Planned

- After Only (post program)
- Retrospective (post program)
- Before-After (before and after program)
- During (during program)

Description

The success and accomplishments of this project will be evaluated based on the following measures: (a) the number of communities and administrators 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 University 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(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.

2. Data Collection Methods

- Sampling
- Mail
- Telephone
- On-Site
- Case Study
- Observation
- Tests

Description

• Census data will be compiled and analyzed to delineate various aspects of the social, economic and demographic features of the respective communities. • Comprehensive survey instruments will be developed and used to collect pertinent data on human capital development, labor and social-psychological issues within the community study areas• Standard mailing and telephone sampling techniques will be used to select and collect respondents data.• Questionnaires will be pre-tested in each of the study areas before they are actually administered. Criteria for an acceptable response rate of return of questionnaires will be developed by the principal investigators• Various statistical tests will be used to evaluate the reliability of the secondary data.• Labor Economic Interviews, sampling and polling will be conducted in targeted communities • Reliability coefficient tests will be done to estimate and determine the reliability and consistency of the data.• Observations will be documented of community leaders implementing and completing ongoing local community and economic projects.

V(A). Planned Program (Summary)

1. Name of the Planned Program

Forestry Natural Resources and Preservation

2. Brief summary about Planned Program

The planned program will focus on soil, plant, water, and nutrient relationships; management of the forest resources; Agroforestry; and alternative use of land. These programs will benefit the Alcorn State University community and the stakeholders that Alcorn services by giving valuable knowledge to ensure a healthy and productive forested area. The soil, plant, water, and nutrient relationships will emphasize the use of manures and other organic materials as plant nutrient sources on forested lands. Composting is a natural way to increase tree growth [USDA EPA Office of Solid Waste, 1999]. Other benefits associated with composting includes but not limited to 1) suppression of plant diseases and pests, and 2) reduction or the elimination of chemical fertilizers. Management and sustainability of forest resources will highlight forest health assessments and management practices to protect forests from insect and disease infestations, and investigate native and non-native invasive species that interfere with forest management objectives. The insects of interest for the initial phase of the planed program will be Southern Pine Beetles. The diseases that will be investigated will include Oak Wilt and Leptographium Root Disease of Loblolly pine trees. Agroforestry will, through identifying new and innovative woody plant species, enhance economic returns. From Agroforestry practices, designs will be created to emphasize floral products. The woody plant species of interest will be pine straw. Products will be produced from pine straw to improve small farmers' economic status.
The planned program will focus also on alternative uses of land concentrating on conservation and management practices. The emphasis here will be to inform small farmers about the benefits of good forest management practices to prevent erosion, increase timber yields, and provide recreational usage. This phase of the project will be geared to educating clientele about multi-use of their property. It will also update the targeted audiences about new methods and ideas in forest conservation and management. Alcorn State University is a land-grant institution that encourages researchers to seek new avenues through research initiatives for the financial betterment of the under-privileged communities in Southwest Mississippi, in particular the limited-resources farmers. This mission will enable this project to provide additional income for its clientele as well as conserve their existing property for future generations, and ecologically preserve the land as well as the environment by continuous forestation.

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

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

- 102 30% Soil, Plant, Water, Nutrient Relationships
- 123 30% Management and Sustainability of Forest Resources
- 125 15% Agroforestry
- 131 25% Alternative Uses of Land

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

1. Situation and priorities

Soil erosion is a social and economic problem that is an essential factor in assessing ecosystem health and function. Forest soils are characterized by their associated litter. Soils found in a forest can have a direct effect on tree species composition and productivity. Trees prevent soil erosion, and they conserve energy. Tree roots stabilize the soil (Soil, Plant, Water, and Nutrient Relationships, and Management and Sustainability of Forest Resources). Forested lands are an important natural resource especially in Mississippi. Mississippi has over 18.5 million acres of forested lands [Mississippi State University Extension Service, 2005]. The forest creates economical impacts of $1.25 billion to the quality of life for Mississippians by providing jobs, forest products, livestock forage areas, wildlife habitats, scenic areas, conditions for medicinal plants, and recreational experiences [Mississippi State University Extension Service, 2004]. Practices to improve management are needed to maintain and sustain the current forested lands for present and future generations (Alternative Uses of Land, Management and Sustainability of Forest Resources, and Agroforestry). The keys to reducing the impact to the southern pine beetle and other forest pests are prevention and rapid detection. Improving forest health aids in the reduction of susceptibility to forest diseases. Southern pine

beetles are the primary tree-killing species, and they are responsible for the death of millions of conifer trees [Price et. al., 1992]. Southern pine beetles kill more conifers than fire, disease, and storms combined [Prestemon, 2001]. Research needed to be done to determine susceptibility versus non-susceptibility of trees to forest pests. Formulations in the prevention or determent of forest pests will be needed to help small farmers and non-agriculture landowners maintain a healthy forest environment. (Management and Sustainability of Forest Resources) To achieve the goals of these research initiatives, researchers and extension educators at Alcorn State University will be involved. Collaborations between scientists and federal agencies will be needed to ensure that the overall goals are met. Innovative and sound scientific methods in forest management will be instituted in order to achieve erosion prevention, economic sustainability, and insect suppression.References:Mississippi State University Extension Service. 2005. www. msucares.com/forestry/management.Mississippi State University Extension Service. 2004. www. msucares.com/forestry/economics.Prestemon, Jeffrey P., John M. Pye, and Thomas P. Holmes. 2001. “Timber Economics of Natural Catastrophes”. In: M. Pelkki (ed.) Proceedings of the 2000 Southern Forest Economics Workshop. Lexington, KY. pp. 132-141.Price, T. S., C. Doggett, J. M. Pye, and T. P. Holmes. 1992. “A History of Southern Pine Beetle Outbreaks in the Southeastern United States”. Georgia Forestry Commission, Macon, GA. 66 pp.

2. Scope of the Program

- In-State Extension
- In-State Research

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

1. Assumptions made for the Program

In order to complete the tasks necessary for the soil, plant, water, and nutrient relationships to be successful, native trees should be planted to protect against erosion. Other important issues for the success of this task will be soil types, healthy stock trees, and survival of planted trees. The data gathered from this study must also be accepted and implemented by the small farmers and non-agriculture landowners, for whom the research is directed to ensure that erosion is controlled. If the research data is not accepted and implemented by the targeted audiences, town hall meetings incorporating county agents will be used to determine what new methods must be designed to change mindsets and reeducate.In order to complete the tasks necessary for the success of management and sustainability of forest resources, collaborations with scientists who have forest pathology backgrounds will be needed. Also, instrumentation for the detection of diseases such as Oak Wilt and Loblolly Decline will need to be purchased. Data gathered from this study will need to be disseminated via presentations and pamphlets to targeted audiences to ensure that these and other diseases do not spread and destroy plantations and groves. If diseases spread despite information distribution, the trees affected will have to be eradicated.In order to complete the tasks necessary for the success of Agroforestry, collaborations with the National Agroforestry Center and other forest products agencies will be needed. Innovative methods to increase income of small farmers and non-agriculture landowners will need to be invented. Also, maximum use of available resources will be needed to show targeted audiences the benefits of raw material products that were once destroyed as waste materials. If additional income is not generated, the targeted audience will remain in their present economic state. The cooperation of county agents will be needed to disseminate information about the importance of increased income for each household that Alcorn services.In order to complete the tasks necessary for the success of alternative uses of land, small farmers and non-agriculture landowners must be given information concerning techniques used for multi-purpose land practices. Small farmers and non-agriculture landowners must be taught innovative and new ideas to prevent soil erosion, increase time yields, and provide recreational usage of their property. Without this knowledge, small farmers and non-agriculture landowners will continue to thwart the progress of future generations. If new knowledge is rejected, researchers and county agents will determine a new method to stimulate interest in alternative uses of land by showing the positive components to multi-use sustainability.

2. Ultimate goal(s) of this Program

-Forest productivity- To educate and demonstrate to small farmers and landowners the benefits in conservation and sustainability of the forest for enhancing income and awareness of the need for a healthy forest environment.

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
2008	0.0	3.5	0.0	2.6
2009	0.0	4.0	0.0	3.0
2010	0.0	4.0	0.0	3.0
2011	0.0	4.0	0.0	3.0
2012	0.0	4.0	0.0	3.0

V(F). Planned Program (Activity)

1. Activity for the Program

• Identify forest pests and their host trees using rapid identification techniques as well as 2-D gel analyses. The Gas chromatography/Mass Spectrometer will be used to identify and verify natural attractants or repellents of forest pests found in the preferred planted host trees.• Tree planting for demonstration plots using native trees as treatments.• Collaborate with other agencies such as USDA Forest Service and Mississippi State University to determine the survival index of native trees' soil types and natural stands.• Set up test plots for erosion control using native trees as treatments and non-tree areas as control.• Alternative usage of forestation by-products will be formulated using materials and methods that limited-resources farmers can readily obtain.• Research guides will be established to implement techniques needed to supply limited-resources farmers with alternatives to provide additional income on their property such as multi-use endeavors.• Conduct Educational workshops to teach small farmers and non-agricultural landowners about research findings.• Conduct Educational tours for children as recruitment tools to make them aware of the careers agriculture offers for their future.• Conduct Conferences on research findings to the scientific community and the university.• Present research findings at national meetings to the global community in agriculture.• Disseminate research findings to stakeholders via newsletters, internet, town hall meetings, flyers, open forums, workshops, farm visits, and demonstration tours

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

Extension	
Direct Methods	Indirect Methods
• One-on-One Intervention • Education Class • Other 1 (Town Hall Meetings) • Demonstrations • Group Discussion • Workshop	• TV Media Programs • Web sites • Billboards • Public Service Announcement • Newsletters

3. Description of targeted audience

• Small Farmers (less than 100 acres)• Youth Aged 12-18 Years• Extension Educators• Non-Agriculture Landowners• Policy Makers

V(G). Planned Program (Outputs)

1. Standard output measures

Target for the number of persons(contacts) to be reached through direct and indirect contact methods

	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Year	Target	Target	Target	Target
2008	400	500	200	400
2009	450	600	250	500
2010	500	700	300	600
2011	550	800	350	700
2012	600	900	450	800

2. (Standard Research Target) Number of Patents

Expected Patents

2008 :0 **2009 :**0 **2010 :** 1 **2011 :** 1 **2012 :** 0

3. Expected Peer Review Publications

Year	Research Target	Extension Target
2008	0	0
2009	0	0
2010	0	0
2011	0	0
2012	0	0

V(H). State Defined Outputs

1. Output Target

- Conduct educational demonstrations and tours on tree planting using native trees as tree treatment for Forest Management for Limited Resource farm families and youth in communities.

  2008 :4 **2009 :**6 **2010 :** 8 **2011 :**10 **2012 :**12

- Conduct Educational workshops on Environmental Education for Youth on Forest Management.

  2008 :4 **2009 :**6 **2010 :** 8 **2011 :**10 **2012 :**12

- Conduct events at State Fair and develop Exhibits for Career Day on Environmental Forestry Management.

  2008 :2 **2009 :**4 **2010 :** 6 **2011 :**8 **2012 :**10

V(I). State Defined Outcome

1. Outcome Target

Percent of participants gaining knowledge and skills on Forest Management.

2. Outcome Type : Change in Knowledge Outcome Measure

2008 :15 **2009 :** 20 **2010 :** 25 **2011 :**30 **2012 :** 35

3. Associated Knowledge Area(s)

- 123 - Management and Sustainability of Forest Resources

1. Outcome Target

Number of persons implementing erosion techniques

2. Outcome Type : Change in Action Outcome Measure

2008 :	2009 :	2010 :	2011 :	2012 :
2	4	6	10	12

3. Associated Knowledge Area(s)

- 123 - Management and Sustainability of Forest Resources

1. Outcome Target

Percent of landowners and farms decrease of soil erosion on forest land.

2. Outcome Type : Change in Condition Outcome Measure

2008 :	2009 :	2010 :	2011 :	2012 :
5	10	15	20	25

3. Associated Knowledge Area(s)

- 123 - Management and Sustainability of Forest Resources

1. Outcome Target

Number of Youth implementing environmental education on Forestry Management techniques.

2. Outcome Type : Change in Action Outcome Measure

2008 :	2009 :	2010 :	2011 :	2012 :
30	40	50	60	70

3. Associated Knowledge Area(s)

- 123 - Management and Sustainability of Forest Resources

1. Outcome Target

Number of Youth implementing youth education on forestry management technique.

2. Outcome Type : Change in Action Outcome Measure

2008 :	2009 :	2010 :	2011 :	2012 :
2	4	10	12	14

3. Associated Knowledge Area(s)

- 123 - Management and Sustainability of Forest Resources

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

Description

Natural disasters can destroy the trees that will be planted as part of this project. Nature has its own mind and no one can predetermine what years and how much damage that may occur. Natural disasters whether drought, flood, weather extremes, or even insect infestations can wipe out an entire forest. This destruction can be economically devastating as well as aesthetically unpleasing. Storm winds have a dramatic effect on the stability of trees. Winds can cause irreplaceable damage such as leaning, breakage, and stress.The economy can play a crucial role in maintaining as well as purchasing necessary equipment and native trees for the project. Economics also affects transporting small farmers and non-agriculture landowners to demonstration plots. Appropriation changes can determine the completion of the project. Without the needed funds, the project will cease. Appropriated funds are necessary to fund the research and personnel needed to make the project a success. Any regulations that

the government may impose can impede the sustainability of this project. Forestry has various constraints that may be implemented at any time.

V(K). Planned Program (Evaluation Studies and Data Collection)

1. Evaluation Studies Planned

- Before-After (before and after program)
- During (during program)
- Time series (multiple points before and after program)
- Comparisons between program participants (individuals,group,organizations) and non-participants

Description

• Before-After (before and after program)• During (during program)• Time series (multiple points before and after program)• Comparison between program participants (individuals, groups, and organizations) and non-participants• Peer Review Evaluations (such as Mississippi State University and the USDA Forest Service)• Peer Review Journals• Oral Presentations• Poster Presentations• Measure Landscape Changes• Measure Forest Health Improvements• Survey the Small Farmers and Non-Agriculture Landowners Acceptability and Implementation of Research DisseminatedTo evaluate the success of this project, digital pictures will be taken before the research is implemented, during the process, and at the end. This will give landowners, small farmers, and collaborators the opportunity to see how this research has made an impact. Documentation will be necessary in recording the progress of the research project. Dissemination of the findings will be done at national meetings and seminars. Information obtained from research finding will be presented in peer review journals.

2. Data Collection Methods

- Sampling
- Mail
- Telephone
- On-Site
- Observation
- Tests
- Journals

Description

Mailings will be done to invite landowners and small farmers to view demonstration plots. They will obtain on-site observations and demonstrations. The plots will also be used as part of classroom activities for students enrolled at the university. The knowledge given to the students will be tested in the form of exams to further evaluate their comprehension of the research demonstrated. From this research, publications will be used to disseminate findings to the scientific Forestry community. The telephone will be a tool used to communicate questions that any individual may have concerning the projects performed in this research.

V(A). Planned Program (Summary)

1. Name of the Planned Program

Human Development and Family Well-Being

2. Brief summary about Planned Program

The Human Development and Family Well-Being planned program will focus on providing an understanding of the social, cognitive, emotional, and physical development of individuals and families over the lifespan. The consequences of not educating parents are tremendous. Poor parenting skills are linked to abuse and neglect as well as youth behavior problems including teen pregnancy, adolescence substance abuse, and youth violence. According to surveys conducted by Alcorn State University Extension Program (ASUEP) parents who participate in parenting classes report greater knowledge of child development, increased confidence in parenting, and decreased rates of abuse and neglect. Positive outcomes for children include fewer behavioral problems, greater academic achievement, and increases in social development. Creating strong families serve as the foundation for community life by enhancing family relationships, parenting, child development and the community institutions that promote family well-being.In the area of Individual and Family Resource Management, the program will emphasize exploring strategies to assist individuals and families to obtain and use resources of time, money, and human capital to improve their economic situation. Families lack the educational information to meet their needs while keeping pace with day-to-day expenses and addressing the basics of earning, spending, saving, investing, health care, and housing issues. The complexity of the financial products and services industry, along with the rapid changes in technology, information availability, and public policy, demands a financially literate consumer. Managing money effectively to meet present needs and future goals is a learned skill. Working as learning partners with adults and youth, as individuals and families, the ASUEP had the capacity and expertise to be key contributors to a financially literate Mississippi .The ongoing challenge for the Alcorn State University Extension Program over the next five years will be to deliver educational programs to help families to effectively address such a broad range of family factors affecting limited resource families. The ASUEP exemplifies the basic concept of helping people identify their own problems and opportunities, and then provide practical, research-based information that helps them to overcome the problems and benefit from the opportunities. Finding those problems certainly requires the involvement and input of those who share the problems. Only by knowing the problems and creating awareness of the opportunities can we respond credibly with immediate, sound, and comprehensible programs .Alcorn State University Extension Program has always been a catalyst for change, developing a comprehensive environmental scanning system to facilitate the implementation of Town Hall Meetings, Focus Groups, and Individual Client Service Plans as a means to collect data that identified key issues of parenting and financial management for limited resource citizens which is primary reason for the selection of this planned program.

3. Program existence : Intermediate (One to 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

- 801 50% Individual and Family Resource Management
- 802 50% Human Development and Family Well-Being

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

1. Situation and priorities

Research by Popkins (2002) states that parents should strengthen and develop skills to build in their children qualities of resiliency, courage, self-esteem, responsibility, cooperation, and respect. 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 spends part of their childhood in poverty, lives in a single parent household and are latch key children. One in six lack adequate health insurance, 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, and elder care in the area of human development and family well-being the emotional, physical and social welfare of individuals and family members are threatened. Parents are working harder and more

than one job; hence, there is a need for child care. Many factors contribute to this process which decreases the family's internal strengths and the durability of the family unit. The dramatic economic, social, and demographic changes have extensively altered the family structure profoundly in the past forty (40) years. In order to combat such concerns, ASUEP will deliver programs on parenting practices, different developmental stages of childhood, which include a range of outcomes which are customized to meet special needs, address cultural differences and still be sensitive to the needs of particular family structures. The other challenges to be addressed include inadequate education, loss of employment, depression, suicide, low self-esteem and unsustainable life skills. 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). The ASUEP goal is to provide education to individuals and families on how to acquire the knowledge, skills, and motivation to build financial security. Programs focus on behavioral change, starting with achieving financial self-sufficiency, then stability through educational programs. References:Annie E. Casey Foundation. (1998). KIDS COUNT Online Data Service. Annie E. Casey Foundation, Baltimore, MD.Census Bureau. (2000) www.census.gov/dmd/www/2khome.htm.Economic and Commerce. (2006, April). CSREES Online Data Service. Cooperative State Research, Education, and Extension Service, Washington, DC.Popkin, Michael . (2006) Active Parenting Publishers. Online Data Service. Active Parenting, Kennesaw, GA.

2. Scope of the Program

- In-State Extension
- In-State Research

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

1. Assumptions made for the Program

ASUEP assumes that human development family well-being will respond to critical needs about innovative child care and educational programs for children and youth development; behaviors for successful couples, family relationships; family system interface to balance life roles, reduce stressors; and the influence of aging on family and community support service demands. However, many limited resource parents face many challenges and life situations that limit them from seeking and participating in human development and family well-being programs even if the programs are designed to address their immediate needs, and are affordable, and conveniently available. Families are important sources of support and guidance for children and are often tied to the strength of their families (Partnerships in Prevention Science Institute, 2006) ASUEP parenting education programs, events, activities, newsletters, brochures, and other media communications method through direct and indirect teaching can improve limited resource individual and families' situations. Educating parents about factors on human development and family well-being can alleviate problems associated with child safety, neglect, and injuries.A family's resources and experiences from day-to-day stress affect the families' well-being. There is substantial data, programs, and regulations as to the amount of credit card indebtedness that can assist families to have adequate resource to manage (ISU, 2006). Without a strong knowledge base to deal with limited resource families, the financial realities and obligations limits these families from successfully achieving financial security. Low income and many moderate income households have limited or no access to financial advice and non-biased financial and other resource management information. ASUEP assumes that limited resource individual and families will become actively involved in educational programs, events, and activities that focus on financial resource management education which entails leading to improved management practices and result in increased household disposable income and lessened financial set-backs.Reference:Iowa State University, Take Control of Your Money, 2004. Iowa State Cooperative Extension Service, 2006.Partnerships in Prevention Science Institute, Strengthening Families Program, 2006. Ames, Iowa.

2. Ultimate goal(s) of this Program

1. Improve parenting practices that result in better family development and relationship outcomes.2. Improve parent/caregivers practices to increase and provide high quality, accessible and affordable childcare.3. Improve financial management skills of targeted limited resource residents to improve their financial stability.The ultimate goal is to increase the capacity of family groups and agencies to positively impact the lives of families in communities by direct and indirect contact through educational programs, events, and activities which influence the learning, planning processes, experiences, and clientele interest. ASUEP will provide a proactive, responsive, and collaborative learning organization committed to the growth and development of people through life-long learning.

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
2008	0.0	4.0	0.0	0.0
2009	0.0	4.5	0.0	0.0
2010	0.0	4.5	0.0	0.0
2011	0.0	4.5	0.0	0.0
2012	0.0	5.0	0.0	0.0

V(F). Planned Program (Activity)

1. Activity for the Program

This is a comprehensive, statewide educational program entailing multiple education methods depending on local context and need. Campus-based staff and extension county-based educators are involved in designing, implementing, and evaluating educational efforts depending on the focus and scope of their role. ASUEP in the areas of Human Development and Family Well-Being and Individual Family Resource Management will conduct educational sessions to educate limited resource individuals and families on the importance of parenting, and financial management skills as a result of data collected through town hall, advisory meetings, focus groups, and Individual Client Service Plans. Therefore, educational sessions will be conducted as follows: one (1) program every other month (6 mo. x 3 co. = 18) within five (5) regions four (4) events per year in three (3) counties, two (2) workshops, and/or group meetings tours, demonstrations, seminars per month in five (5) counties in various communities, local government and extension offices, one-on-one home visits will be conducted as well as providing clientele with six (6) newsletters, and information through four (4) quarterly radio or television sessions

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

Extension	
Direct Methods	Indirect Methods
• One-on-One Intervention • Education Class • Workshop • Group Discussion	• Public Service Announcement • Newsletters • TV Media Programs • Web sites

3. Description of targeted audience

The target audiences are limited resource families, single parent families, and individuals in the state of Mississippi.

V(G). Planned Program (Outputs)

1. Standard output measures

Target for the number of persons(contacts) to be reached through direct and indirect contact methods

	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Year	Target	Target	Target	Target
2008	1200	1000	150	350
2009	1350	1200	200	400
2010	1500	1500	225	450
2011	1500	1800	250	500
2012	1550	2000	300	550

2. (Standard Research Target) Number of Patents

Expected Patents

2008 :0 **2009 :**0 **2010 :** 0 **2011 :** 0 **2012 :** 0

3. Expected Peer Review Publications

Year	Research Target	Extension Target
2008	0	0
2009	0	0
2010	0	0
2011	0	0
2012	0	0

V(H). State Defined Outputs

1. Output Target

- Conduct educational programs in Human Development & Family Resource Management

  2008 :18 **2009 :**18 **2010 :** 18 **2011 :**18 **2012 :**20

- Conduct events (fairs, conferences, field days, etc.) in Human Development & Family Resource Management

  2008 :8 **2009 :**10 **2010 :** 12 **2011 :**14 **2012 :**16

- Target Activities Human Development and Family Resource Management

  2008 :15 **2009 :**20 **2010 :** 25 **2011 :**30 **2012 :**35

- Develop newsletters Human Development and Family Resource Management

  2008 :6 **2009 :**8 **2010 :** 10 **2011 :**12 **2012 :**14

- Develop Radio/TV programs developed for human developemnt

  2008 :3 **2009 :**3 **2010 :** 3 **2011 :**3 **2012 :**3

V(I). State Defined Outcome

1. Outcome Target

Percent of limited resource participants reporting to have applied positive parenting practices

2. Outcome Type : Change in Action Outcome Measure

2008 :	**2009 :**	**2010 :**	**2011 :**	**2012 :**
10	12	14	16	18

3. Associated Knowledge Area(s)

- 802 - Human Development and Family Well-Being

1. Outcome Target

Percent of limited resource participants reporting to have applied good infant and child care practices

2. Outcome Type : Change in Action Outcome Measure

2008 :	**2009 :**	**2010 :**	**2011 :**	**2012 :**
8	10	12	14	16

3. Associated Knowledge Area(s)

- 802 - Human Development and Family Well-Being

1. Outcome Target

Percent of limited resource participants reporting to have used child care quality characteristics in their care selection

2. Outcome Type : Change in Action Outcome Measure

2008 :	**2009 :**	**2010 :**	**2011 :**	**2012 :**
10	12	14	16	18

3. Associated Knowledge Area(s)

- 802 - Human Development and Family Well-Being

1. Outcome Target

Percent of limited resource participants to develop and utilize skills to analyze financial statements to make effective managerial and financial decisions

2. Outcome Type : Change in Action Outcome Measure

2008 :	**2009 :**	**2010 :**	**2011 :**	**2012 :**
8	10	12	14	16

3. Associated Knowledge Area(s)

- 801 - Individual and Family Resource Management

1. Outcome Target

Percent of parents/relative caregivers reporting to have experienced positive change in parent-child relationships that they attribute to implementing new parenting behaviors learned in educational programs

2. Outcome Type : Change in Condition Outcome Measure

2008 :	**2009 :**	**2010 :**	**2011 :**	**2012 :**
3	5	7	9	12

3. Associated Knowledge Area(s)

- 802 - Human Development and Family Well-Being

1. Outcome Target

Percent of child care providers, child care programs or parents reporting improved child care as a result of participating in educational programs

2. Outcome Type : Change in Condition Outcome Measure

2008 :	**2009 :**	**2010 :**	**2011 :**	**2012 :**
2	5	6	10	12

3. Associated Knowledge Area(s)

- 802 - Human Development and Family Well-Being

1. Outcome Target

Percent decrease in financial in debt for utilized financial and credit management

2. Outcome Type : Change in Condition Outcome Measure

2008 :	**2009 :**	**2010 :**	**2011 :**	**2012 :**
5	8	10	12	15

3. Associated Knowledge Area(s)

- 801 - Individual and Family Resource Management

1. Outcome Target

Percent of (target contact) limited resource participant to gain knowledge of financial management skills of preparing a budget, developing a financial emergency plan, credit management, and identify theft

2. Outcome Type : Change in Knowledge Outcome Measure

2008 :	**2009 :**	**2010 :**	**2011 :**	**2012 :**
15	20	25	30	35

3. Associated Knowledge Area(s)

- 801 - Individual and Family Resource Management

1. Outcome Target

Percent of youths to gain knowledge and develop sound consumer and financial skills to assist in family financial management

2. Outcome Type : Change in Knowledge Outcome Measure

2008 :	**2009 :**	**2010 :**	**2011 :**	**2012 :**
35	45	50	50	50

3. Associated Knowledge Area(s)

- 802 - Human Development and Family Well-Being

1. Outcome Target

Percent of (target contact) program participants who demonstrate knowledge or skill gained related to positive parenting practices and child care needs

2. Outcome Type : Change in Knowledge Outcome Measure

2008 :	**2009 :**	**2010 :**	**2011 :**	**2012 :**
35	45	50	50	50

3. Associated Knowledge Area(s)

- 802 - Human Development and Family Well-Being

V(J). Planned Program (External Factors)

1. External Factors which may affect Outcomes

- Economy
- Competing Programatic Challenges
- Populations changes (immigration,new cultural groupings,etc.)
- Public Policy changes
- Government Regulations
- Competing Public priorities

Description

Economy - the economic funding resources for providing quality and increasing the availability and accessibility of child care and parenting program and services which can limit the impact on limited resource single parent and families.The lack of the availability of limited personnel and other critical resources can impact on program implementation in communities of the state.Government regulation - policies driven by public priorities that can change the circumstances of personal finances.Public Policy Changes - number of children required to attend child care centers throughout the state which impacts programs.Competing Public Priorities- Communities and societies face issues that require collaborative efforts and attention to enhance potential impact and effect on families through collaboration.Competing Programmatic Challenges- State and Regional programs with similar educational focuses across communities influence both needs and program strategy.Population Changes-the growth of minority populations in many communities across the state emphasizes a need for programming more diverse cultures and values related to parenting and child care.

V(K). Planned Program (Evaluation Studies and Data Collection)

1. Evaluation Studies Planned

- Before-After (before and after program)
- During (during program)
- After Only (post program)
- Time series (multiple points before and after program)

Description

To measure adoption of practices a follow-up with the clientele trained a few months after the session or series. Some processes to be used:• Identify and conduct a telephone summary of a sample of parents from enrollment lists (every 5th, 10th or 25th name). Make phone calls 6-10 weeks after the session. Ask them 2-3 prepared questions. Record the percentage of who report they have changed their interactions with children or as parents.•Adoption of practices utilizing sampling method, to generalize the percent of the whole audience to arrive at the reported figure. Sample questions may include: Did you use information presented from the educational events, activities on human development (date, title, location), what specifically have you used more than once? What techniques have you shared with someone else? Outside evaluation specialist for MSU will be utilized to evaluate educational programs of this planned program to obtain to utilize an external expert on the program effectiveness with limited resource audiences. • Calculate their results with counting 36/40 of participants indicated they have adopted practices. A report will be generated that states the percentage of those interviewed adopted practices or if this was a sample of a larger group, obtain a percent by reporting 90 (out of 100).

2. Data Collection Methods

- On-Site
- Observation
- Case Study
- Structured

Description

Basic program documentation and monitoring activities include collected data on program outputs and resource clientele. Program outcome data is collected through direct observation, participant feedback before, during, and after programs, systematic collection of anecdotal information, and follow-up surveys.• Results will be counted 36/40 who indicate they have adopted practices. A report will be generated that states the percentage of those interviewed adopted practices or if this was a sample of a larger group, obtain a number by reporting 90 (out of 100).• Use a written sample survey (similar to phone survey but mailed or delivered). Provide incentive to increase returns and write up results.• Hold an end of session focus group to be conducted by someone other than the primary instructor. This information will provide qualitative information.• Record keeping sheets are offered for use. A number or a set of initials for each client will be assign so that you know if the same client comes to multiple sessions and gains knowledge more than once. Then when the reported knowledge is gained, the staff is only reporting the number of actual people gaining knowledge and not duplicating this by the number of times they attended.Each local site uses a different mix of these methods appropriate to their level of implementation of educational program, events and activities. etc. Local extension staff provides quarterly and annual reports via a web-based reporting system documenting program participation data, reports against an output/outcome template derived from the approved Federal plan of work, and selected success stories.

V(A). Planned Program (Summary)

1. Name of the Planned Program

Human Nutrition, Health, Wellness and Obesity

2. Brief summary about Planned Program

The planned program focuses on improving the foods and food products consumed in the state of Mississippi especially in the Southwest, Coastal and Delta regions. The scope of the research will cover improvements in all aspects of foods including functional, sensory, economic, nutrition and selection criteria and composition. Research will span from developing more effective nutrition education tools to understanding fundamental principles of food ingredients, nutritive value and bioavailability. The overarching objective of this project is to improve human food consumption patterns that will enhance a healthy, well nourished population. Diet and nutrition are major factors in assuring adequate growth in children to maintaining optimal health, and preventing acute and/or chronic diseases stemming from obesity such as heart disease, diabetes and hypertension. The program, therefore, will involve an understanding of the foods consumed in rural areas, their nutrient composition, their function and how they can be utilized and/or augmented to promote lifestyle changes. The four major behavior changes to be address are dietary, social, physical activity and personal health habits to reduce obesity and the prevalence of chronic, high risk diseases in youth and adults. The planned program, will stress fostering healthy lifestyles through translating behavior research into practical application and disseminating current nutrition education to address human nutrition, health, wellness and obesity to foster healthier lifestyles of individuals and families in communities in the state of Mississippi. Educational programs have been successful in addressing health concerns identified within the rural communities. A reduction in blood pressure and glucose level are to be realized among limited resource individuals and families from adopting healthy food choices. Therefore, nutrition education, weight management and increased physical activity will be emphasized for limited resources individual and families in communities of the state especially in the Southwest and Delta regions of the state of Mississippi. Research projects that addresses obesity will be implemented with nutrition education programs to slow down or stop excessive weight gain and increased physical activity among rural residents. The following objective will be achieved by the program: Improve our understanding of the principles of ingredients and flavor of foods. Increase our understanding of human nutritional needs and nutrient metabolism. Assess and optimize bioavailability of dietary components. Determine optimal dietary intakes for health maintenance and disease prevention. Develop strategies to improve the quality and nutritional value of foods consumed. Develop novel foods and food ingredients that will help prevent human disease. Improve tools for food surveys and nutritional assessment. Optimize market aspects of improved food products. Develop strategies for effective nutrition education. Improve our understanding of dietary and feeding choices.

3. Program existence : Intermediate (One to 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 : Yes

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

- 701 5% Nutrient Composition of Food
- 702 5% Requirements and Function of Nutrients and Other Food Components
- 703 80% Nutrition Education and Behavior
- 724 10% Healthy Lifestyle

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

1. Situation and priorities

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, (J.P. Peter, 2002). In 2004, 60% of Mississippi citizens were overweight. Obesity has been linked to the increased risk of chronic disease such as hypertension, type II diabetes, heart disease, stroke, gallbladder disease, osteoarthritis, sleep apnea and colon cancer. Almost 190,000 adults in the state now have been diagnosed with diabetes, with an estimated 520,000 adults considered obese. Heart disease is the number one killer in the state. Thirty-four (34%) of Mississippians had hypertension, with diabetes being the 7th leading cause of death in the state, (MS. State Department of Health 2005). Chronic disease is responsible for 7 out of 10 deaths each year. Practical application of healthy lifestyles and positive eating habits can reduce excess weight gain, lower the cost of

medical insurance, prescription medication and frequent visits to the doctor's office. A number of social, health and socioeconomic factors affect the prevalence of obesity in the state of Mississippi. Socially disadvantaged groups such as single parents, women, elderly, or disabled individuals are at greater risk of suffering from nutrition-related health conditions, (Wrigley, 2002). According to the 2002 Census, Southwest Mississippi consists of sixteen counties with a poverty rate of 23.71% of all households. The region has an all time high infant mortality rate of 28.74%. The percentage of the population receiving food stamps ranked at 12.18% with 28.74% of the total population having less than a high school degree of education. The problem of obesity in Mississippi may be partly due to the lack of community involvement in identifying the problems, and a lack community approach for developing appropriate interventions. Past efforts at Alcorn involving research and outreach with an emphasis on community approaches resulted in significant decreases in blood pressure and cholesterol. Researchers have also noted that the current environment, as it relates to the layout of communities including locations of food supplies, recreational facilities, and access to these locations, does not support healthy life styles. Proper access to adequate healthcare and hospital services is a crucial issue for rural and poverty stricken areas in Mississippi. Environment can be conceptualized as multi-faceted, including physical, economic, and socio-cultural factors (Yancey et al., 2004). Information linking diet and health is increasing, but consumers in these rural communities of Mississippi are more dependent upon processed and packaged foods for larger proportions of their meals. Based on the "Foods 2000" results from the Delta, there is a greater dependence on stores like gas stations, Dollar General, Wal-Mart and other non-food retailers, for prepared foods and groceries. This, points to a critical need to make foods with improved nutritional properties that will maintain optimal health and prevent disease available.

2. Scope of the Program

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

Grow a healthy and well nourished population through the development and dissemination of information on new and improved methods, practices, and products that will result in increased public awareness of health promoting dietary and food consumption behaviors. Increase knowledge and skills, change behavior patterns of culturally sensitive practices to decrease the trend of excessive weight gain. This measure should improve the health status, the quality of life and longevity of Mississippi rural population. Increase in the research information disseminated by ASU scientists and through the Extension service that can be applied in other rural communities nationwide.

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
2008	0.0	4.0	0.0	6.0
2009	0.0	4.5	0.0	6.5
2010	0.0	4.5	0.0	6.5
2011	0.0	4.5	0.0	6.5
2012	0.0	4.5	0.0	6.5

V(F). Planned Program (Activity)

1. Activity for the Program

• Investigate the impact of social, psychological and economic factors on food choices.• Research food consumption patterns, improved tools for dietary intake assessment and nutritional status pertinent to rural communities.• Research the educational programs that are effectively informing and educating people in rural communities about related issues of food and nutrition.• Develop interventions using tenets of Community based participatory research (CBPR) approach which ensures collaboration from the communities and sustainability of the outcomes.• Use the CBPR approach, fostering “Equal access” will be a goal in reaching audiences that are diverse in terms of income, language, age, gender and culture. Some issues will be addressed through public policy and community capacity building.• Determine the prevalence of nutrition related problems such as malnutrition, food insecurity, lack of nutrition information and knowledge that can lead to obesity and nutrition related diseases. Empower people to reclaim control of their lives by developing positive lifelong habits related to safe and healthy eating at home and away from home, regular physical activity, stress management and time management.• Conduct workshops within local communities to promote nutrition and healthy lifestyles.• Conduct Seminars to increase the use of garden fresh vegetables.• Provide technical assistance on a continual basis in the promotion of community activities and events geared toward the improvement of healthy weights, adequate nutrient intake, preventive steps in childhood obesity and intervention steps in managing per existing medical conditions.• Providing educational training sessions and information exchange among program participants engaged in the program will enables them to make wise decisions concerning nutrition, health and lifestyle. The community-based weight management program is expected to decrease the incident of major health problems and save medical dollars. The program translates scientific methods of losing and maintaining healthy weights for longevity of life. The program offers eight weeks learning sessions including: practical application in dietary therapy, behavior therapy, physical activities, stress reduction, and recipe modification. The research output will include publications in refereed journals, non refereed publications, oral and poster presentations at professional conferences and newsletters articles. Joint research and extension output will include workshops, demonstrations and seminars.

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

Extension	
Direct Methods	**Indirect Methods**
• Other 1 (Seminars) • Workshop • Education Class • Demonstrations • Other 2 (Technical Assistance) • Group Discussion • One-on-One Intervention	• Billboards • Public Service Announcement • TV Media Programs • Newsletters • Web sites

3. Description of targeted audience

- High Risk obese Adults and Youth- High Risk Adults and youth with Chronic Diseases- Limited Resource Families- Other interested community membersThe target audience will initially include all community members. Baseline assessment data

will be collected on community members from the age of 3 and above. Through the CBPR process the community will identify what they believe are their problems, and through collaborations with the university, will design an intervention to address the identified problem. This could include interventions targeting children or intervention targeting adults or both.

V(G). Planned Program (Outputs)

1. Standard output measures

Target for the number of persons(contacts) to be reached through direct and indirect contact methods

	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Year	Target	Target	Target	Target
2008	1537	1200	1200	1000
2009	1763	1400	1700	1200
2010	2001	1600	1400	1400
2011	2251	1800	2500	1600
2012	3000	2000	3000	1700

2. (Standard Research Target) Number of Patents

Expected Patents

2008 :0 **2009 :**0 **2010 :** 0 **2011 :** 0 **2012 :** 0

3. Expected Peer Review Publications

Year	Research Target	Extension Target
2008	0	1
2009	0	1
2010	0	1
2011	0	1
2012	0	1

V(H). State Defined Outputs

1. Output Target

- Number of community members involved in the CBPR process

  2008 :300 **2009 :**300 **2010 :** 300 **2011 :**300 **2012 :**300

- Number of interventions

  2008 :3 **2009 :**6 **2010 :** 8 **2011 :**10 **2012 :**12

- Conduct educational classes on adequate nutrient consumption and physical fitness and lifestyle.

  2008 :24 **2009 :**35 **2010 :** 40 **2011 :**45 **2012 :**50

- Conduct demonstrations on recipe modification to decrease fat, salt and sugar

2008 :6 **2009 :**10 **2010 :** 15 **2011 :**21 **2012 :**25

- Provide educational seminars on obesity related health conditions

2008 :10 **2009 :**12 **2010 :** 18 **2011 :**21 **2012 :**24

- Conduct community activities in nutrition and health

2008 :9 **2009 :**12 **2010 :** 28 **2011 :**32 **2012 :**39

- Research studies conducted on Human Nutrition, Health, Wellness and Obesity

2008 :4 **2009 :**5 **2010 :** 5 **2011 :**6 **2012 :**8

- Research papers prepared for publication in refereed and non-refereed outlets

2008 :4 **2009 :**6 **2010 :** 6 **2011 :**7 **2012 :**7

- Research results presented at conferences

2008 :4 **2009 :**4 **2010 :** 4 **2011 :**4 **2012 :**4

V(I). State Defined Outcome

1. Outcome Target

Percentages of participants that will improve their nutritional knowledge on healthy lifestyle.

2. Outcome Type : Change in Knowledge Outcome Measure

2008 :28 **2009 :** 37 **2010 :** 43 **2011 :**48 **2012 :** 51

3. Associated Knowledge Area(s)

- 724 - Healthy Lifestyle

1. Outcome Target

Percentages of participants that will increase physical activity to reduce stress and maintain healthy weights.

2. Outcome Type : Change in Action Outcome Measure

2008 :12 **2009 :** 15 **2010 :** 20 **2011 :**22 **2012 :** 25

3. Associated Knowledge Area(s)

- 724 - Healthy Lifestyle

1. Outcome Target

Percentages of participants that will improve existing health conditions related to obesity through the enhancement of positive lifestyles.

2. Outcome Type : Change in Action Outcome Measure

2008 :10 **2009 :** 12 **2010 :** 14 **2011 :**16 **2012 :** 18

3. Associated Knowledge Area(s)

- 703 - Nutrition Education and Behavior

1. Outcome Target

Percentages of participants that will increase their involvement in the number of organized neighborhood sports and or other programs to increase physical fitness among youth at risk.

2. Outcome Type : Change in Action Outcome Measure

2008 :	**2009 :**	**2010 :**	**2011 :**	**2012 :**
4	6	8	10	12

3. Associated Knowledge Area(s)

- 702 - Requirements and Function of Nutrients and Other Food Components

1. Outcome Target

Percentage of participants that will reduce fast foods consumption with an increase in home prepared meals.

2. Outcome Type : Change in Action Outcome Measure

2008 :	**2009 :**	**2010 :**	**2011 :**	**2012 :**
12	14	16	18	20

3. Associated Knowledge Area(s)

- 701 - Nutrient Composition of Food

1. Outcome Target

Percentages of participants that will improve lifestyles behavior in the management or prevention of diabetes.

2. Outcome Type : Change in Condition Outcome Measure

2008 :	**2009 :**	**2010 :**	**2011 :**	**2012 :**
5	8	10	12	14

3. Associated Knowledge Area(s)

- 703 - Nutrition Education and Behavior

1. Outcome Target

Percentages of participants that will changes lifestyles behaviors in the management or prevention for hypertension.

2. Outcome Type : Change in Condition Outcome Measure

2008 :	**2009 :**	**2010 :**	**2011 :**	**2012 :**
3	5	7	9	10

3. Associated Knowledge Area(s)

- 703 - Nutrition Education and Behavior

1. Outcome Target

Percentages of participants that will improve lifestyles behaviors in the management or prevention of heart disease.

2. Outcome Type : Change in Condition Outcome Measure

2008 :	**2009 :**	**2010 :**	**2011 :**	**2012 :**
8	10	12	14	16

3. Associated Knowledge Area(s)

- 703 - Nutrition Education and Behavior

1. Outcome Target

Percentages of participants that will improve skills in the management or prevention of childhood overweight and obesity.

2. Outcome Type : Change in Condition Outcome Measure

2008 :	**2009 :**	**2010 :**	**2011 :**	**2012 :**
5	7	10	12	15

3. Associated Knowledge Area(s)

- 724 - Healthy Lifestyle

1. Outcome Target

Percentages of participants that will maintain weight loss.

2. Outcome Type : Change in Condition Outcome Measure

2008 :	**2009 :**	**2010 :**	**2011 :**	**2012 :**
4	6	8	10	12

3. Associated Knowledge Area(s)

- 724 - Healthy Lifestyle

1. Outcome Target

Percentages of participants that will decrease excessive weight gain.

2. Outcome Type : Change in Condition Outcome Measure

2008 :	**2009 :**	**2010 :**	**2011 :**	**2012 :**
5	8	10	12	14

3. Associated Knowledge Area(s)

- 703 - Nutrition Education and Behavior

1. Outcome Target

Percentages of children that will increase physical fitness.

2. Outcome Type : Change in Condition Outcome Measure

2008 :	**2009 :**	**2010 :**	**2011 :**	**2012 :**
10	15	20	25	28

3. Associated Knowledge Area(s)

- 703 - Nutrition Education and Behavior

1. Outcome Target

Percentages of participants that will Increase their consumption of healthier food products which promote healthier eating and reduction of chronic diseases.

2. Outcome Type : Change in Condition Outcome Measure

2008 :	**2009 :**	**2010 :**	**2011 :**	**2012 :**
5	7	10	12	15

3. Associated Knowledge Area(s)

- 702 - Requirements and Function of Nutrients and Other Food Components

V(J). Planned Program (External Factors)

1. External Factors which may affect Outcomes

- Natural Disasters (drought,weather extremes,etc.)
- Other (Poor transportation)
- Public Policy changes
- Economy

Description

Natural Disasters: Natural disasters such as Hurricane Katrina may affect the research component. This may cause problems in the availability of nutritious foods. Natural disasters can also force the participants to relocate resulting in a decrease in program participation.Environmental measures: may influence those population groups which are hard to reach with health education programs such as those with lower educational attainment, lower incomes and language barriers. Environmental changes may also be cost-effective and have a more lasting effect on behavior changes because they become incorporated into structures, systems policies and socio-cultural norms. Additionally in the area of obesity, environmental changes minimize the direct message to the public about body size thereby reducing the chance of contributing to eating disorders and distorted perceptions of body image. Resistance to change: This could be due to techniques and management and suspicion which can be potential obstacles to achieving the objectives. In addition, reduction of traditionally available public and private sector financial-risk mitigation programs, such as availability of insurance, can add to this resistance to try/adopt innovative practices. Using the CBPR approach could be one solution to this problem.

V(K). Planned Program (Evaluation Studies and Data Collection)

1. Evaluation Studies Planned

- Comparisons between program participants (individuals,group,organizations) and non-participants
- During (during program)
- Before-After (before and after program)
- Case Study

Description

The experimental design of most studies will be: Pre- post-. Intervention community with control community Delayed interventionInstruments to Assess the Obesity Problem through Baseline data collection on the following Psycho-social Socio-economic Anthropometric Biological Geographical layout of communities Availability of food stores and recreational facilitiesIncrease Public Awareness of the Problem through Social Marketing Campaign Brand the Community Based Research in the Communities Solicit community member involvement Process evaluation of Social MarketingRecruit Community MembersCommunities will be active members in the collaborative process as the baseline data is evaluated, problems identified and interventions developedThe challenge now is to develop innovative strategies for reaching the individual within the community and to develop methods for evaluation that make common and scientific sense. Population behavior change can occur, even though the gains may be smaller than anticipated. Promoting and evaluating the participant's behavior change continues to be a major challenge. The development and execution of nutrition and health intervention programs will require the following steps: (1) need analysis, (2) problem identification, (3) strategy development, (4) intervention and (5) evaluation.

2. Data Collection Methods

- Tests
- Structured
- Observation
- On-Site
- Sampling
- Mail

Description

In behavior study there is a need to consider both individual variations within each community, and community-level variations within each treatment group.Two sets of sample sizes must be considered: the number of individuals in each community to be sampled and the number of communities to be included. Studies should report justification for sample size at both of these levels with, ideally, power calculations at both individual and community level.Intervention Group – Participants who attend events, activities and programs developed and implemented to improve weight managements, chronic diseases and healthy lifestyles will be identified as the intervention group.Control Group— randomly selected rural counties who did not receive the intervention will be asked to complete the pre-post evaluation instrument to measure nutrition knowledge, food choices, attitudes and behavioral changes compared to that of the intervention counties.The Pre-Post Evaluation-- instruments to measure awareness, knowledge, attitudes and the health belief model of the intervention counties compared to that of the control counties who did not receive the Healthy Weights Program intervention model.Primary data will be transferred from the Tracking and Evaluation Folders using the computer software program Nutritionist IV Data Base. The data will be used for evaluating the lifestyle of the rural communities. Research scientists will have access to valid data, which can be used to write nutrition articles and design educational prevention programs in nutrition and health. Data collected will not only serve as tools for evaluating program outcome and impact, but as an avenue for collecting primary data on the living conditions, nutrition status, lifestyle and health problems of the rural communities in Southwest Mississippi.Sustainable Evaluation- mail-out instruments to measure project participants six weeks after completing Healthy Weights 10-week segment. The instruments will assess the impact.Reference:McGinnis, J. M. and Nestle, M. (1989). The Surgeon General's report on nutrition and health: Policy implications and implementation strategies. American Journal of Clinical Nutrition, 49, 23-28.Centers for Disease Control and Prevention. Obesity still on the rise, new data show. National Center for Health Statistics. Available at: http://www.cdc.gov/nchs/releases/02news/obesityonrise.htm. Accessed March 14, 2004.

V(A). Planned Program (Summary)

1. Name of the Planned Program

Small Family Farm Enterprise Financial Analysis, Management, and Marketing

2. Brief summary about Planned Program

The planned program, through both research and extension outreach programming in the School of AREAS at Alcorn State University, strives to serve the needs of small and limited resource farmers. It encompasses the economics of agricultural production and farm management, business management, finance, taxation, marketing, and distribution practices.In the area of Economics of Agricultural Production and Farm Management, up-to-date economic analyses will be provided to delineate the factors that may contribute to farm profitability and sustainability. Farm and enterprise budgets will be developed and regularly updated. Models of profitable and sustainable operations and strategies would be determined and used in the delivery of extension programs to farmers who are experiencing financial stress. Small Farm Development Center of Alcorn State University will be an intergral part of this project.In the area of Business Management, Finance and Taxation, the planned program will focus on the financial situation of the farm family, their debt level, spending ability and income generating capacity. Research will be designed to determine the situation of farmers with regard to their level of knowledge about farm record keeping, financial analysis, decision-making, and other critical areas affecting financial viability. Educational programs, events, activities and technical assistance will be implemented to address the relevant issues and needs of limited resource farm families. In the area of Marketing and Distribution Practices, the program will focus on local, niche, regional, national and international markets, to provide reliable research-based market analyses, and an understanding of the economic environment, marketing institutions, policy, regulatory, and global settings that are constantly changing. Joint extension and research studies and extension programming will focus on addressing problems associated with enterprise and market selection, optimal resource allocation in production, risk management. Furthermore, extension and outreach programs will be designed with the ultimate goal of enhancing the economic viability of small and limited resource farms and families.

3. Program existence : Intermediate (One to 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 : Yes

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

- 601 30% Economics of Agricultural Production and Farm Management
- 602 40% Business Management, Finance, and Taxation
- 604 30% Marketing and Distribution Practices

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

1. Situation and priorities

Agriculture and forestry contribute significantly to the economy of the State of Mississippi, producing more than $ 5 billion worth of goods and services. The income created in agriculture and forestry generates more than $20 billion impact on the overall state economy via multiplier effects. Small and limited resource farms (i.e., farms generating less than $100,000 annual sales) constitute approximately 90% of Mississippi's 42,186 farms, according to the 2002 Census of Agriculture (USDA, NASS, 2003). Small and limited resource farmers are important to Mississippi's economy because of the unique nature of farm structure in this state. A large proportion of farmers in Alcorn State University's clientele are small and limited resource farmers. These farms are engaged in a variety of crop and livestock enterprises, including traditional field crops, beef, and new alternatives enterprises targeted to niche markets. Small farmers face numerous challenges having negative impact on financial and economic performance. Fox et al. (1993), Sonka, et al. (1989), Abbott and Yarbrough (1993), are examples of past studies that investigated large farms managerial performance and income variability, and computer technology use in decision-making. Similarly, some past studies have examined farm management, marketing, policy and farm structure from the perspective of small and limited resource farmers (Nelson et al., 1999; Anderson and Roth, 1997; Gebremedhin and Christy, 1996). The planned program will expand on Alcorn's past research, extension and outreach efforts. For example, research will continue to address problems associated with enterprise and market selection, optimal resource allocation in production, risk management, farm business management, and financial and marketing strategies to enhance farm income, overall farm profitability, and individual/family

resource allocation. ReferencesAbbott, E. and Paul Yarbrough. (1993). “The Unequal Impacts of Microcomputer Adoption and Use on Farmers.” Proceedings, International Conference on Information Technology and People,-ITPA ’93, Moscow, Russia.Anderson, G. and M. Roth. (1997). “A Role for the Land Grant System in Strengthening the Marketing Skills, Practices and Opportunities of Small Farmers”. In D. Ebodaghe (ed.), Proceedings of the National Small Farm Conference. USDA, CSREES.Fox, G. P., A. Bergen, and E. Dickson. (1993). “Why are some farms more successful than others? A Review, “In Size, Structure, and the changing Face of American Agriculture. Ed., A. Hallman, pp. 232-50. Boulders, Co: Westview Press.Gebremedhin, T.G. and R. Christy. (1996). “Structural Changes in Agriculture: Implications for Small Farms, “Journal of Agricultural and Applied Economics, Volume 28, number 1.Nelson, B., M. Roth and J. Maestro-Sherer. (2000). Direct Marketing Today- Challenges and Opportunities. U.S. Department of Agriculture, AMS.Sonka, S. T., R. H. Hornbaker, and M.A. Hudson. (1989). “ Managerial Performance and Income Variability for a Sample of Illinois Cash Grain Producers.” North Central Journal of Agricultural Economics. Vol. 1, pp.219-226.USDA, NASS. (2003). Census of Agriculture.

2. Scope of the Program

- In-State Extension
- In-State Research

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

1. Assumptions made for the Program

• By providing technical assistance in financial management an assumption of the planned program is that the farmers’ profit will increase, the farmers’ debt will decrease, that their quality of life is not adequate, that they will adapt to business management and that this will help increase their chances of getting a loan and other assistances made available by both Federal and State Agencies.• The planned program is expected to increase the knowledge of small and limited resource farmers in farm management, business management, finance, marketing and distribution of farm products.• Personnel/FTE allocation, and funding are internal environmental variables that may affect outcome.• The participants in this planned program are expected to be small and limited resource farmers with varying educational background and limited access to capital for startup. The participants in the planned program are assumed to have a desire to improve their current situation.• County staff will provide adequate liaison between the state staff and the participating farmer for effective implementation of the planned program.• Profitable marketing is assumed to require a logical approach in deciding at what price to sell or buy and by what method to establish that price. The decision of how to market and at what price requires an informed understanding of how markets work and why prices move up and down. Knowing the basics of supply and demand is necessary. But, also understanding the various marketing methods and tools helps in making the right marketing decisions.

2. Ultimate goal(s) of this Program

The ultimate goal is to enhance the economic viability of small and limited resource farm families by strengthening their technical knowledge, skills and economic decision-making so that they can contribute fully to the agricultural economy; better their own lives and the lives of their children or other dependents, ultimately benefiting the society as a whole in rural Mississippi.

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
2008	0.0	9.5	0.0	5.5
2009	0.0	10.0	0.0	6.0
2010	0.0	10.0	0.0	6.0
2011	0.0	10.0	0.0	6.0
2012	0.0	10.0	0.0	6.0

V(F). Planned Program (Activity)

1. Activity for the Program

Research activities: Collection of primary data from farmers, retailers and other economic units along the supply chain; gathering and collation of relevant secondary statistical data; analysis of production, managerial, marketing and financial data; development of enterprise budgets; development of models of effective strategies; dissemination of results.One conference presentation per year; one non-refereed publication per year; one biennial refereed journal article; two presentations annually at meetings and workshops for farmers.Extension and Outreach Activities: Will consist of the development (or identification) of relevant training materials to address knowledge gaps and training needs of farmers. Focus GroupsSurvey instrumentsOne research project per yearWorkshop/MeetingsDevelopment of curricula and learning resourcesEvaluation and assessmentTypes of Methods Research methods will include focus groups, surveys to obtain primary data; data analysis through cross-tabulations, analysis of variance, regression techniques, enterprise, whole farm and partial budgeting techniques, linear programming, 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 farmers, field days tours and small farmers' conferences. Additionally, farmers will be reached via indirect methods, such as, public service announcements, news bulletins, media programs and web sites.

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

Extension	
Direct Methods	**Indirect Methods**
• Workshop • Education Class • Demonstrations	• Web sites • Newsletters

3. Description of targeted audience

Small farmers; limited resource farmers; family farmers and disadvantaged farmers, low-income rural families.

V(G). Planned Program (Outputs)

1. Standard output measures

Target for the number of persons(contacts) to be reached through direct and indirect contact methods

	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Year	Target	Target	Target	Target
2008	2200	1500	100	125
2009	2500	1800	125	150
2010	2700	2000	150	175
2011	3000	2200	200	200
2012	3200	2400	250	225

2. (Standard Research Target) Number of Patents

Expected Patents

2008 :0 **2009 :**0 **2010 :** 0 **2011 :** 0 **2012 :** 0

3. Expected Peer Review Publications

Year	Research Target	Extension Target
2008	0	1
2009	0	1
2010	0	1
2011	0	1
2012	0	1

V(H). State Defined Outputs

1. Output Target

- Conduct educational sessions on farm and financial management of farming operations

2008 : 18 **2009 :** 27 **2010 :** 36 **2011 :** 36 **2012 :** 36

- Conduct educational Conduct educational sessions on farm Legal Risk

2008 : 18 **2009 :** 27 **2010 :** 36 **2011 :** 36 **2012 :** 36

- Conduct educational Venders Borrowers Training

2008 : 18 **2009 :** 27 **2010 :** 36 **2011 :** 36 **2012 :** 36

- Conduct educational Workshop on Farm Management

2008 : 23 **2009 :** 28 **2010 :** 32 **2011 :** 37 **2012 :** 42

- Conduct educational demonstration on Farm Management

2008 : 16 **2009 :** 18 **2010 :** 20 **2011 :** 22 **2012 :** 24

- Conduct educational tours/ conferences

2008 : 6 **2009 :** 8 **2010 :** 10 **2011 :** 12 **2012 :** 14

V(I). State Defined Outcome

1. Outcome Target

Percentage of clientele (experiencing financial difficulty) who will benefit from the planned program through training workshops and technical assistance offered by extension personnel.

2. Outcome Type : Change in Knowledge Outcome Measure

2008 : 30 **2009 :** 35 **2010 :** 40 **2011 :** 45 **2012 :** 45

3. Associated Knowledge Area(s)

- 602 - Business Management, Finance, and Taxation

1. Outcome Target

Percentage increase in farmers who demonstrate knowledge or skill gained of their Legal Rights.

2. Outcome Type : Change in Knowledge Outcome Measure

2008 : 30 **2009 :** 35 **2010 :** 40 **2011 :** 45 **2012 :** 45

3. Associated Knowledge Area(s)

- 602 - Business Management, Finance, and Taxation

1. Outcome Target

Percentage increase of clientele gaining knowledge or skill to minimize legal risks on farms.

2. Outcome Type : Change in Knowledge Outcome Measure

2008 :	**2009 :**	**2010 :**	**2011 :**	**2012 :**
30	35	40	45	45

3. Associated Knowledge Area(s)

- 601 - Economics of Agricultural Production and Farm Management

1. Outcome Target

Percentage increase of clientele who will gain knowledge of farm and financial management

2. Outcome Type : Change in Knowledge Outcome Measure

2008 :	**2009 :**	**2010 :**	**2011 :**	**2012 :**
30	35	40	45	45

3. Associated Knowledge Area(s)

- 601 - Economics of Agricultural Production and Farm Management

1. Outcome Target

Percentage of farmers that have modified from existing practices or technologies.

2. Outcome Type : Change in Action Outcome Measure

2008 :	**2009 :**	**2010 :**	**2011 :**	**2012 :**
10	14	16	18	20

3. Associated Knowledge Area(s)

- 601 - Economics of Agricultural Production and Farm Management

1. Outcome Target

Percentage of farmers that have adopted new production management practices and technologies to address current issues

2. Outcome Type : Change in Action Outcome Measure

2008 :	**2009 :**	**2010 :**	**2011 :**	**2012 :**
10	12	14	16	20

3. Associated Knowledge Area(s)

- 601 - Economics of Agricultural Production and Farm Management

1. Outcome Target

Percentage of farmers to establish and maintain a budget.

2. Outcome Type : Change in Action Outcome Measure

2008 :	**2009 :**	**2010 :**	**2011 :**	**2012 :**
15	17	20	22	25

3. Associated Knowledge Area(s)

- 601 - Economics of Agricultural Production and Farm Management

1. Outcome Target

Percentage of farmers that learn how to balance their accounts.

2. Outcome Type : Change in Action Outcome Measure

2008 :	**2009 :**	**2010 :**	**2011 :**	**2012 :**
10	15	18	20	25

3. Associated Knowledge Area(s)

- 602 - Business Management, Finance, and Taxation

1. Outcome Target

3Percentage of farmers that developed a complete record book or some formalized record keeping system.

2. Outcome Type : Change in Action Outcome Measure

2008 : 10	**2009 :** 15	**2010 :** 17	**2011 :** 20	**2012 :** 22

3. Associated Knowledge Area(s)

- 602 - Business Management, Finance, and Taxation

1. Outcome Target

Percentage of Increase in annual farm income for participating farmers

2. Outcome Type : Change in Condition Outcome Measure

2008 : 10	**2009 :** 15	**2010 :** 20	**2011 :** 25	**2012 :** 30

3. Associated Knowledge Area(s)

- 601 - Economics of Agricultural Production and Farm Management

1. Outcome Target

Percentage of Increase in the number of youth applying for farm operation loans.

2. Outcome Type : Change in Condition Outcome Measure

2008 : 10	**2009 :** 15	**2010 :** 18	**2011 :** 20	**2012 :** 22

3. Associated Knowledge Area(s)

- 602 - Business Management, Finance, and Taxation

1. Outcome Target

Percentage of clients utilizing an established marketing plans.

2. Outcome Type : Change in Condition Outcome Measure

2008 : 5	**2009 :** 7	**2010 :** 9	**2011 :** 10	**2012 :** 12

3. Associated Knowledge Area(s)

- 604 - Marketing and Distribution Practices

1. Outcome Target

Conduct educational sessions on marketing and distribution of products, goods and services.

2. Outcome Type : Change in Knowledge Outcome Measure

2008 : 10	**2009 :** 20	**2010 :** 30	**2011 :** 40	**2012 :** 50

3. Associated Knowledge Area(s)

- 604 - Marketing and Distribution Practices

1. Outcome Target

Conduct educational workshops on marketing and distribution of products, goods and services.

2. Outcome Type : Change in Knowledge Outcome Measure

2008 : 20	**2009 :** 20	**2010 :** 25	**2011 :** 30	**2012 :** 30

3. Associated Knowledge Area(s)

- 604 - Marketing and Distribution Practices

1. Outcome Target

Conduct educational demonstrations on marketing and distribution of products, goods and services.

2. Outcome Type : Change in Knowledge Outcome Measure

2008 : 2	**2009 :** 4	**2010 :** 6	**2011 :** 8	**2012 :** 8

3. Associated Knowledge Area(s)

- 604 - Marketing and Distribution Practices

1. Outcome Target

Conduct educational tours on marketing and distribution of products, goods and services.

2. Outcome Type : Change in Knowledge Outcome Measure

2008 : 10	**2009 :** 10	**2010 :** 10	**2011 :** 10	**2012 :** 10

3. Associated Knowledge Area(s)

- 604 - Marketing and Distribution Practices

1. Outcome Target

Percentage of clientele to gain knowledge on new marketing techniques.

2. Outcome Type : Change in Knowledge Outcome Measure

2008 : 15	**2009 :** 30	**2010 :** 45	**2011 :** 60	**2012 :** 75

3. Associated Knowledge Area(s)

- 604 - Marketing and Distribution Practices

1. Outcome Target

Percentage of the number of individuals' knowledge of marketing and distribution practices.

2. Outcome Type : Change in Knowledge Outcome Measure

2008 : 30	**2009 :** 35	**2010 :** 40	**2011 :** 45	**2012 :** 50

3. Associated Knowledge Area(s)

- 604 - Marketing and Distribution Practices

1. Outcome Target

Percentage of the number of participants making adjustments in produce marketing.

2. Outcome Type : Change in Action Outcome Measure

2008 : 30	**2009 :** 35	**2010 :** 40	**2011 :** 45	**2012 :** 50

3. Associated Knowledge Area(s)

- 604 - Marketing and Distribution Practices

V(J). Planned Program (External Factors)

1. External Factors which may affect Outcomes

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

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.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 programs affecting the clientele, the weather and related natural disasters.

V(K). Planned Program (Evaluation Studies and Data Collection)

1. Evaluation Studies Planned

- Comparisons between program participants (individuals,group,organizations) and non-participants
- During (during program)
- Retrospective (post program)

Description

The following evaluation processes will be used in evaluating management decision-making knowledge and skills gained and adoption of research based techniques. Mail, telephone, on-site, structured as well as unstructured processes.• After Only (post program)• Before-After (before and after program)• During (during program)Time series (multiple points before and after program)Baseline data will be collected (or assembled) on the clientele in year one; the data will include demographic variables, skill levels, farm characteristics; acreage, crops and livestock produced, etc. Program evaluation will take place at the end of each year; summative program evaluationwill be conducted in year 5.

2. Data Collection Methods

- On-Site
- Case Study
- Tests
- Mail
- Structured
- Journals
- Sampling
- Observation
- Telephone

Description

Primary data will be collected via surveys by structured interviews, by mail or by telephone. Stratified samples of farmers will be drawn for the surveys. Financial and farm accounting data will be extracted (with consent) from farm records of those producers who participate in the small-farm technical assistance program. Also, primary statistical data will be collected from retailers, wholesalers, and other units along the food distribution chain by face-to-face interviews, mail or telephone surveys.Secondary statistical data on input and output prices will be assembled from government documents and USDA NASS websites.

V(A). Planned Program (Summary)

1. Name of the Planned Program

Sustainable Animal Production Systems

2. Brief summary about Planned Program

The proposed planned program will focus on improving meat animal production efficiency and meat quality. The program will focus on reproductive performance of animals including growth rate, feed availability, and survivability, including research aimed at reducing the prevalence and impact of infectious diseases in meat producing animals. Emphasis will be placed on the reproductive efficiency and increase in the prenatal survival of meat producing animals. The importance of developing a controlled breeding season according to market demands and trends will be stressed. The management of animals during gestation and delivery will also be emphasized. Nutrient utilization in animals will emphasize nutrient requirements of livestock and the improvement of forages for winter and summer months. Additionally, utilization of feeding and management programs to improve the competitiveness of meat animal industry appropriate to regions of the state will be undertaken. Genetic improvement of animals will focus on proper selection of breeding stock with the aim of improving the meat quality. The planned program will evaluate the impact of traditional and non-traditional feedstuffs on meat quality, safety and consumer confidence and acceptance of meat from cattle, swine, goats and poultry. Also, the program will investigate methods of eradicating or controlling infectious diseases and methods of monitoring harmful organisms to ensure that herds remain free of specific diseases. Additionally, investigations will focus on factors associated with early embryo viability with the view of reducing embryo mortality and exploring more feasible methods of embryo transfer. Improvements in the testing program to accommodate genetic improvement of multiple traits, including growth performance, longevity and carcass merit/quality and shelf life of meat will be researched. The planned program was developed based upon feed back or requests from our clientele through various methods such as town hall meetings, livestock advisory groups, needs assessment from agricultural agents, livestock specialist and other community leaders.
The target audiences for these programs are limited-resource farmers and producers, extension educators, and rural dwellers within the State of Mississippi. Educational programs and current research based information have not reached many rural farm families and small livestock and poultry producers. Therefore, they, for the most part, have not made appropriate production management practices in order to remain profitable and sustainable in the market place. The technology transfer component of this program will include publications in referee journals, poster presentations, documentation and procedures/materials for sustainable livestock production and improving meat quality. Also, a wide range of demonstrations, farm tours, group meetings, seminars, applied research, and other activities will be conducted to meet the needs of the targeted audiences. Alcorn State University is a land grant institution as designated by the second Morrill Act of 1890. Historically, ASU has assisted economically and socially disadvantaged livestock producers, and the proposed program is considered an integral part of this long tradition, especially for the limited-resource farmers of southwest Mississippi, an area surrounding Alcorn.

3. Program existence : Intermediate (One to 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

- 301 20% Reproductive Performance of Animals
- 302 15% Nutrient Utilization in Animals
- 303 15% Genetic Improvement of Animals
- 305 15% Animal Physiological Processes
- 308 20% Improved Animal Products (Before Harvest)
- 311 15% Animal Diseases

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

1. Situation and priorities

Agriculture is Mississippi's number one industry, employing approximately 30% of the state's workforce either directly (http://www.mdac.state.ms). Agriculture in Mississippi is a 6 billion-dollar industry. There are approximately 42,000 farms in the state covering 11 million acres. The average size farm is composed of 262 acres. Agriculture makes a significant contribution to

all 82 counties. In Mississippi, animal production accounts for 40% of the agricultural cash receipts (poultry/eggs - $1.98 billion, cattle and calves-$250 million etc.). A strong livestock industry is essential to maintaining economic diversity in the state's economy. Animal production will face many challenges of specialization in the next decade, and economic survival for many small-scale producers will be difficult. Specialization will favor the adoption of expensive, capital-intensive confinement facilities and technologies. However, the main constraints, for the development of a viable small-scale livestock industry in the state, will remain unsophisticated breeding system, poor veterinary management, insufficient utilization of feedstuffs in the region, and weakness of the marketing system. Other constraints for the limited-resource producer include the seasonal variation in the availability of feed ingredients. Medium-to low-input systems and crop livestock (mixed) systems dominate livestock production in rural Mississippi. Low-input systems provide all – or at least the major part of – the livelihoods of the livestock-keeping households, many of whom have few resources beyond their smallholdings and livestock. Information regarding these or alternative technologies must flow from, to, and among researchers, students, extension workers, and producers to ensure that new technologies will address problems and is user-friendly for producers. The overall goal of this program is to overcome the challenges that the farmers are expected to face in the future. This will be accomplished by altering quality characteristics of meat and carcass while maintaining or improving progress on performance and productivity of the breeding herd. To achieve this goal, projects will be designed to improve nutrient utilization as well as to use of novel feed ingredients to partition nutrients towards protein and other essential fatty acids deposition. On-going research supplementation of animal feeds with highly nutrient – rich vegetable has shown reduced bad cholesterol and improved good cholesterol and vitamin levels. In addition, studies aimed at the rate of genetic improvement, feed availability, and reproductive survivability, including research aimed at reducing the prevalence and impact of infectious disease will be conducted.

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

Limited livestock and poultry producers are often not fully aware of management practices that may help maximize their operations for economic sustainability. Producers' unawareness of potential environmental impacts of their operation and/or requirements and opportunities of environmental regulations and programs will have major impact on their potential for economic well being on farms. Educational programs and current research based information have not reached many rural farm families and small livestock and poultry producers. Therefore, they, for the most part, have not incorporated appropriate production management practices in order to remain profitable and sustainable in the market place. Integrated livestock management systems are needed to expand understanding and development of best management practices that better address current and future challenges as well as meet economic sustainability goals.

2. Ultimate goal(s) of this Program

To improve the profitability of livestock and poultry produced by limited resource farmers by improving the quality of meats through research and appropriate educational programs.

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
2008	0.0	4.0	0.0	13.5
2009	0.0	4.0	0.0	14.0
2010	0.0	4.0	0.0	14.0
2011	0.0	4.0	0.0	14.0
2012	0.0	5.0	0.0	14.0

V(F). Planned Program (Activity)

1. Activity for the Program

This livestock educational program will provide a wide range of demonstrations, farm tours, group meetings, seminars, applied research, and other activities to meet the needs of the targeted audience. Extension personnel and research scientists are involved in designing, implementing, and evaluating the educational efforts depending on the focus and scope of the program. Our dissemination strategy involves a process requiring a careful match among (a) the creation of knowledge and the context of that creation, (b) the target audiences, and (c) the content, media, formats, and language used in getting the outcomes into the hands (and minds) of those target audiences. A wide variety of dissemination methods will be employedwhich include:o Field days, on-farm demonstration and student projectso Curriculum development (graduate, undergraduate certificate programs).o Seminar, workshops and trade showso Distance and flexible learning optionso Articles in scientific journalso Books, reports, thesis, and patentso Conference abstracts posters and proceedingso Articles in industry publications and popular pressIn general, but not exclusively, the research program identified priority areas with respect to sustainable meat animal production. The areas identified encompass the followings:The impact of traditional and non-traditional feedstuffs on quality, safety and consumer confidence and acceptance of meat will be studied. A key approach is to continue work on novel feedstuff rich in minerals, omega fatty acids, pectin and antioxidants (Purslane and waterleaf). Other promising ingredients need to be screened for favorable nutrients contents. o Studies will target the development of technology for the prediction of intramuscular fat (marbling) and detection of quality defects from measurements taken on the live animal. A key approach will be to investigate the feasibility of predicting intramuscular fat in the longissimus muscle in live animals from a single real-time ultrasonic longitudinal or cross sectional image, and to assess the merit of using ultrasound predicted IMF values to classify animals into specific IMF groups.The research output will include publications in referred journals, poster presentations, documentation and procedures/materials for improving meat quality. The livestock/poultry educational program will provide a wide range of demonstrations, farm tours, group meetings, seminars, applied research, and other activities to meet the needs of the targeted audience. Extension personnel and research scientists are involved in designing, implementing, and evaluating the educational efforts.

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

Extension	
Direct Methods	**Indirect Methods**
• Demonstrations • Workshop • One-on-One Intervention • Group Discussion • Other 1 (Field days)	• Newsletters • Other 1 (Distance and flexible learning) • Other 2 (Research Publications) • Web sites

3. Description of targeted audience

The target audiences are limited-resource farmers and producers, extension educators, and rural dwellers within the State of Mississippi. The ultimate targeted audience is customers/consumers of livestock and poultry products throughout the State of Mississippi and the nation.

V(G). Planned Program (Outputs)

1. Standard output measures

Target for the number of persons(contacts) to be reached through direct and indirect contact methods

	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Year	Target	Target	Target	Target
2008	400	300	150	130
2009	550	400	200	200
2010	650	500	200	200
2011	750	600	150	150
2012	850	800	150	150

2. (Standard Research Target) Number of Patents

Expected Patents

2008 : 1 **2009 :** 2 **2010 :** 3 **2011 :** 3 **2012 :** 4

3. Expected Peer Review Publications

Year	Research Target	Extension Target
2008	0	1
2009	0	1
2010	0	1
2011	0	0
2012	0	0

V(H). State Defined Outputs

1. Output Target

- Conduct educational tours on livestock production practices for Limited Resource farm families and youth in communities.

  2008 : 4 **2009 :** 6 **2010 :** 8 **2011 :** 10 **2012 :** 10

- Conduct educational demonstration for Limited Resource farm families and youth in communities

  2008 : 8 **2009 :** 10 **2010 :** 12 **2011 :** 14 **2012 :** 12

- Conduct educational workshop on livestock production practices for limited Resource farm families and youth in communities.

  2008 : 12 **2009 :** 16 **2010 :** 18 **2011 :** 20 **2012 :** 20

- Number of educational seminars on livestock production practices for Limited Resource farm families and youth in communities on Reproduction Performance, nutrient utilization in animals.

  2008 : 8 **2009 :** 10 **2010 :** 12 **2011 :** 12 **2012 :** 12

- Conduct educational field days and other educational activities on livestock production practices for Limited Resource farm families and youth in communities.

2008 :4 **2009 :**5 **2010 :** 6 **2011 :**8 **2012 :**9

- Conduct educational activities on livestock production practices for Limited Resource farm families and youth in communities.

2008 :6 **2009 :**8 **2010 :** 10 **2011 :**12 **2012 :**16

- Conduct educational training on animal production to limited resources farm families

2008 :2 **2009 :**2 **2010 :** 3 **2011 :**3 **2012 :**2

- Develop an educational facts sheets on animal production to limited resources farm families

2008 :8 **2009 :**10 **2010 :** 12 **2011 :**14 **2012 :**8

- Number of Research Publications published in the field of animal sciences/meat production

2008 :2 **2009 :**2 **2010 :** 2 **2011 :**3 **2012 :**0

- Number of research based reader-friendly pamphlets and leaflets developed by extension educators for farmers and farm families

2008 :6 **2009 :**12 **2010 :** 12 **2011 :**0 **2012 :**8

- Develop an educational thesis for Limited Resource farm families and youth in communities

2008 :8 **2009 :**8 **2010 :** 8 **2011 :**8 **2012 :**0

- Conduct educational field days and other educational activities for Limited Resource farm families and youth in communities

2008 :1 **2009 :**1 **2010 :** 1 **2011 :**1 **2012 :**1

- Develop M.S. thesis on alternative production systems for meat animals

2008 :1 **2009 :**2 **2010 :** 3 **2011 :**4 **2012 :**0

- Conduct educational activities for Limited Resource farm families and youth in communities on alternative production systems for meat animals

2008 :22 **2009 :**25 **2010 :** 25 **2011 :**20 **2012 :**22

V(I). State Defined Outcome

1. Outcome Target

Percentage of participants to gain knowledge on genetic improvement of animals.

2. Outcome Type : Change in Knowledge Outcome Measure

2008 :50 **2009 :** 40 **2010 :** 40 **2011 :**30 **2012 :** 25

3. Associated Knowledge Area(s)

- 303 - Genetic Improvement of Animals

1. Outcome Target

Percentage of participants improving breeding stock to maintain quality; sustainability, and profitability.

2. Outcome Type : Change in Knowledge Outcome Measure

2008 :	**2009 :**	**2010 :**	**2011 :**	**2012 :**
30	30	25	20	20

3. Associated Knowledge Area(s)

- 308 - Improved Animal Products (Before Harvest)

1. Outcome Target

Percentage of participants to improve production efficiency through adoption of best management practices.

2. Outcome Type : Change in Knowledge Outcome Measure

2008 :	**2009 :**	**2010 :**	**2011 :**	**2012 :**
25	20	20	15	15

3. Associated Knowledge Area(s)

- 301 - Reproductive Performance of Animals

1. Outcome Target

Percentage of program participants to gain knowledge on breeding stock selection, reproductive performance.

2. Outcome Type : Change in Knowledge Outcome Measure

2008 :	**2009 :**	**2010 :**	**2011 :**	**2012 :**
50	40	40	30	25

3. Associated Knowledge Area(s)

- 301 - Reproductive Performance of Animals

1. Outcome Target

Percentage of producers, documented to have modified existing practices or technologies.

2. Outcome Type : Change in Action Outcome Measure

2008 :	**2009 :**	**2010 :**	**2011 :**	**2012 :**
25	20	15	15	10

3. Associated Knowledge Area(s)

- 303 - Genetic Improvement of Animals

1. Outcome Target

Percentage of producers adopted new production management practices and technologies.

2. Outcome Type : Change in Action Outcome Measure

2008 :	**2009 :**	**2010 :**	**2011 :**	**2012 :**
25	20	15	10	5

3. Associated Knowledge Area(s)

- 308 - Improved Animal Products (Before Harvest)

1. Outcome Target

Number of producers documented to have assessed potential environmental impacts of their operations and developed and acted on plans to eliminate or minimize those concerns

2. Outcome Type : Change in Action Outcome Measure

2008 :	**2009 :**	**2010 :**	**2011 :**	**2012 :**
15	10	10	5	2

3. Associated Knowledge Area(s)

- 308 - Improved Animal Products (Before Harvest)

1. Outcome Target

Percentage of producers documented to have developed and implemented herd health management plans or modified existing plans to improve production.

2. Outcome Type : Change in Action Outcome Measure

2008 :	**2009 :**	**2010 :**	**2011 :**	**2012 :**
15	15	10	10	5

3. Associated Knowledge Area(s)

- 311 - Animal Diseases

1. Outcome Target

Percentage of producers documented to have improved economic returns to agricultural profitability and vitality resulting from enhanced production management practices.

2. Outcome Type : Change in Action Outcome Measure

2008 :	**2009 :**	**2010 :**	**2011 :**	**2012 :**
20	15	10	10	5

3. Associated Knowledge Area(s)

- 301 - Reproductive Performance of Animals

V(J). Planned Program (External Factors)

1. External Factors which may affect Outcomes

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

Description

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 (Evaluation Studies and Data Collection)

1. Evaluation Studies Planned

- Retrospective (post program)
- During (during program)
- Before-After (before and after program)

Description

Research will be evaluated according to its relevance to Mississippi and the nation. Productivity will be measured by publication in scientific and popular literature and other means of communicating results as well as amount of external funding. Interdisciplinary research is encouraged, bringing together expertise to address the broad-based issues that face animal agriculture. All evaluations will go through the Research Director or Dean. The Dean will use these evaluations for program development. Program success is important in deciding where future school resources will be used. Extension will be evaluated by participants in extension programs. An evaluation form will be used to assess program effectiveness. Input is also solicited from extension agents and advisory committees. This information is used in planning future programs. Interdisciplinary and multi-state programs are encouraged to improve quality and efficiency.

2. Data Collection Methods

- Observation
- On-Site
- Other (Partcipants Feedback,)
- Tests

Description

Research will be evaluated according to its relevance to Mississippi and the nation. Productivity will be measured by publication in scientific and popular literature and other means of communicating results as well as amount of external funding. Interdisciplinary research is encouraged, bringing together expertise to address the broad-based issues that face animal agriculture. All evaluations will go through the Research Director or Dean. The Dean will use these evaluations for program development. Program success is important in deciding where future school resources will be used. Extension will be evaluated by participants in extension programs. An evaluation form will be used to assess program effectiveness. Input is also solicited from extension agents and advisory committees. This information is used in planning future programs. Interdisciplinary and multi-state programs are encouraged to improve quality and efficiency.

V(A). Planned Program (Summary)

1. Name of the Planned Program

Sustainable Horticulture Production Systems

2. Brief summary about Planned Program

The planned program will focus on determining the agronomic requirements of alternative crops for developing high value sustainable horticultural system for rural Mississippi. These studies will encompass the following subject areas: o Soil, Plant, Water, Nutrient Relationships. Different cropping systems, fertilizer treatments and moisture applications will be used to identify high-income generating crop cultivars, under selected Mississippi soils.o Plant management Systems. The impact of plant density, row preparation, irrigation sources and application methods, staking and pruning techniques and other management practices on the growth and development of each test crop will be determined.o Insects, Mites and other Arthropods Affecting Plants. Both organic and inorganic chemicals, as well as recommended cultural practices as crop rotation, multiple cropping, resistant cultivars, and differential planting dates, and soil solarization among others will be used for plant pest control in alternative test crops.o Weed Affecting Plants. Chemical, Biological, and cultural methods of weed control in alternative crop test plots will be evaluated and most effective measure or measures recommended. In addition to developing economically viable cropping systems, some easy to use protocols will be developed to generate consumer products for enhancing the crop value.New and Improved Food Processing Technologies. The Alcorn State University vegetable processing facility in Marks, MS will be used to educate farmers on how to add value to and package harvested alternative crops. Research based information will be provided to farmers through on-farm demonstrations at ASU-EP Demonstration Centers located in Mound Bayou, Northwest Mississippi; Preston, East Mississippi, and Lorman, Southwest Mississippi. The Centers will be used to demonstrate needed information to farmers on the agronomic practices and other plant management systems that will enhance the growth, yield and quality of vegetable crops. The centers will also be used to demonstrate and educate on new technologies suited to the needs of the small farmer. Such technologies include crop varieties that tolerate or resist natural environmental and pest management programs that utilize judicious combinations of pesticides, host resistance, and cultural methods.Educational programs will be provided to farmers on adding value to crops produced under sustainable agriculture systems. This value added technology could enhance profitability of farming operations; minimize fluctuation in farm income and improve the economic well-being which may improve the quality of life of the limited-resource farmers. Alternative crop evaluation studies at the Alcorn State University Experiment Station have been in existence since the establishment of the station on campus in 1971. The information derived from the horticultural and food processing research will be extended to limited-resource farmers in the most effective manners.

3. Program existence : Intermediate (One to 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

- 102 20% Soil, Plant, Water, Nutrient Relationships
- 205 20% Plant Management Systems
- 211 20% Insects, Mites, and Other Arthropods Affecting Plants
- 213 20% Weeds Affecting Plants
- 501 20% New and Improved Food Processing Technologies

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

1. Situation and priorities

The focus of this program is to examine the feasibility of incorporating alternative high value crops by identifying the appropriate relationships between plants, water, nutrients and soil in Mississippi. The pest management systems, disease and weed control measures will also be evaluated.Mississippi's soil and water resources, favorable mild climate and excellent long growing season make growers produce high priority agronomic crops such as cotton, soybean, corn and rice. However, for some of these conventional crops, the potential for production has exceeded demand, thus depressing prices below the level of profitability. The number of farms, farm family income, and opportunity for employment are declining, and urban population increasing. Fruit and vegetable crop productions have been suggested as agricultural alternatives that could improve the income situation of small-scale

farmers in Mississippi. This has become an issue because most farmers who benefit from agricultural research at Alcorn State University are limited-resource farmers seeking scientific methods to improve their crop production potential and profitability. Studies have shown that low-input alternative agriculture using alternative crops and environmentally friendly production practices will enhance productivity without polluting the environment. (Igobokwe et al., 1996; Igbokwe and Hollins, 2000; Panicker et al., 2004.) Alcorn's scientists and supporting staff are currently using field studies to identify alternative crops with high-income potentials. The relationships between plants and growth factors as well as crop management practices are seriously being investigated, (Panicker et al., 2002). Personal communications with extension agents and some farmers indicate that some farmers, especially those who previously considered alternative production practices unacceptable, are now transitioning into organic agriculture. The Extension program is now designed to assist farmers in their effort to adopt the new production practices through workshops, seminars and field visits. References:Igbokwe, P.E., D. Alipoe, and M. Rizvi. 1996. Sustainable agriculture for vegetable production in Mississippi. Journal of the MAS 41(3):136-142.Igbokwe, P.E. 1996. Mulching for nutsedge control in field-grown peppers. Journal of Vegetable Crop Production, 2(1):47-52.Igbokwe, P.E., and N.V.K. Nkongolo. 1996. Peanut yield potential as influenced by cropping system and plant density. Peanut Science. 23:129-133.Igbokwe, P.E. and S. Hollins. 2000. Field Evaluation of Vegetable Amaranth. Journal of Vegetable Crop Production. 6(2):75-85.G.K. Panicker, A.H. Al-Humadi, C.A. Sims, J.L. Silva and F.B. Matta. 2004. Animal and Forest Wastes on Muscadine Grapes (Vitis rotundifolia) Production, and Water and Fruit Quality. Acta Horticulturae. Vol. 659. P.657-662.G.K. Panicker, S.C. Tiwari, A.H. Al-Humadi, C. Sims, L.C. Huam, P Igbokwe, O.P. Vadhwa, A. Johnson, J. Harness, G.A. Weesies, D.E. Stott, J. Bunch and T.E. Collins. 2002. Research on biomass development and residue decomposition of horticultural crops for erosion prediction models. Acta Horticulture. Vol. 638. p.53-58.

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

This program assumes that with contributions from our highly qualified, experienced and knowledgeable research team, better production practices will be identified and used for the profitable production of adapted alternative crops. To ensure full participation of the stakeholders, some of these investigations will be conducted on farmers' fields. Planning and execution of the plans will continue to be in collaboration with limited-resource farmers in southwest Mississippi. Previous studies have shown that using farmers' fields as field laboratories provide them with another opportunity to be better involved in series of workshops, seminars and conferences where information on production and utilization of alternative crops are presented by specialists and experienced farmers. This plan is therefore based on results and recommendations from previous studies. (Igbokwe, 1996; Igbokwe and Nkongolo, 1996) Alcorn State University will continue to support research on alternative crop production because part of its mission is to enhance income opportunities and the quality of life of its clientele through sustainable production of alternative crops. We also assume that if our plan is fully implemented, this entire program will be a success.

2. Ultimate goal(s) of this Program

1) To enhance the income-potential of the Mississippi limited-resource farmers by growing alternative crops through sustainable production practices.2) To improve the quality of life of small-limited resource farm families.

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
2008	0.0	13.0	0.0	11.4
2009	0.0	13.5	0.0	12.0
2010	0.0	13.5	0.0	12.0
2011	0.0	13.5	0.0	12.0
2012	0.0	13.5	0.0	12.0

V(F). Planned Program (Activity)

1. Activity for the Program

Soil, Plant, Water, Nutrient RelationshipsIdentified high yielding alternative crops suitable for western Mississippi will be made available to limited-resource farmers for incorporation into their production plan. Production manuals will be developed as well as other information sheets will be used as guides by farmers in their efforts to incorporate these crops, increase productivity, and enhance profitability. Plant management SystemsImproved cultural practices, such as crop rotation, conservation tillage, mulching, multiple-cropping, nutrient management and other factors of optimal production will be recommended. Insects, Mites and other Arthropods Affecting PlantsPests of the crop plants will be controlled with appropriate pesticides. Major principles of integrated pest management system will be demonstrated and made available to farmers. The need to use the identified pest resistant cultivars will be emphasized.Weeds Affecting PlantsWeeds in crop lands will be controlled with appropriate herbicides, mulching with organic and/or synthetic materials, cover cropping, and solarization, among other measures that will be found suitable through research at Alcorn State University.New and Improved Food Processing TechnologiesFarmers will be educated on modern value-added processing and packaging technology of alternative crops. The processing plant will serve as a laboratory where limited-resource farmers will receive hands-on experience on the activities associated with value-added processing and packaging of alternative crops. This value-added technology will also encourage farmers to engage in commercial, alternative crop production, create some marketing opportunities and ultimately improve their quality of life.Workshops, and seminars, group meetings, on-farm laboratories, field day expositions will be used to emphasize the need to use approved field preparation practices, proper fertilizer types and rates of applications in all form of alternative crop production. The importance of crop rotation, cover cropping, intercropping and use of non-organic materials to enhance productivity, while protecting the environment will be demonstrated. Handouts and production manuals will be made available to all program participants. The need to practice teamwork through farmers' cooperatives will be encouraged. Value-added product developments using raw materials from these investigations will be encouraged. The efforts between Alcorn scientists, extension educators, specialists, and off-campus collaborators from NRCS, ARS and other 1890 and 1862 institutions will lead to the success of the plan.This program will be designed specifically for the limited-resource farmers, extension educators, and rural dwellers within the State of Mississippi. We hope to obtain trademarks marks and patents for some of the products, through the collaborative efforts with the Department of Human Services on campus. Recipe booklets developed at Alcorn State University and information sheets will be used to disseminate generated results to the public, particularly for food processing initiatives.

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

Extension	
Direct Methods	**Indirect Methods**
• One-on-One Intervention • Demonstrations • Workshop • Group Discussion • Other 1 (Curriculum Development)	• Other 1 (Reports) • Public Service Announcement • Web sites • Newsletters • Other 2 (Patents)

3. Description of targeted audience

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

V(G). Planned Program (Outputs)

1. Standard output measures

Target for the number of persons(contacts) to be reached through direct and indirect contact methods

	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Year	Target	Target	Target	Target
2008	600	450	50	100
2009	850	500	100	150
2010	1000	600	150	200
2011	1150	700	175	250
2012	1250	800	200	300

2. (Standard Research Target) Number of Patents

Expected Patents

2008 :0 **2009 :**1 **2010 :** 0 **2011 :** 1 **2012 :** 1

3. Expected Peer Review Publications

Year	Research Target	Extension Target
2008	2	2
2009	0	0
2010	0	0
2011	0	0
2012	0	0

V(H). State Defined Outputs

1. Output Target

- Numbers of Papers and Publications developed by Research

  2008 :3 **2009 :**3 **2010 :** 4 **2011 :**4 **2012 :**0

- Conduct educational seminars for Limited Resource farm families and youth in communities on Soil, Plant, Water, Nutrient Relationships

  2008 :24 **2009 :**32 **2010 :** 36 **2011 :**40 **2012 :**48

- Conduct educational workshop for limited Resource farm families and youth in communities on plant management systems.

  2008 :24 **2009 :**32 **2010 :** 40 **2011 :**48 **2012 :**54

- Conduct educational field days for Limited Resource farm families and youth on sustainable crop production practices.

2008 : 8 **2009 :** 10 **2010 :** 12 **2011 :** 14 **2012 :** 16

- Conduct educational tours for Limited Resource farm families and youth on sustainable crop production practices.

2008 : 4 **2009 :** 6 **2010 :** 8 **2011 :** 10 **2012 :** 12

- Conduct educational training on sustainable horticulture production practices to limited resources farm families.

2008 : 13 **2009 :** 15 **2010 :** 17 **2011 :** 19 **2012 :** 27

- Develop and educational facts sheets on sustainable horticulture production practices to limited resources farm families.

2008 : 6 **2009 :** 8 **2010 :** 8 **2011 :** 9 **2012 :** 9

- Number of Research Projects

2008 : 4 **2009 :** 4 **2010 :** 4 **2011 :** 4 **2012 :** 4

V(I). State Defined Outcome

1. Outcome Target

Percent of program participants in integrated nutrient management for sustainable agriculture production and environmental protection.

2. Outcome Type : Change in Knowledge Outcome Measure

2008 : 20 **2009 :** 30 **2010 :** 40 **2011 :** 45 **2012 :** 50

3. Associated Knowledge Area(s)

- 102 - Soil, Plant, Water, Nutrient Relationships

1. Outcome Target

Percent of program participants in integrated pest management for sustainable production and environmental protection.

2. Outcome Type : Change in Knowledge Outcome Measure

2008 : 15 **2009 :** 20 **2010 :** 25 **2011 :** 30 **2012 :** 35

3. Associated Knowledge Area(s)

- 211 - Insects, Mites, and Other Arthropods Affecting Plants

1. Outcome Target

Percent of program participants in plant management for sustainable agriculture production and environmental protection.

2. Outcome Type : Change in Knowledge Outcome Measure

2008 : 20 **2009 :** 25 **2010 :** 30 **2011 :** 35 **2012 :** 40

3. Associated Knowledge Area(s)

- 102 - Soil, Plant, Water, Nutrient Relationships

1. Outcome Target

Percent of producers to have adopted new production management practices and technologies

2. Outcome Type : Change in Knowledge Outcome Measure

2008 : 10	**2009 :** 15	**2010 :** 20	**2011 :** 25	**2012 :** 30

3. Associated Knowledge Area(s)

- 205 - Plant Management Systems

1. Outcome Target

Percent of producers to have increased their on New and Improved Food Processing Technologies and Quality Maintenance.

2. Outcome Type : Change in Knowledge Outcome Measure

2008 : 10	**2009 :** 12	**2010 :** 15	**2011 :** 17	**2012 :** 20

3. Associated Knowledge Area(s)

- 501 - New and Improved Food Processing Technologies

1. Outcome Target

Percent of producers documented best management practices in their recommendations.

2. Outcome Type : Change in Knowledge Outcome Measure

2008 : 17	**2009 :** 20	**2010 :** 22	**2011 :** 22	**2012 :** 25

3. Associated Knowledge Area(s)

- 205 - Plant Management Systems
- 211 - Insects, Mites, and Other Arthropods Affecting Plants

1. Outcome Target

Percent of producers who have incorporated best weed/insect management practices based on the recommendations.

2. Outcome Type : Change in Action Outcome Measure

2008 : 10	**2009 :** 12	**2010 :** 15	**2011 :** 17	**2012 :** 20

3. Associated Knowledge Area(s)

- 211 - Insects, Mites, and Other Arthropods Affecting Plants

1. Outcome Target

Percent of producers documented to meet or exceed current environmental protection standards as a result of Knowledge gained from relevant educational programs.

2. Outcome Type : Change in Condition Outcome Measure

2008 : 5	**2009 :** 7	**2010 :** 10	**2011 :** 12	**2012 :** 14

3. Associated Knowledge Area(s)

- 102 - Soil, Plant, Water, Nutrient Relationships

1. Outcome Target

The number of producers reported reduced environmental concerns for participating enterprises.

2. Outcome Type : Change in Condition Outcome Measure

2008 : 4	**2009 :** 6	**2010 :** 8	**2011 :** 10	**2012 :** 12

3. Associated Knowledge Area(s)

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

1. Outcome Target

Percent of participants that will gain knowledge on new production-management practices.

2. Outcome Type : Change in Knowledge Outcome Measure

2008 : 20	**2009 :** 25	**2010 :** 30	**2011 :** 35	**2012 :** 40

3. Associated Knowledge Area(s)

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

1. Outcome Target

Number of producers documented to have assessed potential environmental impacts of their operations

2. Outcome Type : Change in Knowledge Outcome Measure

2008 : 20	**2009 :** 25	**2010 :** 30	**2011 :** 35	**2012 :** 40

3. Associated Knowledge Area(s)

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

1. Outcome Target

Percent of participants that improved product handling and sanitation .

2. Outcome Type : Change in Knowledge Outcome Measure

2008 : 15	**2009 :** 20	**2010 :** 25	**2011 :** 30	**2012 :** 35

3. Associated Knowledge Area(s)

- 501 - New and Improved Food Processing Technologies

1. Outcome Target

Percent of participants making crop choices for sustainability and profitability.

2. Outcome Type : Change in Action Outcome Measure

2008 : 20	**2009 :** 25	**2010 :** 30	**2011 :** 35	**2012 :** 40

3. Associated Knowledge Area(s)

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

1. Outcome Target

Percent of program participants to improve production efficiency through best management practices.

2. Outcome Type : Change in Action Outcome Measure

2008 : 20	**2009 :** 25	**2010 :** 30	**2011 :** 35	**2012 :** 40

3. Associated Knowledge Area(s)

- 205 - Plant Management Systems

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

• Natural Disasters (drought, weather extremes, etc.). Planned agricultural/horticultural enterprises operate in a complex and volatile context involving susceptibility to weather which prevents or delays planting and drought conditions that reduces yield and quality of the crop. • EconomyFundamental change occurring in the state and regional economies within which agricultural and horticultural enterprises operate. • Public Policy changesAnother 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 RegulationsChanging government regulations such as competitive land uses, shifting development patterns and global market influence.• 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.

V(K). Planned Program (Evaluation Studies and Data Collection)

1. Evaluation Studies Planned

- Before-After (before and after program)
- Case Study
- Comparison between locales where the program operates and sites without program intervention

Description

Comparison of crop performances under improved production practices with 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.

2. Data Collection Methods

- Whole population
- Mail
- Telephone
- Observation
- Tests
- Journals

Description

o Soil sampling will be used to determine nutrient requirements for crop evaluation studies.o Questionnaires to be completed by limited-resource farmers and the community will be used to determine crop production problems in the State of Mississippi.o Personal observation and communication will also be used to identify major crop of interests to growers.o The impact of all field management practices would be observed and findings reported.o Statistical analysis to be used to compare findings from these studies will depend on experiment design and outcome desired.o Data collection on growth and yield components will be based on the procedures established by the American Society of Agronomy and Horticulture.o Journals will be used to collect

information on previous work related to the project.

V(A). Planned Program (Summary)

1. Name of the Planned Program

Youth - At - Risk

2. Brief summary about Planned Program

The Youth at Risk Planned Program will emphasize important issues facing youth and explore methods to provide support systems to aid youth in becoming productive individuals of society. The program will focus on club development/volunteer management to facilitate the organizing and managing of community and school-based clubs to increase limited resource participation in leadership opportunities. Also club members will gain multiple life skills, including public speaking, problem solving, goal-setting, citizenship and planning. Creative skills will be developed to demonstrate superior expression in writing and in public events. Additionally, volunteers will be trained to work with youth in clubs to provide variety of educational, cultural and citizenship opportunities. In community-based clubs, youth will be provided with learning experiences to attain a voice; to actively engage in activities of clubs. Tobacco education, prevention and harmful affects on the health of youth are an emphasis of the planned program. Coping skills will be developed to handle peer and other life pressures to resist the use of tobacco and tobacco products that leads to unhealthy and antisocial behaviors. Educational programs will be developed and implemented to enhance decision-making, communication skills and creativity and cultural arts of youth through adulthood. Teen pregnancy/sexually transmitted diseases will also be addressed by developing negotiation, decision-making and coping skills to enable youth to resist risky behaviors. Increase in awareness of harmful present and future health affects of unprotected sexual activity and the social and economic consequences of early teen pregnancies will be implemented. 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. Citizenship skills will also be increased to provide an understanding of community and cultural heritage. The planned program will focus on career development/workforce preparedness to develop job readiness skills to assist youth in the job search. It will provide job development and vocational skills to provide an understanding and awareness of career options and the steps necessary to accomplish adequate preparation for the world of work. The Youth at Risk planned program was selected based on the findings from the implementation of Environmental Scanning Processes: town hall meetings, focus groups, advisory councils and Individualized Client Service Plan (ICSP) in various counties that identified tobacco use, high rate of teen pregnancy and infection rate of sexually transmitted diseases as relevant issues facing youth in the state. Also other issues identified were the lack of leadership skills of youth in school and communities; lack of job preparedness/readiness; and the lack of recreational, cultural and social activities for youth.

3. Program existence : Intermediate (One to 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

- 802 35% Human Development and Family Well-Being
- 806 65% Youth Development

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

1. Situation and priorities

In Mississippi youth are faced with staggering issues such as pregnancy, and sexually transmitted diseases. Although the pregnancy rate has declined, Mississippi still has the one of the highest percentages of birth to teens in the nation of 17.1 percent. Of 214,190 girls' between ages 10 to 19, 7,583 became pregnant in 2002. Also in 2002, 2,831 dollars were spent on teen childbearing. For every dollar invested in teen pregnancy prevention $2.65 in medical and social cost are saved. In 2002, Mississippi State Department of Health (MSDH) reported many cases of sexually transmitted diseases, 11,815 cases of Chlamydia, 6,859 cases of gonorrhea and 248 cases of syphilis. There were 379 new cases of HIV and 348 of AIDS. Research by the After-School Alliance (2004) states that youth that participate in high quality educational programs, activities and events such as school and community clubs and after-school programs are linked with a lower incidence of problem behaviors, such as decreased academic failure, substance use, early sexual active and delinquency. 16 percent of youth in Mississippi are in unsupervised care after school each day these youth are more likely to become involved in risky behavior than those in supervised

care. Youth that are unsupervised during out of school time are much more likely to engage in activities that place them at risk. Youth who participate in these programs have demonstrated improved academic behaviors and improved personal and social skills. 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. 4-H educational programs, events and activities for age-appropriate youth can create opportunities to develop leadership, teamwork, and life skills. Another issue facing youth, was reported in the 2004 State Youth Tobacco Survey (YTS) which found that 22.4 % of Mississippi's high school student's smoke and 15.5% of high school males use spit tobacco. 6,800 students under the age 18 become smokers each year and 192.000 youth under 18 are exposed to secondhand smoke at home each year. 662 million dollars was spent on health care costs directly caused by smoking and the use of tobacco products. According to the Mississippi Labor Market Data the unemployment rate of youth is 15 percent. Half of the graduating seniors in Mississippi will leave high school lacking the skills necessary to secure a job. The key to the future of rural youth and their communities will be investing in career development/workforce preparation program that provide the knowledge and skills that will to enter and maintain employment and pursue careers in the workplace. The goal of this planned program is to plan and deliver educational programs, activities and events that will enable at risk limited resource youth to develop skills help them cope with life's issues and assume leadership roles in their schools and communities.

2. Scope of the Program

- In-State Extension

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

1. Assumptions made for the Program

A common belief in our society is that troubled youth often are correlated with limited resources families living in disadvantaged communities. An assumption of this program is that Youth Development Programs are appropriate, accessible, and affordable for all youth. Yet, many limited resource youth may lack the financial resources or family and community support system to actively engage in leadership and competitive programs, events and activities at the local, state and national levels. Due to limited financial resources, youth from limited resource families experience fewer opportunities to develop their life skills through involvement in school related activities and community events. Another assumption is that youth who have dropped out of school are at greater risk because they will not have access to programs that will aid them in the development of these skills and because of limited community or family resources and support system. Therefore, diverse strategies will be explored and implemented to aid youth and their families in addressing challenges as they grow and develop into mature adults. It is important to aid youth in addressing at-risk behavior through the developmental stage of their lives. In disadvantaged communities, youth also experience obstacles regarding career development as a result of low school quality available in school districts in the state and because the high unemployment rate in general.

2. Ultimate goal(s) of this Program

The ultimate goal of the proposed plan is to enhance leadership skills of youth to assume leadership roles in schools and communities: to develop decision-making, communication and coping 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.

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
2008	0.0	5.5	0.0	0.0
2009	0.0	6.0	0.0	0.0
2010	0.0	6.0	0.0	0.0
2011	0.0	6.0	0.0	0.0
2012	0.0	6.0	0.0	0.0

V(F). Planned Program (Activity)

1. Activity for the Program

4-H Youth Educator will conduct educational sessions in local schools and communities using Let s Talk about IT: Keeping Teens Safe curriculum.4-H Youth Educator will conduct educational activity entitled “Baby Think it Over will help youth explore the emotional, financial and social consequences of teen parenting. Extension 4-H Youth Educators, Community Volunteers, Youth Specialist and other collaborators will plan and organize regional Teen summit that will provide additional educational information to youth and provide them with an opportunity to network and share resources and experiences4-H Youth Educators and CRD Educators will conduct Career Day/Fair at local schools and Communities. Staff training and educational sessions will be conducted utilizing the Working Class Curriculum local schools and in Communities. Educational workshops, tours and career days/fairs will be conducted at local school and in communities.4-H Youth Educators will plan and implement youth tobacco summits, organize age appropriate tobacco teams and conduct monthly educational sessions for age appropriate tobacco teams in school and communities using the Project STAR Tobacco Curriculum.To provide information and develop skills of volunteer leaders, the 4-H Educators will use the Developing Volunteer Leaders to Organize School and Community Club Curriculum to train new volunteer leaders to 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/Fair.

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

Extension	
Direct Methods	**Indirect Methods**
• Workshop • Group Discussion • Education Class • Other 2 (Summer Camp) • Other 1 (Regional Youth Summits)	• Public Service Announcement • Web sites • Other 1 (Fact Sheets) • Other 2 (Youth Newsletters) • Newsletters

3. Description of targeted audience

The target audiences are at risk resource children and youth age 5-18 and adult volunteers .

V(G). Planned Program (Outputs)

1. Standard output measures

Target for the number of persons(contacts) to be reached through direct and indirect contact methods

	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Year	Target	Target	Target	Target
2008	300	400	2200	1200
2009	350	500	2500	1400
2010	400	600	3000	1600
2011	450	700	3400	1800
2012	500	800	4000	2000

2. (Standard Research Target) Number of Patents

Expected Patents

2008 :0 **2009 :**0 **2010 :** 0 **2011 :** 0 **2012 :** 0

3. Expected Peer Review Publications

Year	Research Target	Extension Target
2008	0	2
2009	0	1
2010	0	1
2011	0	1
2012	0	1

V(H). State Defined Outputs

1. Output Target

- Conduct monthly educational sessions for age appropriate tobacco teams in school and communities using the Project STAR Tobacco Curriculum

  2008 :24 **2009 :**36 **2010 :** 48 **2011 :**56 **2012 :**60

- Conduct educational sessions in local schools and communities using Let s Talk about IT.

  2008 :60 **2009 :**70 **2010 :** 80 **2011 :**90 **2012 :**95

- Conduct educational activities entitled “Baby Think it Over will help youth explore the emotional, financial and social consequences of teen parenting (Pregnancy Prevention)

  2008 :15 **2009 :**20 **2010 :** 25 **2011 :**30 **2012 :**35

- Plan and implement Youth tobacco summits to provide youth an opportunity to network and share resources and life experiences about Tobacco Education

  2008 :9 **2009 :**12 **2010 :** 15 **2011 :**18 **2012 :**20

- Conduct Workforce Development educational sessions utilizing the Working Class Curriculum local schools and in Communities

  2008 :40 **2009 :**45 **2010 :** 50 **2011 :**55 **2012 :**60

- Conduct Career Day/Fair and tours on workforce development

2008 :5 **2009 :**10 **2010 :** 15 **2011 :**20 **2012 :**25

- Conduct volunteer leaders training to organize school and community based clubs

2008 :5 **2009 :**10 **2010 :** 15 **2011 :**20 **2012 :**25

- Youth to Participate in projects at 4-H : Achievement Days , State club congress, and State fair exhibits National Youth Development education activity

2008 :4 **2009 :**4 **2010 :** 4 **2011 :**4 **2012 :**4

- Attend and participate in National 4-H Congress participate in national education activities

2008 :1 **2009 :**1 **2010 :** 1 **2011 :**1 **2012 :**1

- Organize tobacco education clubs

2008 :24 **2009 :**36 **2010 :** 48 **2011 :**56 **2012 :**60

- Conduct Career Development career days/fairs and tours

2008 :2 **2009 :**4 **2010 :** 5 **2011 :**6 **2012 :**8

V(I). State Defined Outcome

1. Outcome Target

Increase percent of youth participating in teen pregnancy and sexually transmitted diseases program

2. Outcome Type : Change in Knowledge Outcome Measure

2008 :30 **2009 :** 35 **2010 :** 40 **2011 :**45 **2012 :** 50

3. Associated Knowledge Area(s)

- 802 - Human Development and Family Well-Being

1. Outcome Target

Percent Increase in knowledge gained regarding tobacco us, secondhand smoke and health consequences

2. Outcome Type : Change in Knowledge Outcome Measure

2008 :15 **2009 :** 20 **2010 :** 25 **2011 :**30 **2012 :** 35

3. Associated Knowledge Area(s)

- 806 - Youth Development

1. Outcome Target

Percent increase in youth knowledge of workforce opportunities and skill needed to pursue careers and jobs

2. Outcome Type : Change in Knowledge Outcome Measure

2008 :15 **2009 :** 20 **2010 :** 25 **2011 :**30 **2012 :** 35

3. Associated Knowledge Area(s)

- 806 - Youth Development

1. Outcome Target

Increase percent of youth knowledge gained participating in educational activities at the Youth Leeadership Academy

2. Outcome Type : Change in Knowledge Outcome Measure

2008 : 5	**2009 :** 10	**2010 :** 15	**2011 :** 20	**2012 :** 25

3. Associated Knowledge Area(s)

- 806 - Youth Development

1. Outcome Target

Increase percent of knowledge gained of job readiness techniques and career search skills

2. Outcome Type : Change in Knowledge Outcome Measure

2008 : 15	**2009 :** 20	**2010 :** 25	**2011 :** 30	**2012 :** 35

3. Associated Knowledge Area(s)

- 806 - Youth Development

1. Outcome Target

Percent of youth benefiting from Teen pregnancy /STD Program

2. Outcome Type : Change in Action Outcome Measure

2008 : 5	**2009 :** 7	**2010 :** 10	**2011 :** 12	**2012 :** 15

3. Associated Knowledge Area(s)

- 802 - Human Development and Family Well-Being

1. Outcome Target

The number of youth benefiting from the teen pregnancy /STD Program. Decrease in the number of teen pregnancies and youth contracting STD's. Decrease the number of youth who use tobacco and tobacco products.

2. Outcome Type : Change in Action Outcome Measure

2008 : 5	**2009 :** 7	**2010 :** 9	**2011 :** 10	**2012 :** 12

3. Associated Knowledge Area(s)

- 802 - Human Development and Family Well-Being

1. Outcome Target

Number of youth with impoved communication and interviewing skills. Number of youth learning effective job readiness skills. The number of Youth who have increased their job readiness skills.

2. Outcome Type : Change in Action Outcome Measure

2008 : 5	**2009 :** 10	**2010 :** 15	**2011 :** 20	**2012 :** 25

3. Associated Knowledge Area(s)

- 806 - Youth Development

1. Outcome Target

Number of youth able to demonstrate the proper skills to develop a cover letter resume and Job application.

2. Outcome Type : Change in Action Outcome Measure

2008 : 5	**2009 :** 10	**2010 :** 15	**2011 :** 17	**2012 :** 20

3. Associated Knowledge Area(s)

- 806 - Youth Development

1. Outcome Target

Increase the number of minority youth participating in competitive youth activities 4-H Project Achievement, State Club

Congress.

2. Outcome Type : Change in Action Outcome Measure

2008 : 10	**2009 :** 12	**2010 :** 15	**2011 :** 18	**2012 :** 20

3. Associated Knowledge Area(s)

- 806 - Youth Development

1. Outcome Target

Reduce the number of teens becoming sexually active as teens and contracting STD 's.

2. Outcome Type : Change in Condition Outcome Measure

2008 : 5	**2009 :** 7	**2010 :** 10	**2011 :** 12	**2012 :** 15

3. Associated Knowledge Area(s)

- 802 - Human Development and Family Well-Being

1. Outcome Target

Reduce the incidence of youth tobacco use .

2. Outcome Type : Change in Condition Outcome Measure

2008 : 5	**2009 :** 8	**2010 :** 10	**2011 :** 12	**2012 :** 15

3. Associated Knowledge Area(s)

- 806 - Youth Development

1. Outcome Target

Increase the number train adult volunteer to organize and manage youth in school and community based clubs.

2. Outcome Type : Change in Condition Outcome Measure

2008 : 10	**2009 :** 12	**2010 :** 15	**2011 :** 17	**2012 :** 20

3. Associated Knowledge Area(s)

- 806 - Youth Development

V(J). Planned Program (External Factors)

1. External Factors which may affect Outcomes

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

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 participating in the program having to leave the program 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 and the availability of transportation for participants.

V(K). Planned Program (Evaluation Studies and Data Collection)

1. Evaluation Studies Planned

- Before-After (before and after program)

Description

The evaluation plan for the pregnancy prevention/STD program will be evaluated before and after the program using the Prevention Minimum Evaluation Data Set Jr. (PMEDSJ).The tobacco education program will be evaluated using the evaluation tool in the tobacco education curriculum.The 4-H Youth Development and Volunteer Development Programs will be evaluated using the evaluation tools for the educational curriculum.

2. Data Collection Methods

- Case Study
- Mail
- Telephone
- Observation
- On-Site
- Sampling
- Unstructured

Description

We will sample the participants of the program before and after the program using pre-post tests, observation, and portfolio reviews. Probability sampling will be used because it is the preferred process for youth program evaluations. This program will have a targeted population and we will be measuring changes in indicators related to the program objectives.