

# 2007 University of Arkansas at Pine Bluff Combined Research and Extension Plan of Work

## Cropping Systems

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### V(B). Program Knowledge Area(s)

#### 1. Program Knowledge Areas and Percentage

- 205 100% Plant Management Systems

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

#### 1. Situation and priorities

Limited Resource Farmers (LRF) and Socially Disadvantaged Farmers (SDF) must become efficient in their row crop operations if they intend to stay in business. The small profit margins in wheat and soybean crops that are often grown by these farmers mean that these farmers must maximize their yields to show a profit. However, these farmers usually do not produce yield that are on par with larger farmers. One reason for this is that LRF and SDF are slow to adopt Best Management Practices (BMPs) at the same rate that larger farmers do. This fact places LRF and SDF at a decided disadvantage and places them in danger of losing their livelihood. If they are unable to make a living, the farmers and their families may place an additional burden on society and reduce the diversity in our American agricultural system.

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

#### 1. Assumptions made for the Program

The benefits of conservation tillage have been shown in many parts of the nation; however, its adoption in Arkansas has been slow as compared to Midwestern states. Demonstrating that conservation tillage improves the bottom line and helps to conserve soil should help farmers to change their minds about the practice. Likewise, if level basin soybean production and/or using round-up ready soybeans are proven to be economically viable; LRF and SDF are likely to adopt these practices.

#### 2. Ultimate goal(s) of this Program

1. The adoption of two or more of the demonstrated BMPs by LRF and/or SDF in the Arkansas delta to improve crop yields. This will lead to reduce environmental contamination by pesticides. 2. The development of enterprise budgets for wheat, soybeans and rice production that show differences in conventional production practices vs. BMPs.

### V(F). Planned Program (Activity)

#### 1. Activity for the Program

Demonstrations on BMPs will be conducted at the SFO-WWMC site. Field days will be held to present findings and show demonstrations at the SFO-WWMC. Relevant information will be provided to field day participants and to other interested individuals.