FIELDPRINT CALCULATOR: ARKANSAS CASE STUDY

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Abstract

Utilization of the Fieldprint Calculator assists producers in determining how their current method of production affects sustainability. The Fieldprint Calculator makes estimates over seven sustainability factors: land use, soil conservation, soil carbon, irrigation water use, water quality, energy use, and greenhouse gas emissions. The objective was to determine if the most efficient producers in terms of cost per unit of production would rank higher than others in several of the metrics measured by the calculator. Research was conducted in eight counties over a span of four years, through the University of Arkansas Division of Agriculture Cotton Research Verification Program. The fields selected for observation varied from potentially high yielding fields to low yielding fields. During weekly visits to the farm the Extension Agent and Verification Coordinator made University of Arkansas based recommendations to the producer. During the study all of the producers' inputs were recorded providing the information needed to calculate fixed and variable cost. Field information was entered into the Fieldprint Calculator and summaries for each field were evaluated. Comparisons were made among the different fields to rank the producers efficiency with regards to output from the calculator. Our results showed a wide range of variability in efficiency of production based on calculator metrics when comparing different locations. Yield provided the best relationship to per unit cost of production. Further work is needed to establish links in sustainability metrics and profitability.