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SENT TO LSU AGCENTER/LOUISIANA FOREST PRODUCTS DEVELOPMENT CENTER - FOREST SECTOR / FORESTY PRODUCTS INTEREST GROUP

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Agricultural Producer Attitudes and Biobased Businesses

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Biomass from agricultural crops is a major potential source of feedstock for renewable energy. It has several advantages, such as lowering carbon dioxide emissions and stabilizing energy dependence. Although the U.S. produces about 3 percent of its total energy from renewable resources, the development and expansion of a biomass industry in the U.S. will require the use of bioenergy crops and agricultural residues. The availability of biomass for energy production from cropland in the United States is about 194 million dry tons annually, which is about 16 percent of total plant material produced.

Louisiana and Mississippi are rich in biomass resources, with approximately a third of each state in farmland acreage. Total farmland in Louisiana is a little more than 8 million acres, 29 percent of the total land area. Family or individual owners account for 85 percent of farm ownership in Louisiana. Mississippi has more than 11 million acres of farmland, which is 38 percent of the state's total land area. Family or individual owners account for 86 percent of farm ownership in Mississippi. In both states, around 90 percent of agricultural farms are less than 999 acres. The decisions of these farmers could affect supply and sustainability issues associated with producing renewable energy from agricultural crops.

The purpose of this research was to survey agricultural producers to identify willingness to participate in new biobased businesses. LSU AgCenter researchers sent questionnaires to 2,964 randomly selected agricultural producers in the 18 county Delta region of Louisiana and Mississippi to discern perceptions regarding biobased industry participation and potential opportunities. A total of 50 unusable surveys and 749 usable surveys were returned. The overall adjusted response rate for this survey was 25.7 percent.

Results

About 59 percent of respondents owned less than 250 acres of land, with 82 percent individual or family owners. Soybeans were the most cited crop planted (33 percent of respondents), followed by "other" – trees, grain sorghum and fruits (24 percent), corn (12 percent) and cotton (10 percent) (Figure 1).









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Figure 1. Major Agricultural Crop by Percent of Respondents in the Region.

Almost 52 percent of respondents believed biomass harvesting will help diversify the management activities of their agricultural land. When asked if they believe agricultural residues from harvesting activities should be used for bioenergy production, a little more than 63 percent agreed, while 12 percent disagreed. A narrow majority (51 percent) were willing to participate in activities specifically geared to biomass production, such as dedicated energy crops. In addition, 56 percent of respondents agreed that economically viable technologies exist for converting agricultural biomass into bioenergy.

Respondents were asked if they would participate in a biomass-to-bioenergy market with an option of "No," "Yes" or "Not Sure." More than 17 percent said they would not participate, and 26 percent said they would participate. However, the majority of respondents (57 percent) were unsure if they would participate in a biobased market.

Summary

The biomass-driven energy sector is in its early stages. Although many respondents think technology exists for producing energy or fuels from agricultural crops and that agricultural residues from harvesting activities should be used for bioenergy production, most were unsure whether they would participate as a supplier. This and other questions that had significant neutral responses indicate a low level of familiarity with emerging biobased markets. As more studies are done, information should be disseminated to farmer clientele to keep them abreast of potential business opportunities or advancements in biobased technologies.









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