Attachment G Economic Benefit

Saving \$20,000 can significantly bolster economic development for a farm, providing vital resources for growth and innovation. This substantial sum can be allocated towards various avenues that enhance productivity, sustainability, and overall profitability. For instance, investing in upgraded equipment and technology can streamline operations, increase efficiency, and reduce long-term costs associated with labor and maintenance. Additionally, funds can be directed towards implementing sustainable practices, such as soil conservation measures or renewable energy initiatives, which not only improve environmental stewardship but also yield long-term cost savings. Moreover, allocating resources towards workforce development, such as training programs or hiring additional skilled labor, can enhance productivity and contribute to job creation within the local community. Ultimately, saving \$20,000 empowers farms to invest in strategic initiatives that foster economic growth, resilience, and prosperity for years to come.

Continued Economic and Technological impacts.

Additional revenue in an operation serves as a crucial lifeline for growers, particularly during periods of low commodity prices. In the face of economic challenges, such as fluctuating market conditions or unforeseen expenses, the infusion of supplementary income provides much-needed stability and resilience. By diversifying revenue streams and maximizing profitability through innovative approaches like drone technology or value-added products, growers can mitigate the impact of depressed commodity prices on their bottom line. This additional revenue not only helps cover operational costs and debt obligations but also enables growers to invest in essential resources, such as equipment upgrades or land improvements, ensuring the long-term viability of their operations. Ultimately, the ability to generate additional revenue empowers growers to weather economic uncertainties and remain competitive in the agricultural industry, safeguarding their livelihoods and sustaining the vitality of rural communities.

Water Conservation-

Water safety is a paramount concern in agriculture, and the use of drones for precision application offers a promising solution to mitigate nitrate contamination in groundwater. By precisely targeting areas in need of nutrient application during the growing season, drones facilitate more efficient use of fertilizers, minimizing the risk of excess nitrates leaching into groundwater. Unlike traditional farming practices that often front-load nutrient applications, which can result in unused fertilizers washing into water sources during rainfall or irrigation, drone technology allows for timely and targeted nutrient delivery. This targeted approach not only optimizes crop uptake of nutrients but also reduces the potential for nitrate pollution in groundwater. By harnessing the efficiency of drone-based application, farmers can enhance water safety and contribute to the long-term sustainability of our groundwater resources. Also we are wanting to apply cover crops with our drone to help excess nutrients to be absorbed to keep the nutrients in the top 6 inches as long as possible. We are wanting to have a rate of .5 to .7 lbs of nitrogen per bushel and this technology can make it happen.