LSU AgCenter Economic Impacts

Water Quality Extension Lab

Extension Response

Since 2023, the LSU AgCenter's Water Quality Extension Lab has provided technical assistance through experiential learning programs that engage students and industrial partners in on-site learning. The funded programs target small to medium-sized manufacturing, processing, and agricultural industries to provide resources, workforce networking, and promote sustainable practices in industrial settings. To complement LSU AgCenter's parish extension presence, the on-campus programs make site visits with students and faculty to provide technical assistance in rural areas to showcase project feasibility, report potential savings, and align with federal stakeholder funding opportunities. These efforts have yielded increased implementation of rural sustainability projects while creating lasting academic-industrial partnerships for future extension collaborations.

Economic and Workforce Impacts

The LSU AgCenter's experiential learning programs have directly contributed to hands-on student learning, adoption of sustainability manufacturing practices, and economic savings around that state:

- **60 manufacturing facilities visited** by faculty and students since 2023.
- **280+ recommendations made** to promote sustainable manufacturing practices in water and energy conservation, waste minimization, pollution prevention, and productivity enhancement.
- **63% implementation rate** for forecasted projects by academic teams and alignment with funding resources.
- **$2,786,535 in savings** calculated based on implementation surveys and post-assessment meeting with facility personnel.
- **30 students participated** in training and engagement opportunities with the Louisiana manufacturing sector.

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LOUISIANA SOLUTIONS GLOBAL IMPACT

Program Outcomes

The LSU AgCenter's emphasis on experiential learning programs enhances the future of Louisiana's rural industries:

- **Sustainable Manufacturing Practices:** Provided recommendations to increase industrial personnel's awareness of sustainable practices and potential economic gain.
- **Implementation Resources:** Assisted partnering facilities with identifying pathways for stakeholder implementation grants through federal agencies.
- **Community Networking:** Helped link facilities and extension agents for community connectivity and access to university resources.
- **Public Health Protection:** Reduced foodborne illness risk by promoting science-based, preventive on-farm practices
- **Workforce Development:** Trained students on persistent problems in rural industries to build skills in developing practical solutions.
- **Long-term Collaborations:** Improved academic and industrial relationship through collaborative efforts in project implementation and best management practice planning.

Training Highlights

- Over **560+ industrial personnel** reached by Water Quality Extension Lab experiential learning program presentations at association meetings and industrial events.
- **120+ industrial personnel participated** in direct technical assistance with academic team on-site visits.
- Technology trainings for increased adoption in facilities and on farms have reached **75+ personnel** while hosted across field days and demonstration events.
- Educated **250+ farmers market vendors and 200+ farmworkers**, including Spanish-speaking audiences, through targeted, culturally relevant programs.
- **14 student recipients** of the Student Certification of Achievement from federal funding agency for active participation in national experiential learning programs.

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