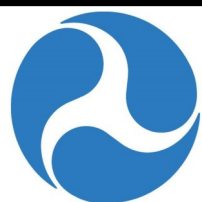


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U.S. Department of
Transportation



**Project Title: Geographic Potential and Environmental Sustainability of
Bioenergy Production in Oklahoma**

DR. GOPAL KAKANI

Project Goal

The goal of this project is to develop practices and technologies necessary to ensure efficient, sustainable, and profitable production of cellulosic biomass.

Three main objectives are to (1) evaluate biomass production potential of lignocellulosic feedstocks, (2) increase the understanding of environmental sustainability, and (3) develop spatial maps to identify bioenergy hotspots.

Project Outcome(s)

The results will provide information to production scientists, county and area extension specialists, and farmers and landowners about the best establishment, maintenance plus management, and harvesting. Project will also provide regional biorefineries with the break-even farm gate price for several switchgrass, sorghum, and mixed grass species.

Publications and Presentations

Haankuku, C., F.M. Epplin, and V.G. Kakani. 2014. Forage sorghum response to nitrogen fertilization and estimation of production cost. *Agronomy Journal*. 106: 1659-1666. doi:10.2134/agronj.14.0078; Published online 22 May 2014.

Kakani, V.G., K. Dhakal, P. Wagle. 2013. Big Data for Big Solutions: Eddy Flux, Mesonet and C Sequestration. Fourth Annual AgMIP Global Workshop, Oct 28-30, New York, NY.



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