

<b>Senior Lecturer</b>	
<p>Kiggundu Nicholas  Department of Agricultural and Biosystems Engineering,  School of Food Technology Nutrition and Bio-Engineering,  College of Agricultural and Environmental Sciences,  Makerere University  P.O. Box 7062, Kampala, Uganda  Tel: +256 414-542277  Mobile: +256 772 443552  Email: kiggundu@caes.mak.ac.ug  Alternative Email: nskiggundu@gmail.com  Skype:Kiggundu.nicholas</p>	
<b>Professional Training and Experience</b>	<p>2010: Ph.D. Agricultural and Biological Engineering (Land and Water Engineering-option), University of Florida, Gainesville, Florida, USA  1999: M.Sc. Agricultural Engineering (Soil and Water Engineering), University of Nairobi, Nairobi, Kenya.  1995: B.Sc. Agricultural Engineering, Makerere University, Kampala, Uganda</p>
<b>Research Interests/Expertise</b>	<p>Crop evapotranspiration, soil water sensor based irrigation technologies, watershed modeling (of runoff water, sediment, and nutrient transport), crop modeling (i.e., simulating optimal planting dates, crop growth, yield production, nutrient uptake and nutrient leaching), soil and water conservation practices, water quality monitoring and agrochemical management, drainage, GIS applications in water quality and quantity management, and modeling climate change impacts on crop yields</p>
<b>Publications [10 most cited on Scopus.com]</b>	<ol style="list-style-type: none"> <li>1. <b>Kiggundu, N.</b>, Migliaccio, K. W., Schaffer, B., Li, Y., Crane, J. H. (2012). Water savings, nutrient leaching, and fruit yield in a young avocado orchard as affected by irrigation and nutrient management. <i>Irrigation science</i>, 30(4), 275-286.</li> <li>2. Sekaluvu, L., Tumutegyereize, P., <b>Kiggundu, N.</b> (2014). Investigation of factors affecting the production and properties of maize cob-particleboards. <i>Waste and biomass valorization</i>, 5(1), 27-32.</li> <li>3. Owusu, P. A., Banadda, N., Zziwa, A., Seay, J., <b>Kiggundu, N.</b> (2018). Reverse engineering of plastic waste into useful fuel products. <i>Journal of Analytical and Applied Pyrolysis</i>, 130, 285-293.</li> <li>4. Aboagye, D., Banadda, N., Kambugu, R., Seay, J., <b>Kiggundu, N.</b>, Zziwa, A., Kabenge, I. (2017). Glucose recovery from different corn stover fractions using dilute acid and alkaline pretreatment techniques. <i>Journal of Ecology and Environment</i>, 41(1), 26.</li> <li>5. <b>Kiggundu, N.</b>, Li, Y., Migliaccio, K. W. (2010). Phosphorus adsorption by ceramic suction lysimeters. <i>Vadose Zone Journal</i>, 9(4), 1092-1099.</li> <li>6. Mbabazi, D., Migliaccio, K. W., Crane, J. H., Fraise, C., Zotarelli, L., Morgan, K. T., <b>Kiggundu, N.</b> (2017). An irrigation schedule testing model for optimization of the Smartirrigation avocado app. <i>Agricultural water management</i>, 179, 390-400.</li> <li>7. Jiru, T. M., Abate, D., <b>Kiggundu, N.</b>, Pohl, C., Groenewald, M. (2016). Oleaginous yeasts from Ethiopia. <i>AMB Express</i>, 6(1), 78.</li> <li>8. Katimbo, A., <b>Kiggundu, N.</b>, Kizito, S., Kivumbi, H. B., Tumutegyereize, P. (2014). Potential of densification of mango waste and effect of</li> </ol>

	<p>binders on produced briquettes. <i>Agricultural Engineering International: CIGR Journal</i>, 16(4), 146-155.</p> <p>9. Obura, J. M., Banadda, N., Wanyama, J., <b>Kiggundu, N.</b> (2015). A critical review of selected appropriate traditional evaporative cooling as postharvest technologies in Eastern Africa. <i>Agricultural Engineering International: CIGR Journal</i>, 17(4), 345-353.</p> <p>10. <b>Kiggundu, N.</b>, Arhin, S. G., Banadda, N., Kabenge, I. (2017). Impacts of biofuel policies on welfare and food security: Assessing the socioeconomic and environmental trade-offs in sub-Saharan Africa. <i>International Journal of Renewable Energy Research</i>, 7(4), 2162-2171.</p>
<b>Innovations Developed and Awards Won</b>	<ul style="list-style-type: none"> <li>• Development of a low cost multipurpose tractor. 2015</li> </ul>
<b>Research Projects</b>	<ul style="list-style-type: none"> <li>• Conducting applied multidisciplinary research for improving economic performance and livestock sustainability in the cattle corridor of Uganda (2016/2017)</li> <li>• Development of a low cost multipurpose tractor. 2015</li> <li>• Strengthening universities capacities for mitigating climate change induced water vulnerability in East Africa (WATERCAP). A University regional project. 2012-2014)</li> <li>• Utilization of food waste for biogas production. 2014-2015</li> <li>• Biomass Waste (Co-products) from FTBIC for Briquette making. 2012-2013</li> </ul>
<b>Professional Membership and Activities</b>	<ul style="list-style-type: none"> <li>• Tau Beta Phi, The Engineering Honor Society</li> <li>• American Society of Agricultural and Biological Engineers</li> <li>• Gamma Sigma Delta Agricultural Honor Society</li> </ul>