

Ms. Fildah Ayaa is an Assistant Lecturer in the Department of Agricultural and Biosystems Engineering (ABE). She has been a faculty member since 2009. Ms. Ayaa teaches a number of undergraduate courses and is heavily involved in research. Her primary research interest areas are Renewable energy and energy generation, Mathematical modeling, Computational fluid dynamics and Environmental engineering. In addition, Ms. Ayaa has extensive consulting experience, and has worked with a number of entities and projects in various consulting roles. Ms. Ayaa received her M.Sc. in Mechanical Engineering from Makerere University, in 2014 and a B.Sc. in Agricultural Engineering from Makerere University in 2008.

List of Selected Publications

1. F. Ayaa, P. Mtui, N. Banadda, J. Van Impe.(2014). Design and Computational Fluid Dynamic Modeling of a Municipal Solid Waste Incinerator for Kampala City, Uganda. American Journal of Energy Engineering. 2(3), 80-86. doi: 10.11648/j.ajee.20140203.12
2. M.M. Nakibuuka, D.Tashobya, N. Banadda, F. Ayaa, I. Nhapi, U.G.Wali and R. Kimwaga. (2012). Qualitative Determination of Methane Gas at Selected Sites in Kampala City, Uganda. The Open Environmental Engineering Journal 5.
3. Nakibuuka M.M., Tashobya D., Banadda N., Ayaa F., Nhapi I, Umaru Garba Wali and Richard Kimwaga(2012). New method of qualitative determination of methane gas at selected sites in Kampala City, Uganda. The open Environmental Engineering Journal, 5:50-55.
4. Banadda N., Nakawooya G., Nambooze C., Natukunda S., Nakibuuka M.D., Luswata D., Ayaa F., Wali U.G. and Nhapi I.(2011). Pollution of Lake Victoria:What next?. Research journal of soil and water management 2(2):19-28.
5. H.Namaweje, N.Banadda, J.B.Kigozi, F.Ayaa and S.Sendagi.(2011). Investigating the effect of cooking on color and texture of green bananas (Matooke) wrapped in polythene bags. African journal of food science 5(10):589-593.
6. N. Banadda, F. Ayaa, I. Nhapi, U.G. Wali and R.J. Kimwaga.(2011). Diffusive flux modeling of non-point source pollutants in Lake Victoria: A comparison study of

Fick's law and the Fokker-Planck law. The Open Environmental Engineering Journal 4.105-111.

Selected Accomplishments

1. Associate Expert/Compilation and analysis of data related to trade in Agricultural commodities in the EAC/ March- April 2013
2. Team member/Appraisal and perspectives of the technical systems of rice processing in Uganda for FAO/October 2012.
3. Program Associate/Study on constraints to accessing agricultural technologies/ February-April 2012
4. Program Associate/ Development of Agro-industries and Agribusiness as an alternative to large scale leasing of land in East Africa/ November 2011.
5. Program Associate/ Support for inclusive markets in Agriculture and Trade, especially technologies that have been developed at each stage of the value chain for selected commodities/November 2011.
6. Research Associate/collection of detailed data and information on products' value chains of maize, cassava, dairy, plantains, bananas, beef cattle, sweet potatoes, Irish potatoes, dry beans, and rice with respect to national, regional and international markets/June-August 2011
7. Program Associate/ Identification of potential market leaders for 20 selected DIMAT commodities/ May 2011
8. Programme Associate/ Agro-industry report and analysis of the EAC region/ May 2011