

# **TEAM BIOCHAR**

# 2020 Finalist Team Guide

### PRESENTER:

**Emmanuel Hanyabui** [E-Man-U-Well | Han-Yah-Bea] Land Use and Environmental Science (G) University of Cape Coast



My name is Emmanuel Hanyabui, I am a Ghanaian male born in 1992. I successfully completed Bachelor of Science degree in Agriculture at the University of Cape Coast, Ghana in the year 2017. I am now a RUFORUM MasterCard Foundation 2018 CARP+ Scholarship beneficiary, pursuing Master of Philosophy in Land Use and Environmental Science at the University of Cape Coast, Ghana. I received a RUFORUM travel grant to Kenya in October, 2018 to present some preliminary findings from my on-going research work. Subsequently, I won a 6-month scholarship under the Intra-Africa Mobility (ACADEMY) project to carry out part of my laboratory analysis and also audit some courses at Kenyatta University, Kenya in 2019/2020 academic year. My hobbies include reading of Scientific journal and other publications, football, leisure and recreation, I am self-motivated, results-oriented, team player with deep commitment, a quick and confident learner with excellent leadership abilities. I have the needed skill and capacity to plan, organize and prioritize workloads to meet intended objectives within time limits. I have good analytical, problem solving, interpersonal, IT and presentation skills.

#### OTHER TEAM MEMBERS:

Emmanuel Kwesi Arthur

Finance (G) Kenyatta University



Agnes Omabour Hagan

Plant Sciences (G) Wageningen University



Apori Samuel Obeng

Agro-Ecology (G) Uganda Martyrs University



Zikiru Shaibu

Agricultural Extension (PG) University of Cape Coast



### **TEAM BIO**

Team biochar is an interdisciplinary team of members interested in facilitating initiatives that will ensure food and nutritional security and improved rural livelihoods without adversely impacting environmental sanitation. Members of team biochar came together based on our common passion, interest and commitment to developing solutions to tackle evolving global challenges such as climate change, poverty, food insecurity, water and air pollution as presented in the Sustainable Development Goals (SDGs) 13, 1, 2 and 6 respectively. The team comprises members with academic backgrounds in land use and environmental science; plant pathology and agroecology; agriculture technology and finance from four different universities based on the problem the team seeks to address. The prize money that will be received will be used to fund a pilot project regarding our proposed initiative. Activities to be funded include construction of user-friendly, affordable and environmentally sensible biochar kilns (reactors) for the production of biochar, vehicle hire and fuel costs for transporting the pineapple waste from the fields, processing units and the market places; costs involved in setting up a field experiment to implement our ideas and examine the outcomes.

## **SOLUTION SUMMARY**

Team Biochar is developing a system to convert Ghana's abundance of pineapple waste—which is currently either burned, discarded on the ground/in bodies of water, or buried in the soil—into biochar and compost that can be used to improve soil fertility, increase crop yield, and enhance food security while eliminating environmental pollution and reducing the spread of disease.