TUAT

The 4th Open Seminar **Current Status and Potential** of Cocoa By-Products in Ghana

2025.12.12 Fri. 15:00~17:30 TUAT∞MUSASHI ENG, INNOVATION CENTER

> Language: English (Live Zoom Subtitles Available) Hybrid seminar (in-person & online)





ERIC KWESI NARTEY

Professor Dean of the School of Agriculture University of Ghana



ONWONA-AGYEMAN SIAW

Assoc. Professor Organization for the Advancement of **Education and Global Learning (TUAT)**



DANIEL OTU

Director of Production and Operations Koa Impact Ghana Ltd.



Cacao product tasting session available!



SYLVIA KPABITEY

West Tokyo Joint Center for Sustainability Research and Implementation (TUAT)

Application Form







♦15:05-15:15

"Introducing the Activities of Platform for Sustainable Cocoa in Developing Countries"

Chihiro Sawada (Law and Justice Team, Governance Group, Governance and Peacebuilding Department, Japan International Cooperation Agency, JICA)

♦15:15-15:50

"Valorisation of cocoa pod husk for biochar-compost production" Eric Kwesi Nartey (Professor, University of Ghana)

Cocoa pod husk (CPH), a major by-product generated in large quantities during cocoa production, was utilized in this study to produce compost by mixing it with biochar, aiming to promote waste valorization and improve soil fertility. The resulting compost was free of pathogenic microorganisms, shows a well-balanced nutrient composition with high phosphorus content, and was found to enhance seed germination and root growth. This initiative offers a sustainable and practical solution for recycling cocoa industry waste whole promoting environmentally friendly and more productive cocoa cultivation.

♦15:50-16:25

"Transforming the Cocoa Industry through Valorisation"

Daniel Otu (Director of Production and Operations, Koa Impact Ghana Ltd.)

Smallholder farmers in West Africa produce approximately 80% of the region's cocoa, yet often face poverty. Cocoa is a seasonal crop, and challenges such as pests, diseases, climate change, and land tenure systems have negatively impacted the livelihoods of farmers. Approximately 80% of the cocoa fruit is wasted, as farmers typically focus on the dried cocoa beans and lack knowledge, infrastructure, and finances to utilise the pulp, placenta, and husk. Koa has developed a farmer-based model with a decentralised approach that aims to assist farmers in generating additional income by valorising these underused parts of the cocoa fruit while offering new products to consumers in the food market.

♦16:35-17:10

"Utilization of Cocoa By-Products as a Strategy for Poverty Reduction among Ghanaian Cocoa Farmers"

Sylvia Kpabitey (West Tokyo Joint Center for Sustainability Research and Implementation, TUAT)

Ghana is globally recognized for producing some of the finest cocoa beans and is ranked as the second-largest producer worldwide. Despite this, many cocoa farmers continue to live in poverty, which threatens the attractiveness and sustainability of cocoa farming. This study explores alternative income opportunities within cocoa production, specifically sources beyond the cocoa beans i.e. cocoa by-products that farmers can leverage to improve their livelihoods. The analysis draws on micro-level data collected from cocoa farmers in Ghana's Eastern Region.

♦17:10-17:20

"Improving the survival rates of transplanted cocoa seedlings with biodegradable seedling pots and mulches"

 ${\bf ONWONA-AGYEMAN\ SIAW\ (Assoc.\ Professor,\ Organization\ for\ the\ Advancement\ of\ Education\ and\ Global\ Learning,\ TUAT)}$

In Ghana, cocoa production depends heavily on seasonal rainfall, and climate change has led to drought-related seedling losses after transplanting. This study explores the use of biodegradable seedling pots — made from recycled cocoa pod husks — and mulched to improve the survival of transplanted cocoa seedlings. The presenter will give introduction on preliminary findings and discuss their potential contribution to sustainable cocoa production.