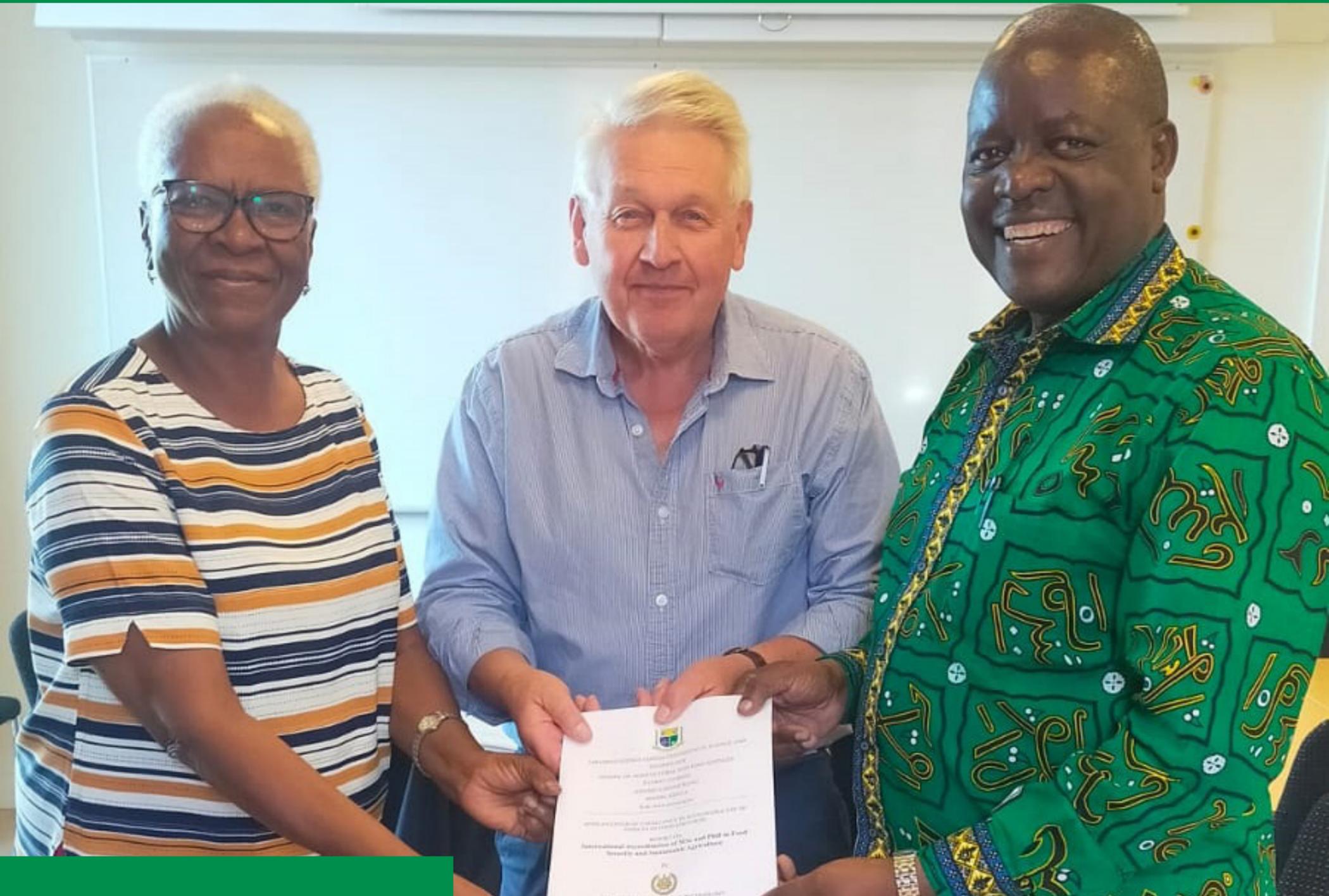


THE OASIS NEWSLETTER

A Publication from the Office of the Vice-Chancellor



UPCOMING EVENTS

26/07/2023 - 30/07/2023:
KISUMU ASK SHOW

*“Promoting Climate Smart
Agriculture and Trade
Initiatives for Sustainable
Economic Growth”*

INSIDE

- » JOOUST programmes get International Accreditation
- » JOOUST set to construct iconic tower at Yala swamp
- » Mapping out of black soldier fly substrate sources

JOOUST PROGRAMMES GET INTERNATIONAL ACCREDITATION



Faculty members of School of Agricultural and Food Sciences sign and receive accreditation document for programmes

Jaramogi Oginga Odinga University of Science and Technology Africa Centre of Excellence (ACE) II INSEFOODS is among the twenty four Africa Centres of Excellence in Eastern and Southern Africa. One of its key aims is to deliver quality postgraduate programmes that are in tandem with international market demands and standards. Subsequently, the programmes offer must be accredited by both the Commission for University Education (CUE) and the International Accreditation Board (IAB)

Against this backdrop, a team of faculty members from the School of Agricultural

and Food Sciences visited Chalmers University of Technology in Sweden and Weihenstephan-Triesdorf University of Applied Sciences, Germany, to seek opportunities for international accreditation of its two postgraduate flagship programs in PhD and MSc in Food Security and Sustainable Agriculture. This visit was equally envisioned to strengthen the already existing collocations.

Based on the Chalmers Quality Assurance Policy, JOOUST presented a meticulously revised scope and content of the MSc and PhD in Food Security and Sustainable Agriculture. Both the programs were

given a clean bill of health by the Chalmers Quality Assurance Policy by Chalmers University of Technology.

JOOUST ACE II INSEFOODS Project promotes the use of edible insect for human and feeds for livestock and poultry. The Center currently has a total of 113 students, 56 of whom are regional, pursuing their Masters degree in Food Security and Sustainable Agriculture while 30 students, 14 of whom are regional, pursuing their PhD degree in the same field.

JOOUST SET TO CONSTRUCT ICONIC TOWER AT YALA SWAMP



Eddy covariance flux tower for atmospheric measurements

Jaramogi Oginga Odinga University of Science and Technology, through VLIR-IUC Project, is now ready to set up an Eddy Covariance Tower in the sleepy Yala Swamp along the beaches of Lake Victoria to help study the relationship between vegetation and the atmosphere.

Not long ago, a group of sub-project 1 team members and technologists from JOOUST conducted a community engagement regarding the installation of the tower at Osieko beach where they met a host of local leaders including the area chief who gladly received the idea and thanked the University for considering their area.

The current ventures are part of year 1 implementation activities through the subproject 1 of the Belgium sponsored VLIR-IUC project that focuses on impacting the community members living around the wetlands through manage Victoria Basin. The community expect to benefit directly and indirectly in the project by being involved in clearing the marked site for the construction of the tower.

The Swamp, sitting on approximately 175Km² along the northeastern shores of Lake Victoria, is completely consumed by a dense and stubborn papyrus vegetation. . It is largely fed

by the floodwaters of the Nzoia and Yala rivers and partly by the backflow of water from Lake Victoria. The wetland lies on the border of Siaya and Busia counties in Kenya and acts as a filter for the waters flowing into Lake Victoria from two major rivers namely, Yala and Nzoia.

Moreover, Yala Swamp is home to the nationally endangered Sitatunga antelope and other large mammals, numerous wetland birds (including the vulnerable Papyrus Yellow Warbler), and is a refuge for cichlid fish endemic to Lake Victoria that have become extinct in the main lake.

In addition, the swamp provides numerous essential ecosystem services and vital resources such as water, food, medicine and wood for over 250,000 people who inhabit its surroundings. The wetland, however, faces many threats, including increasing human population, over-exploitation of its natural resources by the competing local communities, habitat degradation and biodiversity loss.

With eddy covariance, scientists can directly measure the exchange of various gases and energy between the atmosphere and the underlying surface so that?

It is not expressly clear how this project will impact the lives of the locals save for the clearing of the construction site. Neither can the reader visualize the end game of the research activity in terms of new knowledge.



100m walkway within papyrus plantation at Maduwa primary school in Budalangi constituency



Sub-project 1 team members pose for a group photo with the community members



Sub-project 1 team members engage community members

MAPPING OUT OF BLACK SOLDIER FLY SUBSTRATE SOURCES



A group of young farmers in Siaya County observes black soldier fly larvae in their rearing trays

The JOOUST - FAO (Food and agriculture Organization) team is in the process of implementing the commercialization of Black Soldier Fly Larvae (BSFL). The team targets to Strengthen BSF value chain so as to run an inclusive and profitable BSF. To realize this goal, there is need to have a reliable supply of organic waste substrates that in turn will ensure successful BSFL production. This, therefore, informed the decision to map out organic waste sources and secure supply and logistics required to gather such wastes and the required logistical frameworks for delivery to the university and engaged flagship farmers.

Black Soldier Flies feed on organic wastes with scent preferably fresh organic wastes, which includes fresh fruits added with fish, vegetables wastes and hotel wastes. Fish waste is readily available and will be collected from victory farms, Sukuma wiki and fruit waste from markets, farms and fruit processing farms. This will need to be collected in tonnes.

The wastes will be sourced from markets within Siaya County, western Kenya. They will include: Siaya Town, Ndori, Akala, Ugunja, Yala, Usigu and Bondo town. The BSF project is at the pilot phase and its core objective is to test its business viability.

The project has an array of thematic areas ranging from development of business plan for commercialization of BSF based animal feeds and products, mapping of the sources organic wastes to be used in the project, to sourcing out market for the excess/ surplus BSF products .

To achieve this, the project team members organized a meeting on Thursday 6th July 2023 at the postgraduate lecture room 2 where they invited a market manager, seven market masters from the respective markets and youth from each the seven markets to be involved in waste sourcing, sorting and gathering at designated points for subsequent

collection and transportation. The team members from JOOUST included Prof. Manyala, Dr. Elijah Museve, Dr. Richard Magwanga, Dr. Collins Mweresa, Mr. Charles Dwasi, Mr. Kevin Okudo and Mr. Fredrick Oginga.

The key highlights of the meeting included the role of JOOUST in the Black Soldier Fly Larvae (BSFL) commercialization project, mapping out the different markets in Siaya County and the market days, identification of the kind of organic waste to be collected, methods of collection of the organic waste, and the role of market masters, market surveyors and youth in organic waste mapping and sourcing.

The meeting chaired by

Dr. Collins Mweresa, Senior Lecturer, Applied Entomology (JOOUST), agreed that Bins will be distributed in the markets and the respective market masters will then liaise with market surveyors and youth to facilitate the collection of the waste within the markets from the vendors.

The role of the Market Manager will be to mobilize vendors, organize places of waste collection, Sensitize vendors, Coordinate logistics/ transportation of bins, oversee the Security of bins and introduce the youth to vendors. The Market surveyors' brief will be to ensure quality of waste collected, advice on technical issues and be a link between the County

government and the project team on policy issues. The youths that will be on board from all the seven markets will ensure only organic waste is collected, Keep data of volumes of waste collected, participate in the production of BSF and help in sensitization of vendors.

The project team and the stakeholders agreed to work together to ensure that they are able to produce BSF, participate in training and sensitization workshops, keep proper records, disseminate the knowledge and train others.

So far the team has been able to develop a criteria to engage the groups, engaged the County Government of Siaya, and sensitized County teams-livestock officers.



A group of young farmers in Siaya County being trained on techniques of mapping out of black soldier fly substrate sources

The Oasis

**A Newsletter of Jaramogi Oginga Odinga
University of Science and Technology**

A publication from the Office of the Vice-Chancellor



Appetizing Fresh vegetables from JOOUST farm ready for harvesting and sale to the local community and staff. Get your share every friday between 8-10am at affordable cost

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