UWI
ST. AUGUSTINE CAMPUS

FACULTY *of* FOOD *and* AGRICULTURE

Newsletter

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FFA Launches Alumni Association

Alumni and staff from the Faculty of Food and Agriculture

On July 2023 the Faculty of Food and Agriculture hosted an alumni brunch to launch its Alumni Association. The brunch was held at the Sir Frank Stockdale Building and 52 alumni attended. The programme consisted of alumni testimonials, remarks by the Dean and Heads of Departments, and a fun quiz. The alumni mingled among themselves and interacted with their lecturers and other FFA staff. Follow-up activities are being planned to ensure that the enthusiasm and momentum generated at the launch continues. It is hoped that the association will foster a strong, engaged community of alumni who will actively contribute to the growth, development and success of the faculty and its graduates (see page 2).

FFA Launches Alumni Association *Continued*

Alumni giving Testimonials

Mr Winston Rudder graduated in 1965 from the Faculty of Agriculture

Professor Wayne Ganpat graduated from the Faculty of Agriculture in 1978

Mr Marcus Mycoo graduated from the Faculty of Agriculture in 1987

Time to brunch and mingle!

Professional Certificate in Aquaculture Production and Management

The Faculty of Food and Agriculture is teaming up with the Ministry of Youth Development and National Service (MYDNS) Trinidad and Tobago, to offer a *Professional Certificate in Aquaculture Production and Management* for youths. The programme is one-year, full-time for nationals aged 16-35 years, to learn the necessary skills to become successful agri-entrepreneurs in the field of aquaculture (breeding, raising and harvesting fish, shellfish and aquatic plants).

A student orientation session took place on 13 September 2023 and students were addressed by the Dean of the Faculty, Professor Mark Wuddivira and the Deputy Principal of the St Augustine Campus, Professor Indar Ramnarine.

The Dean told the students, "The recent global pandemic and conflicts have emphasised the fragility of global food security. In response, the CARICOM Heads of Government have crafted a visionary plan for a 25% reduction in food import bills by the year 2025. At the heart of this plan lies sustainable, resilient production systems, with a particular focus on sustainable aquaculture. Aquaculture holds immense potential for our Caribbean SIDS." He continued, "Many Caribbean nations have already embarked on initiatives to bolster local aquaculture production. Aquaculture can play a pivotal role in enhancing our resilience, reducing our dependence on costly food imports, and creating more employment opportunities across the agricultural value chain. Furthermore, it's crucial to consider the broader economic context. We live in a time when economic diversification, innovation, and entrepreneurship are more vital than ever. Integrating modernised, technological aquaculture into youth development efforts can undoubtedly reshape Trinidad and Tobago's economic landscape and promote sustainable development. Therefore, this partnership between MYDNS and UWI will empower selected entrepreneurs among you to become technically proficient in aquaculture production and management, focusing on select fish and shellfish species."

Upon successful completion of the programme, participants will receive a Certificate in Tropical Aquaculture Production and Management.

Participants listen attentively to the Dean

techAgri Expo 2023

Empowering Youth Entrepreneurship through Agricultural Technology **was the theme for techAgri 2023, which took place from 22 to 24 September 2023, after a two-year hiatus due to the COVID-19 pandemic. There were over 100 booths displaying wildlife, handicraft and agricultural produce and machinery and tools.**

Over 1,500 students, from both primary and secondary schools, attended the expo on 22 September and an additional 3000 persons visited during the three days. This year's techAgri was held in partnership and with financial support from both the Ministry of Youth Development and National Service (MYDNS) and the Agricultural Development Bank.

Addressing the opening ceremony, Dean of FFA, Professor Mark Wuddivira, stated that this year's theme underscores the unwavering dedication to fostering the entrepreneurial zeal of our youths, who are the future architects of our agri-food landscape. He added that in commemoration of the Commonwealth Year of the Youth 2023, the 2023 techAgri Expo takes on added importance..."It serves as a testament to our dedication to creating opportunities for our young leaders, fostering their innovation, and equipping them with the tools they need to drive progress in the agri-food sector."

The Dean added, "This Expo is more than just a showcase of technological marvels; it is a platform for collaboration, learning, and empowerment. Together, we will explore the myriad ways in which technology can transform the agri-food sector, making it more sustainable, efficient, and inclusive."

Speakers at the opening ceremony of techAgri, from left: ***Dr Ronald Roopnarine, FFA; Senator the Honourable Avinash Singh, Ministry of Agriculture, Land and Fisheries; Dean Mark Wuddivira, FFA; The Honourable Foster Cummings, Minister in the Ministry of Youth Development and National Services; Mrs Wendy Samsundar-Beharry, Agricultural Development Bank; Mr Balliram Maharaj, His Worship, the Mayor of Arima; Professor Indar Ramnarine, Deputy Principal, St Augustine Campus, UWI***

techAgri Expo 2023

Some of the booths at techAgri displayed and sold products sourced from local materials

techAgri Expo 2023

Ornamental plants, wildlife and other animals were also on display

techAgri Expo 2023

A wide array of machinery and tools were also on display

The Faculty of Food and Agriculture to Serve as Operational Partner for two Sub-Regional Fisheries Projects

The Faculty of Food and Agriculture will be the operational partner for the implementation of two sub-regional fisheries projects, which are being co-funded by the Food and Agriculture Organization (FAO) and the Global Environment Facility (GEF). These sub-projects are:

**** Enhancing capacity for the adoption and implementation of the ecosystem approach to fisheries***

This project seeks to advance the adoption and implementation of the ecosystem approach to fisheries (EAF) in the shrimp and groundfish fisheries in the North Brazil Shelf Large Marine Ecosystem. Guyana, Suriname and Trinidad and Tobago will participate in this project.

The major barriers to wider adoption and implementation of EAF management that the project seeks to address are:

(i) lack of adequate data and information for EAF at national and sub-regional levels;

(ii) weak governance and management nationally and sub-regionally;

(iii) weak incentives to support behavioural change towards adoption of EAF management in small-scale fisheries;

(iv) lack of knowledge and poor availability of information on EAF.

**** Strategies, technologies and social solutions to manage bycatch in tropical large marine ecosystem fisheries***

This project seeks to manage bycatch and reduce discards in the Caribbean and North Brazil Shelf Large Marine Ecosystems, thereby promoting sustainable and responsible fisheries that provide economic opportunities, while ensuring the conservation of marine living resources.

The participating countries are Barbados, Guyana, Suriname, and Trinidad and Tobago, which are all highly dependent on fisheries resources for their socio-economic development.

However, many of the region's target fish stocks are suffering from over-exploitation, and some of these fisheries produce high levels of discards and incidental catches of non-target organisms, including endangered, threatened and protected species such as marine turtles, marine mammals, sharks and rays.

Technical Cooperation between the Faculty of Food and Agriculture and the Inter-American Institute for Cooperation on Agriculture

Dr Manuel Otero, Director General of the Inter-American Institute for Cooperation on Agriculture (IICA), and Professor Mark Wuddivira, the Dean of the Faculty of Food and Agriculture marked the signing of a General Agreement for Technical Cooperation (GATC) between their institutions. This significant event occurred at the Regional Dialogue on Innovation, Science, and Technology in Agri-food Systems of Latin America and the Caribbean, held on 4 and 5 May 2023, at the IICA Headquarters in San Jose, Costa Rica.

The GATC establishes the general basis for pursuing the following objectives:

1. To contribute to the generation of relevant research, the effective dissemination and application of results within the agricultural community across the agri-food system, at the policy, project and programme levels.

2. To establish a framework and a legal basis for Specific Cooperation Agreements or Letters of Understanding which may arise in the future from shared concerns, or which respond to proposals for collaboration by one or more of the Parties.

3. To cooperate on training and capacity building for the development of relevant human capital that is thoroughly proficient on addressing matters of critical importance to sustainable agri-food-environmental development.

The areas of cooperation to be covered by this Agreement shall be those that contribute to the achievement of the objectives indicated above in areas related to Agricultural Education, Applied Research and Knowledge Transfer, with a focus on:

Research and studies on areas of strategic interest to regional agricultural development, namely, climate smart agriculture and innovative production technologies, food and nutrition security, agriculture value chain development.

Professional internship, training, fellowship and grant opportunities for FFA graduate students for design of research projects, conduct of research and writing of technical papers.

Design and delivery of target-specific short courses through shared online training platforms.

Extension modernisation and digitisation for enhanced farmer training.

From left: Dr Manuel Otero, Director General of the Inter-American Institute for Cooperation on Agriculture and Professor Mark Wuddivira, the Dean of the Faculty of Food and Agriculture

Caribbean Research and Innovation Network for Georisks

Caribbean Small Island Developing States are being disproportionately impacted by the effects of geo-risks and climate change due to their social, economic, and geographical characteristics. Moreover, individual countries within the region do not have access to the resources, technology, and expertise required to effectively address these intricate and ever-changing challenges.

Research findings to date demonstrate that the linkages between stakeholders are either too weak or there are bottlenecks preventing beneficial technologies from being created. Further, it has been noted that there is also an implementation deficit which can be improved through the use of more contemporary technologies. Confronting these challenges demand a multi-country, multi-stakeholder, and multi-participatory approach.

The Caribbean Research and Innovation Network for Georisks (CARING) project, which will span 18 months and has a budget of €300,000, aims to cultivate a systematic understanding of the networking dynamics of stakeholders that comprise the multiple actors and nodes of a Caribbean Research and Innovation system. This network is recognised as a critical and viable pathway to unlocking innovative solutions to geo-risks and climate change mitigation.

CARING also proposes a series of activities to understand the perception and impacts of georisks and climate change in Dominica, Saint Vincent and the Grenadines, and Trinidad and Tobago.

The final outcome of CARING is to gain a regional understanding of the socio-economic risks that communities in the region face from georisks and climate change.

The execution of CARING represents a significant step towards bolstering disaster resilience in the Caribbean. Working collaboratively and leveraging the Caribbean's collective knowledge and network, are critical building blocks in designing a more resilient Caribbean that is better prepared to face the challenges of climate change and georisk disasters.

The Department of Geography, FFA, is spearheading CARING, in collaboration with the Caribbean Industrial Research Institute, Sustainable Grenadines Inc and the University of Trinidad and Tobago.

Heavy rains and subsequent flood waters, intensified by the effects of climate change, led to the collapse of a significant portion of the Manzanilla/ Mayaro Main Road, in Trinidad, further isolating the already flood-stricken area

Addressing the Climate Change and Poverty Nexus

In recent times, both scientifically and anecdotally, the world is undergoing new challenges with respect to climate change. We cannot continue to sit idly by and allow the *status quo* to prevail or else we will suffer dire consequences to our lives and livelihoods as we know it.

Given this backdrop, organisations such as UWI, FAO, and others have recognised the need to understand the complex linkages between climate change, poverty and food security. Concomitant with this complex relationship is the recognition that some groups are more vulnerable to climate change and a deeper understanding of the challenges that these groups face is needed. Coastal communities, small- scale fisherfolk, rural communities, and women are some of the more vulnerable groups to climate change impacts.

Given this knowledge and with support from the FAO, last year research on a rapid climate poverty vulnerability assessment was undertaken in Orange Valley, Trinidad and Tobago by Dr Sharon Hutchinson and Mr Jesse Williams, from the Department of Agricultural Economics and Extension, FFA.

The aim of the research was to explore the existing vulnerabilities that members of the community face and identify how climate variability affected the existing stressors the community already faced, as well as ascertain perceptions, among the community members, about climate change and poverty.

The results of this study showed that transient poverty affects the community and whilst there is an adequate amount of social capital to buffer the consequences for the most part; the community could perhaps thrive with a targeted approach that encompasses all the elements of the nexus. These results can go a long way in unravelling the complexity of the nexus and provide policymakers with data-driven information to bring about more cohesive policies and strategies in their sustainable development agenda.

Women's Focus Group at the Orange Valley Community Centre, Trinidad

Mango: The Superfood for the Inner and Outer Body

"Mangoes, mangoes, mangoes,
Mango vert, mango teen
Mango vert, mango teen
I want ah penny to buy
Mango vert, Mango teen"

This was the popular folk song referenced by both the Dean of the Faculty of Food and Agriculture (FFA), Professor Mark Wuddivira, and Dr Peggy Lynch, Communications Officer of the Network of Rural Women Producers Trinidad and Tobago (NRWPTT), during the 15th International Mango Festival. The festival was held on 1 July 2023, at The University of the West Indies, JFK auditorium under the theme "Mango: The Superfood for the Inner and Outer Body." This year's festival marked the continuation of a fruitful collaboration and partnership between The UWI and NRWPTT. In fact, the Mango Festival event began after a challenge from a past UWI Professor to, "do something with mangoes." These additional lines in the folksong indirectly speaks to lending a helping hand to achieve the desired end.

"Give me a penny to buy
Mango vert, mango teen"

Along with the representatives from NRWPTT (Mrs Gia Gaspard-Taylor, Mr Curtis Mayers, Dr Peggy Lynch) and Dr Oral Daley (FFA representative), the planning committee was joined by members from the Caribbean Academy of Sciences Trinidad and Tobago Chapter, Dr Lisa Benjamin and Dr Albertha Joseph-Alexander.

Some of the activities at the festival included a display of mango varieties by FFA, demonstration of grafting by the Ministry of Agriculture, quizzes with prizes for the fortunate winners, giveaways, and mango-based items for sale.

Greetings and well wishes came from various local and international representatives present both in person and online, including His Excellency Mr Abu-Bakr Danlami Ibrahim, Nigerian High Commissioner to the Republic of Trinidad and Tobago; Mr Allan Balfour, (Ag) Director and staff of the Agricultural Services Division; Dr Gerald Shively, Associate Dean International Programme in Agriculture, Purdue University; and His Excellency Fedelia Graand-Galon, Suriname Ambassador to Ghana.

In his address to the audience at the opening ceremony, Professor Wuddivira stated, "As Dean of the only Faculty of Food and Agriculture across the UWI system, I am often confronted with the question of how to improve our food and nutrition security in the region. Our challenge in the region is not so much about hunger. But when we consider the high incidence of non-communicable diseases (type 2 diabetes, hypertension, cardiac diseases) that continue to affect our region we recognise that what we eat is as important as how much we eat. While the Caribbean is blessed with a wide array of indigenous and naturalised fruits and vegetables our citizens are often consuming less than the recommended daily servings. At the FFA we deem it critically important to educate the population about healthy dietary choices and increased consumption of our local fruits and vegetables is one of those healthy dietary choices."

Dean of the Faculty of Food and Agriculture, Professor Mark Wuddivira, addresses audience at the opening ceremony

Submitted by Dr Oral Daley and Dr Albertha Joseph-Alexander

FFA Lecturer Joins International Scientific Committee

Dr Ronald Roopnarine, Lecturer in the Department of Food Production, FFA, has been invited to join the International Scientific Committee of the International Water Resources Association Islands Water Congress on *"Freshwater and Islands: Administration, Collaboration, and Innovation."* As a member of this Global Task Force, Dr Roopnarine will plan the thematic framework and discussions for the congress, which will take place in Torshavn, Faroe Islands in September 2024.

Dr Ronald Roopnarine

Focusing on Breadfruit

Staff from the Faculty of Food and Agriculture and retired FFA Professor Laura Roberts-Nkrumah met with Mr Jerson Badal, Programme Manager of Export Saint Lucia, on 5 June 2023 to discuss collaboration on proper techniques for breadfruit processing, harvesting, value addition and exportation.

From left: Dr Wendy-Ann Isaac, Dean Professor Mark Wuddivira, Mr Jerson Badal, Mrs Donna Caesar and Professor Laura Roberts-Nkrumah

UWI/USAID Farmer-to-Farmer Programme

More than 750 people in Trinidad and Tobago have been trained over a 3-year period under the UWI/USAID Farmer to Farmer (F2F) programme. The trainees were from several organisations including: Vision on Mission (NGO), Tri-Valley Cluster (cocoa farmers and agro-processors), Network of Rural Women Producers of Trinidad and Tobago, Tobago Agricultural Society, Tobago Unemployment Relief Programme, Agricultural Society of Trinidad and Tobago, Cocoa Development Company of Trinidad and Tobago and the Ministry of Agriculture, Land and Fisheries (Extension Service). The programme, funded by the United States Agency for International Development (USAID), engaged over 40 US citizens as volunteers to provide solutions to demand-driven issues identified by the Trinidad and Tobago host groups.

The programme's closing ceremony was held on 10 May 2023. Campus Registrar, Dr Dawn-Marie De Four-Gill, gave the programme high praise. Speaking on behalf of Pro Vice-Chancellor and Campus Principal, The University of the West Indies, St Augustine, Professor Rose-Marie Belle Antoine, she stated, “Farmer-to-Farmer has shown itself to be not only very effective, but also very timely. We are in an era of great uncertainty. The world is still in recovery from the pandemic, and still dealing with the fallout of the Russian-Ukraine war". She continued, “Inflation, although showing some signs of easing, still has impacted food prices globally. The Caribbean, perhaps like never before, has to examine and greatly improve our relationship with food, both as producers and consumers."

From left: Professor Mark Wuddivira, Dean of The Faculty of Food and Agriculture, Ms Amanda Dickson, Programme Director for the F2F programme, Campus Registrar of The UWI St Augustine Campus, Dr Dawn-Marie De Four-Gill, US Ambassador to Trinidad and Tobago, Her Excellency Candace A. Bond and Professor Gerald Shively, Associate Dean and Director of International Programmes in Agriculture, Purdue University

Also addressing the closing ceremony was the US Ambassador to Trinidad and Tobago, Her Excellency, Mrs Candace A Bond. Mrs Bond informed the participants that the US Government is committed to helping address food insecurity challenges in the region. She noted that the work being done through the F2F programme is critical to strengthening the food system in Trinidad and Tobago and around the region.

The participants also heard from Ms Amanda Dickson, Programme Director for the F2F programme in Trinidad and Tobago. “It has been exciting to see Trinbagonian farmers, extension agents, and agro-processors adapt and adopt new techniques, reach audiences in a different way, and create new products. This is exactly what this demand-driven technical assistance is for. Farmers are implementing climate-smart techniques that address drought and excess rainfall, precision watering, using less pesticides and in safer ways, and creating food products that are safer, nutritious, and meet food-allergy needs,”

“This one-on-one attention to skills and knowledge is very beneficial for our groups,” said Professor Wayne Ganpat, F2F Country Director and retired UWI Dean, Faculty of Food and Agriculture (FFA). He added that “It complements the support they receive from FFA and extension, but gives more individual attention that is needed.”

Source: *What’s On, Marketing and Communications UWI. Tuesday 16 May 2023*

Celebrating Our Students

The dynamics of food import demand in the Caribbean region, with a special emphasis on consumer demand, consumption patterns, food policy, and welfare is the title of Mr David Forgenie's PhD research topic. Mr Forgenie, from the Department of Agricultural Economics and Extension, FFA, is being supervised by Dr Sharon Hutchinson, Professor Dr Andrew Muhammad, and Dr Ewan Scott.

One significant milestone in Mr Forgenie's academic career was his participation, along with Dr Sharon Hutchinson, in the Agricultural and Applied Economics Association (AAEA) Annual Meeting held in Washington, DC, in July 2023. The AAEA Annual Meeting is the biggest agricultural economics conference in the western hemisphere. It is a premier gathering of agricultural economists, policy makers, and industry experts from around the world. It provides a platform for scholars to showcase their research, engage in discussions, and connect with peers and mentors in their field.

The exposure gained at such events is invaluable, as it allows researchers to gain fresh perspectives, exchange ideas, and build lasting professional relationships. At this prestigious event, Mr Forgenie was given the opportunity to present a paper from his research, titled ***Dynamic Analysis of Caribbean Food Import Demand***, co-authored by Dr Hutchinson and Professor Dr Muhammad. According to Mr Forgenie attending the conference was not only an academic achievement, but also provided an opportunity for networking, exposure, and to gain invaluable feedback from scholars in the field.

From left: Mr David Forgenie and Dr Sharon Hutchinson at the AAEA Annual Meeting in Washington DC, July 2023

Mr Forgenie was able to attend the conference through the generous support of The University of the West Indies, via a Travel Grant, and the AAEA, via an International Travel Grant. Accessing these grants underscored the recognition and value of his research on the international stage.

Mrs Meera Mahase-Forgenie
MPhil Candidate in Geography

Mrs Meera Mahase-Forgenie is a Master of Philosophy candidate at the Department of Geography, FFA. Her research, which is being supervised by Dr Arlette Saint Ville, is on **the dynamics of household food security during the COVID-19 pandemic in coastal communities in southeast Trinidad**. She seeks to understand how the pandemic affected the rural households' food security and to identify vulnerable population segments. She is also focusing on food policy and community resilience.

Mrs Mahase-Forgenie is a graduate from the department with a BSc degree in Environmental and Natural Resource Management and Geography (upper second-class honours). She is currently a full-time demonstrator in Human Geography in the department.

Mrs Mahase-Forgenie is also working as a data analyst using social network analysis (UCINET) on a project reviewing Caribbean Nutrition literature on Small Island Developing States, using 337 studies from 2007 to 2022. The project is in collaboration with leading regional and international researchers from the University of Exeter (funding agency), The University of the West Indies, Cave Hill, Barbados and the Technical University of Denmark.

Mrs Mahase-Forgenie is the lead author of a paper coming out of this research, in which preliminary findings show that food and nutrition security studies are evolving within the Caribbean context and that there is uneven geographic distribution in their status.

CAS23-2023 is coming up!

"Sustainability and Development Initiatives of the Caribbean" is the theme of this year's Caribbean Academy of Sciences (CAS) conference (CAS23-2023), its first face-to-face conference since 2018. During the COVID-19 pandemic a virtual conference was held.

The conference will be held at The University of the West Indies, St Augustine Campus from 24 to 25 November 2023.

One of the sub-themes of the conference is "***Agriculture for Development***."

Dean of FFA, Professor Mark Wuddivira will be one of the keynote speakers. Some of the other invited speakers include Dr Andrea M Sealy, Dr Terry Mohammed and Dr Jacqueline Bridge.

We invite you to register for the conference (#CASConf23), CAS members can receive a discount on conference fees. Additionally, there is an early bird discount of 10% on registration fees paid by 2 October.

Additional enquiries can be sent to Dr Albertha Joseph-Alexander (alberthaj@hotmail.com) and Dr Cilla Pemberton (cilla.pemberton@sta.uwi.edu).

Submitted by: Dr Albertha Joseph-Alexander (Acting President, Caribbean Academy of Sciences Trinidad and Tobago Chapter).

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