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CRIN Signed MOU With CEMT, TADC

Collaboration and partnership for research and development has been a pivot for the nation's growth. The Executive Director, Cocoa Research Institute of Nigeria (CRIN), Dr. Patrick Adebola, has consistently practiced this art thereby increasing the visibility and profile of the Institute towards the delivery of her mandate. In an epoch making event, the Institute has again recently signed a Memorandum of Understanding (MoU) with the Cooperative Executive Management Team (CEMT), headquartered in Washington, DC, with operations across Africa, and The African Diaspora Collective (TADC) – African Embassy, operating as the liaison for global Black supply chain integration and headquartered in Tema, Ghana and Washington, DC. The ED CRIN, Dr. Patrick Adebola, ably represented by the Director, Research Operations, Dr. S.O. Agbeniyi signed the MoU on behalf of the Institute, while CEMT, TADC was represented by HE Ambassador Davisha L. Johnson, President, CEMT and Ambassador to Africa, TADC.

The purpose of the MoU is to establish a strategic tri-party partnership that promotes agricultural innovation, professional development, AgTech research, and the integration of Nigeria's cocoa and agricultural value chains into global Black-owned trade networks. The collaboration shall cover, but not be limited to, the following areas: The Parties agree to collaborate in the following key areas: a. Research and Development (Establishment of a One-Hectare Sustainable Farm (OHSF) Research Model at

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CRIN, Joint research in organic cocoa cultivation, regenerative agriculture, medicinal plants, and biotechnology); b. Professional Development and Fellowship (Launch of seasonal Fellowship Programs facilitated by CEMT and coordinated by TADC African Embassy, with hands-on training hosted by CRIN, Research collaboration, agronomic studies, policy contributions, and technical capacity-building); c. Export and Supply Chain Integration (Integration of CRIN products into TADC's global supply chain via white-label agreements, Brand enhancement, standardization, and export facilitation through Africa Trade Houses and Black-owned marketplaces worldwide) and d.Youth Empowerment and Agripreneurship (Joint training programs for university students, local farmers, and agribusiness professionals, and Use of the OHSF model as a live learning environment and innovation lab).

Endorsement of this MoU is another landmark achievement by the ED CRIN, Dr. Patrick Adebola.

CRIN Holds Monthly Seminar

The 6th in the series of the 2025 monthly seminar was held on July 14, 2025 at the Lawrence Opeke Conference Hall of the Institute. The program featured presentations from Mr. Adesokan M.A., Research Officer, Value Added Research Department (VAR) and Mr. J.O. Onatunde-Onanuga, Director and Head Admin and Supplies Department. The seminar was chaired by Dr. Micheal Okeniyi Assistant Director / Tea Programme Leader.

Dr Okeniyi (2nd on the right) with the seminar presenters and rapporteur

Group photograph after the MoU endorsement

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Evaluating the Potential of Coffee Husk as a Source of Renewable Energy

- Engr. M.A. Adesokan

Coffee husk is a by-product of coffee processing and is mainly regarded as waste. In Nigeria, it piles up, causing nuisance and pollution in general. Recently, there have been efforts globally to identify and adopt sustainable and renewable energy sources through the Sustainable Development Goals (SDGs), which are more environmentally friendly than non-renewable energy sources such as fossil fuels. One of Nigeria's most promising renewable energy sources as an alternative to fuel wood is biomass, which represents a great opportunity as feedstock for bioenergy due to the availability of biomass in substantial quantities as waste. Coffee husk is a good example of a biomass source that can be converted into a briquette. The study explores the potential of coffee husk as fuel through briquetting. The briquette's mechanical, fuel, and combustion properties were determined, including the ash content, volatile matter, fixed carbon, relaxed density, shatter index, water resistance, burning rate, and ignition time. The results of the properties determined showed that the more the quantity of the cassava-based starch (binder), the denser the briquette and the higher its burning rate, shatter index, fixed carbon, calorific value, and ignition time, but the lower the moisture content, volatile matter, and the ash content. In conclusion, besides being environmentally friendly, economical, and requiring less technicality, coffee husk briquette can serve at low and medium burning levels.

Programmed Withdrawal VS Annuity

- Mr. J.O. Onatunde-Onanuga

Retirement marks the end of active employment and ideally ushers in a period of rest and financial security, but the quality of this rest largely depends on how retirement benefits are managed. The presentation addressed the knowledge gap on optimal strategies for retirees choosing between programmed withdrawal and annuity plans, comparing which option provides better long-term financial security and satisfaction. It was revealed that while programmed withdrawal offers flexible access to funds, it exposes retirees to the risk of fund depletion, whereas annuity guarantees a steady income for life. but limits financial flexibility. Retirees' choices often reflect their financial literacy and risk tolerance, highlighting significant differences in financial security and satisfaction levels between the two options.

The presentation concludes that both options have unique advantages and drawbacks and provides policy recommendations to guide retirees and policymakers towards better retirement planning.

Mr. Onatunde-Onanuga opined that the findings contribute to improving retirees' welfare and ensuring sustainable pension systems.

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Cross section of seminar participants

CRIN Holds Departmental Seminar

The Department of Value Added Research (VAR) and Economics and Extension (E&E) Division organized Departmental and Divisional Seminar, respectively, on July 21, 2025 to cross pollinate ideas and showcase research innovations. The duo of Mrs. Elizabeth Odeyemi and Mr. K. Mustapha made presentations on behalf of VAR on Value Addition Research in Black Plum: A review and Potential of alkali-treated coffee as alternative feed ingredient in rabbits' diet, respectively. The E&E presentation was titled effect of risk management on rice production performance in Katcha L.G.A, Niger State and was anchored by Mr. Abdullahi Atiku.

Value Addition Research in Black Plum: A Review

- Mrs. Elizabeth Odeyemi

Black plum or African black plum is scientifically called *Vitex doniana* Sweet. It is a tree crop that belong to the Lamiaceae family. It is Genus *Vitex* and most prevalent species in the genus. It is valued for its edible fruits, medicinal bark and leaves and found in Ile-Ife, Uromi, Benin, Vunchi (Niger State). Various parts of the plant are used by traditional medicine practitioners in Nigeria in the management and treatment of several disorders: rheumatism, hypertension, cancer, inflammatory diseases, dysentery and gastroenteritis, colds and cough in children. Some of the drawbacks in *V. doniana* research and products are the availability and the anti-nutritional constituents such as tannins, saponins, alkaloids and

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trace of cardiac glycoside. The tannins facilitate the binding to proteins forming complexes that are hard to digest and leads to the bitter taste. The saponins constituent leads to the formation of soap-like foams which causes irritation in the digestive tract as it interacts with cell membranes; it also reduces nutrient absorption. The alkaloids interfere protein synthesis and neurological functions. Some are toxic at high doses while the cardiac glycosides affect electrolyte balance, indirectly influencing nutrient adsorption and are toxic. To mitigate the anti-nutritional effects of the compounds, processes such as boiling, fermenting, cooking, soaking, removal by extraction and cooking or boiling is recommended.

Potential of Alkali-treated Coffee as Alternative Feed Ingredient in Rabbits' Diet - Mr. K. Mustapha

Alternative feed ingredients generally refer to those materials that have not been traditionally used for feeding livestock or are not normally used in conventional livestock diets. Typical among such feed ingredients is coffee pulp. Coffee pulp is a by-product of coffee crop which is obtained usually during wet processing of de-pulping operation of the coffee cherries to remove the beans. pulp is always considered valueless, hence a waste. Coffee pulp is inherently rich in fibre, carbohydrates, proteins and minerals especially potassium. Previous studies on effect of utilization of raw coffee pulp in animal feeds have produced deleterious effects on growth and health of animals, and this was attributed to the presence of anti-nutritional factors such as caffeine, tannin among others. Global quest to use maize and other cereal grains as bio-fuel has caused frequent fluctuations in their prices. Increases in coffee cultivation by the farmers as a result of increases in foreign exchange earnings from coffee trade have indirectly led to increases in coffee pulp production. The finding of the study revealed that inclusion of alkali-treated coffee pulp in the diet of weaner rabbits up to 8% has no adverse effect on growth performance and carcass characteristics. Additional advantage recorded was that, as the level of alkali-treated coffee pulp increases in the diet, feed cost and feed cost per kilogram body weight gain decreases. Livestock farmers (particularly rabbits) can gain more as return on investment by substituting expensive basal ingredients like maize with alkali-treated coffee pulp.

Effect of Risk Management on Rice Production Performance in Katcha L.G.A., Niger State - Mr. Abdullahi Atiku.

Rice is an important cereal crop in Nigeria, However, its availability has been affected by different types of risks involved in its production. Hence, farmers employ various strategies to manage risk. Therefore, it is on this basis that the effect of risk management on rice production performance in Katcha Local Government Area of Niger State, Nigeria was carried out. Data were collected using a multi-stage sampling technique from 100 respondents and analysed using descriptive statistics and a Likert risk scale. The results revealed that the majority of respondents (73%)

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were male and had low levels of formal education, with 80% having attained only Primary School Education. The principal risk factors affecting rice production in the study area were identified as climate variability (WM = 4.46), flooding (WM = 3.80), and theft (WM = 3.77). The most effective risk management practices adopted by farmers to mitigate risks associated with rice production in the study area were the use of supplementary irrigation (WM = 2.46), which ranked first; application of fertilizers (WM = 2.43), ranked second; and cooperative marketing (WM = 2.36), which ranked third. Based on these findings, it is recommended that farmers in the study area adopt modern risk management strategies such as agricultural insurance and integrated farming systems

Cross section of participants

Health News

Common Cold – Mrs. Bosede Famaye

A cold is a contagious upper respiratory infection that affects the nose, throat, sinuses and windpipe (trachea). More than 200 different types of viruses can cause a cold. The most common cold virus is the Rhinovirus. Cold is termed "common" because as the name implies, they are widespread. Adults catch two or three colds a year, while young children come down with a cold four or more times a year.

Common cold is contagious; it spread easily from person to person. For one to become infected, the virus has to get to one of the mucous membrane - the moist lining of the nostrils, eyes or mouth. That happens when one touches a surface or breathe moist air that contains the cold virus.

The incubation period is the time between when one is infected and when the symptoms first appear; usually between 12 hours and three days after exposure to the virus.

Symptoms

Common cold symptoms typically appear in stages. These includes: early, active and late.

Stage 1: Early (Days 1 to 3)

- Sneezing
- Runny nose
- Stuffy nose (nasal congestion)
- Cough
- Hoarseness

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Stage 2: Active (Days 4 to 7)

Symptoms typically worsen or peak during this stage. It involves:

- Body aches
- Headache
- Runny eyes and nose
- Fatigue
- Fever

Stage 3: (Days 8 to 10)

Colds usually begin to wind down during this stage. One may be free and clear at this point, but some symptoms can persist. Some people develop a nagging cough that can last up to two months after a respiratory infection.

Prevention

There are several steps one can take to prevent cold:

i. Washing of hands frequently, especially before eating or preparing food, after using the bathroom, wiping nose or coming into contact with someone who has a cold.
ii. Avoiding touching the face: Cold viruses spread from the hands to eyes, nose and mouth.
iii. Cleaning frequently used surfaces: Viruses can live on doorknobs and other places people touch.
iv. Using hand sanitizers: When one can't wash hands with soap and water, use alcohol based hand sanitizer.
v. Strengthening the immune system: Get enough sleep, eat a healthy diet and exercise so the body is ready to fight off germs.
vi. Staying home: To make sure one don't spread the cold to others, stay home when sick.

Management and treatment

There is no cure for a cold. It has to run its course. Most colds go away on their own within 7 to 10 days. Common cold treatment includes over the-counter (OTC) medications to help reduce the symptoms and keep one comfortable until recovery. Contact a healthcare provider for prescriptions.

Also, contact a healthcare provider if you have any of the following symptoms: High fever, Chest pain, Ear pain, Asthma flare-up or difficulty breathing, and Symptoms lasting more than 10 days or getting worse.

Market Survey

Price Report for July 2025

This report provides an overview of cocoa prices across selected Nigerian states for July, 2025. Data were collected from major cocoa-producing areas within the surveyed States, and average prices were computed accordingly. In July, cocoa prices experienced a general decline across all states compared to the previous month. The most significant drop was observed in Oyo State, where prices fell by approximately 20%. During the month, Abia State recorded the lowest average cocoa price at ₦7,750 per kilogram, while Kogi State reported the highest average price at ₦10,250 per kilogram. These price variations reflect underlying supply and demand dynamics in the market during the reporting period. It is also noteworthy that cashew is currently in its off-season, and no price data were available for this commodity in the current month.

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Cocoa Cost Per Kg (Local Price), July, 2025			
State	**Minimum Price (₦)**	**Maximum Price (₦)**	**Average Price (₦)**
Abia	7500	8000	7750
Cross River	9000	9000	9000
Kogi	10000	10500	10250
Kwara	9500	10000	9750
Ondo	10000	10000	10000
Osun	9000	9500	9250
Oyo	9000	9500	9250

Source: CRIN Survey, 2025
Economics and Statistics Sections

Staff of the Month

Mrs. Abiade Balikis Olabisi was born in Ibadan, Oyo State on 29 December, 1987. She attended CRIN Staff School for her Primary Education and Ogbere Community High School, Ibadan, Oyo State for her post primary education and obtained her Senior School Certificate O' Level in 2007. Subsequently, she attended Osun State College of Technology, Esa Oke for her National Diploma (ND) and Higher National Diploma (HND) in accounting in 2015 and 2021, respectively. She was employed by the Institute in 2010 as Clerical Officer with the Admin. Department and was promoted as Executive Officer and posted to the Internal Audit Division in 2018. At present, she is of the Higher Executive Officer cadre. She was sponsored for training on Efficiency Improvements Workshop for Clerical Officers in Public Institutions in Nigeria – Ibadan from 6 - 8 March, 2017 by the Institute. She is happily married with children.

August Birthday Galore

Hearty birthday celebrations to the members of staff that will be celebrating their birthdays this month. Wishing you all the very best in your life endeavours. Congratulations!

Adio Oluwadare Timothy	01-Aug
Amaize Augustine	01-Aug
Yahaya Aderonke Taiwo	01-Aug
Adeyemi Yetunde	02-Aug
Ayinde Jelili A.	02-Aug
Bamigbose Adetayo	02-Aug
Lasisi Yinka	02-Aug
Ubi Augustine Eteng	02-Aug
Idorenyin Okpo	03-Aug
Alufa Funmilayo	04-Aug
Iloyanomoh Cecilia I.	04-Aug
Olugbesan Adebayo	05-Aug
Adedeji John	06-Aug
Fagbemi Dorcas Oyeyemi	06-Aug
Idowu Babatunde Oluwakemi	06-Aug
Ojedeji Olusegun	08-Aug

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Yusuf Tajudeen	09-Aug
Adedoyin Nkanlola Mathew	10-Aug
Babalola Joseph Odewale	10-Aug
Omowaire Felicia Ajayi	10-Aug
Williams Olaide Abisola	10-Aug
Adeyemo Adewale Akeem	11-Aug
Adeoye Ibrahim	13-Aug
Obatolu Babalola Olakunle	13-Aug
Adegboye Azeez Adeoye	14-Aug
Ajiroba Adeniyi Taiwo	15-Aug
Akinola Abiola Ann	15-Aug
Akpgher Michael	15-Aug
Ihueze Chinedu	15-Aug
Salako Gbenga Samson	15-Aug
Adeyemo Adekunle Johnson	16-Aug
Adewuyi Kazeem Olawale	17-Aug
Akangbe Folorunso	17-Aug
Onwubiko Michael	17-Aug
Dada Keji Emmanuel	18-Aug
Ajayi Olusegun Kelvin	20-Aug
Kareem Suraju	20-Aug
Makinde Felicia Adeteju	20-Aug
Salami Oyenike	22-Aug
Osun Michael	23-Aug
Sobowale Mayowa Olutayo	23-Aug
Ubebe Philomena Adunni	23-Aug
Ugi Pauline	23-Aug
Oladokun Yetunde	24-Aug
Yahaya Sulaiman Zulukas	24-Aug

Amusan Latifat Adebola	25-Aug
Ibiremo Olufemi Samuel	25-Aug
Adegbindin Abel Olukayode	26-Aug
Atolagbe Toluwalope	26-Aug
Bello Babajide	26-Aug
Adeosun Seun Adewale	27-Aug
Nwakeze Linus	27-Aug
Oghenegueke Rebecca Janet	27-Aug
Onuh Ochenchi Paulina	27-Aug
Folarin Victoria Adeyinka	31-Aug
Ojo Iyabo	31-Aug
Robert Oludare	31-Aug

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