# agronches

VOL 3. | 19TH EDITION

### GHANA TODAY

Agribusiness Farmers Urged to Adopt Innovative Pricing

### ARTICLE

Agrifood systems contribution to solving food insecurity globally

### NOTRE CHRONIQUE

Les prévisions du blé de la saison 2023/24

BEYOND ORGANIC FARMING!







TIAST Group, originating from China has been in existence for over 30 years and has extended its services to West Africa with the sole purpose of adding value to the agriculture value chain and promoting the worth of the agricultural industry in Ghana. Through localization and standardization, we are devoted to adding value to the agricultural chain and boosting the agriculture industry's worth in all African countries. Our business scope includes designing, manufacturing, installation and maintenance of agricultural processing machinery. These machines are designed to process a variety of agricultural goods, including tubers like cassava and sweet potato, etc. rubber processing, fibre extraction and processing from sisal and pineapple leaf, and agricultural machinery for planting, harvesting, and other tasks. We also provide financial leasing for our agricultural processing factories through our partnership with Banks which supports up to 70-80% of the total cost of the entire project. This lease is spread out in a 5-year term of payment which is convenient after the project starts running.

TIAST Group ensures offtake services of all processed goods to the international market at competitive international market prices. This solves the problem of the unavailability of a ready market and promotes ready sales at the best rate. We have also secured a huge international market demand for most of the products that will be processed for ready export. These products will command competitive prices on the world market and will subsequently gain considerable market traction. TIAST facilitates the training of local employees and personnel on how to operate and maintain these machines through its localization scheme. We have technical staff on hand who are willing to train locals to operate these processing units. We are justifiably proud to be the market leaders in the agricultural industrialization space in Ghana and the sub-region. We are also proud of our footprint in Ghana and the impact we are making in the agricultural space. This life-changing opportunity is provided by TIAST Group for everyone interested in boosting agricultural value and promoting the value chain.

**Executive Publisher** 

Mr. David Tai

Editor-In-Chief

Peter Ekow Baidoo

Senior Editorial Supervisor

Prince Opoku Dogbey

Marketing Manager

Peter Ekow Baidoo

Information Technology

Prince Kudowor

**Creative Designer** 

Bismark Kwabena Baiden

**Growth and Strategy Team** 

Leo Chan

Peter Ekow Baidoo

Content Developers

Prince Opoku Dogbey Yosua Domedjui

Nana Ama Oforiwaa Antwi

Jessica Meledi

Social Media Manager

Chelsea Nkuah



No. 26 giffard road, palm wine junction, la-accra

email: info@tiastgroup.com

phone: +233204758888

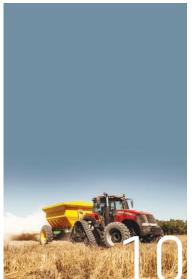
editorial: editorial@tiastgroup.com

OUR AGRICULTURAL INDUSTRIALIZATION AGENDA IS AIMED AT PARTNERING WITH FARMERS AND INTERESTED PARTIES TO ADD VALUE TO THE AGRICULTURAL VALUE CHAIN.

KINDLY SCAN THE QR CODE TO READ MORE ON OUR WEBSITE.















EDITORIAL	04
Sustainable Agriculture: A Path to Profitable and Resilient Farming	
CROP PROFILE	05
Moringa	
GHANA TODAY	06
Agribusiness Farmers Urged to	
Adopt Innovative Pricing Method	
CONTINENTAL DIGEST	07
UK to Provide £57.9 M Support Package for Climate-Resilient Agriculture in Nigeria	
WORLD NEWS	08
USDA Announces \$33 million fund for	
agriculture projects at 19 HBCU	
TECHNOLOGICAL TRENDS	10
Precision Seeders: Revolutionizing	
Planting Efficiency in Agriculture	
INSIGHT AFRICA	12
Why Africa should embrace	

Genetically Modified (GM) food crops

CENTRE SPREAD	14
Beyond Organic Farming!	
THE PLATTER	16
Moringa Leaves Dal	
ARTICLE	17
Embracing the Circular Economy in Ghana's Agriculture	
ARTICLE	19
Rice Farming	
ARTICLE	21
The evolution of natural rubber	
NOTRE CHRONIQUE	22
Le grand sommet de la FAO tenue	
pour soutenir la chaîne agricole	
NOTRE CHRONIQUE	23
Les prévisions du blé de la saison 2023/24	

### Editoria .

## Sustainable Agriculture: A Path to Profitable and Resilient Farming

By Nana Ama Oforiwaa Antwi

he world's population increases daily, and the agricultural sector is tasked with meeting their ever-growing demand. As a result, little to no attention is paid to the environment or the soil, despite the immense pressure bestowed on it to be productive.

In recent years, several challenges have threatened the productivity of farmers, ranging from financial constraints to issues of climate change. The soil is not allowed a break to regain its lost nutrients, and traditional farming practices also do little to improve it. Amidst that, there is the application of inorganic fertilizers and other human activities such as deforestation, bush burning, and illegal mining activities, which destroy the soil and water bodies.

Sustainable Agriculture involves methods and practices that ensure that resources such as land and water are naturally or artificially replenished while sustaining them for future generations. What this means is that the agriculture sector employs sustainable ways that allow them to produce food at the same capacity without compromising the ability of current or future generations.

This does not only ensure the preservation of resources, but it also helps promote the agricultural business, and here is why:

Sustainable practices such as sifting cultivation and crop rotation give the soil time to replenish lost nutrients, which allows it to serve its purpose by increasing productivity, ensuring soil fertility, and conserving water, thereby allowing the sector to meet the demands of the growing population.

It also lessens the overall costs involved in farming. Moving food from farm-to-fork in a more efficient manner and incorporating smart farming have helped everyone involved with the agriculture industry. IoT and data from sensors installed in everything from seed drills, sprayers, and spreaders to drones, satellite imagery, and soil make it so surprises become rarities.

In addition, sustainable agriculture produces a wide range of plants and animals, resulting in biodiversity. During crop rotation, plants are seasonally rotated, and this results in soil enrichment, the prevention of diseases, and pest outbreaks, which saves the farmer money.

Also, by engaging in sustainable farming methods, farmers receive a fair wage for their produce, which reduces their reliance on government subsidies and strengthens rural communities. Organic farms typically require 2 1/2 times less labor than factory farms yet yield 10 times the profit.



### Moringa

By Prince Opoku Dogbey

### Origin

Moringa, scientifically known as Moringa oleifera, is a fast-growing deciduous tree native to South Asia, particularly India, where it has been cultivated for centuries. It is also found in various other tropical and subtropical regions around the world, including Africa and Southeast Asia.

### Description

Moringa is a small to medium-sized tree that can grow up to 10-12 meters in height. Its leaves are small, oval-shaped, and bright green, with a unique feathery appearance. The tree produces fragrant, cream-colored flowers and long, slender, green seed pods that contain edible seeds. Almost all parts of the Moringa tree, including leaves, pods, seeds, and roots, are used for various culinary and medicinal purposes.

### Health Benefits

### **Nutrient-Rich Superfood:**

Moringa leaves are a powerhouse of essential nutrients, including vitamins (A, C, E, and B-complex), minerals (calcium, iron, magnesium, and potassium), and amino acids. Consuming Moringa provides a natural boost to overall health and helps meet nutritional needs.

### **Antioxidant Properties: Moringa**

Moringa is rich in antioxidants, such as flavonoids and polyphenols, which help combat free radicals in the body. These antioxidants contribute to reducing oxidative stress and supporting a healthy immune system.

### **Anti-Inflammatory Effects: Cholesterol Management:** The compounds present in Mor-Studies suggest that Moringa inga possess anti-inflammatory consumption may help lower bad cholesterol levels (LDL properties that may aid in reduccholesterol) and improve ing inflammation and easing joint pain and related discomfort. overall heart health, thus reducing the risk of cardiovascular diseases.

"Moringa contains anti-inflammatory properties that may aid in reducing inflammation"

### Agribusiness Farmers Urged to Adopt Innovative Pricing Method for Sustainable Growth

By Prince Opoku Dogbey

n a recent community engagement event held at Diare in the Savelugu Municipality of the Northern Region, Professor Osei-Agyeman Yeboah, Project Coordinator of North Carolina Agriculture and Technical University, emphasized the need for stakeholders in the agricultural sector to adopt an innovative pricing method for agribusiness farmers in Ghana.

The call comes as a response to the prevailing practice of individual farmers setting their own prices on the market, which the professor believes is hindering their potential for growth.

The engagement event was organized as part of the USDA-National Institute of Food and Agriculture (NIFA) project, jointly implemented by 1890 Land Grant Universities, including the University of Maryland East Shore and North Carolina Agricultural and Technical University.

The project is focused on the Northern and Upper East Regions and receives support from the Council for Scientific and Industrial Research – Savanna Agricultural Research Institute (CSIR – SARI) with the aim to improve food security and nutrition in the country by providing communities with the best agricultural technologies.

During the event, Professor Yeboah stressed the importance of pricing in the marketing of agribusiness products, stating, "The change in price cost margin

resulted in a percentage change in the innovative agricultural business' profitability."

He urged Ghanaian farmers to consider adopting a pricing approach that would maximize the value of their agricultural produce, emphasizing that pricing was a crucial element in the agribusiness product marketing process.

"The significance of reasonable pricing in a high-value product cannot be underestimated," Professor Yeboah added, highlighting the potential economic benefits for farmers when they settle on a price that strikes a balance between being too low or too high.

In light of this, Naa Abdulai Abukari II, Chief of Diare, appealed to agricultural sector stakeholders to lend their support in providing farming communities with innovative technologies to enhance farming practices in the region.

He recognized the pivotal role of technology in promoting food security in the country and emphasized the need for collaborative efforts in advancing the agricultural sector.



# UK to Provide £57.9 M Support Package for Climate-Resilient Agriculture in Nigeria

By Prince Opoku Dogbey

British Foreign Minister James Cleverly is set to announce a new package of support aimed at making Nigeria's agriculture sector more climate-resilient during his visit to the African country this week.

he support includes a 55 million-pound contract to help transform Nigeria's rural economy and a 2.9 million-pound grant to assist more than 4 million people in adopting and scaling up sustainable agricultural practices.

According to Cleverly's office, the focus is on implementing green and clean measures in agriculture and infrastructure development to create climate-resilient solutions to global challenges.

Nigeria, with a majority of its population residing in rural areas, faces the harsh impacts of climate change, including drought and flooding, which significantly affect livelihoods.

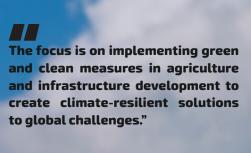
The newly pledged funding aims to enhance productivity and resilience in Nigeria's agriculture sector, particularly in the face of climate change. The support will also contribute to the development of heatand flood-tolerant crops, as well as techniques to increase soil fertility.

In addition to the aid for agriculture, Cleverly will announce a 10 million-pound facility designed to provide funding for climate-friendly infrastructure projects in the country. This move comes after Nigeria experienced devastating floods last year, resulting in more than 600 fatalities and over a million people being displaced.

The floods washed away crops, exacerbating an existing food crisis and pushing millions into food poverty over the past three years, as reported by international aid groups.

With this new financial support from the British government, Nigeria aims to build a more climate-resilient agriculture sector, improve food security, and mitigate the devastating impacts of climate change on vulnerable rural communities.

Cleverly's visit to Nigeria is expected to strengthen bilateral cooperation and address the pressing challenges posed by climate change in the region.







# USDA Announces \$33 million fund for agriculture projects at 19 HBCU land-grant institutions.

By Nana Ama Oforiwaa Antw

The United States Department of Agriculture announced a \$33 million fund to support research and education projects at 19 historically Black Colleges and universities designated as land-grant institutions, including the University of Maryland Eastern Shore.

he funding through USDA's National Institute of Food and Agriculture will support 82 projects in sustainable farming practices such as reducing use of plastics, enhancing nutritional value in vegetables and addressing shortages in sunflower seed oil.

According to the Agricultural Deputy Secretary Xochitl Torres Small, what these universities will accomplish will have a greater impact outside their classrooms and laboratories.

"The investments will help deliver real-life applicable solutions to make our food system stronger, while at the same time inspiring a next generation of students and scientists who will help us meet tomorrow's agricultural challenges," Xochitl said.

The National Institute of Food and Agriculture's Director, Manjit K. Misra, commented saying, "The USDA looks forward to the impact that these visionary projects will have in proving the supply of affordable, safe, nutritious, and accessible food and agricultural products while fostering economic development and rural prosperity in America.

The projects focus heavily on sustainable farming methods. About 11.2% of greenhouse gas emissions in the United States are caused by agriculture, and the Biden administration has prioritized "climate smart" farming methods.

For instance, a project at North Carolina A&T State University received funding of roughly \$250,000 to test biodegradable mulches on farms as a replacement for plastic mulch.

The Central State University, a different land-grant university in Wilberforce, Ohio, also received around about \$500,000 to explore the use of a perennial flower — one that grows again every year as a means of enhancing honey production to promote agricultural sustainability methods.

Additionally in Nashville, a project at Tennessee State University was awarded \$100,000 to evaluate climate resiliency in legume species. The projects funded at the University of Maryland Eastern Shore include studies to improve the health of pasture-raised poultry, research beneficial microbes for soil health, and develop technology to detect Listeria during harvest of leafy greens. Five projects at the campus in Princess Anne will receive a combined total of more than \$2.5 million.

## AGRIFOOD SYSTEMS CONTRIBUTION TO SOLVING FOOD INSECURITY GLOBALLY

By Jessica Meledi

grifood refers to all the processes in the agricultural food chain. That is the food we eat, as well as the way that food is sold, distributed, and processed. It also includes how food is grown or harvested on land or at sea and other non-food products, such as fuel and fibre. All these processes involve a whole host of activities, investments, and decisions.

An agrifood system pulls together all of this into an interconnected system; for example, if we want to grow fruits and vegetables for people to eat healthier, we have to think not just about growing the vegetables but also about how they are delivered to people.

Well-functioning agrifood systems play an important role in increasing food and nutrition security, reducing poverty, especially in low-income coun-

tries, and meeting climate and environmental goals for sustainable development. They are especially important now in the face of rising prices and food insecurity.

Agrifood provides solutions to the world's most important challenges. Right now, the power to provide those solutions is not there because the agrifood system has been weakened. However, there are many ways to transform agrifood systems.

The most important way is to bring all the systems together and support agribusiness firms and small-holder farmers to diversify their food production and grow more diverse, high-value, and nutritious food crops. This will not only increase their agricultural productivity but also provide nutritious foods that currently remain undersupplied or largely unaffordable to low-income consumers.



## Precision Seeders: Revolutionizing Planting Efficiency in Agriculture

By Prince Opoku Dogbey

recision seeders are innovative agricultural machines designed to optimize planting practices and significantly improve planting efficiency. These advanced devices have revolutionized the way seeds are sown, providing farmers with greater control, accuracy, and resource management during the planting process.

Traditional seeders often rely on manual methods, leading to inconsistent seed spacing and depth, which can result in uneven crop emergence and reduced yields. Precision seeders, on the other hand, incorporate cutting-edge technologies to precisely plant seeds with uniformity and at the optimal depth, ensuring each seed has the best chance of germination and growth.

### **Key Features and Benefits**

Accurate Seed Placement: Precision seeders utilize advanced metering mechanisms and seed delivery systems to ensure each seed is placed precisely at the desired spacing and depth. This accuracy leads to uniform plant populations, reducing competition among plants and promoting better nutrient utilization

Variable Rate Technology (VRT): Many precision seeders are equipped with VRT capabilities, allowing farmers to adjust the seed population according to

specific field conditions. VRT helps optimize seed distribution, especially in fields with varying soil types, topography, or yield potential, leading to resource savings and improved crop performance.

Increased Productivity: The efficiency of precision seeders enables farmers to cover larger areas in less time, significantly increasing planting productivity. This time-saving advantage is especially valuable during critical planting windows, allowing farmers to capitalize on optimal weather conditions for planting.

**Reduced Seed Waste:** With accurate seed placement and spacing, precision seeders minimize seed waste. This not only results in cost savings for farmers but also promotes environmental sustainability by reducing the need for excessive seed use.

**Versatility:** Precision seeders are designed to handle various seed types and sizes, from small seeds like vegetables to larger seeds like grains and legumes. This versatility makes them suitable for a wide range of crops and farming practices.

In conclusion, precision seeders have emerged as a game-changer in modern agriculture, empowering farmers to adopt efficient and sustainable planting practices.





agricultural productivity, affecting crops, essential for farmers to adopt integrated pest management (IPM) strategies that are both based approaches to controlling pests on the

### **Identify and Monitor Pests**

pheromone lures, and digital tools for automated

#### Implement Cultural Practices

#### **Use Resistant Crop Varieties**

way to minimize pest damage. Resistant varieties reducing the need for chemical interventions and promoting long-term sustainability.

### Integrated Chemical Management

judicious use of pesticides can be considered as part of an integrated pest management strategy. doses, and apply pesticides during the appropriate

#### **Education and Training**

Attend workshops, consult with agronomists, and

"The first step in pest control is accurate identification."

## 



unger and undernourishment have plagued Africa for years. In 2022, the African region accounted for the highest level of hunger as described by the Global Hunger Index. Low agricultural productivity and post-harvest losses have accounted for Africa's hunger issues.

One solution to Africa's low agricultural productivity and food insecurity, is to embrace genetic modification of crops.

Genetic (GM) modification is a technology that involves inserting DNA into the genome of an organism. To produce a genetically modified plant, new DNA is transferred into plant cells. The genetic makeup of an organism is its genome, which in all plants and animals is made of DNA.

The genome contains genes, regions of DNA that usually carry instructions for making proteins. It is these proteins that give the plant its characteristics.

Scientists have shown that GM technology increases yield, develops disease-resistant crops, and creates varieties that can tolerate drought. The technology appears to often generate employment because more

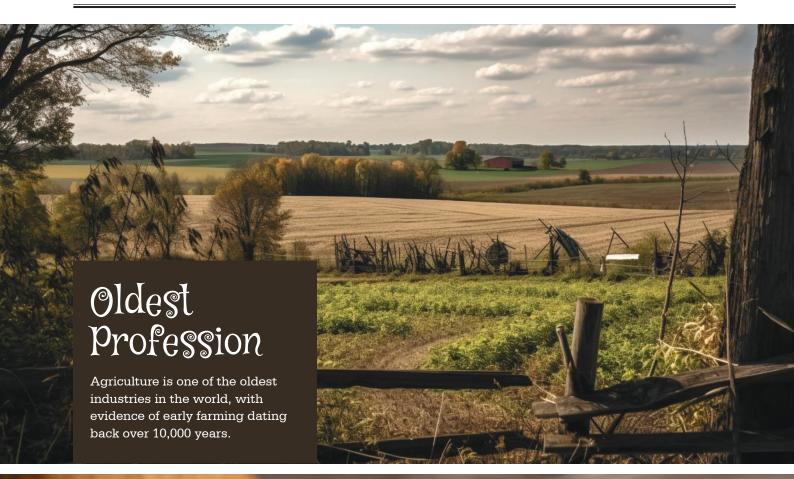
workers are needed to harvest the significantly higher yields.

One study in India suggests that GM cotton produces 82 percent higher incomes for small-farm households compared with conventional cotton.

Genetic modification technology is controversial. In Africa, only Nigeria, Eswatini, Ethiopia, Malawi, Sudan, South Africa, and Kenya allow commercial production and importation of GM products. Other African countries oppose them, largely because of the European Union's (EU) stance on GM products, limited scientific capacity, and the high cost of regulation.

To create resilient food systems on the African Continent, a wide range of existing and new agricultural technologies, including GM organisms, are required. One of the main ways to do this is to increase investment in agricultural biotechnology research and train local scientists to be involved in GM research.

"One solution to Africa's low agricultural productivity and food insecurity, is to embrace genetic modification of crops."





# BEYOND ORGANIC FARMING!

By Prince Opoku Dogbey

s the world faces increasing challenges of climate change, resource depletion, and food security, the call for sustainable farming practices has never been louder. The world needs to note that Beyond Organic Farming represents a progressive approach that goes beyond conventional methods, emphasizing environmental stewardship, biodiversity, and regenerative practices. In this article, we delve into the principles of Beyond Organic Farming and its potential to reshape the future of agriculture.

### Regenerating Soil Health

Beyond Organic Farming places paramount importance on nurturing and regenerating the health of our soils. By adopting techniques like cover cropping, composting, and no-till farming, farmers promote soil biodiversity, enhance water retention, and sequester carbon dioxide. These regenerative practices help mitigate climate change while creating resilient and fertile soils for sustainable crop production.

### Cover Cropping

Cover cropping involves planting a variety of crops during off-seasons or alongside cash crops. This practice protects the soil from erosion, improves its structure, and enhances nutrient availability. Composting, on the other hand, utilizes organic waste materials like crop residues and manure to enrich the soil with essential nutrients, reducing the need for synthetic fertilizers. No-till farming reduces soil disturbance, preserving its structure and preventing carbon loss, while also reducing greenhouse gas emissions from plowing.

### Harnessing Technology for Sustainability

In the digital age, technology plays a pivotal role. Advanced precision agriculture tools, soil sensors, and drone technology enable farmers to monitor and manage their fields with precision, optimizing resource use and minimizing environmental impact.

Precision agriculture tools, such as GPS-guided tractors and variable rate technology, help farmers apply inputs like fertilizers and pesticides with pinpoint accuracy, reducing wastage and minimizing the environmental footprint.

Diversity is the backbone of a thriving ecosystem"

### Supporting Biodiversity

Diversity is the backbone of a thriving ecosystem. We need to promote the preservation of native plant species, on-farm habitat creation for beneficial insects and wildlife, and the integration of livestock in a holistic manner. Encouraging biodiversity enhances natural pest control, reduces reliance on external inputs, and fosters a balanced ecological harmony.

Farmers can create pollinator-friendly habitats with wildflowers and hedgerows to attract bees and other beneficial insects, contributing to enhanced crop pollination and ecosystem health. Incorporating livestock into diversified farming systems allows for the recycling of nutrients through manure, reducing the need for synthetic fertilizers, and fostering symbiotic relationships between crops and animals.

### Embracing Agroforestry

Agroforestry, involves integrating trees with agriculture. This practice enhances productivity by providing shade, reducing erosion, and diversifying income streams through the sustainable harvesting of fruits, nuts, and timber. Agroforestry systems have the potential to sequester significant amounts of carbon, contributing to climate change mitigation.



### Ingredients

1 cup Moringa leaves (fresh or frozen)
1 cup split red lentils (masoor dal)
Onion, tomatoes, garlic, ginger, and green chilies
for seasoning

Spices: turmeric powder, cumin seeds, mustard seeds, asafoetida, red chili powder (optional)Oil or ghee (clarified butter) | Salt to taste

Fresh coriander leaves for garnish

### Instructions

- Rinse and soak the split red lentils for 30 minutes.
- Sauté cumin seeds and mustard seeds in oil or ghee until they splutter. Add asafoetida and sauté briefly.
- Add onions, garlic, ginger, and green chilies. Sauté until onions turn translucent.
- Stir in chopped tomatoes, turmeric powder, and red chili powder (if using). Cook until tomatoes soften and oil separates.
- Add drained lentils and enough water to cover them. Season with salt.

- Pressure cook for 3-4 whistles (10-15 minutes) until lentils are well-cooked.
- Add Moringa leaves and cook for 5 more minutes until they wilt and blend with the dal.
- Garnish with fresh coriander leaves and serve hot with rice or Indian bread.
- Enjoy the nutritious and flavorful Moringa Leaves
- Dal, a wholesome and delightful dish that combines the goodness of Moringa with lentils and aromatic spices.

# FMRRACING THE CIRCUI

By Nana Ama Oforiwaa Antwi

griculture in Ghana plays a pivotal role in the country's economy and development. From providing livelihoods to providing employment opportunities, it contributes significantly to the Gross Domestic Product of the country.

However, like many other countries, Ghana is also plagued with several environmental challenges and sustainability concerns that impede agricultural productivity. To combat these challenges, several sustainable agricultural practises are widely publicised by agricultural activists and private organisations. Such practises include regenerative agriculture, precision farming, and climate-smart agriculture, among others, but not often do you hear of the circular economy.

The circular economy is the polar opposite of the linear economy, which follows a "take-make-dispose" approach. It emphasises recycling, reusing, and regenerating materials, thereby minimising waste and environmental impacts.

Today, we will dive into the circular economy and how incorporating its principles will present a transformative opportunity to revolutionise the agricultural sector, promote resource efficiency, reduce waste, and foster long-term sustainability.

In recent times, the concept of a circular economy has gained prominence as a sustainable approach to address several challenges posed by our linear consumption patterns, as it seeks to minimise waste and promote resource efficiency.

The circular economy offers numerous benefits to Ghana's agricultural sector. It promotes efficient resource use by minimising waste and maximising the value extracted from resources. By adopting practises like composting, recycling organic waste, and reusing agricultural by-products, Ghana can reduce its reliance on external inputs such as chemical fertilisers and minimise resource depletion.



In addition, it places emphasis on diverse farming systems and regenerative practises, which contribute to climate resilience. Crop rotation, agroforestry, and conservation agriculture techniques enhance Ghana's agricultural systems ability to withstand extreme weather events and adapt to changing climatic conditions.

Moving on, embracing the circular economy opens up new economic opportunities for Ghana's agricultural sector. By promoting local value addition and agro-processing, the country can create more jobs and increase the value of its agricultural exports.

The circular economy also minimises waste generation by using agricultural by-products as valuable resources rather than discarding them. This contributes to a cleaner environment and reduces the burden on waste management systems. It also reduces the release of harmful pollutants and greenhouse gases into the environment.



### The Farmer and his Green leaf

In the fields of golden promise, toil-worn hands,
The farmer treads with love for fertile land,
His heart aligned with nature's timeless art,
He tends the soil, a steward apart.

Beneath the sun's warm gaze, he sows the seed,
As rich leaves emerge, with life's full speed,
Each sprout a testament to hope's embrace,
In harmony with season's steady pace.

With care and patience, he nurtures each shoot, Through wind and rain, he stands resolute, For in the harvest's dance, his heart finds peace, The Farmer's green leaf whispers life's release.

--- By Jessica Meledi



Rice Farming

By Prince Opoku Dogbey

ice, often dubbed the "staple of life," has been nourishing civilizations for thousands of years. As one of the most important cereal crops globally, rice farming holds a special place in the hearts and fields of farmers worldwide. From ancient traditions to modern techniques, the journey of rice farming is a tale of perseverance, adaptability, and sustenance. Join us as we delve into the fascinating world of rice farming and explore the vital role it plays in nourishing our planet.

The story of rice farming begins in the lush valleys of ancient Asia, where wild rice first caught the eye of early farmers. Over millennia, humans cultivated and refined the crop, spreading it across the globe. Today, rice farming spans diverse landscapes, from vast paddy fields to terraced hillsides, with each region contributing its unique flavors and techniques to the global rice tapestry.

Rice farming is a delicate dance with nature's rhythms. The planting, growing, and harvesting seasons are synchronized to make the most of sunlight, water, and temperature. With meticulous care and attention, farmers sow the seeds, nurture the seedlings in flooded fields, and later drain the water for the maturing crop. This timeless artistry creates the ideal conditions for rice to thrive.

From paddies filled with water to rainfed drylands, rice adapts to diverse growing conditions. In regions where water is abundant, flooded paddies create a picturesque landscape, fostering a harmonious coexistence with wetland ecosystems. On the other hand, in rainfed areas, farmers rely on the monsoon's blessings to quench the thirst of their rice fields, showcasing nature's resilience and the ingenuity of farmers.

With overhalf of the global population consuming rice as a dietary staple, its significance in global food security cannot be overstated. Innovations in rice farming have fueled unprecedented yield improvements and sustainability. High-yielding rice varieties, hybridization, precision agriculture, and water-saving technologies have revolutionized rice farming, making it more productive and environmentally friendly.

In conclusion, rice farming is a celebration of human ingenuity, rooted in ancient traditions and embracing modern innovations. From the seedling to the table, this age-old journey touches the lives of billions, nourishing them with the sustenance and love of the land.

"Innovations in rice farming have fueled unprecedented yield improvements and sustainability."

## TODAY'S TIPS

Before embarking on any farming endeavor, one crucial step that should never be overlooked is soil testing. Soil testing is the process of analyzing the soil's nutrient levels, pH balance, and overall health to make informed decisions about crop selection and appropriate fertilization. Here's why soil testing is essential for successful and sustainable farming:

Optimize Nutrient Management: Soil testing provides valuable insights into the nutrient content of the soil. By understanding which nutrients are deficient or excessive, farmers can apply the right amount of fertilizers to meet the specific needs of their crops. This targeted approach not only ensures healthy plant growth but also reduces the risk of nutrient runoff, minimizing environmental impact.

Tailor Crop Selection: Different crops have specific soil requirements. By testing the soil, farmers can identify the crops best suited to the soil's characteristics. This enables them to choose crop varieties that will thrive in the given soil conditions, maximizing yields and reducing

**Detect Soil Imbalances:** Soil testing helps detect pH imbalances in the soil, such as acidity or alkalinity. Correcting pH levels is crucial because it affects nutrient availability to plants. By addressing these imbalances, farmers create an environ-

ment where crops can access the nutrients they need for optimal growth.

**Budget-Friendly Approach:** Soil testing is a cost-effective investment. It allows farmers to avoid unnecessary spending on excessive fertilizers or lime, which might not be required in their specific soil conditions. Targeted fertilization based on soil test results ensures efficient resource use and saves money in the long run.

Prevent Soil Degradation: Over time, continuous planting without proper soil testing can lead to soil depletion and degradation.

In conclusion, soil testing is a fundamental practice that serves as the foundation for successful and sustainable farming.





THE FARMER'S LEGACY

By Prince Opoku Dogbey

In the bustling modern world, as cities grow taller and technology advances, it's easy to lose sight of the true heroes of our sustenance - the farmers. From dawn till dusk, these unsung champions toil on the fertile earth, their hands sowing seeds of nourishment and hope.

With unwavering dedication and love for the land, they nurture crops and care for livestock, ensuring we have wholesome food on our plates.

Beyond their vital role in feeding the world, farmers are the backbone of our communities. Their hard work and resilience shape our traditions and culture, binding us together as one big family. In every meal we savor, we taste the fruits of their labor and the essence of their friendship.

So, let's take a moment to honor our trusted friend, the farmer. Let's recognize their tireless efforts and the deep-rooted connection they create between nature and us.

As we enjoy the bounties of the land, let's remember that the farmer is not just a provider, but a cherished friend who stands at the heart of our lives.

## Le grand sommet de la FAO tenue pour soutenir la chaîne agricole

Par Yosua Domedjui

rès de trois milliards de personnes n'ont pas les moyens d'avoir une alimentation saine, près d'un tiers de la nourriture produite dans le monde est perdue ou jetée, et plus de 780 millions de personnes souffrent de la faim. Les Nations unies appellent à un changement dans la manière dont nous produisons et consommons, en raison de l'échec des systèmes agroalimentaires.

Plus d'un quart de toutes les professions sont soutenues par les systèmes alimentaires et agricoles, qui nourrissent également le monde. Du 24 au 26 juillet 2023, le siège de l'Organisation des Nations unies pour l'alimentation et l'agriculture (FAO) à Rome a accueilli le Sommet des Nations unies sur les systèmes alimentaires +2, qui a attiré plus de 2 000 participants de plus de 160 nations.

A. Guterres, le secrétaire général de l'ONU, a souligné trois domaines d'action clés dans son discours :

Les investissements "massifs" dans les systèmes alimentaires durables ; la collaboration entre les entreprises et les gouvernements pour « faire passer les gens avant les profits » ; le rôle essentiel que jouent les systèmes alimentaires dans la réduction des émissions de carbone ; et l'obligation d'utiliser de nouvelles technologies pour réduire l'utilisation non durable des terres, de l'eau et d'autres ressources dans le domaine de l'agriculture et de la production alimentaire.

Les systèmes alimentaires, selon les termes du directeur de la division des systèmes alimentaires et de la sécurité alimentaire de la FAO, comprennent « tout ce qui est lié à l'alimentation et à l'agriculture. Ce que nous mangeons et la commercialisation, la distribution et la transformation des aliments ». Ces systèmes régissent également la façon dont les aliments sont élevés ou récoltés sur terre et dans la mer, ainsi que la façon dont les produits non alimentaires, tels que les combustibles et les fibres, sont produits. Toutes ces procédures impliquent de nombreuses actions, dépenses et choix.

En termes de productivité et d'efficacité, la spécialisation mondiale dans la production de certaines cultures de base a sans aucun doute été bénéfique. Toutefois, selon la FAO, la perte de diversité a affaibli la résilience du système, entraîné une dépendance et porté atteinte à la biodiversité.



## Les prévisions du blé de la saison 2023/24

Par Yosua Domedjui

Le ministère américain de l'agriculture (USDA) a mis à jour en juillet ses prévisions concernant les importations de blé de l'Algérie pour la saison 2023/2024.

8,7 millions de tonnes d'importations sont prévues, soit une hausse de 1,2 million de tonnes par rapport à l'année précédente. La même source estime que la production prévue sera de 2,7 millions de tonnes, soit environ 600 000 tonnes de moins que la saison précédente. L'USDA estime la consommation annuelle typique de blé de l'Algérie à 11 millions de tonnes, ce qui la place au deuxième rang de la région après l'Égypte. La sécheresse et la chaleur ont affecté les rendements à l'hectare, qui sont estimés à 1,3 tonne contre 1,5 tonne l'année précédente.

cacité, la spécialisation mondiale dans la production de certaines cultures de base a sans aucun doute été bénéfique. Toutefois, selon la FAO, la perte de diversité a affaibli la résilience du système, entraîné une dépendance et porté atteinte à la biodiversité.

En termes de productivité et d'effi-

Dans un précédent rapport publié en mai dernier, le Monitoring Agricultural Resources (Mars) de l'Union européenne prévoyait des rendements inférieurs de 24 % à la moyenne quinquennale, avec de mauvaises récoltes à la clé. Le manque de précipitations et les vagues de chaleur ont eu un impact important sur l'industrie céréalière, non seulement en Algérie mais dans toutes les régions d'Afrique du Nord, où le changement climatique ne fait que s'accentuer.



### Market Analysis of Cassava Starch In Thailand

he market prices of cassava starch have reduced slightly over the last month. The price ranges from 530-535 US dollars/ton (3,683.10 yuan /ton). This week, the market price of cassava starch in Thailand's tapioca starch quotation is FOB (Bangkok) 495 US dollars/ton (3,627.80 yuan /ton). The starch prices in the domestic cassava starch market are stable. In Thailand, the raw material supply of fresh cassava is stable. The average starch leavening of cassava starch is between 24-28 percent. Thailand is relatively stable, the open factories remain high, and the starch output continues to increase. The speed of cassava starch clearance is still low, and the quotations of traders are slightly confused.



### **Price Factors**

Quality of cassava root: Factory owners demand cassava with high starch content for production. Higher starch content would receive a higher price than the lower one. The price WWWoffered by the collector is dependent on the quality of the cassava root, specifically, the starch content.

Cost of Labour: Total labour cost including farm labour for the cultivation and harvesting of cassava. The cost of labour during the harvesting period is high as compared to cultivation therefore the cost of harvesting directly affects pricing.

Harvest Yield: There is a high correlation between harvest yield and the price of cassava. The price of cassava is lower when there is a low yield. The lowest prices in June and July can be explained in a similar way but the opposite end. It is noted that the abundance of cassava roots drives the prices down

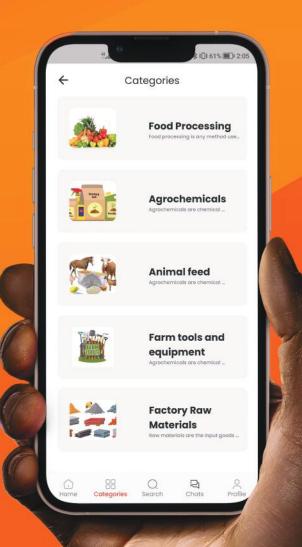
Handling and Logistics: The storage and shipping costs from producing areas to importing countries are great determinants of cassava prices. When the shipping and transportation cost of cassava to consumers and industries are high, it affects the retail price of cassava. Cassava farmers bring their harvest to the collectors, where they are responsible for absorbing the cost of transportation from farm to collecting

Harvesting time: The harvesting period is a great determinant for the price of cassava. The abundance and scarcity of cassava affect the price. The prices of fresh cassava roots often rise in November and December of every year as cassava is easily harvested during the rainy season. During the harvesting season, the prices are relatively high due to the limited supply.



China-Africa Industrialize Socialize Traders Terrace

## YOUR AGRO PRODUCT TRADING SPACE.



### **Everything Agric:**

Seedlings
Agro-Chemicals
Farm products
Farm tools
Food Processing
Animal feeds
Many others



SIGN UP TODAY
WWW.CAISTT.COM

+233 25 796 3383



## GET UP TO 80%

financing to own an agroprocessing factory of diverse capacities now.

With our newly-launched financial module, an investor needs only 20% investment to become a factory owner.

Other Service Includes:



TECHNICAL & TECHNOLOGICAL SUPPORT



**WEEKLY OFFTAKE SERVICE** 



No. 25 Giffard Road, GL-034-5603 LA Trdae Fair, Accra

### Download Now



Agriculture in your hands.

## AGRICULTURAL SCIENCE | INDUSTRIALIZATION | TECHNOLOGY

















## WE BUILD ALL TYPES OF FACTORY SIZES!

AT TIAST GROUP, WE BUILD AGROPROCESSING FACTORIES THAT SUITS YOUR SPECIFICATION.

CALL US **0204758888** 

Agroriches is a weekly issued that seeks to inform our cherished readers about the latest information in the agricultural industry.

Kindly Scan the QR Code to access the ditigal copy of this edition and previous editions.

info@agroriches.com

