agroriches

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INSIGHT AFRICA

Kenya's Transforming Tea Industry

BECOMING GHANA'S RICE HUB

MR. SAMUEL EVANS LAMPTEY - SCHEME MANAGER, KPONG IRRIGATION SCHEME

SEPETMBER 2023

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.

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The Weather doesn't have to rule your farm any longer!

By Jessica Meledi

Gone are the days where farmers had to rely strictly on the weather to determine when to plant and harvest their crops. Even though climate change makes it more difficult for farmers to plan now, the advent of technology, which has birthed the innovation of "agritech," has given farmers an advantage to counter the weather conditions and plant their crops.

Agritech integrates conventional technologies into agriculture to address climate change issues, paving the way for sustainable farming and reducing weather susceptibility on farmlands.

Advanced technologies such as drip and precision irrigation systems use water more efficiently, ensuring every drop counts, which can be very helpful for farmers in combating drought. Soil moisture sensors are small but mighty tools that give farmers real-time data about their fields' water status, optimising irrigation schedules. Pair these with predictive weather models, and farmers gain the ability to plan. This allows them to adjust their strategies based on upcoming weather patterns.

Severe rain events can lead to huge floods that can wipe out farmers' crops. Fortunately, there are numerous ways to protect farmland from such floods through technology. Water gates may also help farmers protect their crops from floodwater. Water gates, a PVC device that stabilises itself and creates a barrier from oncoming water, can help farmers protect their crops from floods. Self-deploying and lightweight, they are easier to set up and install than sandbags, making them a worthwhile investment for small-scale farmers.

During warmer temperatures, more weeds and new pests that stick around longer may come up. By leveraging drones, pest control has become more effective. Drones with cameras and sensors detect pests in large areas, spraying pesticides or treatments from the air. Genetically modified crops also modify crops to resist certain herbicides, making weed control more efficient.

Technology has transformed the agricultural industry, and farmers can make sure to fully optimise agritech to ensure that weather conditions no longer become a hinderance to productivity on their farmlands.

> **"The advent of technology, which has birthed the innovation of "agritech," has given farmers an advantage to counter the weather conditions and plant their crops."**

Longan

By Nana Ama Oforiwaa Antwi

Dimocarpus Longan, popularly known as longan fruit, is a white-fleshed exotic fruit that belongs to the soapberry family. It is known for its similarities with lychee fruit. Longan is a tasty addition to puddings, sorbets, smoothies, salads, and jellies. All you need to do is peel away its outer shell for consuming longan.

Description

It tastes like grapes and looks like an eyeball when the shell is taken off. The black seed and white flesh resemble a pupil hence; some people refer to it as the dragon eye fruit.

Health Benefits

1. Improves Memory

Longan fruit is nootropic in nature. It means that the fruit extract enhances cognitive function and memory. In traditional Chinese medicine, longan fruit tonic is for anxiety-induced treatment.

2. Boosts Skin Health

It is rich in vitamin C, which effectively helps in reversing the signs of ageing. It improves pigmentation, blemishes, fine lines, and wrinkles. In addition, this fruit helps in the formation of collagen which facilitates the formation of new skin cells and keeps the skin healthy.

3. Improves Sleep Quality

Due to its anxiolytic activity, the fruit extract can lower stress or anxiety. It does so by reducing the levels of a stress hormone called cortisol, which helps in improving sleep duration and quality.

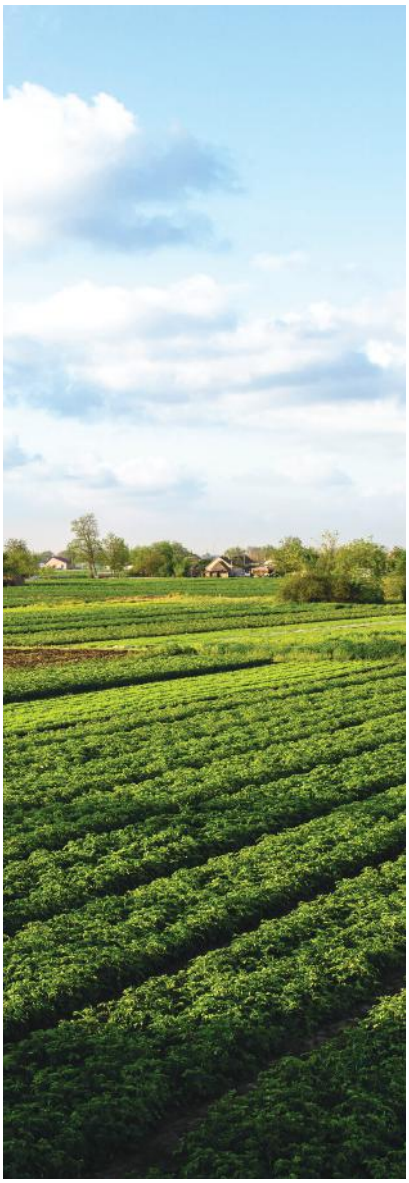
4. Boosts Immunity

Longan fruit exhibits potent anti-microbial properties which helps the immune system in fighting infections. Also, its richness in vitamin C., a well-known antioxidant helps reduce free radicals' harmful action.

Netherlands Ambassador Emphasizes Importance of Agriculture in Ghana's Economy

By Prince Opoku Dogbey

Mr. Jeroen Verheul, the Netherlands Ambassador to Ghana, has underscored the critical need for the Ghanaian government to prioritize the agriculture sector and create a conducive environment for its growth.



Speaking at the inauguration of a farmers' Knowledge Transfer and Learning Site at Abesim, near Sunyani, Ambassador Verheul emphasized that agriculture served as the backbone of Ghana's economy, with farmers constituting a vital segment of the working population.

The event drew farmers from the Bono, Bono East, and Ahafo Regions, as well as selected farmers from other parts of the country.
Ambassador Verheul stressed that due to agriculture's significance as a source of livelihood for farmers, the government should pay critical attention to the sector, given its importance for both the local and national economy.
He commended the Ghanaian government for the successful launch of the second phase of the Planting for Food and Jobs (PfFJs) program, applauding it as a commendable step toward promoting the country's agriculture to a higher level.

The Knowledge Transfer and Learning Site, established by the East West Seed Foundation, a non-governmental organization under East West Seeds (EWS) International, aims to facilitate knowledge exchange to enhance best agricultural practices for local farmers.

It provides farmers with the opportunity to improve their skills and knowledge by utilizing simple technologies that use natural materials such as cocoa leaves, rice straw, dried grass, and corn husks for mulching techniques to achieve higher crop yields.

At the site, various vegetables, including Onions (Prema), Cabbage (Nuzaka F1), Cucumber (Nandini), Sweet Corn (Sugar King F1), Tomato (Padma F1), Egg Plant (Kibibi F1), and Hot Pepper (Efia F1), were cultivated, showcasing innovative farming methods.

Mr. Coen Everts, the Business Development Manager of EWS International, stressed the organization's objective of enhancing the livelihoods of smallholder farmers by equipping them with the necessary knowledge and resources to maximize agricultural yields and improve overall productivity.

Kenya: Sugar production down 31% in seven months

By Prince Opoku Dogbey

Output of sugar from local millers in Kenya has dropped by nearly a third in seven months due to a shortage of cane, with the scarcity sharply pushing prices to a record high.

Analysis of the latest data from the Kenya National Bureau of Statistics (KNBS) shows domestic production of sugar dropped to 332,034 tonnes in the seven months to July, marking a 31.2 percent decline from 482,871 tonnes last year.

The drop has been a nightmare for consumers as sugar prices have risen at the fastest rate of any food commodity over the past year.

According to KNBS data, the cost of sugar has gone up by 61.4 percent over the past year. In comparison, the price of beans has risen by 27.9 percent and that of maize flour and cooking oil has increased by 9.6 percent and 18.5 percent respectively.
A spot check at Naivas Supermarket on Friday showed a kilogramme of sugar was retailing at between Sh213 and Sh225. At Carrefour, prices of the sweetener start at Sh210 per kilo.

During the seven months, the highest production was recorded in January when output peaked at 81,648 tonnes before rapidly dropping to 31,495 tonnes in May.

Kenya has 16 sugar factories out of which five Miwani, Chemelil, Muhoroni, Nzoia, and South Nyanza are owned by the government which also has a stake in Mumias Sugar which is now under receivership.

The millers have been facing a severe shortage of cane this year having largely depleted stocks of mature cane that even forced some millers to crush immature cane.

Some millers reduced the crushing schedule to a few days in a week to allow them to mop up sufficient cane. Others also temporarily closed their factories to do maintenance and upgrade.

The dire situation forced the government to step in by declining to renew their licences in July, thereby suspending milling until November to allow the cane to mature in what has seen local production plummet.

By last month, only three factories named, Transmara, Sony, and Sukari were still milling.
“Total sugarcane milled by all sugar factories dropped by 10 percent to 395,232 tonnes in July 2023 from 436,694 tonnes in June. Sugar made similarly decreased to 33,328 tonnes from 34,373 tonnes in June,” said the Agriculture and Food Authority

CHINA ACHIEVES WORLD RECORD PEANUT YIELD IN PURSUIT OF FOOD SECURITY

By Prince Opoku Dogbey

In a significant milestone for China's drive towards food security, a research field in the eastern province of Shandong has achieved a world-record-breaking peanut yield, according to state media reports.

The yield of 12,980 kilograms (28,600 pounds) per hectare is a breakthrough for researchers at the Shandong Academy of Agricultural Sciences (SAAS) who have dedicated over two decades to increasing peanut yields.

The impressive yield was obtained from a 4-hectare (10-acre) field, surpassing the national crop average by 3.4 times. Tang Song, director of economic crop technology at the National Agro-Tech Extension and Service Centre, highlighted the significance of this achievement.

Chinese President Xi Jinping has underscored the importance of science and technology in agriculture during a recent tour to the northeast's Heilongjiang province. This emphasis on innovation aligns with the nation's continuous efforts to bolster food security in the face of challenges such as extreme weather and rising fertilizer costs.

The achievement at the SAAS research field was attributed to several innovations, including the "single-seed precision sowing" method introduced in 2001. This method involves planting one peanut seed per hole instead of two, which was a common practice in China due to seed quality issues. According to Zhang Jialei, an associate researcher at SAAS, the single-seed method, while potentially delaying harvest by up to two weeks, enhances photosynthetic efficiency and leads to higher yields.

The success of the single-seed sowing method relies on high-quality seed selection, precise soil preparation, controlled fertilization, nutrient management, and pest prevention. By adopting these practices, SAAS has not only broken a world record but also demonstrated the potential to significantly increase peanut production across China.

In 2021, China had approximately 4.75 million hectares of peanut fields, producing around 18.2 million tonnes of peanuts. Tang Song suggested that by applying the successful yield achieved at the SAAS research field to other farms nationwide, China could potentially reach a total peanut production of 60 million tonnes.

Cong Liang, vice-chairman of the National Development and Reform Commission, emphasized the paramount importance of food security in China, especially in the wake of the Covid-19 pandemic.

GLOBAL TRADE AND AGRICULTURE'S UNIQUE RELATIONSHIP

By Nana Ama Oforiwaa Antwi

Agriculture, as one of the oldest and most fundamental human activities, has always played a pivotal role in global trade. The exchange of agricultural products across borders was one of the earliest forms of trade in human history. People exchanged food and spices among cultures and this was not just a matter of economics; it was about ensuring food security, meeting global demand, and fostering international cooperation. Let's delve into the intricate relationship between global trade and agriculture.

One of the primary reasons for engaging in global agricultural trade is food security. Countries often have different climates, growing seasons, and resources. This diversity allows nations to specialize in the production of certain crops or livestock, ensuring a steady supply of various food items throughout the year. When one region faces a crop failure due to adverse weather conditions or pests, other countries can step in to meet the deficit through international trade.

Moreover, global agricultural trade contributes to the diversity of diets worldwide. It allows consumers to access a wide range of fruits, vegetables, grains, and animal products that might not be available locally. This variety enhances nutrition and culinary experiences, promoting a healthier and more culturally rich society.

Agricultural exports are a significant driver of economic growth and development in many countries. For developing nations, agriculture often represents a substantial portion of their GDP. Exporting agricultural products can boost rural economies, create jobs, and provide income to small-scale farmers. This, in turn, contributes to poverty reduction and improved living standards.
However, the relationship between global trade and agriculture is not without its challenges and controversies. Critics argue that some aspects of international trade, such as subsidies provided to farmers in wealthy nations, can distort global markets and disadvantage farmers in developing countries who suffer tax on imports. Additionally, the environmental impact of long-distance transportation and the loss of agricultural biodiversity due to the focus on a few cash crops are concerns that need to be addressed.

To harness the benefits of global agricultural trade while addressing its challenges, there is a need for responsible and sustainable practices. This includes fair trade agreements that consider the interests of all nations involved, as well as efforts to reduce the environmental footprint of food production and transportation.

Global trade and agriculture are intricately connected, and their relationship has profound implications for food security, economic development, and international relations.

Bioreactors in Agriculture: Transforming Crop Production

By Prince Opoku Dogbey

Innovation is the driving force behind the pursuit of more sustainable and efficient practices. One such innovation that has been making significant strides is the use of bioreactors. These remarkable machines, originally designed for the field of biotechnology, are now revolutionizing agriculture by transforming crop production in ways we could have only dreamed of a few decades ago.

What is a Bioreactor?

A bioreactor is essentially a controlled environment where biological processes, such as microbial fermentation or cell culture, take place under carefully monitored and regulated conditions. In agriculture, bioreactors have found a range of applications, from enhancing soil health to producing valuable compounds and plant materials.

Soil Bioreactors: Cultivating Healthy Soils

One of the most promising applications of bioreactors in agriculture is soil bioremediation. These bioreactors are designed to cultivate beneficial soil microorganisms that can help break down contaminants and improve soil health. Through controlled aeration, moisture, and nutrient levels, soil bioreactors stimulate the growth of microbes that naturally detoxify soil, making it safer for agriculture and reducing the need for chemical interventions.

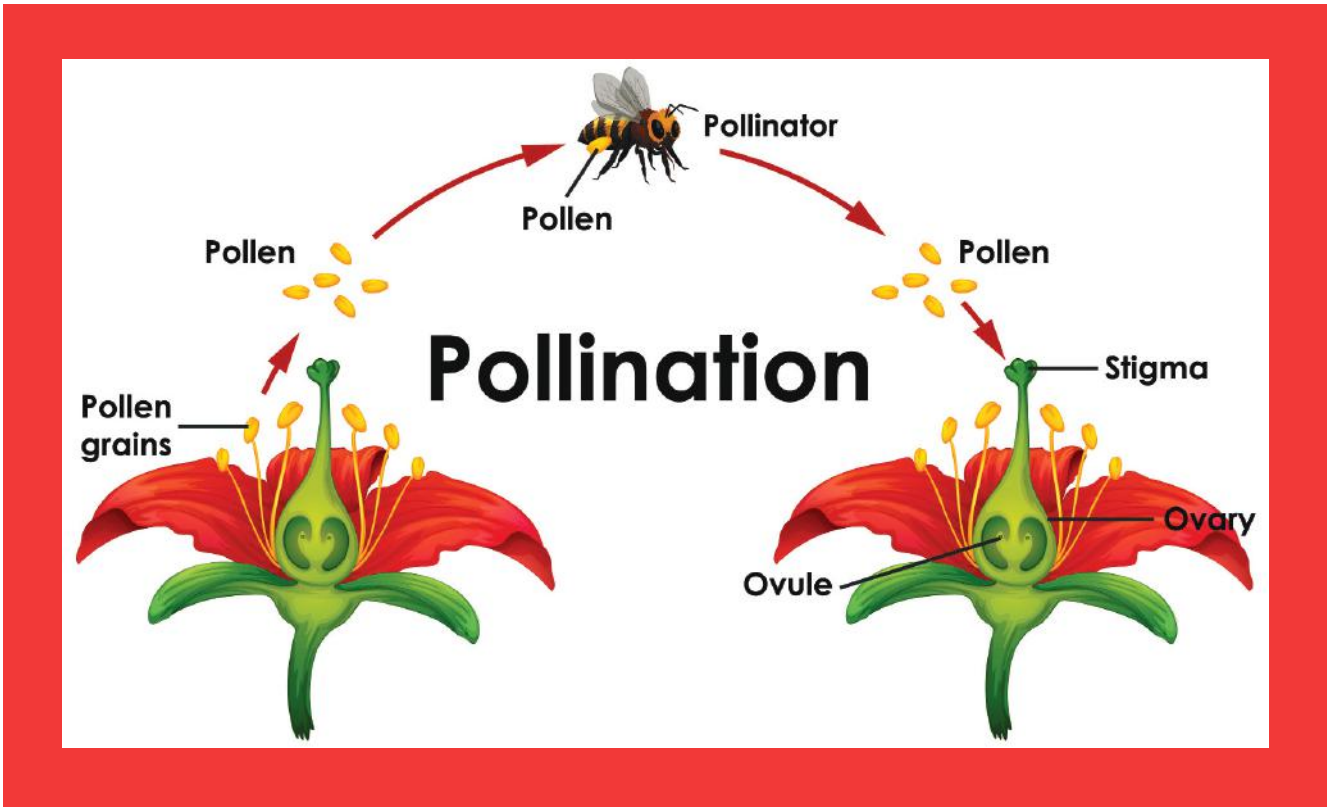
Plant Cell Bioreactors: Precision Agriculture at its Best

Plant cell bioreactors take agriculture to the next level by enabling the controlled growth of plant cells in nutrient-rich solutions. These bioreactors are miniature plant farms, producing everything from pharmaceutical compounds to exotic plant materials with remarkable precision. This technology allows for the year-round production of high-value crops in a fraction of the time it would take in traditional fields.

Bioreactors for Biofuel Production

Biofuels are gaining popularity as an eco-friendly alternative to fossil fuels, and bioreactors play a critical role in their production. Microorganisms are cultivated in bioreactors to ferment organic matter into biofuels like ethanol and biodiesel. This not only reduces greenhouse gas emissions but also opens up new possibilities for sustainable energy sources.

"Plant cell bioreactors take agriculture to the next level by enabling the controlled growth of plant cells in nutrient-rich solutions



What do you know about Pollination?

By Prince Opoku Dogbey

In gardens and fields all around us, there's a special kind of magic happening every day. It's a process called pollination, and it's how plants make more plants. This magic is like a secret dance between flowers and helpful insects, and it's incredibly important for all life on Earth.

Partnership Between Plants and Bugs

Think of pollination as a teamwork between plants and bugs like bees and butterflies. Flowers have sweet nectar, like a tasty treat, that bugs love to eat. When bugs visit flowers for nectar, they accidentally pick up tiny specks called pollen. Then, when they visit another flower, some of that pollen falls off and helps the new flower make seeds. It's like the plants are saying, "Thanks for the visit, now help us make more plants!"

The Bee's Special Role

Among these helpful bugs, bees are like superheroes. They work really hard, visiting lots of flowers in a single day. As they go from flower to flower, they move the pollen around, which allows the plants to grow fruits and seeds. This helps us because many of the foods we enjoy, like apples and strawberries, wouldn't exist without bees

.Why Pollination Matters to Everyone

You might wonder why this whole pollination thing is a big deal. Well, it's because it's not just about pretty flowers. Pollination is crucial for growing the fruits, vegetables, and nuts that make up a big part of our meals. It's also vital for the animals that depend on these plants for food.

So, the next time you see a buzzing bee or a colorful butterfly, know that they're not just enjoying the flowers; they're doing some of nature's most important work, making sure our world stays green and tasty.

Kenya's Transforming Tea Industry

By Jessica Meledi

Kenya's tea industry, is experiencing a dynamic shift in recent times, notably with significant developments surrounding the Kenya Tea Development Agency (KTDA) factories. This transformation reflects both the industry's rich history and its resilience in adapting to changing global market demands.

Kenya's journey in tea cultivation began in the early 20th century with British colonial influences. Since then, the tea industry has grown into one of the country's most vital sectors. Tea plantations span across landscapes, particularly in regions like Kericho and Nandi Hills, where the equatorial climate provides the perfect conditions for tea cultivation.

In recent years, Kenya's tea industry has faced a series of challenges. Price fluctuations in the international tea market, climate change affecting crop yields, and a need for modernization have all posed significant obstacles. Additionally, concerns over transparency and governance within the KTDA and its affiliated factories have been raised, leading to demands for reforms.

The tea industry is now undergoing a transformative phase. The government's commitment to reforms in the KTDA and tea value chain is a positive step toward addressing issues of accountability and increasing returns for tea farmers. Furthermore, new tea varieties and sustainable farming practices are being adopted to enhance productivity while minimizing environmental impact.

One of the remarkable trends in Kenya's tea industry is its shift towards producing high-quality tea. Kenyan tea is renowned for its briskness and bright colour, making it a favourite in international markets.

Kenya's tea industry transformation is not only vital for the country but also has global implications. As one of the world's leading tea exporters, Kenya's ability to adapt and thrive in changing market dynamics sets an example for other tea-producing nations.

Kenya's tea industry, with its rich history and recent challenges, is on a path of renewal and transformation. With a commitment to transparency, sustainability, and quality, Kenya is poised to retain its status as a global tea powerhouse and provide a brighter future for its tea farmers and the nation as a whole. The changes in the KTDA and the broader industry are not just brewing; they are signaling a refreshing and promising shift in Kenya's tea culture.

Did you know that, a single acre of healthy soil can contain more living organisms than there are people on Earth?

Papaya Seeds

Papaya seeds contain enzymes like papain, which can aid in digestion. Consuming a small amount of papaya seeds after a meal may help alleviate digestive issues like bloating and indigestion.

BECOMING GHANA'S RICE CENTRE

By Prince Opoku Dogbey

In a bid to bolster sustainable rice farming and reinforce food security, the Kpong Irrigation Scheme (KIS) in Ghana has set an ambitious target of achieving an impressive 8 tons per hectare.

After over two decades of successful cultivation, the KIS is determined to further elevate its rice production.

Speaking exclusively with Agroriches TV, Mr. Samuel Evans Lamptey, the Manager of the scheme, expressed unwavering optimism about reaching this significant milestone.

"Our aim is to go further to about 8 tons per hectare," he asserted, "by focusing on viable and high-yielding seeds through collaborations with universities and the Japan International Cooperation Agency (JICA)."

The KIS, encompassing 4,000 hectares of land, allocates over 2,000 hectares to rice farming, cementing its status as a major rice producer in the region.

Emphasizing private sector involvement, Mr. Lamptey highlighted the invaluable contributions of service providers, input dealers, and financial institutions like Manya Krobo Rural Bank in supporting farmers.

As the KIS gears up to achieve its ambitious goal, Mr. Lamptey called on potential investors to invest in the scheme's future. He emphasized the importance of introducing labor-saving technologies like transplanters and seeding machines to optimize productivity.

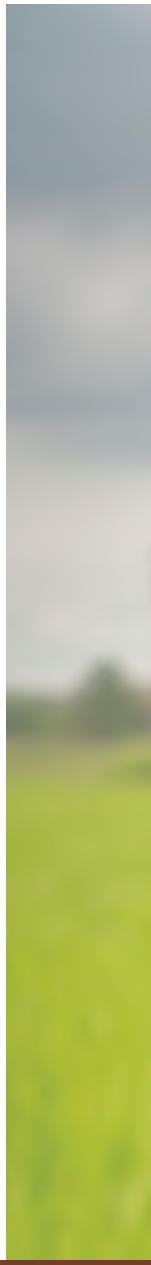
Additionally, he said the vast rice fields would greatly benefit from mechanized methods for spraying, including the use of drones.

Complementing Mr. Lamptey's enthusiasm, Kedzi Frank, an agronomist and extension officer on the scheme, shared insights into the successful partnership with JICA and the MASAPS project.

According to him, JICA introduced series of agronomic training and capacity building.

He explained that the average rice yields have surged to an impressive 5.5 tons per hectare.

Mr. Kedzi also noted gthat beyond rice and bananas, the KIS has also delved into aquaculture, diversifying its agricultural prowess.



Mr. Samuel EVANS LAMPTEY

SCHEME MANAGER, KPONG IRRIGATION SCHEME

With sustainability and innovation at its core, the Kpong Irrigation Scheme stands as a symbol of successful rice farming practices in Ghana. As the scheme strives towards achieving 8 tons per hectare, it continues to epitomize the spirit of progress and collaboration, ensuring a bountiful future for Ghana's agricultural landscape and its people.

The Kpong Irrigation Scheme

The Kpong Irrigation Scheme (KIS) in Ghana stands tall as a beacon of success in sustainable rice farming and a vital contributor to food security. Established in 1998, the scheme covers an extensive 4,000 hectares of land, with over 2,000 hectares dedicated to rice cultivation. Its strategic location along the Kpong Dam, which has a remarkable height of 18.25 meters, ensures a consistent water supply throughout the year, fostering year-round farming activities.

Lemon Longan Cookies

By Nana Ama Oforiwaa Antwi

Ingredients

gluten-free all-purpose flour
vegan/plant-based butter
baking powder
longan fruits
lemon juice + zest
agave/maple syrup
pinch of salt
pure vanilla extract
powdered sugar for dusting (optional)

Preparation

Remove the seeds from the longan fruits and set aside.
Pour the blended fruits together with all other liquid ingredients in a bowl and whisk.
Mix your all dry ingredients in in another.
Now stir all ingredients together and plop onto a parchment lined baking sheet using a melon baller and bake for 12-15 minutes.

Take it out and enjoy your lemon longan cookies with a chilled drink or tea.

The importance of safety for farmers in cultivating at the farmlands

By Jessica Meledi

Farming is more than a profession; it's a way of life. Yet, amidst the fields and farms, safety practices can sometimes be neglected. It's time to recognize that farm safety is not just a choice but a crucial investment in the future.

The most compelling reason to prioritize farm safety is, quite simply, to safeguard lives and livelihoods. Agriculture remains one of the riskiest industries worldwide. Tractor accidents, livestock mishaps, and machinery incidents can result in tragic consequences. By embracing safety protocols, we protect our most valuable assets: ourselves and our loved ones.

Accidents can disrupt farm operations, leading to financial losses and setbacks. An injury to a key worker may leave essential tasks undone, affecting crop yields, livestock care, and overall productivity. By adhering to safety measures, we ensure the continuity of our operations.

Farms are generational legacies. By practicing safety today, we guarantee a thriving farm for future generations. Safe farming practices maintain soil health, minimize environmental impact, and reduce potential liabilities, ensuring a sustainable agricultural legacy.

Accidents can be financially devastating. Medical bills, equipment repairs, and insurance claims can drain resources. Implementing safety measures, even if they require an initial investment, ultimately saves money in the long run.

Farms are integral to communities. A farm with a strong safety culture reflects positively on the entire community. Conversely, accidents can lead to negative attention and damage the reputation of both the farm and the farming profession.

Adhering to safety regulations and standards is not just a legal requirement but also a moral obligation. Compliance ensures we are responsible stewards of our land, animals, and employees.

Farm safety isn't an afterthought or an inconvenience; it's an investment in the future. By prioritizing safety, we preserve lives, maintain operational continuity, ensure sustainability, safeguard our financial well-being, enhance our reputation, comply with regulations, and, most importantly, find peace of mind in the midst of our life's work. It's not just about farming safely; it's about farming smartly, for the benefit of all.

The magic of the plants

I stand guard at night while I stare into the abyss
I watch the grains and trees sway
The oxen and horses fast asleep
Yet I do not butt an eye
Though my eyes grow heavy
And my yawns had enough of me
I still looked on
Waiting to see the magic of the plants
The plants continued to sway
And the birds chirped
I stood against the gushing wind
Not even my shivering legs could sway my mind
Blink one, two, felt a drop hit my face
The morning dew had fallen
When did I lose my guard?
When did sleep steal me away
I quickly rushed to see the plants
And the magic had happened
The budding fruit had arrived, with its little green face staring at mine
How did I miss it, I exclaimed?
It came like the thief in the night mama said
That is how the magic happens

— Poem by Nana Ama Oforiwaa Antwi

THE SECRET LANGUAGE OF FLOWERS

By Prince Opoku Dogbey

In a world filled with words and expressions, there exists a language that transcends linguistic boundaries – the language of flowers. This ancient form of non-verbal communication, known as floriography, has been used for centuries to convey deep emotions, sentiments, and hidden messages through the gift of blooms.

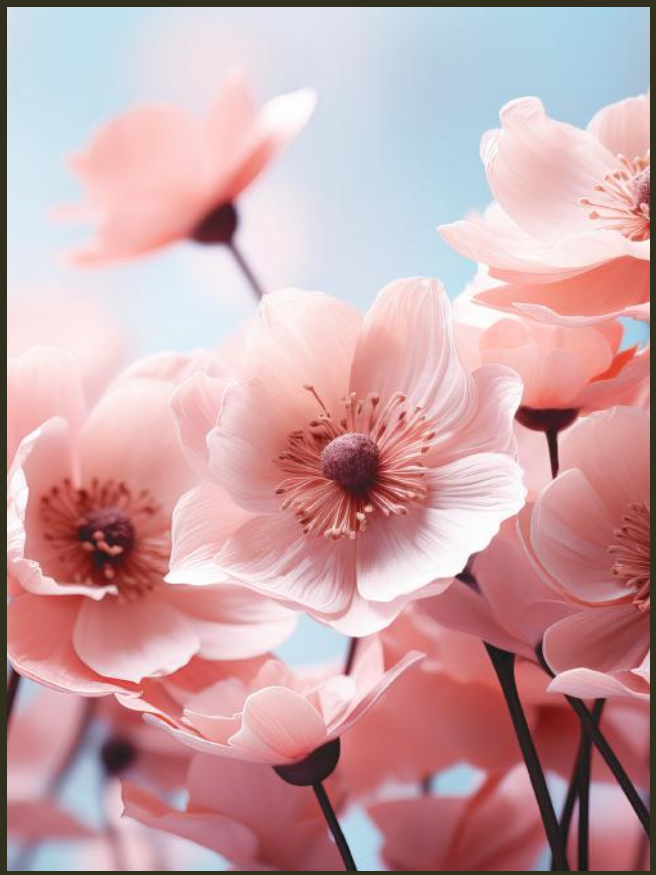
Flowers have always held a special place in human culture, symbolizing a wide range of emotions and meanings. Whether it's the romantic red rose representing love or the delicate white lily symbolizing purity, each flower carries a unique message. This art of expressing sentiments through blossoms gained popularity during the Victorian era, when it was considered improper to openly express one's feelings.

The Victorian era saw the publication of various flower dictionaries and guides, which provided detailed meanings for numerous flowers and arrangements. People used these references to send secret messages to their loved ones, friends, or even rivals. An elegantly crafted bouquet could convey anything from admiration and affection to sorrow or even a discreet refusal of a proposal.

While some flower meanings are widely recognized, such as the rose, others are more obscure. For instance, the chrysanthemum symbolizes fidelity and optimism, while the sunflower signifies adoration and loyalty. Even the direction in which a flower is handed to someone can alter its message – giving a flower with the right hand signifies "yes," while the left hand signifies "no."

The beauty of the language of flowers lies not only in its historical significance but also in its versatility. It allows people to express their feelings in a subtle and heartfelt manner, making it a thoughtful and personalized way to convey emotions. Whether it's a single bloom tucked into a handwritten note or a carefully arranged bouquet, the secret language of flowers continues to speak to our hearts, bridging gaps and conveying sentiments that words alone may struggle to express.

So, the next time you receive or give a bouquet of flowers, take a moment to consider the hidden messages that may be nestled within those petals. It's a reminder that nature's beauty extends beyond its visual appeal and into the depths of human emotions and connection



Silvo pasture Farming

By Prince Opoku Dogbey

Silvopasture, a lesser-known but highly effective farming style, integrates trees, forage, and livestock to create a harmonious and sustainable ecosystem. This approach offers a host of benefits that go beyond traditional farming methods. Silvopasture involves planting trees in pastures.

1. Enhanced Sustainability: Silvopasture promotes long-term sustainability by harnessing the benefits of agroforestry. Trees help sequester carbon, reduce erosion, and improve water quality.

2. Increased Income: Farmers can diversify their income sources through timber production, while still benefiting from livestock grazing and forage production.

Biodiversity Boost: Silvopasture systems often encourage greater biodiversity by providing habitats for wildlife in both the tree and forage components.

Reduced Inputs: Trees act as windbreaks, reducing the need for additional fencing and windbreak construction. They also require less maintenance compared to other crops.

Climate Resilience: The presence of trees can help mitigate the impacts of climate change by moderating temperature extremes and increasing overall farm resilience.

Carbon Sequestration: Trees in silvopasture systems sequester carbon from the atmosphere, contributing to climate change mitigation.

Improved Soil Health: The tree roots enhance soil structure and nutrient cycling, benefiting both forage and livestock.

While silvopasture may not be as common as conventional farming methods, its potential for sustainable agriculture is gaining recognition. By implementing silvopasture practices, farmers can create a resilient and productive farming ecosystem that benefits both their bottom line and the environment.

Preserving Quality and Reducing waste with Post Harvest Technology

By Jessica Meledi

Post-harvest technology plays a vital role in ensuring that the fruits of farmers' labor reach consumers in optimal condition, minimizing losses and reducing food waste. Recent advancements in this field have not only extended the shelf life of produce but have also contributed to a more sustainable and efficient agricultural industry.

One of the key innovations in post-harvest technology is controlled atmosphere storage. This technique involves manipulating the storage environment by regulating temperature, humidity, and gas composition. For example, by reducing oxygen levels and increasing carbon dioxide, controlled atmosphere storage slows down the ripening process, preserving fruits and vegetables for longer periods. This technology is particularly valuable for crops like apples, pears, and tomatoes.

Another breakthrough is the development of specialized packaging materials. These materials are designed to protect produce from physical damage, moisture loss, and microbial contamination. Vacuum-sealed bags and modified atmosphere packaging (MAP) are examples of such technologies. They create a microenvironment around the product, prolonging freshness and preventing spoilage.

Post-harvest technology also encompasses the use of advanced sorting and grading systems. Automated sorting machines use optical sensors and machine learning algorithms to identify and remove defective or low-quality items from the harvest. This not only ensures that consumers receive only the best produce but also reduces waste by diverting imperfect items to alternative uses like processing or animal feed.

Furthermore, cold chain management has seen significant improvements. Refrigerated transport and storage facilities have become more efficient and reliable, maintaining the temperature integrity of perishable goods from the farm to the market. This helps to prevent temperature-related deterioration and spoilage.

The impact of these advancements extends beyond the farm and market. By reducing post-harvest losses, we conserve valuable resources, reduce greenhouse gas emissions associated with food waste, and enhance food security. Moreover, farmers can access new markets and increase their income by delivering high-quality produce year-round.

In conclusion, post-harvest technology has made impressive strides in recent years, contributing to the sustainability and efficiency of the agricultural sector. By extending the shelf life of produce, reducing waste, and maintaining quality, these innovations benefit everyone involved in the food supply chain, from farmers to consumers. As technology continues to evolve, we can look forward to even more exciting developments in the post-harvest arena, helping to feed the world more sustainably.

Le CORAF promouvoir une agriculture résilience en Afrique

Par Yosua Domedjui

Le CORAF promouvoir une agriculture résiliente en Afrique
Les expériences des participants en matière de développement de projets dans les pays sont partagées ; les participants maîtrisent les techniques de développement de projets pro-CIA ; les participants maîtrisent les méthodes et outils d'évaluation des pratiques et technologies agricoles ; les participants identifient et partagent les idées de valorisation des connaissances acquises avec les participants ; les participants revisitent et maîtrisent les concepts théoriques et techniques de base sur le changement climatique et l'agriculture climato-intelligente ; les participants partagent leurs expériences en matière de développement de projets dans les pays sont capitalisés.

Ces résultats et d'autres sont attendus de l'atelier de formation sur l'AIC en Afrique centrale, qui a été officiellement lancé le 6 septembre 2023, à Douala (région du Littoral), par le Dr Noé Woin, directeur général de l'Institut de recherche agronomique pour le développement (IRAD).

Le Conseil Ouest et Centre Africain pour la Recherche et le Développement Agricole (CORAF) a organisé le séminaire, qui s'est déroulé du 6 au 8 septembre, en collaboration avec l'Alliance Bioversity International et le CIAT, qui étaient représentés respectivement par le Dr Emmanuel Njukwe (Directeur de la Recherche et de l'Innovation) et le Dr Alcade Segnon (Responsable Scientifique), dans le cadre du projet AICCRA (Accélérer l'Impact de la Recherche Climatique du CGIAR en Afrique).

Pour être utilisées dans des projets et des programmes, les techniques et technologies potentiellement utiles de l'AIC doivent faire l'objet d'évaluations préalables. Le DG de l'IRAD a recommandé de procéder à une évaluation rigoureuse de ces dernières afin de valider les qualités d'intelligence climatique des choix de l'AIC.

L'objectif de l'événement, a noté le Dr Njukwe dans son discours de bienvenue à la vingtaine de participants, était de "développer des idées pour mettre en œuvre un projet au niveau régional afin de lutter contre les effets du changement climatique".

Les objectifs principaux de cet atelier de trois jours, selon les organisateurs, sont de "renforcer les capacités des acteurs des systèmes nationaux de recherche agricole (SNRA) et des alliances AIC dans le développement de projets AIC et l'utilisation d'outils et de méthodes pour évaluer les caractéristiques intelligentes face au climat des pratiques et technologies AIC potentielles".

Le CORAF est composé des pays suivants : Gabon, Gambie, Ghana, Guinée Conakry, Guinée-Bissau, Liberia, Mali, Mauritanie, Niger, Nigeria, Sénégal, Sierra Leone, Togo et Sao Tomé et Principe.

Togo : La Subvention du riz par le Japon

Par Yosua Domedjui

Le Japon fournira à nouveau une assistance au Togo dans le cadre du programme d'aide alimentaire du Kennedy Round (KR). L'ambassadeur du Japon au Togo, Ikkatai Katsuya, et le ministre togolais de l'agriculture, de l'élevage et du développement rural, Antoine Lékpa Gbégbéni, ont signé le 25 septembre 2023 à Lomé un accord de don de 250 millions de yens, soit environ un milliard de FCFA, pour financer l'achat de 3600 tonnes de riz.

En réalité, cette signature ouvre la voie à l'arrivée d'une cargaison de riz de 3638 tonnes pour le compte de KR 2022 au mois de décembre. Cette quantité sera déversée sur le marché local et vendue à un "coût raisonnable". Le produit de la vente constituera un fonds de contrepartie qui servira à financer diverses initiatives de développement socio-économique dans les régions où le riz est cultivé.

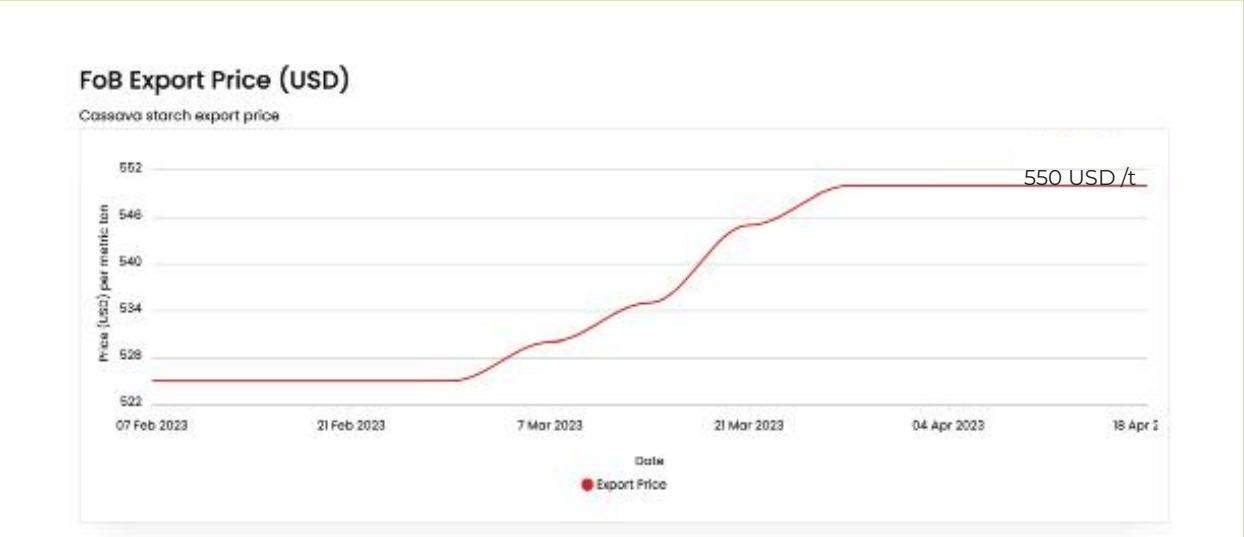
Il n'est plus à démontrer l'importance de cette assistance alimentaire des projets KR pour le bien-être économique, social et alimentaire de nos populations. C'est pourquoi le ministre Lékpa Gbégbéni a ajouté : « Nous tenons à exprimer notre gratitude pour la poursuite de cette assistance alimentaire, en particulier le renforcement de ce programme ».
Les fonds de contrepartie des KR 2018, 2019 et 2020, selon l'officiel togolais, financeront la mise en œuvre du projet et favoriseront la promotion de la mécanisation agricole au Togo.

« Treize projets KR, totalisant 100.551 tonnes de céréales et une enveloppe financière de près de 20 milliards de FCFA, ont été mis en œuvre au Togo entre 2008 et 2022 ».

Market Analysis of Cassava Starch In Thailand

The market prices of cassava starch have reduced slightly over the last month. The price ranges from 500-550 US dollars/ton (3,627.80 yuan /ton). This week, the market price of cassava starch in Thailand's tapioca starch quotation is FOB (Bangkok) 495 US dollars/ton (3,788.46 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.

Thailand Cassava Starch price



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 fields.

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.

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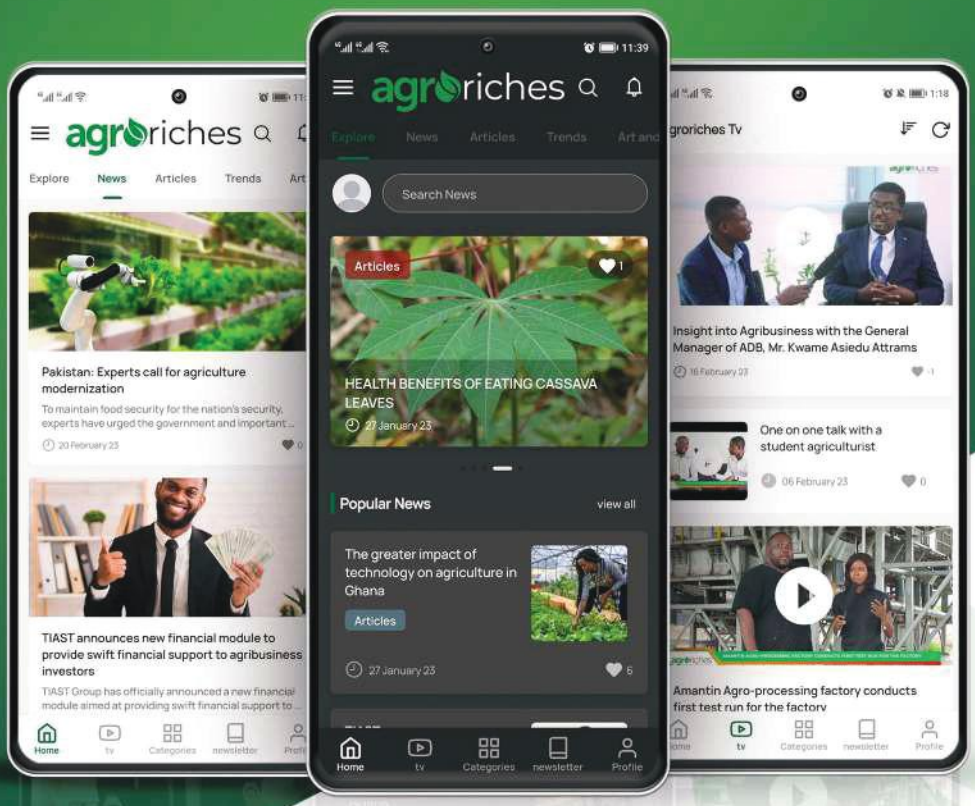

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