

agro**riches**

VOL 3. | 25TH EDITION

CONTINENTAL DIGEST

Add value to crops to stay competitive on global market

ARTICLE

The Age of Agricultural Robots

INSIGHT AFRICA

Innovative strategies for African Farmers to manage flooding

THE GREEN VANGUARD

OCTOBER 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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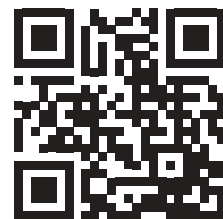
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Why is Crop Value Addition Essential for Economic Growth?

By Prince Opoku Dogbey

Agriculture is the backbone of economies worldwide, providing sustenance, employment, and raw materials for numerous industries. In an era of burgeoning populations and shifting environmental challenges, the need for value addition in crop production has never been more critical. Value addition refers to the process of enhancing the value of agricultural products by transforming them into higher-value goods. Here are some compelling reasons why value addition of crops is essential for modern agriculture:

1. Enhanced Economic Returns:

One of the most compelling arguments for crop value addition is its potential to significantly boost farmers' incomes. Raw agricultural products often command lower prices compared to processed or value-added products. By investing in value addition, farmers can tap into higher-value markets, increasing their revenue and overall profitability.

2. Reduction of Post-Harvest Losses:

Post-harvest losses are a persistent challenge in agriculture, leading to food waste and financial losses for farmers. Value addition techniques, such as drying, canning, and processing, extend the shelf life of crops, reducing losses caused by spoilage and transportation issues.

3. Market Diversification:

Value-added products open up diverse market opportunities. Processed foods, for instance, can find their way into local and international markets. By diversifying their product offerings, farmers are less reliant on a single commodity's market fluctuations, providing financial stability.

4. Increased Food Security:

Value-added crops often come in convenient, ready-to-use forms, making them more accessible to consumers. This can contribute to improved food security by ensuring that nutritious food products are available and less prone to spoilage.

5. Export Potential:

Value-added agricultural products often meet international quality standards and consumer preferences more effectively. This opens doors to export markets, which can be lucrative for both individual farmers and the country's economy as a whole.

In conclusion, the need for value addition of crops is clear. It not only benefits farmers by increasing their income and reducing losses but also plays a crucial role in ensuring food security, creating jobs, and contributing to economic growth.



Nanking Cherries

By Nana Ama Oforiwaa Antwi

Nanking cherries are known scientifically as *Prunus Tomentosa* and are a delicious cherry option which grows late spring through to the summer.

Description

Nanking cherries grow on medium-sized shrubs that reaches not more than two and a half meters tall. The tiny red fruit grows in a cluster on a short stem and look pale pink or bright cherry red when ripe. However, it is worth noting that a white variety exists. Nanking cherries are about the same size of a blueberry, and have a smooth skin with a juicy pulp and seed within.

Origin

Nanking cherries are native to many areas of Southeastern Asia, China, Tibet and the Himalayas. They were cultivated for hundreds of years in Asia before being introduced to England in 1870 and then to the United States in 1882. At one time, there may have been a large number of named varieties, but many have been lost over the last 100 years.

Nutritional Benefits

Antioxidant and Inhibitory activity

Nanking cherry seeds contain flavonoids that are known to exhibit antioxidant activity.

Promotes hair growth

Research has discovered that the cherry has protective action on skin tissues and its subsidiary organs. It has also shown a strong role in promoting hair growth.

Fights Cancer

Research shows that phenylpropanoid sucrose esters, isolated from leaves of Nanking cherry have shown cytotoxic activity against four human cancer cell lines tested.

The cytotoxic activity of these isolates was stronger when compared with the positive control 5-fluorouracil used. The results also indicate these isolates might be a promising source for anti-cancer drug candidates.

'Add value to crops to stay competitive on global market'

By Prince Opoku Dogbey

Seth Kwame Acheampong, Eastern Regional Minister, has issued a compelling call to farmers in the Eastern Region to embrace value addition as a key driver of economic transformation.

This approach, he emphasized, is essential for farmers to remain competitive on the international market.

According to him, adding value to crop produce allows farmers to sell their products at standard market prices.

He said this while addressing Eastern Regional farmers and stakeholders at the third edition of the Eastern Commodity Satellite Market, held on October 3 at the Apenteng Hall in Koforidua.

Speaking under the theme "Enhancing Value Addition and Export Potential through the Eastern Commodity Satellite Market: The Role of Regulatory Bodies," Hon. Acheampong said, "The market fair, which was launched in 2021, marked the journey of the region to achieve agricultural industrialization by adding value to crops, exporting the majority of our products, and staying competitive on the international market, which subsequently boosted economic growth and created more job opportunities."

Mr. Acheampong also highlighted the government's commitment to supporting industrialization efforts, both at the national level and specifically in the Eastern Region.

To thrive in the agricultural sector, Mr. Acheampong stressed the importance of unity, as it is a driving force for progress in the region.

Speaking about investment potential, Mr. Acheampong pointed out that the Eastern Region holds significant potential for agricultural investments. Factors such as vast and fertile lands, a diligent workforce, and a favorable environment for agribusinesses to thrive make it an attractive destination.



Discussing the role of regulatory bodies in promoting value addition, he highlighted their contributions, including setting quality standards, facilitating trade, negotiating market access, protecting intellectual property, ensuring safety and compliance, influencing tariff policies, and certifying products to meet standards.

He called on the Ghana Standards Authority (GSA) and the Food and Drugs Authority (FDA) to raise awareness among agribusinesses about the importance of adhering to regulatory standards.

Ruby Neils Palme, Coordinator for Modernizing Agriculture in Ghana (MAG), emphasized their commitment to advancing and modernizing the agricultural sector.

According to her, the MAG program has provided technical assistance to women farmer organizations, focusing on value addition to increase productivity and provide easy access to technical support.

EAC Agribusinesses get €40 million boost under Market Access Scheme

By Jessica Meledi

A new regional scheme is set to unlock the potential of agribusinesses within the East African Community (EAC) by investing €40 million (approx. Rwf51 billion) to this end, according to information from the regional bloc and the European Union.

The initiative called EU-EAC Market Access Upgrade Programme (MARKUP II), is funded by the EU. It was launched in Arusha by the EAC and the EU delegation in Tanzania on October 3.

According to the EU delegation, MARKUP II will strengthen EAC's small agribusinesses through enhanced regional and international trade in close partnership with the East African Business Council, EAC Partner States, business support organisations, and local institutions.

It is implemented by the International Trade Centre (ITC) in collaboration with the EAC Secretariat.

A statement from the EU delegation to Tanzania and EAC indicates that building on the successes of MARKUP I, this new phase will focus on EAC priority sectors including avocado, cocoa, coffee, essential oils, French beans, horticulture, leather, packaging, spices, and tea - with an emphasis on processing, value addition, diversification, investment, and export linkages.

Under MARKUP II, the inclusion of packaging as a stand-alone and crosscutting value chain is a new feature, which addresses the unique challenges facing micro, small and medium-sized enterprises (MSMEs) in the EAC.

The initiative will take into account the inclusion of women and youth in trade, while a regional Steering Committee chaired by the EAC Secretariat, which will include representation from relevant national ministries, will provide overall direction for the programme, officials indicated.

Speaking at the launch of the initiative, the Ambassador of the Delegation of the EU to Tanzania and the EAC, Christine Grau, said: "MARKUP II demonstrates the EU's commitment to supporting East African companies, fostering sustainable growth, and creating decent job opportunities."

EAC Secretary General Peter Mathuki, underscored the importance of the initiative by highlighting the outcomes of its previous phase.





FAO INCREASES GLOBAL CEREAL PRODUCTION FORECAST FOR 2023

By Prince Opoku Dogbey

The Food and Agriculture Organization of the United Nations (FAO) has raised its forecast for global cereal production in 2023, bringing positive news for the agricultural industry worldwide.

According to the latest report, global cereal production is now estimated to reach 2,819 million tonnes, marking a 0.9 percent increase compared to the previous year.

This upward revision is primarily driven by more positive yield estimates for two key players in the global grain market - the Russian Federation and Ukraine.

These countries have experienced continued favorable weather conditions, leading to improved crop yields. However, the report also highlights challenges in Canada, where persisting dry weather in crucial crop-growing regions is expected to result in notably lower cereal output.

In a detailed breakdown, the FAO's Cereal Supply and Demand Brief reveals that global wheat production is projected to reach 785 million tonnes, while coarse grain production is anticipated to reach 1,511 million tonnes, reflecting a substantial 2.7 percent increase from 2022. World rice output is forecasted to be 523.1 million tonnes.

The report also notes that global cereal utilization for the 2023/24 period is expected to surpass the previous year's figures by 0.8 percent, reaching 2,804 million tonnes. This growth is attributed to increased wheat consumption. However, in the case of rice, the forecast suggests a second consecutive season of no or negative utilization growth. This is due to ongoing reductions in non-food uses offsetting the population-led increase in rice food consumption.

Furthermore, global cereal stocks by the end of the 2024 season are expected to reach a record high of 884 million tonnes, exceeding opening levels by 3.0 percent. This is accompanied by a projected cereal stocks-to-use ratio of 30.8 percent.

In conclusion, the FAO's latest report presents a positive outlook for global cereal production in 2023, driven by improved yields in some regions. However, challenges persist in other areas, highlighting the importance of continued monitoring and adaptation in the ever-changing world of agriculture.



Global cereal stocks by the end of the 2024 season are expected to reach a record high of 884 million tonnes

ARE GMOs A BOON, OR A BANE?

By Nana Ama Oforiwaa Antwi

In the world of agriculture, where every extra grain matters, a technological marvel has emerged, promising to reshape our approach to food production by contributing to food security among other noble fights the industry is currently battling. Genetically Modified Organisms, or GMOs, are scientifically engineered organisms which have sparked intense debates, offering both the promise of bountiful harvests and the specter of unintended consequences.

GMOs are created through precise alterations to an organism's genetic material, typically to enhance desirable traits such as resistance to pests, improved nutritional content, or drought tolerance. These modifications can help increase crop yields, reduce the need for pesticides, and create more resilient plants in the face of a changing climate.

One of the most celebrated achievements in the realm of GMOs is the development of Golden Rice, created by Emeritus Professor Ingo Potrykus of the Swiss Federal Institute of Technology and Prof. Peter Beyer of University of Freiburg, Germany. started the research on Golden Rice in 1982 as a Rockefeller Foundation initiative.

The crop, which was engineered to combat vitamin A deficiency in developing countries, had its research work started in 1982 as a Rockefeller Foundation Initiative. This supercharged grain can now save countless lives and prevent blindness among malnourished populations.

However, the GMO journey has not been without its controversies. Critics express concerns about potential environmental impacts, such as the unintended effects on non-target species and the development of pesticide-resistant insects. Ethical and health concerns also persist, with some questioning



the long-term effects of consuming genetically altered foods.

Nonetheless, the use of GMOs continues to grow globally. Countries like the United States, Canada, and Brazil have embraced them for their potential to increase agricultural productivity. Yet, the European Union has imposed strict regulations and labeling requirements due to public concerns.

The debate over GMOs is far from settled, as science and society grapple with complex questions. Are these genetically enhanced organisms a blessing, providing food security for a burgeoning global population, or a Pandora's box with unforeseen consequences?

As GMOs continue to evolve, one thing is certain: they will remain at the center of passionate discussions, a symbol of humanity's boundless curiosity and its ongoing quest for mastery over the natural world.

Galvanometers in Agriculture

By Prince Opoku Dogbey



Galvanometers, typically associated with physics and engineering, have found a valuable application in agriculture. These precise instruments play a pivotal role in modern farming, enabling farmers to enhance productivity and sustainability through accurate data collection and analysis.

What is a Galvanometer?

A galvanometer is an electromechanical device used to measure small electric currents. It comprises a coil of wire suspended within a magnetic field, connected to a pointer that moves in response to the flow of electricity. The movement of the pointer is directly proportional to the current passing through the coil, making it a highly sensitive indicator.

Applications in Agriculture

Soil Moisture Management: Galvanometers are integrated into soil moisture sensors. These sensors measure the electrical conductivity of the soil, which changes with moisture content. By utilizing galvanometers, farmers can precisely monitor soil moisture levels in real-time, facilitating accurate irrigation control to prevent both overwatering and water resource wastage.

Nutrient Analysis: In soil and plant tissue nutrient analysis, galvanometers play a crucial role. Soil samples can be mixed with a solution containing specific ions, and the resulting electrical conductivity is measured with a galvanometer. This data provides farmers with insights into soil nutrient content, aiding them in making informed decisions regarding fertilizer application.

Crop Health Assessment: Galvanometers are integrated into sensors that measure plant health indicators, such as chlorophyll content. By analyzing the electrical prop-

erties of plant leaves, farmers can assess crop health accurately. Early detection of stress or disease allows for timely interventions, minimizing crop loss.

Precision Irrigation: Galvanometer-equipped sensors assist in precision irrigation systems. These sensors monitor various environmental factors, including humidity and temperature, and adjust irrigation accordingly. This ensures that crops receive the precise amount of water they require, conserving resources and reducing costs.

In conclusion, galvanometers have evolved from their traditional applications into indispensable tools for modern agriculture. Their accuracy and sensitivity in measuring various agricultural parameters contribute significantly to improved crop yields, resource conservation, and overall farm efficiency.



Why Should Farmers Join Cooperatives?

By Jessica Meledi

Agriculture is the backbone of many economies, and the livelihoods of millions of people depend on it. However, small-scale farmers often face numerous challenges, from market access and limited resources to fluctuations in crop prices. In the face of these challenges, joining agricultural cooperatives is a good option for farmers.

To begin with, agricultural cooperatives embody the principle of strength in numbers. Individual farmers often struggle to negotiate favorable terms with suppliers, buyers, and financial institutions. By coming together as a collective force, farmers can leverage their combined resources, bargaining power, and influence in the market. This unity enables them to secure better prices for their produce, access affordable credit, and obtain essential agricultural inputs at reduced costs.

Farming is inherently risky, with unpredictable factors like weather, pests, and disease outbreaks. Cooperatives offer a safety net for farmers in times of adversity. By pooling their resources, cooperatives can collectively invest in risk management strategies, such as insurance coverage, drought-resistant crop

varieties, and pest control measures. When disaster strikes, the burden is shared, helping farmers weather challenging seasons.

Agricultural cooperatives are not just about economic benefits; they also foster knowledge sharing and capacity building. Farmers within cooperatives can learn from one another, attend training sessions, and access information on best practices. This knowledge transfer empowers farmers to improve their farming techniques, enhance crop yields, and adapt to changing agricultural trends more effectively.

Cooperatives enable resource-sharing among members. This can include shared access to machinery and equipment, bulk purchasing of seeds and fertilizers at lower prices, and shared storage facilities. Such collaborative arrangements reduce individual farmers' capital expenses and increase their overall efficiency.

Cooperatives foster community and solidarity among farmers, offering economic advantages, mutual support, and collective strength. They provide a sense of belonging, knowledge sharing, and shared resources, enabling farmers to build a sustainable future for themselves and their communities.





Innovative strategies for African Farmers to manage flooding on Agricultural lands

By Prince Opoku Dogbey

In recent years, climate change has aggravated the unpredictability of weather patterns, making it increasingly challenging for farmers to plan their planting and harvesting seasons. One of the most pressing issues faced by small-scale farmers in Africa is the threat of flooding, which can destroy crops and disrupt food supplies. Furthermore, agricultural floods can erode soil nutrients, rendering it unsuitable for cultivating essential food crops.

Thankfully, a range of practices and innovative technologies are now available to help farmers mitigate the impact of flooding on their farms, or even prevent floods from occurring in the first place. With the integration of technology into agriculture, African farmers can proactively reduce the recurring losses caused by flash floods.

Severe rain events can result in massive floods capable of decimating farmers' crops. Fortunately, there are numerous high-tech solutions to safeguard farmland against these destructive floods. One such innovation is the use of water gates, which offer an effective defense against floodwaters. These PVC devices, designed to stabilize themselves and create a barrier against incoming water, have proven to be invaluable for crop protection. Notably, water gates are easy to set up and in-

stall, especially when compared to traditional sandbags. This accessibility makes them a valuable investment for small-scale farmers.

Another innovative flood protection solution is the water-inflated property protector (WIPP). Constructed from vinyl-coated polyester, the WIPP forms a heavy, reliable barrier against flash floods. Its durability allows it to withstand the harshest of conditions, making it an ideal choice for flood-prone regions. Like other flood prevention products, the WIPP can be swiftly deployed to either prevent or reduce the impact of flooding, providing farmers with an essential tool to safeguard their livelihoods.

As climate change continues to alter weather patterns and intensify flooding events, it is imperative for African farmers to adopt innovative strategies and technologies to protect their farms and livelihoods. Water gates and water-inflated property protectors represent just a couple of the cutting-edge solutions available to help farmers mitigate the damaging effects of floods. By embracing these technologies, African farmers can not only safeguard their crops but also ensure food security and promote sustainable agriculture in the face of evolving climate challenges.



Crop rotation improves soil health and reduces the use of chemical fertilizers.



Sugarcane Juice

Sugarcane juice is a good source of essential nutrients, including vitamins (especially vitamin C), minerals (such as calcium, magnesium, and potassium), and antioxidants. These nutrients contribute to overall health and well-being.

THE GREEN VANGUARD

In a recent interview with Reindorf Nakuja, an experienced agriculture extension officer responsible for plant protection at the Atiwa East District, we gained valuable insights into the pivotal role that agriculture extension plays in the development of the agricultural sector in Ghana. The interview, conducted on Agroriches TV, shed light on the successes achieved and the ongoing efforts to ensure food security in the country.

Mr. Nakuja, who has dedicated nearly five years to the Ministry of Food and Agriculture, emphasized the multifaceted responsibilities of agriculture extension officers. These professionals act as a bridge between the government, research institutions, and the farming community. Their role is crucial in disseminating knowledge, providing support, and implementing agricultural policies at the grassroots level. They play an instrumental role in helping farmers adopt modern farming practices, make informed decisions, and increase their overall productivity.

One of the most remarkable success stories that Mr. Nakuja shared during the interview was the "Planting for Food and Jobs" initiative. This government program has not only created employment opportunities for Ghanaians but also provided farmers with access to mechanized tools for more efficient farming. With the support of agriculture extension officers like Mr. Nakuja, the initiative has significantly improved the livelihoods of countless farmers across the country.

REINDORF NAKUJA - EXTENSION OFFICER



Moreover, the interview highlighted the essential training activities conducted for farmers in the area of climate-smart agriculture. With climate change posing a growing threat to agriculture, these trainings aim to equip farmers with the knowledge and tools they need to adapt and mitigate its effects. By practicing climate-smart agriculture, farmers can ensure food security even in the face of adverse weather conditions. Mr. Nakuja's work involves facilitating these trainings, allowing farmers to make informed decisions and implement sustainable farming practices.

In essence, the role of agriculture extension officers is more critical than ever in Ghana's farming sector. Their expertise and dedication contribute to not only improving the productivity and income of farmers but also ensuring the nation's food security. As the country faces the challenges of a changing climate and a growing population, the work of these officers becomes indispensable.

In conclusion, Reindorf Nakuja's interview on Agroriches TV shed light on the significant role that agriculture extension officers play in Ghana's agricultural development. Their responsibilities encompass knowledge dissemination, policy implementation, and training for farmers. The successes achieved, such as the "Planting for Food and Jobs" initiative and climate-smart agriculture training, underscore the invaluable contributions of these officers. With their dedication, Ghana's farming sector is better equipped to thrive in the face of evolving challenges, ultimately ensuring the nation's food security.

NANKING CHERRY JELLY

By Nana Ama Oforiwaa Antwi

INGREDIENTS

3½ - 4 pound fully ripe fresh Nanking cherries, fresh tart red cherries, or 3 16-ounce packages frozen pitted tart or sweet red cherries

11.75 ounce package of regular powdered fruit pectin

4½ cups of sugar

PREPARATION

- Wash fresh cherries with cool tap water but do not soak; drain. Stem cherries and place in an 8- to 10-quart heavy Dutch oven or kettle. Barely cover cherries with water (about 3 1/2 cups). Bring to a simmer (do not boil as flavor will be less). Simmer, uncovered, about 20 minutes or until soft and the skin on the cherries starts to split, mashing cherries with a potato masher during cooking. Remove from heat.
 - Place a fine mesh sieve over a large bowl. Ladle cherry mixture into the sieve. Using the back of a large spoon, press cherries through the sieve; discard seeds and cooked skins. Place the sieve or a colander lined with four layers of 100-percent-cotton cheesecloth over a large bowl. Strain cherry juice; do not squeeze cheesecloth if you want a clear jelly. Measure 3 1/2 cups liquid. Discard pulp.
 - In a 4-quart heavy Dutch oven or kettle, stir together the 3 1/2 cups strained liquid and the pectin. Heat on high, stirring constantly, until mixture comes to a full rolling boil (bubbles break the surface so rapidly you can't stir them down). Add sugar; stir to combine. Return to boiling; boil for 1 minute, stirring constantly. Remove from heat; quickly skim off foam by gently scooping off the top with a metal spoon.
- Ladle into hot, sterilized* half-pint standard canning jars, leaving a 1/4-inch headspace. Wipe rims; adjust lids. Process jelly in a boiling-water bath canner for 5 minutes (start timing when water returns to boiling and keep the water boiling gently during processing).
- Remove jars; cool on wire racks. When jars are completely cool (12 to 24 hours), press the center of each lid to check the seal. If dip in lid holds, the jar is sealed. If lid bounces up and down, the jar isn't sealed. (The contents of unsealed jars can be refrigerated and used within two to three days or reprocessed within 24 hours.)

A Taste of Yesteryears: The Allure and Adventure of Heirloom Crops

By Nana Ama Oforiwaa Antwi

Agriculture is becoming increasingly dominated by modern marvels, the humble heirloom crop is a delicious rebellion—a whispered secret from the past that's shaking up our palates and planting a seed of curiosity. These age-old varieties of fruits, vegetables, and grains are like the culinary equivalent of time travel, promising a taste of history that's far from stale. Hold onto your taste buds as we embark on a flavorful adventure to unearth the delights of heirloom crops.

Heirloom crops are the keepers of ancient secrets. They are seeds with stories, passed down through generations like family heirlooms. When you plant an heirloom seed, you're essentially growing a piece of history. These aren't just crops; they're living whispers from the past.

Heirloom crops come in a spectacular array of shapes, colors, and tastes. Take the Cherokee Purple tomato, a crimson marvel with a flavor so rich it's like a sunset in your mouth. Or the Glass Gem corn, a literal cornucopia of colors that look as though they've been plucked from a wizard's garden.

These aren't just crops; they're a feast for the senses.

In our rush to embrace the future, we've left behind the diverse bounty that heirloom crops offer. These are nature's quirky creations, hardy survivors that have thrived through ages. By cultivating heirlooms,



we're championing the quirky and the unique in a world that's increasingly uniform. It's like inviting the most interesting guests to a party and watching them mingle.

But here's the twist: heirloom crops aren't relics. They're rebels with a cause. Whether you're a green-thumbed gardener or just a curious eater, there's a place for heirlooms in your life. They're not just plants; they're an invitation to an extraordinary culinary adventure, an ode to flavors forgotten by time.

So, in a world obsessed with the latest and greatest, don't forget to savor the past. Heirloom crops aren't just a taste of yesteryears; they're a bite-sized rebellion against the mundane. Bite into history, and you'll find that it's deliciously alive.



A girl's place can be the farm

Put the tools down they said
Put the seeds down they said
Girls don't touch dirt they said
A girl's place is in the kitchen they said
But I loved the good old farm
I loved to play with the trees
Who always waved me hi
The little budding fruits, who always
showed me their baby teeth
And the big mango tree,
who never failed to drop me a gift
But Daddy never liked that
Daddy wanted me in the kitchen
Where my fingers fidget
He liked to see me cook chicken
Not holding a picket
But I defied Daddy
And went for the good old farm
And the never caused me harm
The mango never stopped the gifts
And the crawling plants gave
the babies lifts
The seeds bore me grandchildren
And I named one Mildred.

— Poem By Nana Ama Oforiwaah Antwi

Adapting Strategies to mitigate post-harvest losses for a thriving Agricultural sector

By Jessica Meledi



Agriculture is crucial for economies, providing livelihoods and food security, but post-harvest losses often lead to significant waste. These losses not only impact individual farmers' incomes but also have far-reaching consequences on food security and the economy as a whole.

Post-harvest losses encompass a wide range of issues, including spoilage, pests, inadequate storage, and inefficient transportation. According to the Food and Agriculture Organization (FAO), Africa experiences post-harvest losses of up to 30% of its total food production. This staggering figure highlights the urgent need for effective measures to mitigate these losses.

One of the primary reasons for post-harvest losses is inadequate storage facilities. Investing in improved storage options, such as silos, airtight containers, and cold storage, can significantly reduce losses due to spoilage, pests, and fungal contamination.

Also, training farmers and agricultural workers in proper handling and sorting techniques can minimize physical

damage and bruising during harvesting and transportation, thereby preserving the quality and freshness of the produce.

Implementing cooling and drying technologies like solar dryers and mechanical coolers can extend the shelf life of perishable goods, particularly fruits and vegetables.

Again, farmers must learn to Utilize appropriate packaging materials that protect against moisture, pests, and physical damage can prevent post-harvest losses. Vacuum-sealed packaging and hermetic bags are examples of effective solutions.

Expanding market access and encouraging value addition can reduce post-harvest losses by ensuring that farmers can sell their produce promptly. This can include processing, packaging, and branding to increase the value of agricultural products.

Another important thing is to invest in better transportation infrastructure, including roads and refrigerated trucks, can help reduce damage and spoilage during transit, ensuring that products reach the market in optimal condition.

Reducing post-harvest losses is not only essential for improving the livelihoods of farmers but also for addressing food security challenges and boosting economic growth. By implementing a combination of the strategies mentioned above.





Utilizing beneficial Insects for Pest Control Farming

By Jessica Meledi

In the world of agriculture, where the battle against pests is a never-ending struggle, nature has some allies that can make a significant difference. One valuable farm tip that many farmers might not be aware of is the use of beneficial insects for natural pest control.

Some of these beneficial insects include ladybugs, lacewings, parasitic wasps, and predatory beetles, among others. These insects are natural predators of common crop-damaging pests like aphids, caterpillars, and mites.

The benefits of these insects are numerous. For instance, the most significant advantage of using beneficial insects is the reduction in the need for chemical pesticides. This not only saves you money but

also promotes environmentally friendly farming practices. Beneficial insects specifically target harmful pests, minimizing collateral damage to beneficial insects or pollinators like bees. Unlike chemical pesticides that may lose effectiveness over time due to pest resistance, beneficial insects offer a sustainable, long-term solution and reduce cost of manual labour.

How to Attract Beneficial Insects

Plant Diverse Crops: A variety of plants attracts a wide range of beneficial insects. Planting cover crops, flowering herbs, and companion plants can create an inviting habitat for them.

Minimize Pesticide Use: Reduce or eliminate the use of broad-spectrum pesticides that harm both harmful and beneficial insects.

Provide Shelter: Build insect-friendly habitats like hedgerows, beetle banks, or insect hotels to provide shelter and breeding grounds for beneficial insects.

Release Beneficial Insects: You can purchase beneficial insects from suppliers and release them strategically in your fields during the growing season.

Harnessing the power of beneficial insects is a farm tip that can revolutionize your pest management strategy. By working with nature's allies, you can protect your crops while reducing the environmental impact of farming. Consider integrating these tiny heroes into your agricultural practices and reap the benefits of chemical-free, sustainable pest control.

The Age of Agricultural Robots

By Nana Ama Oforiwaa Antwi



In the heartland of agriculture, where fields stretch to the horizon and the labor of planting and harvesting never seems to end, a technological revolution is quietly taking root. Welcome to the world of agricultural robotics, where machines and technology are joining forces with farmers to shape the future of farming.

The Age of Agricultural Robots

Agricultural robotics represents a new dawn for farming. These robots aren't your typical sci-fi creations; they're practical, efficient, and changing the way we cultivate our food. These machines come in all shapes and sizes, from autonomous tractors to precision weeders and even drones that monitor crop health from above.

Precision and Efficiency

One of the remarkable aspects of agricultural robotics is their precision. These machines don't just plow or plant; they do it with a level of accuracy that's almost superhuman. They can identify and eliminate weeds, detect ripe fruits, and even manage irrigation with incredible efficiency. This precision not only reduces waste but also ensures that every plant gets the care it needs.

Environmental Benefits

Agricultural robots are eco-warriors in their own right. By precisely applying fertilizers and pesticides only where needed, they reduce the use of chemicals, which is a win for both the environment and our health. Additionally, their ability to work around the clock means that farmers can optimize resource usage and reduce energy consumption.



The Human-Machine Partnership

Perhaps what's most fascinating is that agricultural robots aren't here to replace farmers; they're here to collaborate with them. Farmers are increasingly becoming farm managers, using robots as their trusted allies. These machines take care of the repetitive and labor-intensive tasks, allowing farmers to focus on decision-making and innovation.

The Future Beckons

As the world grapples with the challenges of feeding a growing global population and mitigating the effects of climate change, agricultural robotics offer a glimmer of hope. They represent a path to more sustainable, efficient, and resilient farming practices.

In the sprawling fields and orchards of tomorrow, agricultural robots will be the unsung heroes, working tirelessly to put food on our plates. They are not just machines; they are the architects of a more sustainable future for agriculture, where precision, efficiency, and environmental stewardship go hand in hand. Welcome to the future of farming—where technology and tradition unite to nourish the world.

La SFI et le OCP contribuent au financement de l'agriculture.

Par Prince Feliho

Selon un communiqué de presse du groupe phosphatier, la SFI et le groupe OCP ont lancé mardi une plateforme de financement agricole afin de construire et de soutenir des systèmes de production et de distribution alimentaires durables en Afrique. D'ici 2030, la nouvelle plateforme a pour objectif de mobiliser 800 millions de dollars de capitaux et de contribuer au développement des compétences, à la création d'emplois et à la sécurité alimentaire.

Grâce à 60 opérations de financement agricole couvrant divers types de cultures et visant à relever les défis qui freinent la croissance et la résilience du secteur, la plateforme contribuera à renforcer 30 chaînes de valeur agricoles en Afrique en fournissant un accès au financement et à la formation professionnelle.

La nouvelle plateforme créera un portefeuille d'opérations qui permettra à de nouveaux investisseurs de participer, directement ou indirectement. Chaque investissement sera soumis à des mesures sociales, économiques et environnementales pour évaluer son impact.

Après le financement, des recherches approfondies sur les chaînes de valeur ciblées seront menées afin de déterminer les défis auxquels la branche est confrontée et de proposer des solutions appropriées. En outre, la plateforme encouragera l'émergence de champions africains et facilitera le partage des meilleures pratiques, permettant ainsi aux exemples de réussite de se multiplier.

En outre, la plateforme a collaboré avec la Banque d'Afrique pour améliorer la disponibilité des engrais et d'autres intrants pour les agriculteurs et les agro-industries africains, et a développé de nouveaux projets pour soutenir les chaînes de valeur de la noix de cajou et du riz en Côte d'Ivoire. D'autres pays, en particulier le Cameroun et le Gabon, seront également ciblés par de nouveaux projets.

Le développement de la plateforme est basé sur l'expertise d'INNOVX, une plateforme multisectorielle de capital-risque lancée par l'Université Polytechnique Mohammed VI (UM6P) et dédiée au développement d'entreprises et d'écosystèmes innovants et durables à fort impact local, et sur les connaissances approfondies d'OCP Africa (une filiale du Groupe OCP dédiée au continent).



Dans le cadre de la première édition de " Voice of Africa ", organisée par l'UM6P de Benguerir, INNOVX et OCP Africa collaborent pour encourager l'investissement dans l'agriculture africaine.

Ce 10 octobre 2023, à l'Université Polytechnique Mohammed VI (UM6P) de Ben Guerir, INNOVX et OCP Africa ont présenté la première édition du Forum d'investissement Agrichain en Afrique dans le cadre d'une collaboration sans précédent. « Le forum devrait devenir un événement important dans l'agriculture africaine avec l'objectif d'encourager l'investissement dans les chaînes de valeur agricoles grâce à une coopération renforcée entre les parties prenantes, y compris les développeurs de projets et les investisseurs ».

Un large éventail d'acteurs clés du secteur, notamment des entrepreneurs, des startups, des investisseurs, des banques, des institutions de développement et des représentants du secteur public, se sont réunis lors du forum Agrichain Investment in Africa. Cette convergence d'intérêts divers favorisera un environnement de travail en réseau propice à l'émergence de projets collaboratifs, prêts à être mis en œuvre rapidement dans le cadre d'une approche intégrée.

Le programme soigneusement élaboré du Forum d'investissement Agrichain Africa vise à insuffler du dynamisme dans la résolution des problèmes opérationnels qui entravent le financement et l'investissement dans les chaînes de valeur agricoles (CVA). En outre, il cherche

Le forum d'investissement agricole de Agrichain Africa

Par Pavel Chamabe

à démêler les complexités entourant les questions stratégiques telles que la souveraineté alimentaire, la durabilité, le progrès technologique et l'innovation financière.

Le contexte dans lequel se déroule le forum Agrichain sur l'investissement en Afrique est de la plus haute importance : en Afrique, à peine 3 % du financement de l'économie va à l'agriculture, un secteur pourtant essentiel à la prospérité du continent. Étonnamment, alors que les besoins de financement annuels du secteur agricole s'élèvent à 240 milliards de dollars, seuls 25 % de cette somme colossale - équivalant à 60 milliards de dollars - sont satisfaits.

« Avec Agrichain Investment in Africa, nous souhaitons contribuer concrètement à l'accélération des investissements dans le secteur agricole en Afrique », explique M. Youssef ELBARI, PDG d'INNOVX. Ce forum s'adresse principalement aux développeurs de projets, en leur offrant une plateforme pour entrer en contact avec des investisseurs et des catalyseurs de financement, ainsi qu'avec l'innovation technologique, afin de maximiser les perspectives de succès de leurs projets.

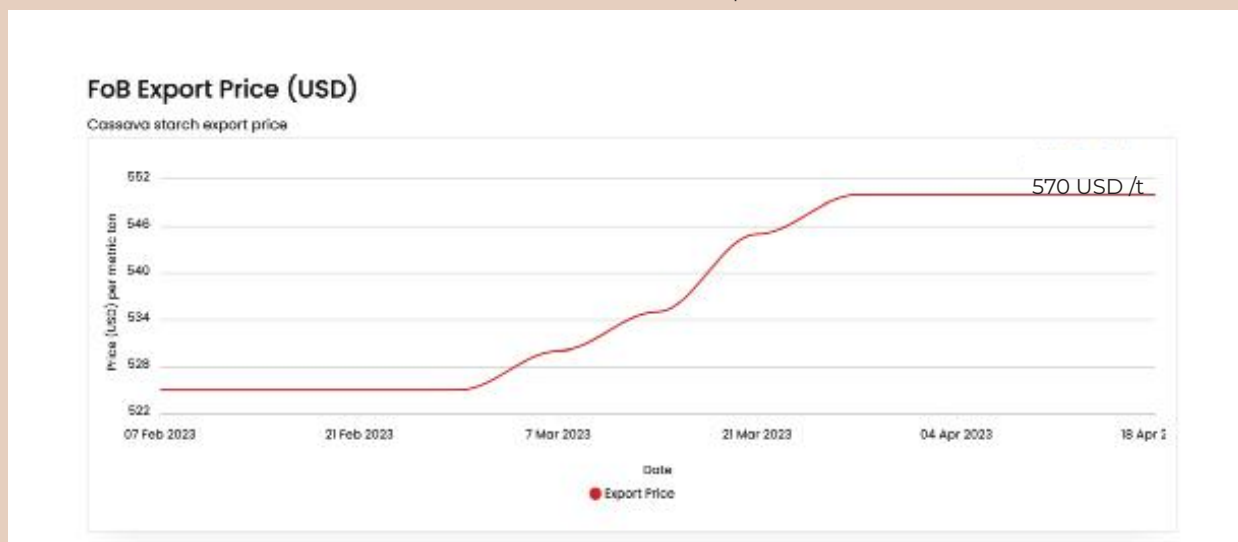
« Nous sommes ravis de joindre nos forces à celles d'INNOVX pour cet événement historique, réunissant des personnalités influentes de l'ensemble de la chaîne de valeur agricole pour aborder les défis et les opportunités d'investissement dans le secteur agricole africain », a déclaré M. Anouar JAMALI, PDG d'OCP AFRICA. Nous sommes convaincus que ce forum inaugural ouvrira la voie à un rassemblement annuel distingué, réunissant les leaders de l'industrie pour favoriser les investissements avant-gardistes qui encouragent l'évolution durable de l'agriculture à travers le continent.



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 WWW offered 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.



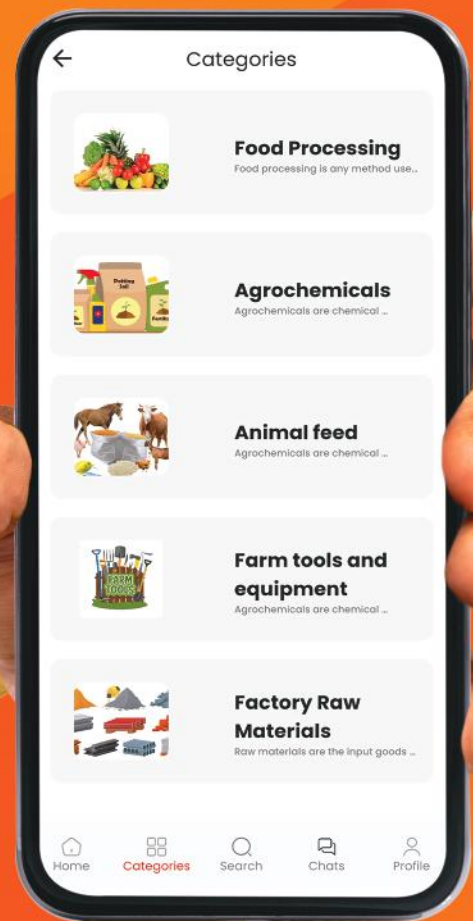
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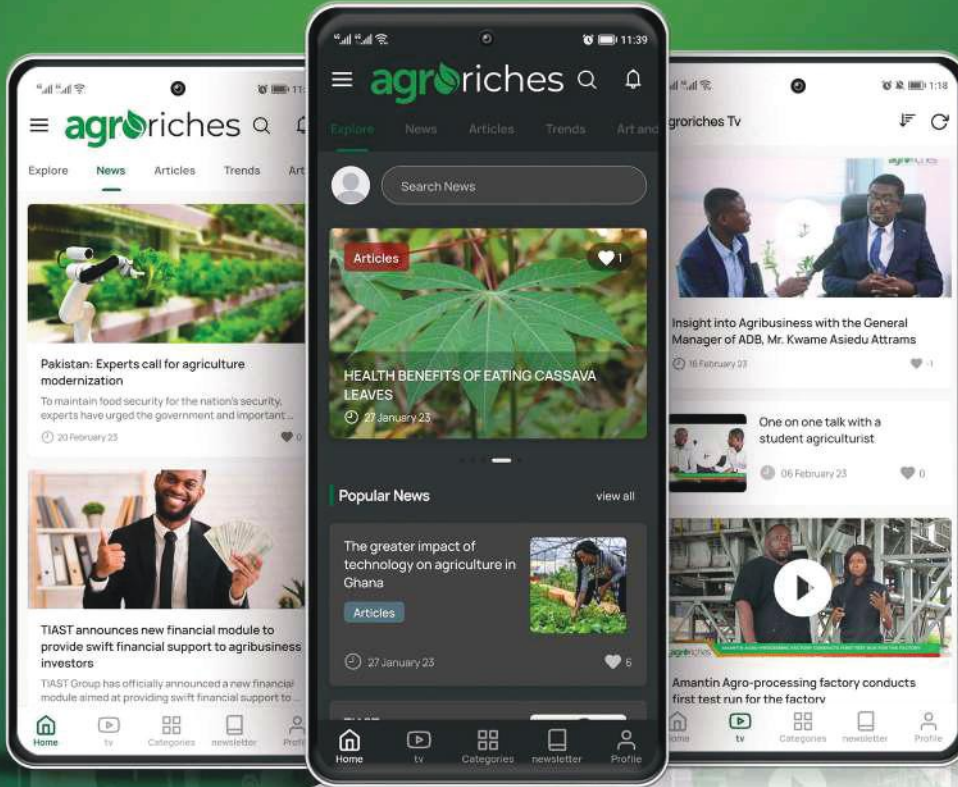


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