# agroriches

VOL 3. | 35TH EDITION

# **GHANA TODAY**

USDA Awards Over \$270 Million to Strengthen U.S. Food Supply Chain

# **ARTICLE**

Three Foods Beneficial for Eye
Health

# NOTRE CHRONIQUE

En Burundi : L'amélioration des performances du secteur agricole



# FUTURE-READY FARMING SOLUTIONS

FEBRUARY 2024





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

**Senior Editorial Supervisor** Prince Opoku Dogbey Asst. Marketing Manager
Mavis Essaba Mensah

**Information Technology**Prince Kudowor

**Creative Designer**Bismark Kwabena Baiden

**Growth and Strategy Team**Leo Chan
Mayis Essaba Mensah

Content Developers
Prince Opoku Dogbey
Yosua Domedjui
Nana Ama Oforiwaa Antwi



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  Best Practices for Thriving Farms	04
Cucumber	
GHANA TODAY	06
COCOBOD Denies Claims of Neglecting Health Care for Cocoa Sprayers	
CONTINENTAL DIGEST	07
High-Level Breakfast Meeting Spotlights Women's Empowerment in African Agriculture	
WORLD NEWS	08
USDA Awards Over \$270 Million to Strengthen U.S. Food Supply Chain and Local Systems	
ARTICLE	09
The Vital Role of Irrigation in Agricultural Productivity	
TECHNOLOGICAL TRENDS	10

Precision Agriculture

INSIGHT AFRICA	12
Investing in Africa's Agribusiness:	
A Lucrative Opportunity	
CENTRE SPREAD	14
Future-Ready Farming Solutions:	
Pioneering Agriculture for Tomorrow	
THE PLATTER	16
Cucumber Salad Recipe	
ARTICLE	17
The Imperative of Proper Investments	
in Agriculture	
ARTICLE	21
Nourishing Vision: Three Foods	
Beneficial for Eye Health	
NOTRE CHRONIQUE	22
Agriculture au Burkina Faso :	
Un projet ambitieux pour	
NOTRE CHRONIQUE	23
En Burundi : L'amélioration des	
performances du secteur agricole	



arming isn't merely about sowing seeds and waiting for a harvest; it's a delicate dance between nature's rhythms and human ingenuity. Successful farms aren't just lucky; they're strategically cultivated, nourished by a blend of traditional wisdom and modern innovation. Here are some best practices that can transform a farm into a thriving hub of productivity and sustainability.

#### **Soil Health Management**

Healthy soil is the foundation of a successful farm. Practices like crop rotation, cover cropping, and minimal tillage help maintain soil structure, retain moisture, and promote nutrient balance. Regular soil testing guides farmers in understanding nutrient deficiencies, allowing for targeted fertilization.

### **Water Conservation and Management**

Water is a precious resource, especially in agriculture. Implementing drip irrigation, rainwater harvesting systems, and proper drainage techniques help optimize water usage and prevent wastage. Conservation practices ensure that crops receive adequate hydration while minimizing environmental impact.

### **Crop Diversity and Rotation**

Monoculture farming poses risks such as soil depletion and increased vulnerability to pests and diseases. Diversifying crops and rotating them sea-

# Best Practices for Thriving Farms

By Prince Opoku Dogbey

sonally enhances soil fertility, disrupts pest cycles, and reduces the need for chemical inputs. It also opens avenues for market diversification and risk mitigation.

#### **Technology Adoption**

Embracing technology can revolutionize farm operations. From precision agriculture tools for soil mapping and yield monitoring to drones for crop surveillance, technological innovations optimize resource allocation and decision-making. Farm management software streamlines administrative tasks, enabling data-driven insights for enhanced productivity and efficiency.

#### **Continuous Learning and Adaptation**

Successful farmers are lifelong learners, staying abreast of emerging trends, techniques, and market dynamics. Engaging in workshops, attending conferences, and networking with fellow farmers fosters knowledge exchange and innovation. Remaining adaptable to changing circumstances and consumer preferences ensures long-term viability.

The journey to farm success is a multifaceted endeavor, blending tradition with innovation, stewardship with entrepreneurship. By adopting best practices that prioritize sustainability, resilience, and adaptability, farmers pave the way for a prosperous future. Each harvest becomes not just a product of labor but a testament to the harmonious relationship between humanity and the land.

# Cucumber

By Mavis Essaba Mensah

# Origin and Description

Cucumbers (Cucumis sativus) belong to the gourd family, Cucurbitaceae, and are believed to have originated in South Asia, specifically in the foothills of the Himalayas. They have been cultivated for thousands of years and are now widely grown across the world in various climates. Cucumbers are annual vines with sprawling stems and large, lobed leaves. They produce cylindrical or elongated fruits with a thin, green skin and crunchy, juicy flesh. Cucumbers come in various sizes, from small pickling cucumbers to long English cucumbers.



#### 1. Hydration and Nutrient-Rich:

Cucumbers are composed of over 95% water, making them an excellent hydrating food choice, especially during hot weather or after physical activity. They are also low in calories but rich in essential nutrients like vitamins C and K, potassium, and various antioxidants.

# 2. Promotes Hydration:

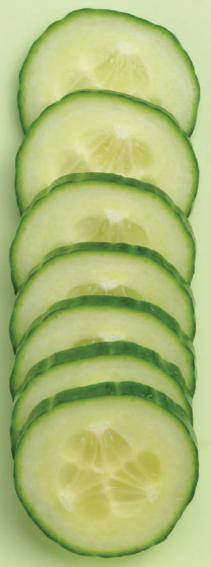
Due to their high water content, cucumbers can help keep the body hydrated and maintain electrolyte balance. Consuming cucumbers regularly can aid in flushing out toxins from the body and supporting overall hydration levels.

# 3. Supports Digestive Health:

Cucumbers are a good source of dietary fiber, particularly in their skin. Fiber aids in digestion by promoting regular bowel movements and preventing constipation. Additionally, cucumbers contain a compound called cucurbitacin, which may have anti-inflammatory properties and contribute to digestive health.

# 4. Provides Skin Benefits:

Cucumbers are often used in skincare due to their hydrating and cooling properties. Applying cucumber slices or cucumber-based masks can help soothe sunburns, reduce puffiness and dark circles around the eyes, and improve overall skin texture and complexion.





# cocobod Denies Claims of Neglecting Health Care for Cocoa Sprayers Amid Toxicity Concerns

By Nana Ama Oforiwaa Antwi

n response to mounting concerns over the alleged lack of essential medical care for contracted mass cocoa sprayers, the Ghana Cocoa Board (COCOBOD) has vehemently refuted the accusations. The controversy arises following reports of health complications, including blindness and impotence, purportedly linked to prolonged exposure to agrochemicals among cocoa farmers.

The Ghana National Association of Cocoa Farmers recently raised alarming claims, asserting that COCOBOD has neglected to provide necessary medical attention to its contracted sprayers. However, COCOBOD's Head of Public Relations, Fiifi Boafo, has swiftly responded, assuring the public that the board prioritizes the health and well-being of all individuals involved in cocoa spraying operations.





Boafo emphasized that COCOBOD ensures regular medical check-ups for the 57,000 individuals annually employed for cocoa spraying across the nation. He underscored the rigorous evaluation processes conducted by COCOBOD, including assessments by the COCOBOD Research Institute and referrals to the Cocoa Clinic for examination.

Furthermore, Boafo rebuffed the allegations of blindness and impotence, stating that such symptoms have not been observed or reported by the Cocoa Clinic. He expressed surprise at the complaints, highlighting that they are not consistent with the health issues typically identified during medical evaluations.

The COCOBOD's swift response seeks to assuage public concerns and maintain confidence in its commitment to the welfare of cocoa farmers and sprayers. However, the allegations raised by the Ghana National Association of Cocoa Farmers underscore the need for heightened scrutiny and comprehensive measures to address potential health risks associated with agrochemical exposure in the cocoa inclustry.



he 7th High-Level Breakfast Meeting of the Empowering Women in Agriculture (EWA) initiative, aligned with the African Union Commission on Food and Security, is set to commend significant strides in empowering women in agriculture. Spearheaded by HE Ellen Johnson Sirleaf and HE Olusegun Obasanjo, former Presidents of Liberia and Nigeria respectively, EWA stands as a beacon of change recognized by the African Women Leaders Network (AWLN).

This distinguished event, scheduled for February 16th, 2024, in Addis Ababa during the 37th African Union summit, promises to unite diverse stakeholders. From government agencies to corporate partners, NGOs, and community leaders, participants will converge to highlight tangible impacts and explore avenues for sustained progress.

Despite constituting 43% of the agricultural labor force in developing countries, women face barriers to resources, leading to reduced productivity. The FAO identifies gender equality in access to re-

# High-Level Breakfast Meeting Spotlights Women's Empowerment in African Agriculture

By Prince Opoku Dogbey

sources as a key driver for global farm yield increases, and initiatives like EWA aim to bridge this gap.

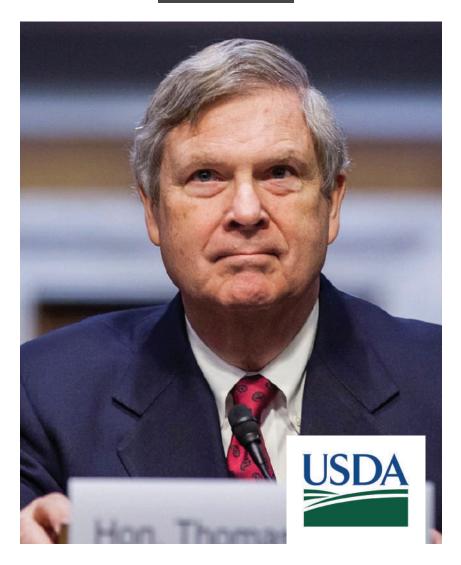
Africa's development agendas, including Agenda 2063 and the UN's Sustainable Development Goals, emphasize gender equality and food security. The Malabo Declaration and CAADP exemplify the AU's commitment to supporting women farmers, yet more efforts are needed to prioritize women in agricultural policies and programs.

Integration of emerging technologies and leveraging the African Continental Free Trade Area (AfCFTA) agreement hold promise for gender equality and economic growth in agriculture. The upcoming EWA meeting, themed "Scaling up empowerment: Results showcase and partnerships building for the empowerment of women in agriculture," will celebrate achievements, foster collaborations, and pave the way for a more equitable and prosperous agricultural sector in Africa.

As the continent embraces innovation and collaboration, EWA stands poised to drive positive change, enhance food security, and empower women as key drivers of agricultural transformation.

# USDA Awards Over \$270 Million to Strengthen U.S. Food Supply Chain and Local Systems

By Prince Opoku Dogbey



■ he U.S. Department of Agriculture (USDA) has taken a significant step towards fortifying the American food supply chain and enhancing regional food systems. Agriculture Secretary Tom Vilsack announced on February 7 that the USDA has allocated over \$270 million to bolster resilience across the middle of the nation's food supply chain.

This substantial investment targets seven states—Colorado, Connecticut, Delaware, Kentucky, Louisiana, Utah, and West Virginia. The funds will support projects aimed at expanding the capacity for processing, manufacturing, storage, and distribution of various food products through the Resilient Food Systems Infrastructure program. Notably, this includes support for dairy, aquaculture, grains, specialty crops, and more, excluding meat or poultry sectors.

Kentucky emerges as a focal point of this initiative, securing the highest funding allocation among the designated states, amounting to \$8.6 million, with \$7 million earmarked specifically for Infrastructure Grants.

Secretary Vilsack highlighted the transformative impact of these investments on consumers, producers, and rural communities alike. By ensuring reliable access to fresh and locally sourced food, the initiative aims to create diverse market opportunities for small and mid-size producers while fostering economic growth in rural areas.

The Resilient Food Systems Infrastructure program, administered by the USDA's Agricultural Marketing Services (AMS), serves as the vehicle for distributing the allocated funds. Secretary Vilsack emphasized the importance of strong partnerships with state agricultural agencies in facilitating these initiatives.

With \$230 million currently available in Infrastructure Grant funding, the USDA's proactive approach underscores its commitment to strengthening the nation's food supply chain and bolstering local food systems to meet the evolving needs of consumers and producers across the United States.

# THE VITAL ROLE OF IRRIGATION IN AGRICULTURAL PRODUCTIVITY

By Nana Ama Oforiwaa Antwi



rrigation emerges as a vital thread, weaving together productivity, resilience, and sustainability. As populations burgeon and climatic uncertainties loom, the imperative to cultivate irrigation systems takes center stage, reshaping the landscape of agricultural practice. Here's a narrative that underscores the pivotal significance of irrigation in modern agriculture.

At the heart of irrigation lies a simple yet profound principle: the harnessing of water resources to nurture crops and sustain livelihoods. In regions marked by erratic rainfall and parched landscapes, irrigation offers a lifeline, transforming arid terrain into verdant oases of productivity.

Picture a symphony of growth unfolding across irrigated fields, where crops sway in unison to the rhythm of abundant moisture. Irrigation orchestrates this harmonious dance, ensuring optimal hydration and nourishment for plants to thrive, unfettered by the caprices of weather.

The bounty of irrigated agriculture knows no bounds, expanding horizons and yielding bumper harvests even in the face of adversity. With water as their ally, farmers cultivate abundance, sowing seeds of prosperity that ripple through communities and economies alike.

In the quest for agricultural sustainability, irrigation emerges as a beacon of innovation and efficiency. Modern irrigation technologies, from drip systems to precision techniques, tread lightly on the land, conserving water, minimizing runoff, and safeguarding fragile ecosystems.

Irrigation is more than a conduit for water; it's a catalyst for empowerment, breathing life into rural communities and propelling them towards prosperity. By democratizing access to water resources and fostering local stewardship, irrigation projects kindle flames of hope and opportunity.

Yet, the path to irrigation's promise is not without challenges. Balancing water demand, optimizing resource allocation, and mitigating environmental impacts demand a delicate dance of science, policy, and collective action. It's a journey fraught with complexities, but one brimming with opportunities to redefine the future of agriculture.

In the unfolding narrative of global agriculture, irrigation emerges as a transformative force, bridging the chasm between scarcity and abundance, adversity and opportunity. As we navigate the intricate web of water, soil, and crops, let us heed the call to stewardship, embracing irrigation as a beacon of hope and possibility. For in the fertile fields of our imagination, the seeds of agricultural renewal take root, nourished by the timeless promise of water.



# PRECISION AGRICULTURE

By Bismark Kwabena Baiden

ne prominent technological trend in agriculture is the rise of precision agriculture. Precision agriculture leverages advanced technologies such as GPS, drones, sensors, and data analytics to optimize farming practices and maximize productivity while minimizing input use and environmental impact.

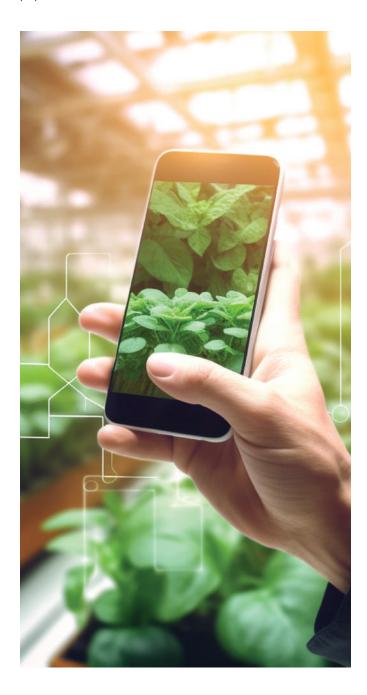
Through precision agriculture, farmers can collect vast amounts of data about their fields, including soil characteristics, moisture levels, temperature variations, and crop health indicators. This data is then analyzed using sophisticated algorithms to generate actionable insights and decision support systems.

One key application of precision agriculture is variable rate technology (VRT), which enables farmers to precisely manage inputs such as water, fertilizers, and pesticides according to the specific needs of different areas within a field. By applying inputs only where and when they are needed, farmers can minimize waste, reduce costs, and improve crop yields.

Another aspect of precision agriculture is remote sensing, which involves the use of satellite imagery and drones to monitor crop growth, detect pest infestations, and assess field conditions from above. This real-time monitoring allows farmers to identify problems early and take proactive measures to address them, thereby optimizing crop management practices and enhancing overall farm efficiency.

Furthermore, the integration of Internet of Things (IoT) devices and smart sensors into agricultural machinery and equipment enables real-time monitoring and control of farm operations. This connectivity allows farmers to remotely manage irrigation systems, monitor equipment performance, and track livestock health, leading to increased operational efficiency and reduced labor costs.

Overall, precision agriculture represents a transformative shift in farming practices, enabling farmers to make data-driven decisions, optimize resource use, and achieve sustainable production goals. As technology continues to evolve, precision agriculture is poised to play an increasingly significant role in shaping the future of agriculture, driving innovation, and addressing the challenges of feeding a growing global population.



# HOW TO PRACTICE EFFECTIVE DRIP IRRIGATION

By Prince Opoku Dogbey

ffective drip irrigation is essential for water-efficient farming. Start by meticulously designing the system, considering factors like crop spacing and soil type to ensure uniform water distribution. Regular maintenance is crucial; check drip lines for leaks and clogs, and promptly repair any issues to prevent water waste.

Continuous monitoring of soil moisture levels helps gauge plant water requirements. Utilize soil moisture sensors or evapotranspiration data to adjust irrigation schedules accordingly, preventing overwatering and promoting healthy root development.

Incorporate mulching and cover crops to enhance water retention and soil health. Mulch reduces evaporation and suppresses weed growth, while cover crops improve water infiltration and retention.

Additionally, consider fertigation—applying water and fertilizers simultaneously through drip irrigation—for targeted nutrient delivery and enhanced fertilizer use efficiency.

Drip irrigation not only conserves water but also improves crop yields and quality. By implementing these practices effectively, farmers can maximize irrigation efficiency, conserve water resources, and sustainably enhance agricultural productivity.



# Investing in Africa's Agribusiness: A Lucrative Opportunity

By Prince Opoku Dogbey



n the vast and diverse landscapes of Africa, lies a wealth of untapped potential in the agribusiness sector. With fertile soils, abundant water resources, and a burgeoning population, the continent presents a compelling case for investment in agriculture. Here's why investing in Africa's agribusiness is not just a good idea, but a lucrative opportunity.

# **Rising Demand for Food Security**

Africa's population is projected to double by 2050, reaching 2.4 billion people. This demographic explosion creates an unprecedented demand for food and agricultural products. Investing in agribusiness enables the continent to enhance food security, reduce reliance on imports, and meet the nutritional needs of its growing population.

#### **Untapped Agricultural Potential**

Africa boasts vast tracts of arable land, accounting for 60% of the world's uncultivated arable land. With favorable climatic conditions and diverse ecosystems, the continent has the capacity to produce a wide array of agricultural commodities, from grains and fruits to livestock and cash crops.

# **Value Addition and Export Opportunities**

Investing in Africa's agribusiness sector opens doors to value addition and export opportunities. By modernizing agricultural practices, improving post-harvest handling, and enhancing processing capabilities, African countries can tap into lucrative international markets, boosting export rev-

enues and fostering economic growth.

#### **Job Creation and Rural Development**

Agriculture remains the backbone of many African economies, employing the majority of the continent's workforce. Investing in agribusiness creates employment opportunities, particularly in rural areas where poverty rates are highest. By empowering smallholder farmers and agri-entrepreneurs, investments drive inclusive growth and foster resilient communities.

### Conclusion

In the mosaic of opportunities that Africa presents, agribusiness shines as a beacon of prosperity and progress. By investing in the continent's agricultural potential, stakeholders unlock pathways to economic growth, food security, and sustainable development. As Africa's agribusiness sector continues to evolve, the time is ripe for investors to seize the opportunity and sow the seeds of a brighter, more prosperous future for generations to come.







# Future-Ready Farming Solutions: Pioneering Agriculture for Tomorrow

By Prince Opoku Dogbey

n an era marked by rapid technological advancements and evolving environmental challenges, the agricultural sector stands at the threshold of transformation. As the global population burgeons and natural resources dwindle, the imperative to cultivate future-ready farming solutions has never been more pressing. Harnessing innovation, sustainability, and resilience, these pioneering approaches are reshaping the landscape of agriculture and ushering in a new era of productivity and prosperity.

#### **Integration of Precision Agriculture**

At the forefront of future-ready farming solutions lies precision agriculture, a paradigm that leverages cutting-edge technologies such as GPS, drones, sensors, and data analytics to optimize resource management and decision-making. By precisely tailoring inputs such as water, fertilizers, and pesticides to the specific needs of crops, precision agriculture maximizes yields while minimizing environmental impact, paving the way for sustainable intensification of agriculture.

# **Adoption of Climate-Smart Practices**

Climate change poses unprecedented challenges to agriculture, from shifting weather patterns to increased frequency of extreme events. Future-ready farming solutions embrace climate-smart practices that enhance resilience to climate variability and mitigate greenhouse gas emissions. These include conservation agriculture, agroforestry, crop diversification, and improved water management techniques, which not only mitigate climate risks but also contribute to ecosystem health and biodiversity conservation.

#### **Embrace of Digital Technologies**

In the digital age, data is king, and agriculture is no exception. Future-ready farming solutions harness the power of digital technologies to revolutionize farm management, supply chain logistics, and market access. From farm management software and IoT-enabled sensors to blockchain-based traceability systems, digital innova-



tions empower farmers with real-time insights, streamline operations, and enhance transparency and trust across the agricultural value chain.

#### **Promotion of Agroecological Approaches**

Agroecology represents a holistic approach to farming that integrates ecological principles, traditional knowledge, and modern science to create resilient and biodiverse agricultural systems. Future-ready farming solutions prioritize agroecological approaches that prioritize soil health, biodiversity conservation, and community resilience. By fostering synergies between agriculture and nature, agroecology holds the promise of sustainable food production while preserving ecosystems for future generations.

# **Investment in Human Capital and Capacity Building**

Ultimately, the success of future-ready farming solutions hinges on the knowledge, skills, and empowerment of farmers and agricultural stakeholders. Investing in human capital and capacity building is essential to ensure the adoption and diffusion of innovative practices, foster entrepreneurship, and address the challenges of rural development and food security in a rapidly changing world.

#### Conclusion

As we stand on the cusp of a new agricultural revolution, future-ready farming solutions offer a beacon of hope and opportunity in a world grappling with complex socio-economic and environmental challenges. By embracing innovation, sustainability, and inclusivity, we can cultivate a resilient and prosperous agricultural sector that nourishes both people and planet for generations to come. As stewards of the land, let us heed the call to action and embark on a journey towards a future where farming is not just a livelihood, but a force for positive change.

www.agroriches.com

# Cucumber Salad Recipe

By Nana Ama Oforiwaa Antwi

Discover the crisp, cool sensation of our Cucumber Salad. Bursting with fresh flavors and vibrant colors, this simple yet delicious dish is the perfect addition to any meal. With thinly sliced cucumbers, zesty red onions, and aromatic herbs tossed in a tangy dressing, our Cucumber Salad is a refreshing delight for your taste buds. Try it today and experience a symphony of flavors in every bite!

# Ingredients

- 2 medium cucumbers, thinly sliced
- 1/4 cup red onion, thinly sliced
- 2 tablespoons fresh dill, chopped
- 2 tablespoons fresh parsley, chopped
- 2 tablespoons apple cider vinegar
- 1 tablespoon olive oil
- 1 teaspoon honey or maple syrup (optional)
- Salt and black pepper to taste

# Instructions

- 1. In a large bowl, combine the thinly sliced cucumbers and red onion.
- 2. In a small bowl, whisk together the apple cider vinegar, olive oil, and honey or maple syrup (if using) until well combined.
- 3. Pour the dressing over the cucumbers and onions in the
- 4. Add the chopped fresh dill and parsley to the bowl.
- 5. Season the salad with salt and black pepper to taste.
- 6. Toss the salad gently until the cucumbers and onions are evenly coated with the dressing and herbs.
- 7. Cover the bowl with plastic wrap or a lid and refrigerate for at least 30 minutes to allow the flavors to meld.
- 8. Serve the cucumber salad chilled as a refreshing side



# The Imperative of Proper Investments in Agriculture

By Nana Ama Oforiwaa Antwi

griculture serves as the backbone of economies worldwide, providing food, employment, and economic stability to billions of people. Yet, the sector remains underinvested, hindering its potential to address pressing global challenges such as food insecurity, poverty, and climate change. Here's why proper investments in agriculture are crucial:

#### **Ensuring Food Security**

Investments in agriculture are essential to meet the growing global demand for food. By supporting smallholder farmers with access to quality inputs, modern technology, and market linkages, we can enhance agricultural productivity and ensure a stable food supply for current and future genera-

# **Alleviating Rural Poverty**

The majority of the world's poor reside in rural areas and depend on agriculture for their livelihoods. Strategic investments in rural infrastructure, education, and financial services empower small-scale farmers to improve their productivity, increase incomes, and lift themselves out of poverty.

#### **Promoting Sustainable Practices**

Proper investments enable the adoption of sustainable agricultural practices that conserve natural resources, mitigate climate change, and safeguard biodiversity. From precision irrigation systems to agroforestry initiatives, innovative technologies and techniques contribute to resilient, eco-friendly farming systems.

#### **Fostering Economic Growth**

Agriculture is a significant driver of economic growth, particularly in developing

countries where it accounts for a substantial share of GDP. Investing in agricultural research, infrastructure development, and value chain optimization creates employment opportunities, stimulates rural economies, and spurs overall economic development.

#### **Building Resilience to Climate Change**

Climate change poses unprecedented challenges to agricultural systems worldwide, exacerbating weather extremes, water scarcity, and crop diseases. Investments in climate-smart agriculture, such as drought-resistant crop varieties and resilient farming practices, build adaptive capacity and mitigate the impacts of climate variability.



# In Grandma's Garden

AgroRiches

In Grandma's garden
hay and grain her burden
tiny flowers down below
with the lemon tree swaying solo

Papa and the horses riding polo All in Grandma's garden Grandma sings and dances as she sows

shouts for us to grab our hoes with sweat and joy we till the farm save for food and then gift some

then at last, we have some ham In Grandma's garden On the last harvest day we dance and drum

honey in the pot, milk in the barn we have some fun while sitting under the sun all in Grandma's garden

—— Poem By Nana Ama Oforiwaa Antwi



# **Effective Crop Rotation: Nurturing Soil Health and Yield**

By Prince Opoku Dogbey

rop rotation is a time-honored agricultural practice that offers numerous benefits to both soil health and crop productivity. By systematically alternating the types of crops grown in a particular field over several seasons, farmers can mitigate soil depletion, control pests and diseases, and optimize yields. Here's how to practice effective crop rotation:

#### **Diversify Crop Families**

Rotate crops from different botanical families to disrupt pest and disease cycles specific to certain plant groups. For example, alternating legumes (such as peas and beans) with grains (such as corn and wheat) helps replenish soil nitrogen levels and reduce the risk of soil-borne pathogens.

### **Consider Nutrient Requirements**

Each crop has unique nutrient demands. Rotate crops with varying nutrient needs to prevent de-

pletion of specific elements in the soil. For instance, following a nitrogen-fixing legume crop with a nitrogen-demanding vegetable like broccoli helps maintain soil fertility without excessive fertilizer applica-

#### **Break Pest and Disease Cycles**

Certain pests and diseases have host-specific relationships, thriving on particular crops. By rotating crops, farmers disrupt these cycles, reducing the buildup of pests and pathogens in the soil. This natural pest management strategy minimizes the need for chemical pesticides while preserving ecosystem balance.

#### **Enhance Soil Structure**

Different crops have distinct root structures and depths, which contribute to soil aeration and structure. Deep-rooted crops like carrots or radishes help break up compacted soil layers, improving water infiltration and nutrient distribution. Shallow-root-



# Maintaining Hygiene on the Farm

By Prince Opoku Dogbey

ygiene is paramount on any farm, not only for the health and safety of workers but also for the well-being of animals and the quality of produce. Implementing practical hygiene measures can mitigate the risk of contamination, disease spread, and environmental pollution. Here are three essential practices for maintaining hygiene on the farm:

### Regular Equipment Cleaning

Farm equipment, tools, and machinery can harbor dirt, debris, and harmful pathogens if not cleaned regularly. Establish a routine schedule for cleaning and disinfecting all equipment after use, focusing on areas that come into contact with soil, animal waste, or agricultural products. Use appropriate cleaning agents and disinfectants recommended for agricultural use to ensure thorough sanitation. By maintaining clean equipment, you reduce the risk of cross-contamination and promote a healthier farm environment.

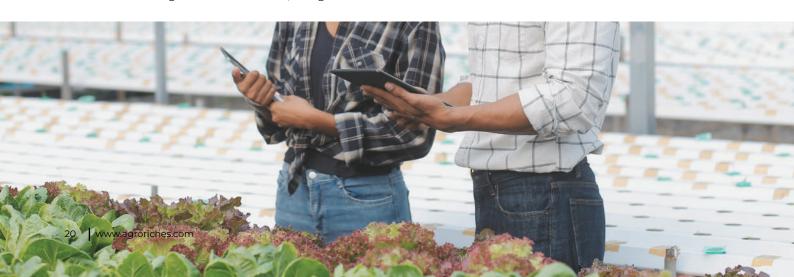
### Proper Waste Management

Effective waste management is crucial for preventing the accumulation of organic matter and reducing the risk of pollution. Designate specific areas for composting organic waste and disposing of non-biodegradable materials such as plastics and packaging. Implement regular waste removal schedules to prevent the buildup of waste and minimize odors and pest infestations. Consider composting organic waste to create nutrient-rich soil amendments for use in crop production, promoting sustainability and reducing environmental impact.

# Personal Hygiene Practices

Encourage farm workers and visitors to practice good personal hygiene to minimize the spread of pathogens and reduce the risk of contamination. Provide accessible handwashing facilities equipped with soap, water, and hand sanitizers throughout the farm premises. Encourage regular handwashing, especially before and after handling animals, harvesting crops, or using the restroom. Educate farm workers about the importance of proper hygiene practices and provide training on food safety protocols to ensure compliance with industry standards.

In conclusion, maintaining hygiene on the farm is essential for promoting health, safety, and productivity. By implementing regular equipment cleaning, proper waste management, and promoting personal hygiene practices, you can create a clean and safe environment conducive to sustainable agriculture and healthy living.



# **NOURISHING VISION:** THREE FOODS BENEFICIAL **FOR EYE HEALTH**

By Nana Ama Oforiwaa Antwi

he eyes, often regarded as the windows to the soul, are also intricate organs that require proper nourishment to maintain optimal health. While advancements in technology and eye care have expanded our understanding of eye health, the role of nutrition remains paramount in preserving vision and preventing age-related degeneration. Incorporating certain foods into your diet can significantly contribute to maintaining healthy evesight.

#### **Carrots**

Carrots have long been associated with promoting good eyesight, and for good reason. Packed with beta-carotene, a precursor of vitamin A, carrots play a crucial role in supporting retinal function and enhancing low-light vision. Vitamin A is essential for the synthesis of rhodopsin, a pigment found in the retina that aids in night vision. Additionally, carrots contain lutein and zeaxanthin, two antioxidants known to reduce the risk of age-related macular degeneration (AMD) and cataracts. Incorporating raw carrots into salads, juicing them, or enjoying them as a crunchy snack can be an easy way to boost your eye health.

# **Leafy Greens**

Leafy greens such as spinach, kale, and collard greens are nutritional powerhouses brimming with essential vitamins and antioxidants crucial for maintaining healthy eyes. Rich in lutein and zeaxanthin, leafy greens act as natural filters, absorbing harmful ultraviolet (UV) radiation and protecting the eyes from oxidative stress. These antioxidants accumulate in the macula, the central part of the retina responsible for sharp, detailed vision. Regular consumption of leafy greens has been linked to a reduced risk of AMD and other vision-related disorders. Adding a variety of leafy greens to salads, smoothies, or sautés can contribute to overall eye health.

# Fatty Fish: Omega-3s for Ocular Wellness

Fatty fish such as salmon, mackerel, and trout are rich sources of omega-3 fatty acids, specifically docosahexaenoic acid (DHA) and eicosapentaenoic acid (EPA). These essential fatty acids are integral components of retinal cell membranes and play a vital role in maintaining retinal function and visual development. Omega-3s also possess anti-inflammatory properties that help alleviate symptoms of dry eyes and reduce the risk of developing glaucoma and AMD.

A balanced diet rich in nutrients, particularly those beneficial for eye health, is key to preserving vision and reducing the risk of eye-related ailments.



# Agriculture au Burkina Faso:

# Un projet ambitieux pour booster l'utilisation des engrais!

Par Yosua Domedjui



'utilisation d'engrais est encore relativement faible en Afrique subsaharienne par rapport au reste du monde, ce qui constitue l'un des principaux facteurs limitant la productivité agricole dans la région.

Le Centre international de développement des engrais (IFDC) a lancé un projet au Burkina Faso le 7 février dans le but d'améliorer l'accès et l'utilisation des engrais par les petits exploitants agricoles. Ce projet de 1,46 million de dollars est financé par le Partenariat africain pour les engrais et l'agro-industrie (AFAP) dans le cadre de son initiative "Sustain Africa".

Grâce à ce projet, l'IFDC espère fournir à 100 000 petits exploitants agricoles et à 70 grossistes et détaillants un accès à 20 000 tonnes d'engrais d'ici le mois de mai de l'année prochaine.

Lefaso.net, le quotidien local, rapporte que le ministère de l'Agriculture, la Société d'exploitation des phosphates du Burkina (SEPB) et l'Association des grossistes détaillants des intrants agricoles au Burkina Faso (AGRODIA) travailleront ensemble pour mener à bien cette opération.

En tenant compte de l'implication de tous les acteurs et des coûts de production, les engrais seront vendus à un prix réduit. "Il s'agit d'une intervention très rapide pour fournir des engrais aux producteurs dans un délai très court", note Bocar Diagana, directeur du département Impact de l'IFDC.

Diagana précise que huit régions du pays - les Cascades, les Hauts-Bassins, la Boucle du Mouhoun, le Centre-Ouest, le Sud-Ouest, le Centre, le Centre-Sud et le Plateau-Central - seront les sites des opérations.

e Fonds monétaire international prévoit que l'économie du Burundi connaîtra une croissance de 4,3 % cette année, contre 2,7 % en 2023, principalement en raison de l'amélioration des performances du secteur agricole.

L'économie burundaise, qui emploie 12 millions de personnes, repose principalement sur l'agriculture, en particulier le thé et le café.

Les pénuries de carburant se sont atténuées, les coûts se sont stabilisés et les subventions aux carburants ont été contenues grâce à l'augmentation des prix à la pompe et du volume des importations de carburant.

Avec une inflation moyenne prévue d'environ 27 % en 2023, les pressions inflationnistes étaient fortes, mais depuis le dernier trimestre de l'année, elles ont commencé à diminuer. En 2024, l'in-

# En Burundi: L'amélioration des performances du secteur agricole

Par Yosua Domedjui

flation moyenne devrait tomber à environ 22 %.

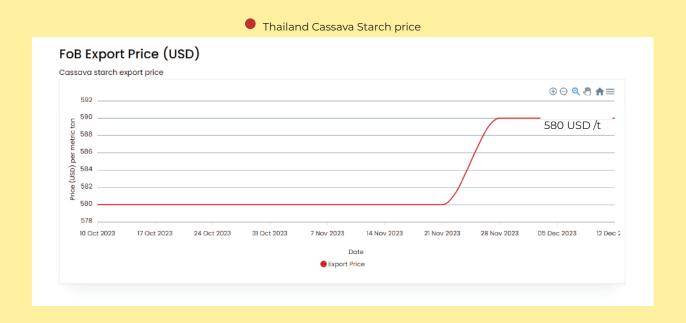
Le 11 janvier 2024, un groupe du Fonds monétaire international s'est rendu à Bujumbura pour discuter de la première évaluation du contrat de 38 mois au titre de la Facilité élargie de crédit de 261,7 millions de dollars, approuvée l'année précédente.



# **Price Trends**

# Market Analysis of Cassava Starch In Thailand

he market prices of cassava starch have reduced slightly over the last month. The price ranges from 570-580 US dollars/ton (4,112.78 yuan /ton). This week, the market price of cassava starch in Thailand's tapioca starch quotation is FOB (Bangkok) 580 US dollars/ton (4,112.78 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 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.



# GLOBAL MARKETPLACE

for all your-agro products

SEEDLINGS • AGRO-CHEMICALS • RAW MATERIALS • FARM TOOLS PROCESSING MACHINE • ANIMAL FEEDS • MANY OTHERS





WWW.CAISTT.COM

+233 25 796 3383 info@caistt.com





# GET UPTO 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** 

+233 20 475 8888 www.tiastgroup.com 🔞 🕙 🖸 📵 Tiast Group



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

# Download Now



Agriculture in your hands.

# AGRICULTURAL SCIENCE | INDUSTRIALIZATION | TECHNOLOGY



















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





0204758888



