

# agr<sup>o</sup>riches

VOL 3. | 12TH EDITION

## GHANA TODAY

Deputy Mayor of Shaoyang  
City Visits TIAST Group

## ARTICLE

A Guide to Pineapple  
Farming

## NOTRE CHRONIQUE

La tâche décourageante des  
jeunes Africains



# THE TECH OASIS

MAY 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.

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.

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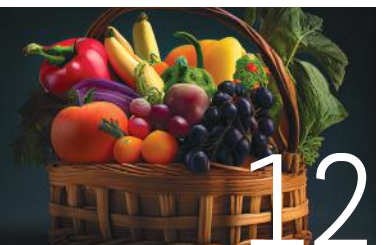
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OUR AGRICULTURAL INDUSTRIALIZATION AGENDA IS AIMED AT PARTNERING WITH FARMERS AND INTERESTED PARTIES TO ADD VALUE TO THE AGRICULTURAL VALUE CHAIN.

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



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L'aspect négligé de l'agriculture

# THE POWER OF REGENERATIVE AGRICULTURE

In an era of mounting environmental challenges, the significance of sustainable agriculture cannot be overstated. As we navigate the complexities of a changing climate and dwindling natural resources, regenerative agriculture emerges as a beacon of hope, offering a positive and transformative solution.

**R**egenerative agriculture goes beyond conventional farming practices by emphasizing the restoration and enhancement of soil health, biodiversity, and ecosystem resilience.

It embraces a holistic approach that promotes the use of cover crops, crop rotation, minimal tillage, and diversified farming systems. By employing these principles, farmers can not only increase yields but also sequester carbon, improve water quality, and enhance overall farm sustainability.

The beauty of regenerative agriculture lies in its ability to restore the natural harmony between the land and its inhabitants. By nurturing healthy soils, farmers create a fertile foundation for plant growth while fostering beneficial microbial activity. This, in turn, reduces the need for synthetic fertilizers and pesticides, leading to healthier food production systems and improved human health.

Moreover, regenerative agriculture supports rural communities by promoting local food systems and enhancing the economic viability of small-scale farmers. By embracing regenerative practices, farmers can tap into new markets that prioritize sustainable and ethically produced goods, fostering a vibrant and resilient agricultural economy.

The time has come to recognize the immense potential of regenerative agriculture as a solution to environmental degradation and food insecurity. Let us embrace this positive shift in our agricultural practices and work together to cultivate a sustainable future for generations to come.



# Tinda, the Asian Vegetable

By Prince Opoku Dogbey

## Origin

When it comes to nutritious and delicious vegetables, the Tinda crop (*Citrullus lanatus* var. *chitralada*) deserves a spot in the limelight. Also known as "Indian round gourd" or "apple gourd," Tinda is a unique vegetable that is gaining popularity worldwide. This article will delve into the brief history, description, and three notable health benefits of this versatile crop.

## Brief History

Tinda is believed to have originated in India and is widely cultivated throughout the Indian subcontinent, Southeast Asia, and parts of Africa. This crop has been cultivated for centuries, with mentions of its usage found in ancient Ayurvedic texts. Over time, Tinda has found its way into various regional cuisines, and its popularity is now spreading across the globe due to its appealing taste and health benefits.

## Description

Tinda belongs to the Cucurbitaceae family and has a round shape, similar to a small pumpkin or a green apple. It features a smooth, pale green skin and a crisp, white flesh. The taste of Tinda is mildly sweet and pleasantly nutty, making it a versatile ingredient in various culinary preparations.

## Health Benefits

**Nutrient-rich:** Tinda is a low-calorie vegetable that is rich in essential nutrients. It is a good source of dietary fiber, which aids digestion, promotes satiety, and helps maintain a healthy weight. Additionally, Tinda contains significant amounts of vitamins A, C, and E, as well as minerals like potassium and calcium, contributing to overall wellness and immune system support.

**Hydration and Detoxification:** With its high water content, Tinda acts as a natural hydrator for the body. Staying adequately hydrated is crucial for maintaining optimal bodily functions.

**Heart Health:** Tinda possesses properties that are beneficial for cardiovascular health. Its significant potassium content helps regulate blood pressure levels, reducing the risk of hypertension and associated cardiovascular issues.



# Deputy Mayor of Shaoyang City Visits TIAST Group

By Prince Opoku Dogbey

**Following the inauguration of the 3rd China-Africa Economic and Trade Expo on Monday, May 15, in Accra, the Deputy Mayor of Shaoyang City embarked on a working visit to TIAST Group.**

The visit afforded the management of TIAST Group the opportunity to interact with the mayor by highlighting the company's progress and contribution to the agricultural sector in the West Africa sub-region since it began operation in 2021.

During the meeting, the Chief Executive Officer of TIAST West Africa, Mr. David Tai placed emphasis on the company's vision which entails creating a million jobs, building 1000 factories and generating an annual trade value of US\$10billion for the West African sub-region.

TIAST Group also presented ongoing projects initiated by the company to foster economic growth and development in the agricultural space. The Marketing Manager, Mr. Peter Baidoo introduced these innovations by the company to the mayor.

Among the newly introduced projects mentioned by the Marketing Manager were an e-commerce website, CAISTT and three mobile applications; namely, Agroriches, Agrorichesse and Agro-Ressource applications. Presenting detailed information to the mayor and the delegation, he mentioned that the CAISTT website would serve as a platform to connect Africa and China business in order to facilitate easy trade between agribusinesses.



On the other hand, he mentioned that, the news applications have been introduced to provide relevant information of all agricultural-related issues and make known the essence and relevance of agricultural industrialization.

Representing the Business Development Department, the Director of TIAST Ghana Business Development, Miss Priscilla Fiati, presented a brief overview of TIAST Group's business module in the West Africa sub-region. She highlighted the three key services rendered by the company; namely, the technical support, financial support and offtake support.

The Deputy Mayor was pleased to have known the key services offered by TIAST Group. She however commended the company and assured the company that her outfit is always ready to assist the company in diverse forms.

Present at the meeting were the Chief Executive Officer of TIAST West Africa, Mr. David Tai, the First Vice President of TIAST West Africa, Mr. Leo Chen, the Head of Engineering at TIAST Ghana, Mr. Jing Yi, and some other dignitaries.

# Over 800,000 people employed in South Africa agric sector

By Prince Opoku Dogbey

South Africa's Minister for Agriculture, Land Reform, and Rural Development and a Member of Parliament, Thoko Didiza, reported that 888,000 people were working in agriculture, up 3% from the prior quarter and 5% from the previous year.

An improvement in agricultural jobs was seen in the first quarter due to favorable production circumstances for a variety of field crops, fruits, and aquaculture.

“Various measures being taken by the government, such as launching the Agri-Energy Fund with the Land Bank, extending the diesel rebate in the food value chain, will have a positive impact,” the Minister said.

The commercial maize harvest is expected to be around 15.9 million tonnes in 2022–2023, up 3% from the 202–202 season and the third-highest on record, according to the government’s Crop Assessment Committee.

Media reports in South Africa said the sugarcane crop is anticipated to rise

by 3% to 18.5 million tonnes in 2023–2024 and the soybean crop is projected to reach a record 2.8 million tonnes.

“We are also positive about the harvest of various field crops and fruits, which contributes to improved employment prospects in the medium term. We will continue to work to maintain existing export markets for the country and expand access to growing markets,” the minister stated.





## France: Agric Ministry Announces €60 M in Emergency Aid for Organic Farmers

By Prince Opoku Dogbey

**An addition €60 million has been announced France’s Agriculture Ministry in emergency aid for organic farmers facing a sharp slump in sales of organic food.**

This is necessary due to the increase in food prices which has made a lot of consumers shy away from organic foods thus making sales of organic foods in French supermarkets drop by more than 7 percent in 2022 as reported by NielsenIQ.

“It would be our collective failure if we lost organic producers,” said Agriculture Minister Marc Fesneau.

He said this when he visited a dairy farm in Oise region west of Paris. He found out that not even a single farm has converted to organic over the last two years.

The Minister announced this aid in addition to the initial emergency aid package of € 10 million, agreed at the end of February at the Agricultural Show.

“Let’s start by putting our house in order by being exemplary” said Fesneau, calling on authorities into school canteens finance to do same.

However, the President of the National Federation of Organic Agriculture (Fnab), Philippe Camburet, said “At this stage, the state’s commitment is symbolic. I’m waiting to see if local authorities follow suit.”

France aims to increase the proportion of agricultural land dedicated to organic farming from the current 10 percent to 18 percent by 2027.

**“France aims to increase the proportion of agricultural land dedicated to organic farming from the current 10 percent to 18 percent by 2027.”**





# The Versatility of Rubber: Revolutionizing Industries and Enhancing Lives

By Precious Akinagbe-Smith

## A Brief History

Rubber has been used for thousands of years, with ancient civilizations such as the Mayans and Aztecs making use of its unique characteristics derived from tree sap. Industrial rubber production began in the 19th century, leading to its extensive application in a variety of industries.

## Essential Applications

Rubber plays a crucial role in numerous industries:

### Automotive:

Rubber components, such as tires, improve vehicle performance and safety by providing traction and shock absorption.

### Construction and Infrastructure:

Rubber is essential for roofing materials, waterproofing membranes, sealants, vibration dampeners, and anti-slip mats in the built environment, assuring durability and versatility.

Healthcare and Medical Field: Medical-grade rubber is essential in medical devices for gloves, syringe plungers, catheters, and seals, ensuring flexibility, chemical resistance, and patient safety.



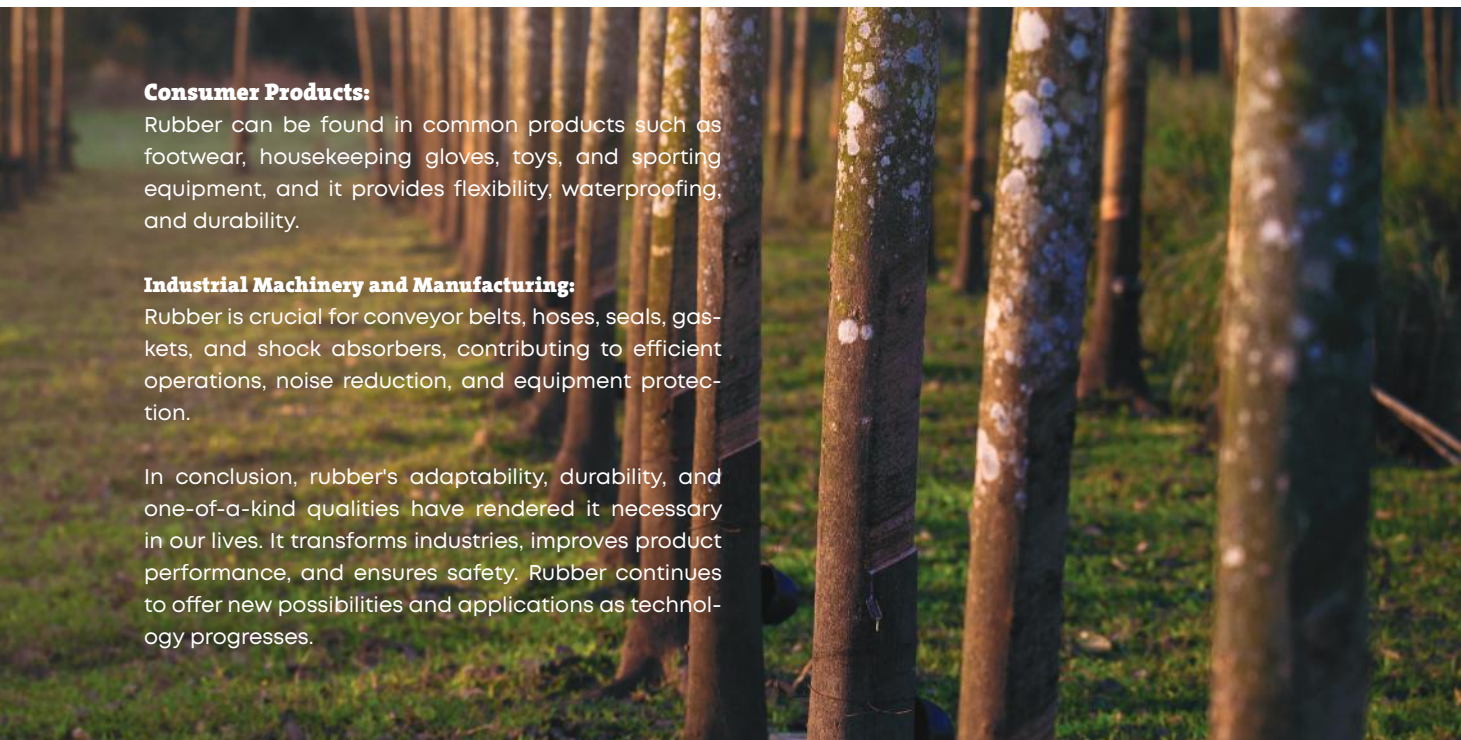
### Consumer Products:

Rubber can be found in common products such as footwear, housekeeping gloves, toys, and sporting equipment, and it provides flexibility, waterproofing, and durability.

### Industrial Machinery and Manufacturing:

Rubber is crucial for conveyor belts, hoses, seals, gaskets, and shock absorbers, contributing to efficient operations, noise reduction, and equipment protection.

In conclusion, rubber's adaptability, durability, and one-of-a-kind qualities have rendered it necessary in our lives. It transforms industries, improves product performance, and ensures safety. Rubber continues to offer new possibilities and applications as technology progresses.





# Plant Phenotyping

By Prince Opoku Dogbey

In the realm of agriculture, innovation knows no bounds. Among the emerging technologies that are reshaping the field, plant phenotyping stands out as a game-changer. Harnessing the power of advanced imaging and data analysis, plant phenotyping offers a new frontier in understanding plant characteristics and unlocking the full potential of crop improvement

## Understanding Plant Phenotyping

Plant phenotyping involves the non-destructive measurement and analysis of a range of plant traits, including growth patterns, leaf area, root architecture, flowering time, and stress responses.

This comprehensive approach provides researchers with detailed insights into how plants interact with their environment, helping to decipher the intricate mechanisms that influence crop performance and productivity.

Advancements in imaging technologies have been instrumental in propelling plant phenotyping forward. Hyperspectral imaging, for instance, enables the collection of high-resolution spectral data, allowing researchers to assess plant health and detect stress conditions in real-time.

3D scanning technology, on the other hand, provides detailed information about plant structure and growth patterns, facilitating the evaluation of root architecture and biomass distribution.





**W**e wake up every day feeling hungry and we quickly look for something to fill our bellies. But have we taken a second, to think about how it all begun? What compelled us to start eating certain plants in the first place and how agriculture came to be? Well, let me take you back to the day it all began.

Many historians have several theories about the history of agriculture but one thing they all seem to agree on is the period in which it started. They all believe it started at a time when the Pleistocene Epoch, also known as the Ice Age, was coming to an end.

The Pleistocene Epoch or Ice Age, began 2.4 million years ago and lasted until 11,500 years ago according to historical sources. The climate around this period alternated between very cold and very warm temperatures.

What made it earn the name "Ice Age" was that, during this period, ice sheets also known as glaciers covered large parts of the world and during the warm periods, they melted and left behind rock piles called moraines. Glaciers which were formed during the warm periods were referred to as inter-glacial and the cold periods were called glacial.

Our ancestors who lived during this period survived by hunting animals and when this era was gradually coming to an end, they started collecting edible plants and also begun using them in different ways which changed everything.

Certain crops began springing up as the Ice Age faded as the world was experiencing a warmer climate. People started altering their environment as they cultivated and the transformation is what is known now as agriculture.

As we have been able to figure out "what" started agriculture, the matter of "who" is still up for debate. Some individuals believe humans were pushed to rely on plants for food as it became difficult to hunt. Others are also of the view that as the population continued to grow, humans had to look elsewhere for food and with plants being in abundance, it made sense that humans considered to use them for food.

One may ask how people know all this when the individuals who lived during this period are long gone. Thanks to science and what is known as archaeobiology, scientists are able to collect old samples of human bones, animals, charred seeds among others all over the world to study and analyze.

# How Africa can become the breadbasket of the world

By Jessica Meledi

Africa undoubtedly has a number of arable lands that are being seen as a source of future food supplies for the rising population. With the rising world population and the imminent danger of food shortages in the future, Africa is well poised to become the global breadbasket and emerge as a major supplier of food. In view of these prospects, the question is: how does Africa position itself to expand its agriculture in order to be a major supplier of food to the world?

The African continent is currently in the grip of the worst economic crisis for a generation. Around 282 million people are food insecure across Africa, 46 million more than in 2019. According to the UN's Food and Agriculture Organisation (FAO), this figure could rise to 310 million by 2030.

For a country to be referred to as a breadbasket, the requirements are to produce a surplus of a particular crop or agricultural goods that are then exported across the world to coun-

tries that do not produce enough of this food to satisfy their domestic demand. According to Agnes Kalibata, the President of the Alliance for a Green Revolution in Africa (AGRA), if the proportion of African farmers using improved seeds rose from 20% to 50%, Africa would be able to produce enough food to feed itself. If the number rose to 75%, African farmers would produce enough "food to feed the rest of the world"

In recent years, foreign governments and private investors have obtained thousands of acres of farmland in the quest to protect their countries against food shortages in the future. For example, investors from Saudi Arabia have leased large tracts of farmland in Ethiopia. South Korea also plans to develop 100,000 hectares of land in Tanzania, at least half of which will be used for raising grains and producing processed foods such as cooking oil and starch. There are other countries that have also taken such initiatives.

The fortunes of Africa's agriculture can turn when more investment is provided to support small-holder farmers, because 80% of food produced in Africa is produced by these small-scale farmers. Governments therefore need to support more farmers by creating financial schemes and investing in agricultural machinery. This would make farming a lucrative venture where more small-scale farmers would make use of the many arable lands on the African continent instead of people from other continents coming in to invest hugely in our croplands for their benefit. Africa can rather invest more in producing food to import to other countries.





Farmers and ranchers in the United States produce enough food to feed approximately 166 people annually, both domestically and internationally. Additionally, agriculture is responsible for providing employment to over 24 million people in the United States.

## Durian

*The nutrients in Durian contribute to various aspects of health, such as supporting digestion, boosting the immune system, promoting healthy skin, and aiding in proper heart function.*



# Cultivating Tech Prosperity

By Prince Opoku Dogbey

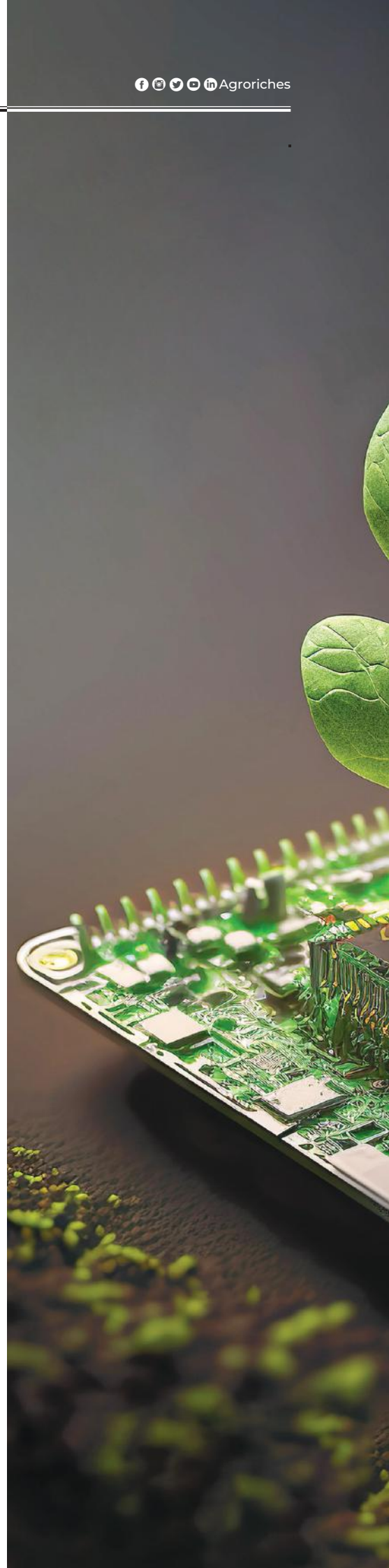
In the ever-evolving landscape of agriculture and industry, agroprocessing factories have emerged as lucrative investment opportunities. These factories play a vital role in transforming raw agricultural commodities into value-added products, contributing to economic growth and food security.

However, for investors looking to venture into this sector, navigating the technical complexities can be challenging. Due to this, TIAST Group has made available some technical support to design, build and install all machinery needed for the processing line.

**Feasibility Studies:** Technical support plays a crucial role in conducting feasibility studies for potential agroprocessing projects. Experts can assess market demand, supply chain dynamics, infrastructure requirements, and regulatory compliance. These studies provide investors with valuable insights into the viability and profitability of their proposed ventures.

**Technology Selection and Optimization:** Agroprocessing factories rely on various equipment, machinery, and processing techniques. Technical support helps investors identify suitable technologies that align with their product portfolio, production scale, and budget. Experts can guide them in optimizing production processes, improving efficiency, and ensuring product quality and safety.

**Infrastructure and Facility Design:** Setting up an agroprocessing factory requires careful consideration of layout, workflow, and facility design. Technical experts assist investors in designing efficient processing lines, optimizing space utilization, and implementing proper hygiene and safety standards. They also provide guidance on utilities, waste management, and environmental sustainability.





**Quality Assurance and Compliance:** Technical support ensures adherence to quality standards and regulatory requirements. Experts help investors implement quality control measures, develop standard operating procedures, and establish quality management systems. This ensures that the final products meet national and international quality standards, enhancing market acceptance and consumer trust.

**Training and Capacity Building:** Successful operation of agroprocessing factories requires skilled personnel. Technical support offers training programs to equip employees with the necessary knowledge and skills in food safety, machinery operation, quality control, and maintenance. This empowers investors to build a competent and capable workforce, driving operational excellence.

**Research and Development:** Technical experts facilitate research and development initiatives to drive innovation in agroprocessing. They explore new technologies, product diversification, and value-addition opportunities, enabling investors to stay competitive and meet evolving market demands.

*Investing in agroprocessing factories holds immense potential for economic growth, job creation, and value addition in the agricultural sector. However, navigating the technical intricacies of this industry requires expertise and support.*

# Tinda Stir-Fry

By Mavis Esaaba Mensah

Delight your taste buds with a burst of flavors and a touch of culinary magic as we present to you an irresistible dish that will leave you craving for more - Tinda Stir-Fry.

## Ingredients

4-5 medium-sized Tinda (Indian round gourds)

1 tablespoon oil

1 teaspoon cumin seeds

1 teaspoon turmeric powder

1 teaspoon red chili powder (adjust to taste)

Salt to taste

Fresh cilantro (coriander) leaves for garnishing

## Instructions

Wash the Tinda thoroughly and pat them dry. Cut off the top portion of each Tinda and remove any blemishes or rough skin. Slice the Tinda into thin rounds.

Heat oil in a pan or skillet over medium heat. Add cumin seeds and let them splutter.

Add the sliced Tinda to the pan and sauté for a few minutes until they start to soften.

Sprinkle turmeric powder, red chili powder, and salt over the Tinda. Mix well to coat the slices evenly with the spices.

Stir-fry the Tinda for about 8-10 minutes or until they are cooked through and slightly browned. Make sure to stir occasionally to prevent sticking.

Once the Tinda is cooked, remove from heat.

Garnish the stir-fried Tinda with freshly chopped cilantro leaves.

Your Tinda Stir-Fry is now ready to be served as a side dish or accompaniment to your main meal.



*Enjoy its delightful flavors  
and crisp texture!*



# WHO BECOMES THE NEXT FARMER?

By Nana Ama Oforiwaa Antwi

It is an open secret that agriculture is the highest employer of all time and while this may be your first-time hearing this, it is actually a fact. This is because agriculture provides an innumerable list of job opportunities unlike any other field. In the agricultural space, one can be a farmer, an agricultural consultant or enthusiast, a business man, an agri-tech developer, in fact you can use anything you learnt in school to help improve the sector as it is one that surely needs our hands on its deck.

However, it appears to be the field most individuals shy away from. The unemployment rate in Ghana now stands at an unwavering 4.7% since 2021, as both the government and private sectors appear to be full yet only 5% of the youth as of 2021 were into agriculture processing (Heifer International Report).

In the same year, Statista reports a significant decline in the number of people performing agricultural activities as of 2021

marked the fourth consecutive decline in the share of total employment in the sector. The unemployed youth clearly do not turn to agriculture as a solution to their problem.

Everyone shies away from the sector for various reasons. Most of these graduates in Ghana view any profession in agriculture as demeaning and not befitting to them as graduates. A misconception spurred from their days in primary and secondary school where the practice of weeding and working on farms were the common punishments for several wrongdoings.

Parents also played a vital role in festering this misconception in their kids as they continuously advise their wards to go for white-collar jobs so as to not end up as farmers in the village. Society as usual also played its part by according the least recognition and respect to farmers, deeming them as villagers as opposed to the other professions.

Therefore, how is it surprising if a child grows up wanting to be a doctor or anything other than a farmer?



This has resulted in the sector consisting of middle aged to very old individuals. The world's population is expected to reach 9 billion by the year 2050 and the agricultural sector carries the responsibility of feeding these 9 billion individuals in the world.

Ghana's population alone stood at 32.8 million as of 2021 and is currently increasing every single day.

The year 2050, will bring an increase in our population and many of these middle-aged farmers or old men, will not be around or may be too weak to partake in any farming activities. Therefore, I beg to ask the question, as the youth in Ghana are not interested in the venture, who then becomes the next farmer when old farmers are passed and gone? Who feeds the next generation?

# The White Collar Boy

Father told me to study hard and make him proud  
Mother told be to be the man she brags about  
My little siblings called me the family scholar  
I avoided cola, To keep my teeth white  
To be seen in a white collar  
And put on my tie without a fight  
I walked to the office to take my seat  
Wore my suit and tie, Amidst the heat  
I made daddy proud  
And I was all mama bragged about  
Until Daddy was no more, Little sister turned four  
The suit and tie did not pay the rent  
Could not even afford a tent  
Then I remembered daddy's old farm  
Should I quit the job to till the land?  
Will Daddy be proud from above  
Will mama look at me with love?  
I removed the suit and tie, Stopped living the lie  
Picked up daddy's working gear  
Avoided noise from far and near  
I decided to till the farm to take care of family  
So my siblings could live happily  
I was still all Mama bragged about  
I dreamt of Dad staring at me with pride.

— Poem by Nana Ama Oforiwaa Antwi





# Agricultural drones, the way to go in Farming now?

By Jessica Meledi

I'm sure you know or perhaps have heard of drones being used to capture images, deliver items, and even for surveillance purposes. Over the years, the purposes of drones have increased and been explored in many ways. One of the areas where drones are being explored now is in the agricultural sector.

With risks from supply chain disruptions, weather, crop disease, and other threats, farmers and other small business owners in the agriculture industry are increasingly turning to technology like agriculture drones for help. Agricultural drones, also known as "ag drones," allow farmers to monitor crop conditions from the air to keep watch for potential problems and optimize field management.

The Federal Aviation Administration (FAA) first granted exemptions for drone use in agriculture in 2015. Agricultural drones can serve varied uses like land imaging, surveying topography and boundaries, spraying needs, collecting soil and water samples, and troubleshooting.

The agricultural drones are also beneficial to the farmers, as they help save time. It can be

time-consuming to walk through one's farm to spot potential issues before they become bigger ones. Since there's little one can see on foot, images collected from a farming drone are in high definition, making it easier to spot crop issues. Also, safety is a major concern for agribusiness, and drones can help improve safety. For example, if a tract of agricultural land is potentially dangerous or difficult to travel, drones can be used to map the area rather than sending workers or surveyors.

The agricultural drone market grew to \$1.2 billion in 2020, and analysts expect it to reach \$6 billion by 2025. The future of drones in the agricultural sector looks promising, with countries like India having start-ups specializing in drone technology and encouraging farmers to use drones to monitor the health of their crops and spray them with pesticides and fertilizers.

The trend comes amid the federal government's ambitious plan to make India a hub for drones by 2030. This innovation of 'ag drones' can also be adopted by other countries to improve agriculture in a technological way

# TODAY'S TIPS

**1** The benefits of crop rotation extend beyond pest and nutrient management. It can help reduce weed pressure, as weed species that thrive in one crop may struggle in another. Rotating crops can also promote biodiversity, attracting beneficial insects that control pests naturally.

**2** To implement crop rotation effectively, it is essential to plan ahead and consider factors such as crop compatibility, market demand, and the specific needs of your farm. Develop a rotation schedule that suits your region's climate and soil conditions, taking into account the unique characteristics of each crop.

**3** By integrating crop rotation into your farming practices, you can enhance yields, reduce the reliance on chemical inputs, and foster a more sustainable and resilient agricultural system. Remember, a well-executed crop rotation plan can be a valuable tool in your quest for a thriving and prosperous farm.



# Sweet Success: A Guide to Pineapple Farming

By Prince Opoku Dogbey

Pineapples, with their succulent taste and tropical allure, have captured the hearts and taste buds of people worldwide. If you have ever dreamt of cultivating your own pineapple farm, you're in for a rewarding journey. Growing pineapples not only offers the satisfaction of nurturing a delicious fruit but also presents a promising opportunity for agricultural entrepreneurship. So, let's dive into the essentials of pineapple farming and set you on the path to sweet success.

First and foremost, selecting the right variety of pineapple is crucial. Consider factors such as climate, soil conditions, and market demand when choosing the cultivar. Common varieties include Smooth Cayenne, Queen, and MD2. Once you've made your selection, it's time to prepare the soil. Pineapples thrive in well-drained, sandy loam soil with a pH level of around 4.5 to 6.5.

The next step involves obtaining healthy pineapple suckers or crowns from a reputable source. Suckers are small offshoots that sprout from the base of mature pineapples, while crowns are the leafy tops. Plant them in pre-prepared beds or containers, ensuring they receive adequate sunlight. Pineapples are resilient and can tolerate drought, but regular watering is still necessary, especially during dry periods.

Maintaining weed control is essential for optimal growth, as weeds can hinder the development of pineapple plants. Apply mulch around the plants to suppress weed growth and conserve moisture. Fertilize the crop at regular intervals using balanced, slow-release fertilizers rich in nitrogen, phosphorus, and potassium.

Pineapples take approximately 18 to 24 months to reach maturity, depending on the variety and growing conditions. When the fruit turns golden yellow and develops a pleasant aroma, it's time for harvest. Cut the fruit carefully, leaving a small portion of the stem intact.

With proper care and attention, your pineapple farm can yield a bountiful harvest. Whether you choose to sell the fruit locally or explore international markets, pineapple farming can be a profitable venture. So, roll up your sleeves, embrace the tropical spirit, and embark on your journey towards pineapple farming success.



# Fermer les yeux sur le changement climatique est le fléau de l'Afrique

Par Pavel Chamabe

**S**aviez-vous que depuis les années 1960, notre climat a commencé à changer ? Le changement climatique s'aggrave d'année en année. Son impact a suscité une inquiétude mondiale car il est très dévastateur.

Il est intéressant de noter que le climat est l'un des principaux outils nécessaires à l'agriculture. Si quelqu'un essaie de se lancer dans l'agriculture dans une région où les terres sont bonnes mais où les conditions climatiques sont mauvaises, il en souffrira beaucoup. En effet, la plupart des cultures ont besoin d'une bonne quantité de pluie et de soleil pour bien pousser. Une culture comme la canne à sucre a besoin de beaucoup de pluie pour bien pousser.



Au contraire, la plupart des légumes se développent bien lorsqu'ils bénéficient d'une quantité suffisante de lumière du soleil. Ce ne sont là que quelques exemples qui prouvent que l'agriculture d'une région est influencée par le climat de cette région.

Il est intéressant de noter que, bien que le changement climatique affecte considérablement l'agriculture en Afrique, il semble que nous ne soyons pas conscients de ce qui se passe. Notre attitude apathique face à cette situation désastreuse est le fléau de l'Afrique. Si vous voulez savoir, l'Afrique peut se nourrir et nourrir le monde entier. En effet, nous sommes dotés de nombreuses ressources naturelles telles que des terres arables qui nous permettent de cultiver de nombreuses plantes. Au lieu de tirer le meilleur parti de ces ressources naturelles pour qu'elles soient bénéfiques pour eux et pour les autres, ils continuent de s'enorgueillir du fait qu'ils peuvent nourrir le monde entier.

Il est vrai qu'il n'y a pas suffisamment d'informations pour résoudre le problème du climat. Le problème, cependant, est que nous ne montrons aucun intérêt pour la situation. Les politiciens, le gouvernement et les parties prenantes en Afrique ont tendance à se préoccuper davantage d'avoir plus d'infrastructures dans leurs pays. C'est un fait que les pays développés ont de bonnes infrastructures. Ce que nos dirigeants africains oublient de noter, c'est qu'avant que les pays dits développés n'arrivent là où ils sont aujourd'hui, ils se concentraient sur l'agriculture. C'est ce qui a nécessité la traite transatlantique des esclaves, qui leur a fourni une main-d'œuvre bon marché pour travailler dans leurs plantations. À l'époque, le problème auquel était confronté leur secteur agricole était la main-d'œuvre et ils ont cherché et trouvé une solution apparemment idéale. C'est parce qu'ils se souciaient de l'agriculture.

Si les Africains ne s'unissent pas pour commencer à chercher une solution à l'impact négatif du changement climatique sur leur agriculture, comme l'a fait l'Occident, nous devons nous préparer à la pire des situations. Il est temps que nous commençons à prendre soin de notre agriculture si nous voulons éviter une calamité.



# L'aspect négligé de l'agriculture

Par Pavel Chamabe

**L**e secteur agricole est un secteur polyvalent dans toute économie. Il est l'un des fondements de la société. C'est pourquoi son champ d'action est vaste, et la plupart des gens l'ignorent ou le méconnaissent.

La première chose qui vient à l'esprit lorsqu'on évoque l'agriculture est, dans la plupart des cas, l'agriculture ou les terres agricoles. Mais c'est loin d'être le cas. La portée de l'agriculture va au-delà de l'agriculture ou du travail de la terre.

Un aspect de l'agriculture qui est le plus souvent ignoré ou négligé est la distribution. Il ne sera pas si choquant de constater que de nombreuses personnes ignorent que la distribution fait partie de l'agriculture. Réfléchissons un instant : comment les denrées alimentaires et les autres produits de la ferme arrivent-ils sur nos marchés alors que les fermes sont éloignées de plusieurs kilomètres de ces derniers ? La réponse réside dans la distribution.

Le simple fait que de nombreuses personnes, y compris des représentants du gouvernement, ignorent l'importance de la distribution dans l'agriculture a conduit à la négligence de cet aspect de l'agriculture dans la plupart des endroits. On le constate souvent en Afrique, où une grande partie

de la population est employée dans le secteur agricole. La distribution ne peut être efficace qu'avec de très bonnes routes. Il sera surprenant de constater que les routes qui relient les fermes aux marchés sont en très mauvais état dans la plupart des endroits en Afrique. Cela est dû au fait que le gâteau national, en matière d'infrastructures, n'est pas équitablement réparti.

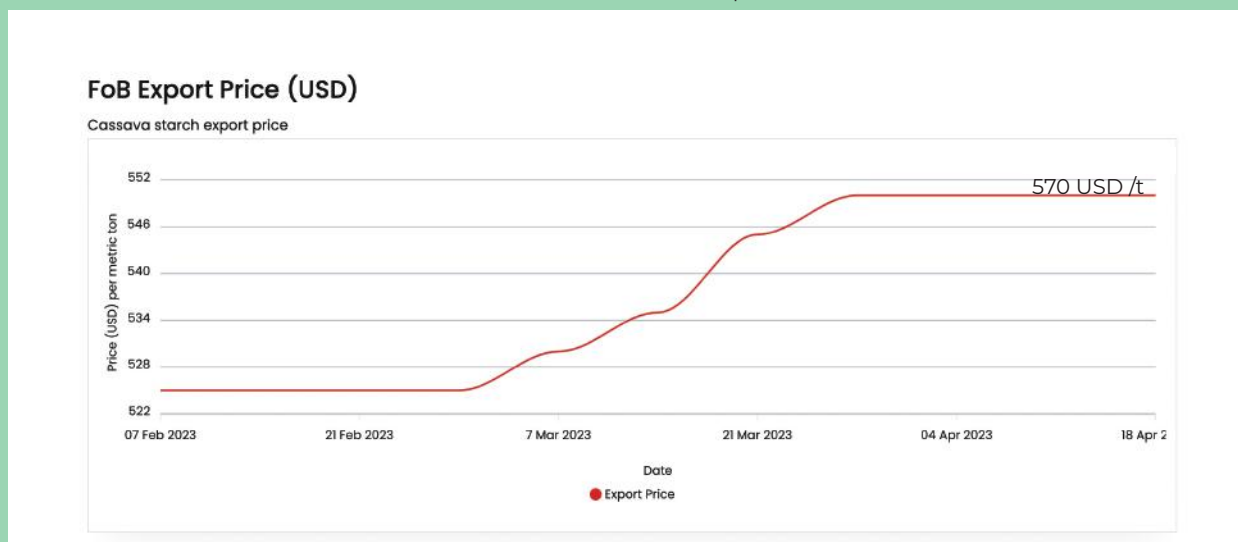
Comme la plupart de ces marchés sont situés dans l'arrière-pays, très loin des villes, ils sont le plus souvent négligés. Cette situation est à l'origine de certains des défis auxquels est confronté le secteur agricole en Afrique. L'un de ces défis est celui des pertes post-récolte. En effet, il n'y a pas de bonnes routes pour permettre aux distributeurs de se rendre facilement dans les fermes et de les quitter pour envoyer les produits agricoles sur les marchés. Par conséquent, la plupart des produits agricoles sont laissés sur les exploitations pendant longtemps, sans être distribués. Ils finissent par se détériorer au cours du processus. On peut imaginer ce que serait l'insécurité alimentaire si le nombre de produits alimentaires avariés sur nos terres se retrouvait sur le marché.

Il est donc nécessaire que les dirigeants et les parties prenantes se concertent pour accorder plus d'attention à la distribution dans l'agriculture. Cela contribuera grandement à stimuler l'économie.

## 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 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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