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GHANA TODAY

Govt to Establish Ultra-Modern Rice Mill in Oti Region

ARTICLE

Navigating the impact of climate change in Agriculture

NOTRE CHRONIQUE

L'utilité du caoutchouc en Afrique

GLOBAL INFLUENCE OF AGRICULTURE

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

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Agribusiness: The Path to Sustainable Development

By Prince Opoku Dogbey

The world stands at a critical juncture, grappling with complex challenges such as climate change, food insecurity, and economic uncertainties. In the face of these pressing issues, agribusiness emerges as a beacon of hope and a powerful catalyst for change.

Agribusiness encompasses the integration of agriculture, technology, and entrepreneurship, creating a dynamic ecosystem that drives innovation, enhances productivity, and fosters economic growth. With its vast scope, agribusiness transcends traditional farming practices and embraces a holistic approach that encompasses value addition, market linkages, and sustainable practices.

One of the key advantages of agribusiness lies in its potential to empower farmers and rural communities. By providing access to modern technologies, training, and market networks, agribusiness unlocks opportunities for small-scale farmers to transition from subsistence farming to thriving enterprises. It offers them the tools and knowledge to maximize productivity, increase their income, and improve livelihoods.

Furthermore, agribusiness serves as a catalyst for rural development, creating employment opportunities, and reducing migration from rural to urban areas.

In addition to its economic impact, agribusiness plays a pivotal role in promoting sustainability and addressing environmental concerns. With the integration of innovative technologies, precision agriculture practices, and sustainable farming methods, agribusiness seeks to minimize resource use, reduce greenhouse gas emissions, and preserve biodiversity.

However, unlocking the full potential of agribusiness requires a concerted effort from all stakeholders. Governments must create an enabling environment through supportive policies, access to finance, and investment in infrastructure. Private sector engagement, including agribusiness enterprises, investors, and technology providers, is crucial to driving innovation, facilitating market linkages, and ensuring inclusive growth.

In conclusion, agribusiness is not merely an industry but a solution to the pressing challenges we face today.

Purple Yam

By Nana Ama Oforiwaa Antwi

We might know many different varieties of yam and might even have a favourite on the market but ever heard of purple yam? **After this article who knows, it might be your new favourite!**

Origin

Purple yam is a part of the Dioscoreaceae family. It is also native to Africa and Asia and grows best in the tropical and subtropical countries. In the Tagalog language of the Philippines where this crop is native, it is usually referred to as Ube(ooh-bae). Other names include winger yam, violet yalm or water yam.

Description

This type of yam is often confused with sweet potatoes but are botanically different and despite the texture looking soft like potato when cooked, it actually has a greyish-brown skin and purple flesh, hence it's name. Purple yams have a sweet nutty flavour and are used in a variety of dishes ranging from sweet to savoury.

Nutritional Benefits

Rich in Vitamins

Purple yams are rich in carbs, potassium, vitamin C and phytonutrients which are very essential for maintaining good health. Vitamin A and C may also help reduce asthma symptoms.

Rich in antioxidants

They are a great source of anthocyanins and vitamin C; powerful antioxidants which protect cell damage and cancer.

May help manage blood sugar

The flavonoids in purple yams may help promote sugar control in people with type 2 diabetes. They also have a low glycemic index, which can help prevent blood sugar spikes.

May help lower blood pressure

Laboratory research has demonstrated the impressive blood-pressure-lowering effects of antioxidant-rich purple yam extracts.



Govt to Establish Ultra-Modern Rice Mill in Oti Region

By Prince Opoku Dogbey



The government led by President Nana Addo Dankwa Akufo-Addo has announced plans to establish a state-of-the-art Rice Mill in Asato near Kadjebi, located in the Kadjebi District of the Oti Region.

The necessary steps, including land acquisition, feasibility studies, and an Environmental Impact Assessment, have already been completed.

The announcement was made by Mr. Wilson Kwami Agbanyo, the Kadjebi District Chief Executive (DCE), during a two-day training workshop for Rice Farmers held in Kadjebi.

The workshop, organized by the Kadjebi District Directorate of the Department of Agriculture, received financial support from the Ghana Agriculture Sector Investment Programme (GASIP) to benefit the rice farmers.

The training workshop focused on various aspects of rice processing, including parboiling, milling, packaging, and

labeling. Mr. Agbanyo encouraged the predominantly female farmers to consider venturing into the lucrative rice parboiling business.

Mr. Besa Akpalu, the Kadjebi District Director of Agriculture, emphasized the nutritional benefits of parboiled rice, highlighting its ability to maintain grain integrity and minimize broken milled rice.

Approximately 70 farmers had the opportunity to benefit from the training, with Miss Esther Asamoah, the Women in Agriculture (WIAD) Officer, and Madam Janet Adade, a Rice Farmer and Processor, serving as Resource Persons.

“President Nana Addo Dankwa Akufo-Addo has announced plans to establish a state-of-the-art Rice Mill in Asato near Kadjebi, located in the Kadjebi District of the Oti Region.”

LCFE Launches a N5 billion rice contract on commodities exchange

By Nana Ama Oforiwa Antwi

The N5 billion series one of the N30 billion Eko Rice Contract has been declared as being launched by the Lagos Commodities and Futures Exchange (LCFE).

The first forward contract to be introduced in the commodities market will eventually be listed on the floor of LCFE.

It is intended to establish a market for rice spots and futures derivatives, ensure product standardization, increase accessibility to large amounts of paddy rice, encourage adherence to international best practices, offer organizational support through collateral management services, and open doors for small product suppliers.

Sanwo-Olu, the contract's initiator, stressed the Lagos State Government's dedication to making Lagos a center for Nigerian rice production.

"This is a significant milestone in our efforts to make Lagos state the hub of rice production in Nigeria. This will create job opportunities and wealth. Lagos State rice has become a key driver in growing our economy. Our goal is to make rice available and affordable through enhanced rice production.

"We want the entire investing public to go into the rice production and the entire value chain for the agricultural sector. We shall be deepening the market together. We are not just stopping at rice production. We are building a mega market hub in the whole of West Africa", he added.

The Managing Director of LCFE, Akin Akereolu-Ale, commended the Lagos State government on its initiative to increase food production in Nigeria and assured the governor of the exchange's readiness to support the initiatives.

"LCFE will provide an opportunity for investment in the rice value chain through the creation, onboarding and listing of commodities instruments for paddy aggregation and trading while also providing opportunities for Rice distributors and stakeholders to trade on the exchange through capital market operators," Akereolu-Ale noted.

GLOBAL AGRICULTURAL TRADE GROWTH SLOWS DOWN

By Prince Opoku Dogbey

According to a joint report by the Food and Agriculture Organization of the United Nations (FAO) and the Organisation for Economic Co-operation and Development (OECD), global trade in agricultural commodities is predicted to expand at a slower rate of 1.3 percent annually over the next decade.

Maize, wheat, and soybeans were major contributors to agricultural trade growth in the past, but these commodities are projected to experience a significant decline in trade growth over the next ten years. South and Southeast Asia, which have become net importers of agricultural commodities, are expected to further increase their net imports driven by strong demand growth in the region.

On the other hand, Sub-Saharan Africa is projected to face an almost doubled trade deficit in major food items by 2032, primarily due to rapid population growth compared to other regions.

North America is anticipated to remain the second-largest exporter of agricultural commodities globally, but its net export position may be slightly curtailed by strong domestic consumption growth. The region's agricultural sector could play a crucial role in stabilizing prices and expanding production to normalize price fluctuations.

The report highlights that the demand for cereals production growth is projected to slow down as per capita food consumption of most cereals approaches saturation levels in many countries. Plant breeding advancements and a shift towards more intensive production systems are expected to drive global crop production growth, with yield improvements accounting for 79 percent of the growth.

The consumption of sugar is expected to rise in Africa and Asia, driven by regions with low per capita intake, while consumption in high-income countries is likely to decline. Per capita meat consumption is forecasted to increase by 0.1 percent annually, primarily driven by middle and lower-income countries.

Fish availability for consumption is expected to grow globally, with the fastest growth in Africa.

Milk production is anticipated to grow by 1.5 percent annually, with India and Pakistan contributing over half of the increase. However, milk production in the European Union is projected to decline slightly due to the transition towards more environmentally sustainable production systems.



Vertical Farming: A contributor to sustainable food production

By Jessica Meledi

Farmers face natural threats like insects, viruses, and extreme weather, requiring modern farming technologies like vertical farming to protect crops and land.

Vertical farming is the practise of growing crops in vertically stacked layers. It involves growing plants indoors, which is why it's sometimes also known as indoor farming. Instead of sunlight and rain, vertical farms use LED lighting and controlled growing and nutrition systems. Plants are stacked vertically in layers, so many of the farms look like warehouses filled with large shelving units.

The main advantage of Vertical farming is the increase in crop yields on a smaller unit area of land compared to traditional farming. Another sought-after advantage is the increased ability to cultivate a larger variety of crops at once because crops do not share the same plots of land while growing.

In addition, crops are resistant to weather disruptions because of their placement indoors, meaning fewer crops are lost to extreme or unexpected weather conditions. Due

“Global companies utilize advanced technologies for vertical farming, with investors including venture capitalists, governments, and private sector.”

to its limited land usage, vertical farming is less destructive to local plants and animals and helps to preserve them.

Vertical farming boosts food production and security by reducing truck travel time, supplying food locally, and reducing fuel costs, potentially reducing food prices.

Global companies utilize advanced technologies for vertical farming, with investors including venture capitalists, governments, and private sector.

Vertical farming faces economic challenges because sunlight, air, and water are free; however, powering LED lights, software, and sophisticated growing systems isn't. If non-renewable energy is used to meet these energy demands, vertical farms could produce more pollution than traditional farms or greenhouses.



Remote Sensing

By Prince Opoku Dogbey



Remote sensing in agriculture refers to the use of satellite imagery, aerial photography, and other remote sensing technologies to gather information about crops, soil conditions, and vegetation indices. This valuable tool has revolutionized the way farmers monitor their fields, make informed decisions, and optimize agricultural practices.

By capturing high-resolution images of agricultural areas from space or aircraft, remote sensing provides valuable insights into crop health, growth patterns, and potential yield. It allows farmers to detect early signs of stress, nutrient deficiencies, pests, and diseases, enabling them to take proactive measures and mitigate potential losses. By identifying specific areas of concern, farmers can target interventions more precisely, reducing the use of inputs such as water, fertilizers, and pesticides, thereby promoting sustainable farming practices.

Additionally, remote sensing assists in monitoring soil moisture levels, identifying areas prone to waterlogging or drought, and optimizing irrigation strategies. By providing detailed information about soil conditions, farmers can make informed decisions about irrigation scheduling, resulting in efficient water usage and improved crop productivity.

Furthermore, remote sensing helps assess crop performance across large agricultural landscapes, enabling the identification of areas with higher or lower yields. This information aids in effective resource allocation and land management, allowing farmers to optimize inputs, plan harvesting operations, and improve overall farm profitability.

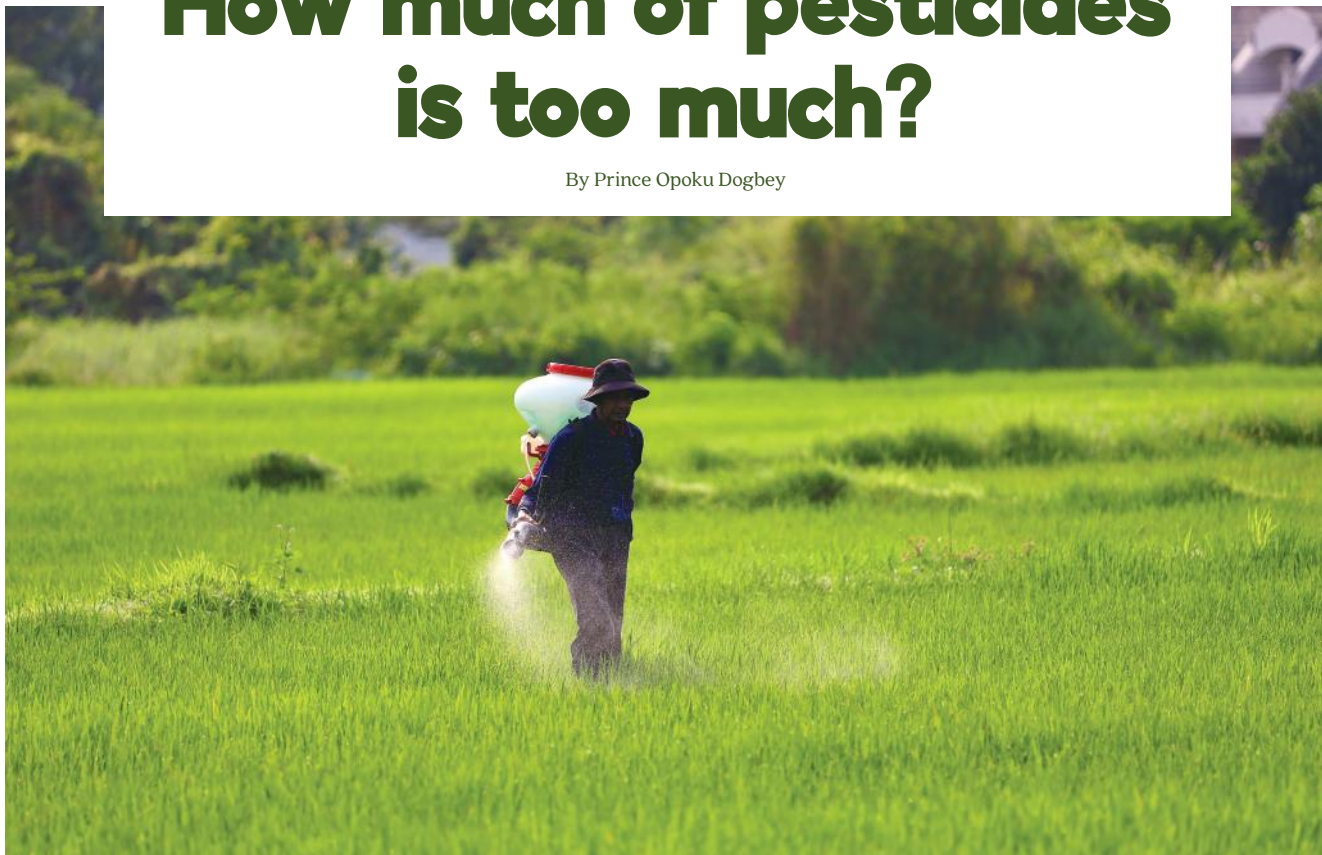
The integration of remote sensing data with Geographic Information Systems (GIS) provides spatial analysis capabilities, allowing farmers to map and monitor field variability, implement site-specific management practices, and optimize the distribution of resources accordingly.

In conclusion, remote sensing technology has become an indispensable tool in modern agriculture. Its ability to provide real-time, accurate, and comprehensive information about crop health, soil conditions, and environmental factors enables farmers to make data-driven decisions, enhance productivity, reduce input wastage, and promote sustainable farming practices. Remote sensing empowers farmers to maximize yields, minimize environmental impact, and navigate the complexities of modern agriculture with greater efficiency and precision.



How much of pesticides is too much?

By Prince Opoku Dogbey



The question of how much pesticides is too much is a matter of great concern in modern agriculture. Pesticides play a crucial role in protecting crops from pests, diseases, and weeds, ensuring optimal yield and food security. However, the excessive and indiscriminate use of pesticides raises important environmental and health considerations.

While pesticides are designed to target specific pests, their impact extends beyond the intended targets. The overuse of pesticides can lead to the accumulation of harmful residues in soil, water bodies, and food products, posing risks to ecosystems and human health. Prolonged exposure to high pesticide levels has been linked to various health issues, including respiratory problems, neurological disorders, and even certain cancers.

Striking a balance is essential. Integrated Pest Management (IPM) practices promote the judicious use of pesticides, integrating alternative pest control methods, such as biological control and crop rotation. By adopting IPM strategies, farmers can minimize pesticide reliance, reduce environmental contamination, and protect beneficial organisms.

Regulatory bodies play a critical role in establishing pesticide usage guidelines and safety standards. Strict monitoring, education, and awareness campaigns are necessary to ensure that farmers understand proper pesticide handling, application techniques, and adhere to safety precautions.

In conclusion, the question of how much pesticides is too much is complex. It demands a comprehensive approach that encompasses sustainable farming practices, robust regulations, and continuous research and innovation in pest management. By striking a balance between pest control and environmental and human health concerns, we can cultivate a safe and sustainable agricultural landscape for present and future generations.

Nigeria's Wheat production seen rising 42%

By Jessica Meledi

Nigeria will see a 42 percent rise in wheat production between July 2023 and 2024 owing to a competitive guaranteed price agreed between farmers and millers, a recent United States Department of Agriculture (USDA) grain report said.

The report stated that the Flour Millers Association of Nigeria (FMAN) signed a memorandum of understanding with the Wheat Farmers Association of Nigeria (WFAN) to purchase wheat at a competitive price.

This is one of the other reasons why Nigeria's wheat production is expected to rise from 110,000 metric tonnes (MT) in 2022–2023 to 156,000 MT in the 2023–24 market year, according to the USDA.

"FMAN and WFAN will arrive at the determining price through an agreed markup plus the cost of production," the report said. "The MOU assures a ready market for wheat," it added.

In addition, FMAN aims to engage six certified seed companies to produce sufficient improved wheat seeds to plant 10,000 hectares (ha) in both the dry and wet seasons in 2023–24. The project will also provide input loans to 4,300 farmers in seven wheat-producing states: Kano, Jigawa, Sokoto, Kebbi, Zamfara, Bauchi, and Kaduna.

Meanwhile, the Federal Ministry of Agriculture considers intercropping an effective system for increasing wheat production. As a result, farmers are increasingly adopting the rice-wheat intercrop system in northern Nigeria as traditional dry-season rice farmers switch to cultivating wheat and rice on the same plot of land.

Also, the government aims to cultivate 250,000 ha of wheat during the 2023–24 cropping season as part of its wheat self-sufficiency drive.



Did you know that one acre of potatoes will produce about 52,000 servings of French fries?



Rambutan

Rambutan contains various antioxidants, such as vitamin C, flavonoids, and phenolic compounds, which help neutralize harmful free radicals in the body.

Agriculture's Economic Impact: Nurturing Growth and Prosperity

Agriculture plays a pivotal role in the global economy, serving as a vital sector that not only ensures food security but also contributes significantly to economic growth, employment, and overall development. In this article, we will delve into the symbiotic relationship between agriculture and the economy, highlighting the key aspects of agriculture's economic impact and exploring its potential for fostering growth and prosperity.

The Backbone of the Economy

Agriculture serves as the backbone of many economies worldwide, particularly in developing countries where it remains a primary source of livelihood for a significant portion of the population. The sector encompasses a wide range of activities, including crop cultivation, livestock rearing, fisheries, and forestry, all of which contribute to the overall economic fabric.

Job Creation and Employment

Agriculture is a labor-intensive sector, offering substantial employment opportunities, particularly in rural areas. From small-scale family farms to large agribusiness enterprises, agriculture provides jobs along the entire value chain, from production to processing, marketing, and distribution. By generating employment, agriculture helps alleviate poverty, reduce inequality, and enhance social stability, ultimately boosting economic prosperity.

Contributing to National Income and Trade

Agricultural products, both raw and processed, are significant contributors to a country's national income and export earnings. Successful agricultural practices can lead to surplus production, enabling countries to meet domestic demands and participate in international trade. By exporting agricultural commodities, countries can generate foreign exchange, stimulate economic growth, and improve their balance of trade.

Supplying Food Security

Ensuring food security is a critical aspect of agricultural development. By producing an adequate and diverse range of food products, agriculture safeguards a nation's ability to feed its population, reducing dependence on costly imports and vulnerability to market fluctuations. A robust agricultural sector with efficient distribution networks enhances food accessibility and affordability, contributing to overall economic stability.

Stimulating Rural Development

Agriculture often serves as the cornerstone of rural development, promoting infrastructure development, social services, and economic diversification in rural areas. Investments in irrigation, road networks, storage facilities, and education create an enabling environment for agricultural activities. The resulting growth in rural economies improves living standards, reduces migration to urban areas, and fosters balanced regional development.

Technological Advancements and Innovation

The agricultural sector continues to witness advancements in technology and innovation, driving productivity gains, efficiency improvements, and sustainable practices. Innovations such as precision agriculture, hydroponics, biotechnology, and farm automation enhance yields, reduce resource consumption,

"Innovations such as precision agriculture, hydroponics, biotechnology, and farm automation enhance yields, reduce resource consumption,

Purple Power Parfait

By Nana Ama Oforiwaa Antwi

Do you love trying new recipes or just a lover of the color purple, then try this new Purple Power Parfait by Natalie.

INGREDIENTS

- 1 medium purple yam
- 1 ripe banana
- ½ teaspoon of vanilla extract
- ¾ cup of non-dairy milk
- 1-2 table spoon of maple syrup

TO DECORATE

- Coconut Whipped Cream
- Freeze dried blueberries
- Pretty purple flowers

INSTRUCTIONS

Bake and peel the yam and allow it cool.

Blend together with all other ingredients in a blender or food processor till smooth.

Pour into two jars.

Top each jar with a dollop of coconut whipped cream and garnish with blueberries and flowers.

Enjoy immediately!

Second Phase of PFJ to be launched in July- MoFA

By Nana Ama Oforiwaa Antwi



The Minister of Food and Agriculture, Honourable Bryan Acheampong, has announced that the second phase of the Planting for Food and Jobs (PFJ) initiative will take off this July. According to him, the second phase will focus more on large-scale farming rather than small-scale farming to transform the agricultural space in Ghana to enable its food security target.

He further mentioned that the five-year plan will be implemented in collaboration with Chiefs to ensure the availability of lands for the program.

“President and National House of Chiefs are going to meet to plead with them to allocate and designate lands as commercial farming areas for Ghana. That is the only way we can measure our product”, he added.

He therefore urged the public to opt for a minimum of 5-acre lands as this new phase will grant direct support from fertilizer suppliers, improved seeds, technical support and a ready market for farmers.

“When you go into large -scale commercial farming all these factors(insurance) come to play. With the new system whatever you produce Ghana Commodities Exchange will buy,” he said.

The Planting for Food and Jobs initiative was introduced in 2018 and its funds allocation for 2023 is GH¢614 million Ghana cedis, a 7.5% increase from last year’s.

This year, GH¢53 million out of the amount allocated will be spent on capital expenditure, with the remaining amount allocated for goods and services including subsidies for seeds, fertilizer and other initiatives associated with the programme.

Meanwhile, some critics are of the view that the Planting for Food and Jobs is not yielding the expected results as the country till imports food and raw materials.

Thus, Member of Parliament for Keta, Kwame Dzudzorli Gakpey urged the Ministry to “revisit the policy” to be able to achieve the necessary impact.

The New Greenleaf

I stretched my tiny limbs and sprung out of my warm cradle

Just then something wet touched my forehead

It was a huge beast showering me from head to toe with a water can

He reached for my little fingers, and did what I learnt to be a handshake

He welcomed me home and promised to be with me through thick and thin

as long as I didn't die on him, Die? but I just got here I replied

He didn't seem to have heard me and walked away

While living me to dry

I looked to my left and saw a couple of other babies

Looking just like me with little fingers stretched upwards and standing up-

right. Looking so young, green and fresh

Hello? I waved my little petals, assuming we were siblings, where are our

parents? Can you hear me? I asked

Hush! child, I heard

Turned ever slowly to see a green older one of us, with her fruits of the

womb clinging to her for dear life

They hadn't come out of their cradle yet they were but a bud on their mother

I followed suit and stretched my little petals upwards; I felt the warmth and

knew it was familiar,

The one I always felt in my cradle, just up close this time

At once everything made sense

At once I knew I was home.

— Poem by Nana Ama Oforiwaa Antwi



Navigating the impact of climate change in Agriculture

By Nana Ama Oforiwaa Antwi

Climate change in recent times has posed a significant threat on a number of things including agriculture. The irregularities in weather patterns threatens global food security and agricultural sustainability.

The rise in temperature causes a shift in rainfall patterns and extreme weather events to become more frequent which sometimes results in the loss of crop yields and destruction of farms. It also leads to heat stress in crops and may cause changes in growing seasons.

As a result, farmers are now tasked with implementing strategies to allow them mitigate the issues posed by climate change. One key strategy for adapting to climate change is crop diversification. Cultivating a variety of crops with different climate adaptability will help farmers reduce vulnerability to extreme weather events. Cultivating drought-tolerant varieties, flood-resistant crops, and heat-resistant varieties offer resilience in the face of changing climatic conditions.

Precision farming techniques and technology play a crucial role in adapting to climate change. Techniques like remote sensing, satellite imagery, and data analytics enable farmers to monitor and manage crop health, optimize irrigation and fertilization practices, and predict weather patterns. One known characteristic of climate change is prolonged droughts, thus, employing efficient water management practices will curb issues caused by prolong droughts and increase crop resilience.

Most farmers neglect the needs of the soil despite it being the essential part of crop production, they cultivate for years without indulging healthy soil management practices to help the soil replenish its nutrients. Integrating trees and shrubs into agricultural landscapes provides multiple benefits such as windbreaks, erosion prevention, and carbon sequestration.

Also, practices such as cover cropping, conservation tillage, and organic matter management enhances water retention, nutrient availability, and overall crop productivity.

In the face of several adverse challenges in the agricultural sector, adapting agriculture to climate change will help ensure food security and sustainable farming practices.

TODAY'S TIPS

Monocropping, the practice of cultivating a single crop on a large scale, has become a prevalent method in modern agriculture. While it offers certain advantages in terms of efficiency and uniformity, monocropping also poses challenges such as increased susceptibility to pests, soil degradation, and reduced biodiversity.

CROP ROTATION

Implementing crop rotation is crucial for maintaining soil health and minimizing pest and disease pressures in monocropping systems. Rotate crops with different nutrient requirements, growth patterns, and root structures to break pest and disease cycles, prevent nutrient depletion, and improve soil structure.

COVER CROPPING

Integrate cover crops into monocropping systems during fallow periods or between main crop cycles. Cover crops help improve

soil fertility, prevent erosion, suppress weeds, and enhance beneficial insect populations. Select cover crops based on your region, soil type, and specific goals.

PEST MANAGEMENT

Develop an integrated pest management (IPM) plan to mitigate pest issues in monocropping systems. Emphasize cultural practices such as crop rotation, proper sanitation, and habitat diversification to reduce reliance on chemical pesticides. Regularly monitor crops for pests and apply targeted treatments when necessary.

SOIL CONSERVATION

Prevent soil degradation and erosion by implementing soil conservation practices. Use appropriate tillage techniques, such as reduced tillage or no-till, to preserve soil structure and moisture content. Apply organic matter amendments and utilize cover crops to improve soil health

Biofertilizer and its impact on food crops and soil health

By Jessica Meledi

Population growth threatens food security, causing ecosystem degradation, climate change, soil erosion, and biodiversity loss. Natural processes can reduce reliance on agrochemicals.

Biofertilizers are living microbes that enhance plant nutrition, either by mobilising or increasing nutrient availability in soils. Various microbial taxa, including beneficial bacteria and fungi, are currently used as biofertilizers as they successfully colonise the rhizosphere, rhizoplane, or root interior. Biofertilizers have potential but have not yet been replaced by chemical fertilisers in agriculture.

Biofertilizers improve soil fertility, crop health, and production by enhancing microbial activity and mobilising nutrients for targeted plants. Biofertilizers have the potential to impede the nitrification process for a long period while improving the fertility status of the soil.

They are among the vital constituents of Integrated nutrient management (INM) strategies for meeting both the soil's productivity and sustainability and at the same time keeping the environment safe by being pollution-free,

economically viable, and a source of renewable nutrients to the plants to augment synthetic fertilisers in the sustainable production system. It has been documented that the impact of bio-fertilisers for yield improvement ranges between 35% and 65%. However, to potentially exploit the benefits of biofertilizers based on the consistency of their performance, these require frequent research in different dimensions due to the complex biological interactions among the hosts.

The use of bio-fertilisers, therefore, supplies and enhances the productivity per area in a comparatively short time, consumes smaller amounts of energy, reduces contamination of soil and water, increases soil fertility, and encourages antagonism and biological control of phytopathogenic organisms.

Nevertheless, food security requires balanced fertilisation in agricultural soils, utilising organic and inorganic sources, and practising 4R management strategies for sustainable productivity and adequate food supply for emerging populations.



L'utilité du caoutchouc en Afrique

Par Prince Feliho

Le caoutchouc est utilisé dans l'industrie de la construction pour fabriquer des joints et des garnitures pour les tuyaux et d'autres équipements. Il est également utilisé dans la production de latex, qui sert à fabriquer des gants, des préservatifs et d'autres fournitures médicales.

L'une des utilisations les plus importantes du caoutchouc en Afrique est la production de pneus. Les pneus sont utilisés dans une large gamme de véhicules (voitures, les camions et les motos). Dans de nombreux pays africains, où les infrastructures de transport sont encore en cours de développement, la demande de pneus est élevée et la production de caoutchouc est un élément important de l'économie.

Outre son utilisation dans les pneus, le caoutchouc est également utilisé dans l'industrie de la construction. Il sert à fabriquer des joints et des garnitures pour les tuyaux et d'autres équipements. Cela est particulièrement important dans les régions où l'eau et d'autres ressources sont rares, car cela permet de préserver ces ressources.

Le caoutchouc est également un matériau important dans l'industrie médicale. Il est utilisé pour fabriquer du latex, qui sert à fabriquer des gants, des préservatifs et d'autres fournitures médicales.

Enfin, le caoutchouc est utilisé dans la production de nombreux produits de consommation. Il sert à fabriquer des jouets, des ballons et d'autres articles très appréciés des enfants et des adultes. Il s'agit d'un élément important de l'économie, car il fournit des emplois et des revenus à de nombreuses personnes.

Malgré ses nombreux avantages, la production de caoutchouc en Afrique est confrontée à de nombreux défis. L'un des plus importants est le manque d'investissement dans les infrastructures et la technologie. De nombreuses plantations d'hévéas sont situées dans des zones reculées, ce qui rend difficile le transport du caoutchouc vers les marchés. En outre, de nombreuses plantations utilisent encore des technologies dépassées, ce qui rend difficile la production d'un caoutchouc de haute qualité.

Aujourd'hui, de nombreux pays africains s'efforcent de développer leur propre industrie du caoutchouc, aussi, grâce à des entreprises comme TIAST GROUP, qui accompagnent de A à Z dans le développement d'industries agroalimentaires.



Le projet Benkadi : former les agriculteurs à la gestion durable des terres grâce au compost

Par Pavel Chamabe

Plusieurs agriculteurs des villages situés près des parcs nationaux ont récemment terminé une formation de deux jours sur la gestion durable des terres grâce à l'utilisation du compost.

Ces agriculteurs participent depuis 2022 au projet Benkadi, mené par la Convention de la société civile ivoirienne (CSCI) et soutenu par l'Agence nationale d'appui au développement rural (ANADER), avec un financement du ministère des Affaires étrangères des Pays-Bas.

L'objectif du projet est de former les agriculteurs à produire un engrais naturel, le compost, afin de les dissuader d'utiliser des engrais chimiques qui sont réputés néfastes pour la terre à long terme. Selon les experts, le compost possède des vertus qui permettent de résister aux effets néfastes des changements climatiques sur l'agriculture. Il permet de nourrir efficacement les sols agricoles et d'obtenir de bonnes récoltes.

Les 816 agriculteurs des 29 villages riverains des parcs nationaux ont produit cinq tonnes de compost à l'issue de leur formation, et il est maintenant essentiel de maîtriser son utilisation. "Une fois de retour dans vos villages, vous devrez partager cette formation avec les autres agriculteurs... Vous êtes venus apprendre pour que cela profite à tout le monde chez vous", a conseillé Mahamadou Kouma, président du conseil d'administration de la CSCI.

Benkadi est un projet axé sur la résilience climatique. Grâce à ce projet, la CSCI s'engage dans un plaidoyer visant à changer les pratiques agricoles, en particulier en ce qui concerne la préservation des zones protégées. L'objectif est de sensibiliser les agriculteurs à l'importance de préserver ces aires naturelles tout en améliorant leur propre productivité grâce à des méthodes durables.

En formant les agriculteurs à l'utilisation du compost,

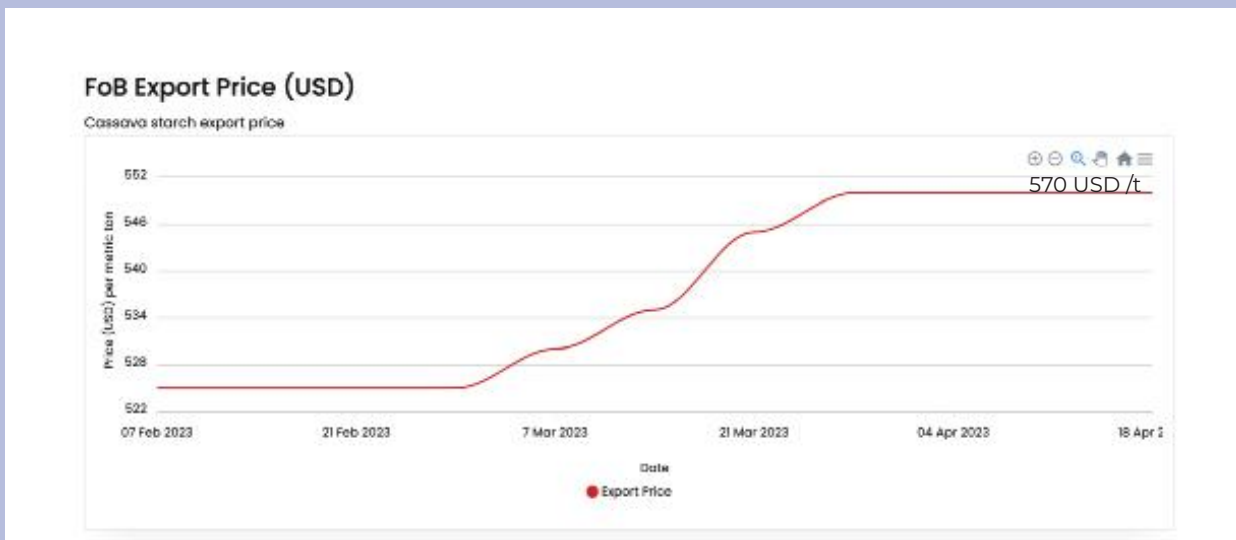
le projet Benkadi contribue à réduire la dépendance aux engrais chimiques et à promouvoir des pratiques agricoles respectueuses de l'environnement. Il s'agit d'un pas important vers la durabilité et la préservation des ressources naturelles, tout en renforçant la résilience des communautés agricoles face aux défis du changement climatique. Grâce à leur formation, ces agriculteurs ont maintenant l'opportunité de partager leurs connaissances avec d'autres membres de leur communauté, contribuant ainsi à un changement plus large et positif dans la région.



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.

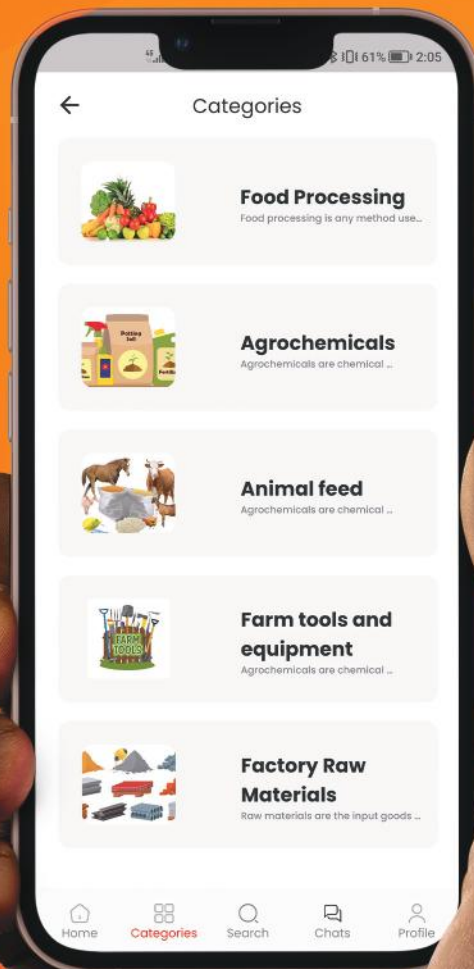
Harvesting time: The harvesting period is a great determinant for the price of cassava. The abundance and scarcity of cassava affect the price. The prices of fresh cassava roots often rise in November and December of every year as cassava is easily harvested during the rainy season. During the harvesting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



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