

African Farming

and Food Processing

Europe €14.50 - Ghana C1.3 - Kenya KSH150 - Nigeria N200 - South Africa R18 - UK £9 - USA \$15

Harvesting

equipment innovations

Egg production

in Africa

Biopesticides

for fall armyworm



Optimum feed performance. p14





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Image credit: vadim/Adobe Stock



Arrival of a new flock.p10



Smart farming ecosystem. p31

African Farming

and Food Processing

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Farming Calendar 2020

SEPTEMBER

28 Sept-01 Oct Biocontrol Africa VIRTUAL
www.informaconnect.com/biocontrol-africa

OCTOBER

28-30 Agritec Africa NAIROBI
www.agritecafrica.com

NOVEMBER

11-15 EIMA-The Digital Preview DIGITAL
www.eima.it/en

Readers should verify dates and location with sponsoring organisations, as this information is sometimes subject to change.

ECOWAS hands over sheep kits and cattle feed to households in Kebbi State

THE ECONOMIC COMMUNITY of West African States (ECOWAS), through its Regional Agency for Agriculture and Food has handed over sheep kits and cattle feed to households in Kebbi State of Nigeria.

The donations event took place on 8 August in Kangiwa which is in the Arewa local government area of the state. The aim is to bring succour to the vulnerable families whose livelihoods as agro-pastoralists are tied to the farms of the area.

The project which covers Nigeria, Senegal, Guinea-Bissau and the Gambia, aims to contribute to securing the livelihoods and reducing the vulnerability of livestock breeders and agro-pastoralists in deficit.

Climate-resilient water and food security in Sudan

THE GREEN CLIMATE Fund approved US\$25.6mn in new funding for a climate resilience project in Sudan to promote agriculture, health as well as food and water security.

The project will support around 1.2 million people from subsistence farming and nomadic pastoralist communities across nine states, with an additional 2.5 million people set to benefit indirectly.

The five-year project led by Sudan's Higher Council for Environment and Natural Resources, with support from the United Nations Development Programme (UNDP), will provide training and equipment, rehabilitate land for sustainable use, introduce new climate-resilient practices, and construct infrastructure to improve access to clean water.

Afreximbank funding to drive agricultural productivity

THE AFRICAN EXPORT-IMPORT Bank (Afreximbank) has approved a US\$400mn global credit facility agreement for the Export Trading Group (ETG), integrated agricultural conglomerates in Africa.

The agreement will allow the ETG to continue to play its vital role in the agri-foods supply chain of effectively connecting African farmers to markets, as well as expanding access to critical inputs to boost agricultural productivity in a continent with tremendous but unrealised potential.

Afreximbank's facility will address major bottlenecks faced by African agricultural exporters, aggregating large amounts of produce to provide access to regional and international markets for small and medium-sized enterprises.

Expanding ETG's work in this area will reduce post-harvest losses by improving access to yield-enhancing inputs and more robust networks to deliver regional and international market output while helping to boost African farmers' scale and productivity. It will further support the vital flow of food supplies throughout the continent amid the COVID-19 pandemic disruption.

West African countries sharing pesticides to combat desert locusts

WITH DESERT LOCUSTS ravaging large swathes of East Africa in recent months, concerns have been rising that swarms could turn their sights westward and invade countries such as Chad, Niger, Mali and Mauritania.

The FAO anticipated this risk in an updated Desert Locust Crisis Appeal launched in May and engaged with governments to mobilise surveillance and control teams across West Africa to preempt a potential invasion of the crop-devouring pest.

An important part of FAO's anticipatory action in West Africa and the Sahel – meant to prevent a further drop in food security for millions of people already struggling to feed themselves across the region – is to preposition the pesticides needed to stop swarms in their tracks.

If conditions do drive the locusts to move west, they will move quickly and countries in the region need to have the supplies on hand now, before that threat might materialise.

This is the reason why the FAO, through its regional locust control commission in the Western region, is involving countries in a



The FAO has engaged with governments to mobilise surveillance and control teams across West Africa.

process called pesticide triangulation. In essence, the commission is moving stocks from low-risk countries to high-risk countries in the region.

"It's been encouraging to see the countries of the region working together so closely to prepare for a potential desert locust infestation and to share their resources so that high-risk

countries are ready to act rapidly if swarms invade," said Coumba Sow, FAO's resilience coordinator for West Africa and the Sahel.

"We've seen in East Africa how quickly locusts can affect an entire region, so acting early and collectively is vital to protecting the food security and livelihood of millions of people in West Africa and the Sahel."

Image Credit: Antomm/Adobe Stock

Ghana's President inaugurates Elmina fishing project

GHANA'S PRESIDENT NANA Addo Dankwa Akufo-Addo inaugurated the construction of the Elmina Fishing Port Project.

According to the President, when the Elmina Fishing Port Project is completed, it will provide a big boost for the fishing industry in Elmina, an important sector of the country's economy.

With about 60% of the nation's annual protein derived from fishing, and with fishing employing about 20% of the nation's work force, the President explained that the decision is taken to continually improve the infrastructure and conditions of the fishing industry to help improve the catch, cut down post-harvest losses and reduce fish imports in the medium to long term.

The Elmina Fishing Port Rehabilitation Project was originally set to be financed by the CDB Loan from China, however, the government has secured separate funding from Belgium for the construction of a new fishing Port.

During his tour of the western region last year, at Axim and Moree, the president symbolically inaugurated the construction of 11 modern landing sites along the coast. The other nine beneficiary towns include Moree, Mumford, Winneba, Senya Beraku, Gomoa Fete and Elmina in the Central region, Teshie and James Town in the Greater Accra region, and Keta in the Volta region.

The work is progressing steadily at all the locations, with the sites at Axim, Dixcove, Senya Beraku and Gomoa Fetteh scheduled to be completed by the end of the year.

The fishing industry in Ghana is based on resources from the marine and inland (freshwater) sectors and coastal lagoons, according to the FAO.

Study says Kenyan farmers are struggling

NINE OUT OF 10 Kenyan farmers said their financial situation has worsened during the coronavirus pandemic, according to data released by 60 Decibels, a tech-enabled impact measurement company.

The report found that Kenyan farmers are economically squeezed by decreasing demand for their produce and livestock, falling prices and rising raw material and supply costs.

The situation has rapidly deteriorated for many Kenyan farmers," according to Venu Aggarwal, agriculture director at 60 Decibels, Inc. "Since agriculture dominates the Kenyan economy and employs approximately 75% of Kenya's workforce, the ability of farmers to weather the pandemic storm is vital to Kenya's future economic outlook."

According to the research, Kenyan farmers are being forced to make adjustments to cope with the economic fallout of the pandemic. The report added that approximately 90% of farmers have reduced the number of people hired to work on their farms. As a result, many farmers said they and family members are spending more time working on their farms.

These adjustments are critical because of the decreasing non-farm incomes for Kenyan farmers and rising food prices. In at least one source of income, 17% of farmers reported a decline compared to this time last year. Only 15% of farmers currently have income from a wage-earning job, compared to 25% in 2019.

According to 60 Decibels' Vulnerability Index, as many as one-third of Kenya's agricultural households are in economic distress. 60 Decibels' research results are based on a telephone survey completed across June and July 2020.

Bunge Loders Croklaan opens shea butter processing plant in Ghana

BUNGE LODERS CROKLAAN (BLC), Bunge Limited's specialty oils and fats business, has opened shea butter processing facility in Tema, Ghana, with the launch of the Where Life Grows campaign, which celebrates the company's efforts to build a resilient and sustainable shea supply chain in Africa.

Aaron Buettner, president BLC, said, "Our latest investment in Ghana plays a critical role in strengthening BLC's global infrastructure for processing and supplying high-quality shea products to our customers around the world, while bolstering the entire ecosystem of regional crushers and local shea collectors in the West African region.

"The facility allows us to meaningfully support and empower the local shea communities through the transfer of knowledge of value-adding processes and by investing in local skills development. We are proud to join forces with local communities to help build and advance the African shea industry together."

Antoine Turpin, general manager West Africa at BLC, stated, "The facility is a fully automated solvent fractionation plant that processes raw shea butter made from locally collected and crushed shea nuts.

"Currently, the facility employs 73 people



Image Credit: Juanamari Ganzalier/Adobe Stock

The company has launched the Where Life Grows campaign to protect and advance the shea supply chain in West Africa

from mostly the local community. Its strategic location not only allows for a more efficient production process but also delivers on BLC's commitment to building a more sustainable supply chain for shea."

The Where Life Grows campaign, a tribute to the long-standing shea legacy in the region,

is designed to celebrate BLC's ongoing commitments and efforts within its shea sustainability programme, set up three years ago with the objective to empower shea collecting women, create socio-economic value in their communities, and conserve and regenerate the shea landscape in the region.

Small-scale farmers in Africa to receive agricultural advice through mobile phones

THE INTERNATIONAL FUND for Agricultural Development (IFAD) has announced to help 1.7mn small-scale farmers in Kenya and Nigeria with personalised agricultural advice through their mobile phones, to improve their incomes, food security and resilience to economic shocks caused by COVID-19.

The initiative is one of the 11 proposals to receive the initial funding under IFAD's Rural Poor Stimulus Facility (RPSF), and is a result of a new partnership between IFAD and Precision Agriculture for Development, a global non-profit organisation co-founded by Nobel Prize winning economist Michael Kremer.

Farmers will receive low-cost, customised advice using mobile technology, to improve on-farm practices, input utilisation, pest and disease management, environmental sustainability and access to markets.

IFAD's RPSF was launched recently by IFAD's UN Goodwill Ambassadors, Idris Elba and Sabrina Dhowre Elba, to mitigate the effects of the COVID-19 on the livelihoods of rural people and improve their food security.

Funding worth US\$11.2mn has been received from the RPSF for these first 11 initiatives. In addition, governments and implementing partners will contribute US\$5.2mn through co-financing to benefit close to 6.7mn small-scale farmers in developing countries, adversely impacted by the economic slowdown.

Among the proposals financed, are two regionally



Rural Poor Stimulus Facility (RPSF) is a result of a new partnership between IFAD and Precision Agriculture for Development, a global non-profit organisation.

Image Credit: Courage/Adobe stock

focused initiatives in Asia and sub-Saharan Africa that will provide emergency livelihood support through local farmers' organisations, and eight country-level initiatives in Afghanistan, Bangladesh, Cambodia, Ethiopia, Nepal, Nigeria, Palestine and Rwanda.

The majority of these initiatives, which are embedded in national COVID-19 response

strategies, will be implemented through IFAD project teams and other strategic partners to ensure fast delivery.

The livelihood support initiatives include providing seeds and fertiliser in time for planting season, assisting with storage and market transport, supporting local banks to provide credit, and establishing digital platforms for information,

training, banking and marketing services. The initiatives will draw on existing targeting data to identify and provide assistance to the most at-risk groups.

A second round of funding, which includes 22 initiatives and amounts to US\$13.8mn, is included in the plans. More funding from contributing partners is expected follow later in the year.

Ghana's cocoa output set to grow in 2020-2021

GHANA'S COCOA OUTPUT is set to be of around 900,000 tonnes in the 2020-2021 season, which is up 5.8% from the forecast for 2019-2020, according the Cocoa Board (COCOBOD) parliamentary report.

As cited in Reuters, the COCOBOD aims to raise US\$1.3bn in syndicated loans to fund the purchase of cocoa during the 2020-2021 season from a consortium of banks and financial institutions, the government being the guarantor.

Cocoa plays an important role in the economy of Ghana. The cocoa industry employs around 800,000 farm families spread over six of the 10 regions of Ghana. The crop generates about US\$2bn in foreign exchange annually and is a major contributor to government revenue and GDP.

Agri insurance platform in southern Africa

AGRITASK, ONE OF the leading global developers of a holistic agronomic operations platform, and Hollard Mozambique, a premier insurance group in Mozambique, have partnered to provide digital solutions to local stakeholders offering crop insurance for farmers in their respective value chains.

To enable the use of high-resolution data at a national scale, the platform creates a village-based geographical clusterisation for the whole country and will integrate additional data layers used to enhance risk assessment. Insured farms will be registered and mapped onto the platform, offering the real-time tracking of relevant parameters at each plot and at the portfolio level.

The partnership will include data capturing tens of thousands of smallholders initially, with the expectation that it will increase ten-fold.

IITA, EAGC sign MoU to produce aflatoxin-free grains for health and trade

THE INTERNATIONAL INSTITUTE of Tropical Agriculture (IITA) and the Eastern Africa Grain Council (EAGC) have signed an MoU to work together to tackle aflatoxin contamination of grains in the region.

Aflatoxin is a highly toxic chemical produced by a natural fungus, known as the *Aspergillus flavus*. The fungus is found in soils, and when not properly dried and stored, it attacks important crops such as maize and groundnut while in the field and storage.

Aflatoxin also causes loss in revenues from trade due to contamination of products that do not meet the standards required. According to the Partnership for Aflatoxin Control in Africa (PACA), Africa is losing an estimated US\$670mn annually due to aflatoxin contamination in the rejected export trade.

As per the agreement, IITA, a not-for-profit research institution that generates innovations to address major agricultural challenges in Africa, and EAGC, a member organisation that brings together major players across the eastern and southern African grain value chain, will promote, among others, best practises and proven aflatoxin management technologies.

This will include promoting the use of Aflasafe, an innovative, safe, and natural product as part of an integrated aflatoxin management strategy that dramatically reduces aflatoxin contamination in maize and groundnuts.

Originally developed by the US Department of Agriculture-Agricultural Research Service (USDA-ARS), the technology is widely used in the US. IITA has successfully adapted this technology for use in many African countries, in partnership with the USDA.

Symrise, Kellogg Company achieve 2020 goal of 100% responsibly sourced vanilla

KELLOGG COMPANY AND Symrise have partnered in an ambitious three-year project in Madagascar to responsibly source 100% of Kellogg's vanilla by 2020.

According to Symrise, the project enjoys continued success based on a shared collective commitment with a strong commitment to the vanilla farming communities of Ankavanana, Madagascar, enabling farmers and their families to work together towards common goals.

"The programme drives impact directly at the source of vanilla farming via our integrated supply chain," said Yannick Leen, global competence director Vanilla, Symrise. "The partnership highlights the value of our active and collaborative year-round presence in this unique region. In turn, it ensures the highest quality vanilla, brings certainty and creates shared value for farmers, as well as ensuring the sustainability of supply."

Kellogg joined the growing 'Symrise and Friends' family of private sector partners in 2019. They work together to deliver synergistic benefits to the vanilla farming communities and the biodiverse environment in which they live.

"Responsibly sourcing our ingredients means making a difference from the very start. That's why we're working closely with the farmers who grow them," said Kellogg company chief sustainability officer Amy Senter.



Image Credit: GCapture/Adobe Stock

The holistic approach of the company includes community-based training and education.

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OPDAG Council of Patrons inaugurated in Ghana

OIL PALM DEVELOPMENT Association of Ghana (OPDAG) has inaugurated its Council of Patrons in Accra.

The council is chaired by Nana Otuo Serebour II who is serving as the chairman of the Council of the State.

The four main objectives of OPDAG include protecting the environment (ensuring the adaptation and implementation of sustainable practices), increased productivity (championing measures to improve yield of smallholders and implement sustainable agricultural practices), land access (making land acquisition easy and attractive for

investors) and trade malpractices (halting the negative effect of imported vegetable oil on the refining sector).

The president of OPDAG Samuel Avaala said that the association has launched a strategic plan for the 2020-2024 period to improve its governance, administrative structure as well as funding to establish an 'auditable financial management system.'

The plan itself was developed through collaboration and consensus building with veritable representatives from actors along the oil palm value chain. It identifies and captures all information including the

strength, weakness, opportunities, and threats of the association and the entire oil palm sector. The strategic plan is expected to improve the membership base and service delivery as well as internal and external communication.

OPDAG was launched in 2015 to help address the challenges facing the oil palm sector such as weak palm oil value chain integration, inadequate funding and modern technology, hindrances to land acquisition, and many more. It is committed to socially responsible and ecologically sustainable production of palm oil in Ghana.

Agri-food system transformation in Africa

THE FOOD AND Agriculture Organisation's director-general QU Dongyu has called for sustained and strategic investments to accelerate an agri-food system transformation in Africa in the face of an impending food crisis driven by COVID-19.

He was addressing an online tripartite meeting of African Ministers responsible for agriculture, trade and finance - the first meeting of its kind in response to the COVID-19 emergency, convened by the African Union Commission with technical support from the FAO.

The director-general welcomed the collaboration between the three portfolios, saying the challenges stemming from the pandemic are multi-dimensional, complex and intertwined and require a holistic, comprehensive and



According to QU, the solution lies in taking bold actions through pursuing radically changed approaches to transforming food systems.

coordinated response by multiple stakeholders and partners.

Around 80 ministers and other representatives from more than 50 countries attended the meeting, as well as representatives from (in alphabetical order) the African Development Bank, the European Commission, the International Fund for Agricultural Development (IFAD),

the private sector, the United Nations Economic Commission for Africa (UNECA), the World Bank, the World Food Programme and other partners.

COVID-19 cases, hunger, rising in Africa

Cases of COVID-19 have been reported in 54 African countries. Across the continent, more than

850,000 cases have been recorded, and more than 17,000 deaths.

Director-general QU told participants that several African countries are on the frontline of an impending hunger crisis driven by COVID-19. In these hotspot countries, high levels of food insecurity and acute hunger were stark realities even before COVID-19 because of overlapping shocks including transboundary pests and diseases, conflicts and climate extremes such as droughts and floods.

According to QU, the solution lies in taking bold actions through pursuing radically changed approaches to transforming food systems, making healthy diets affordable and driving progress towards ending poverty, hunger and all forms of malnutrition.

Arrigoni unveils agrotexiles solutions for better quality of fruit

ARRIGONI HAS LAUNCHED PRISMA thermo-reflective agrotexiles and **BIORETE** insect screens solutions, particularly for melon and watermelon.

Field tests conducted with Prisma at an Italian manufacturer have shown efficacy in controlling temperature, with a consequent reduction in water consumption and better yield of plants.

High summer temperatures, in particular, represent a problem for those who produce late melons. Prisma, a range of protective screens that optimise light diffusion while ensuring temperature control, is ideal for controlling temperatures under tunnel. Conducted at "La Palazzina" farm in Gualtieri (RE), specialised in melons, watermelons and pumpkins, Arrigoni field tests shown that these screens allows the production of late melon, thanks to reduced temperatures under cover, this solution proved to reduce enormously melon plants stress

during the warmer months.

In addition, the use of these agrotexiles allows to cultivate without the need to whitewash the plastic film during summer, allowing it to remain transparent for winter cycles.

For watermelons, however, one of the biggest threats comes from aphids. For total protection, Arrigoni offers the Biorete Air Plus range, innovative anti-insect screens with low-thickness and high-resistance monofilament.

Aolo Arrigoni, managing director of Arrigoni, said, "The solutions we offer on melon and watermelon, as well as on various other fruit and vegetable crops, go precisely in this direction, reducing the use of chemicals and ensuring a cooler and ideal environment for plants growth. Effectively protected, plants can absorb the most authentic force of nature and with less water consumption."

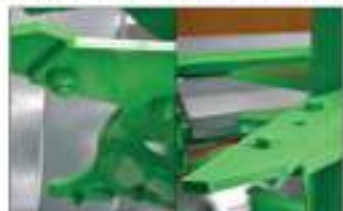
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Teun van de Braak, product manager, Hendrix Genetics, lists out the steps and tasks involved in preparing for the arrival of a new flock of pullets.

Arrival of a new flock



The period of the first 48 hours after housing is critical.

Image Credit: Hendrix Genetics

HOUSING A NEW flock of pullets is a delicate procedure. Transportation is a stressful period, allow the pullets to have enough space and fresh air. Unloading of the pullets should be done as quickly and gently as possible. The right environment needs to be created for the new flock, so they will quickly feel comfortable, which will stimulate them to start producing eggs. The house should provide the following:

- A clean and dry space including the equipment, at a comfortable temperature (an optimum of 18°C is advised but can be hard to achieve in hot climates).
- All repairs should be done prior to the arrival of the new flock. Check if the

nipple lines, drinkers and feeders are working.

- In order to encourage the birds' water intake, drinking water must be clean and fresh when the pullets arrive.
- To improve the birds' appetite, it is better to use meal feeding instead of feeding ad-libitum. As with water, fresh feed should be provided.

The period of the first 48 hours after housing is critical, close supervision and observation are required to ensure the normal behavior of the flock. The following points should be observed:

- The birds should be released close to the drinkers and feeders, try to release them

evenly over the entire poultry house (do not release them just at the door).

- Water consumption – normal drinking habits within six hours after arrival.
- Feed consumption – increasing appetite or feed intake should be observed.
- The behavior of the flock: at first, they will be quiet, but they should gradually become more active and 'talkative' but not frenetic or hyperactive.
- The light intensity must be higher compared to the rearing, make sure they can be easily observed and that they can easily navigate through the new environment.
- Special attention must be given to the birds having difficulty finding the drinking or feeding points. Place these birds close to the drinkers and feeders, or show them how the nipple works.
- When slats are present, too much litter should not be used, as the birds will stay on the litter without going up on the slats or perches during the night.
- At start of lay, floor eggs should be collected several times a day until the level becomes acceptable.
- Maintain the continuous monitoring of the birds' growth by measuring bodyweight weekly. **E**

During the first days, the farm workers should spend time with the laying hens, observing their behavior and monitoring the water and feed consumption. This will allow time for the birds to get used to their caretakers. Inspection of the flock should not be limited to the daytime.

Listening to the birds after turning off the lights is useful – coughing or sneezing, also known as 'snicking', as a result of a respiratory infection can be readily detected when the flock is resting.

Evonik introduces GAA-product GuanAMINO

GUANAMINO SUPPLIES FARM animals with the natural creatine precursor GAA, which provides animals with creatine in the best possible way, improves their performance, ensures optimum nutrient use and therefore returns over feed costs.

“GuanAMINO is the best supplemental creatine source due to its outstanding stability in feed processing and high bioavailability to the animal. Adding GuanAMINO to the feed closes the gap in creatine supply, thereby increasing the efficiency and effectiveness of nutrition and optimising production costs of farm animals,” said Dr Torben Madsen, head of product line sustainable healthy nutrition at Evonik Animal Nutrition.

“With GuanAMINO, we offer our customers the best creatine source and therefore another performance-enhancing solution in our portfolio for sustainable, animal protein-free diets,” added Madsen.

Creatine is vital for vertebrates as it helps ensure a sufficient supply of high-energy, demanding cells, especially muscles. Adding GuanAMINO to animal feed can significantly improve feed conversion in livestock production.

Creatine is formed through GAA methyla-



Image Credit: chayakom/Adobe Stock

GuanAMINO supplies farm animals with the natural creatine precursor GAA.

tion, which is created by the amino acids glycine and arginine. In fast-growing animals, it is estimated that the synthesis of the body

only covers around two-thirds of the daily creatine need required. The remainder must be supplied by adding to the feed.



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There is increasing potential for egg production in Africa. Nawa Mutumweno reports.

Hatching success in egg production

THE SUB-SAHARAN AFRICAN poultry and egg industries have developed considerably over the last decade, increasingly attracting interest from local and international investors, Rabobank highlighted in a recent report.

There has been an acceleration of poultry investments in Africa since 2017, especially in East Africa and parts of West Africa, mainly Nigeria and Ghana.

Nigeria is the biggest market in sub-Saharan Africa, with an ongoing growth of 3-5% predicted for the period 2017 - 2027, making eggs the preferred protein in Nigeria.

In other regions, markets are recovering from a slowdown due to the economic volatility in recent times. Eastern African markets such as Ethiopia, Tanzania, and Uganda especially have shown strong growth.

"The growing demand and modernisation of the supply chain will create additional demand for all input manufacturers, like equipment, animal nutrition, genetics and animal health. Companies in these sectors also need to position themselves to serve Africa's rising demand better," said Nan-Dirk Mulder, senior animal protein analyst at the bank.

According to the OECD-FAO Agricultural Outlook 2016 -2025, positive drivers for growth of the industry in sub-Saharan Africa are population growth – 2.1 billion by 2050 (22% global population); increased urban population (42% by 2025), increased per capita income and growing middle class in urban areas, changing consumers' eating habits – more calories, more proteins (animal source foods) and more processed food and growing access to new information and communication technologies.

East Africa

Governments in the region have made conscious policy changes to incentivise the import of raw materials and ingredients for feed. Countries such as Tanzania and Rwanda have made specific strategies to catalyse growth of their poultry sectors.



Image Credit: Henadz/Adobe Stock

Governments in East Africa have made conscious policy changes to incentivise the import of raw materials and ingredients for feed.

A study undertaken by Wageningen University observed that a majority of poultry farmers in the region are either small or medium-scale farmers. "Collective investments in feed, animal health, knowledge transfer, capacity building, training and access to markets will greatly assist them become better farmers," the Wageningen Livestock Research Report says.

Active players in the market include Homerange Poultry, which continues to connect farmers with quality chicks and further build their capacity through poultry farming training, has introduced Kenya's first Online Comprehensive Poultry Farming Training Module and runs the Homerange Kukupesa Outgrowers Programme.

Brade Gate Poultry has a breeding farm, hatchery, supermarket, a processing plant and feed mill. Nice Hatch Incubators is a leading supplier of egg incubators, feeders, drinkers and other poultry equipment. Its incubators are manufactured using a combination of locally sourced and imported materials so as to reduce the cost of the final product.

Nigeria

A study was conducted in Ogun State a few years ago, to analyse the economics of egg production under two management systems

(deep litter and battery cage). The study showed that both systems exhibited profitable egg production. While battery cage records the higher feed conversion efficiency, deep litter system seemed relatively cost-effective.

Zambia

Secondary production is dominated by smallholder farmers – accounting for 65%, while 35% is by medium, large, commercial and corporate sectors. Poultry has driven the growth of the poultry feed sub-sector – soya beans and grain.

Breeding companies include Hybrid Poultry, Ross Breeders, Tiger Chicks, Copperbelt Chickens and Golden Lay. Feed millers who produce around 320,000 metric tonnes of poultry feed per year include NamFeeds, Choma Milling, Pembe Milling, Tiger Animal Feeds, Novatek (Zambeef), Nutrifeds and Olympia Stock Feed.

Table eggs in Zambia are sold through formal and informal markets. Formal markets comprise chain retail outlet as well as supermarkets such as Melisa. Informal markets include open markets, roadside selling points such as Kasumbalesa at the border with the Democratic Republic of Congo (DRC).

South Africa

The South African egg industry has also seen robust growth, although it was hit by the avian influenza in 2017, which killed more than 10% of the laying flock in the country.

The Department of Trade and Industry has introduced a new Poultry Sector Master Plan aimed at stimulating local demand, boost exports and protect the domestic industry.

Way Forward

Sight & Life, based in Basel, Switzerland undertook a study – Increasing egg availability through smallholder business models in Africa and India. The study sought to investigate constraints in egg production in Kenya, Ethiopia, Malawi and India.

In order to enhance egg production, five viable and sustainable business models were identified:

Micro-franchising, micro-financing, co-operative farming, enterprise development and out-grower model.

Out-grower and enterprise development models have a significant potential of rapidly increasing egg yields, achieve self-



There is need to explore the opportunities at country level to build awareness, benefits and need to consume more eggs.

Image Credit: nulovejoy/Adobe Stock

sufficiency, operate at or near scale, and provide a high income for the farmers.

As Rabobank rightly observes, the sub-Saharan poultry and egg value food chain needs further upgrades:

- Skills and knowledge need to be improved, while more and better inputs - equipment, seeds, fertilisers – are required.
- Bigger and more modern feed mills are required.

There is need to explore the opportunities at country level to build awareness, benefits and needs to consume more eggs.

“Building brands and creating new product categories will grow business and market share. Strong, active egg farmer organisations are key to expanding the market size for eggs,” says Vincent Guyonnet, managing director, FFI Consulting.

To enhance growth further, there is urgent need to enhance consumer promotional campaigns to promote the good nutritional value of eggs, the ease of using eggs in multiple ways to prepare dishes and meals and to promote them as a great source of proteins and nutrients. **13**

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TOGETHER WE MAKE MOBA

Segun Oluwole, business manager, Africa, DuPont Nutrition and Biosciences, explains how to maximise animal performance despite variability in diets and environment.

Optimum feed performance in a volatile market

Moving to more complex diets has a significant effect on the dietary substrates available for digestion by the animal.



Image Credit: Generacor

BROILER PRODUCERS MUST continue to meet performance objectives, in terms of both growth and flock uniformity, despite increases and volatility in raw material costs.

During the production cycle of a broiler, many factors influence a bird's ability to achieve the full metabolisable energy (ME) potential of the feed. Changes in diets and environment – as well as its genetics – can play a role. However, the main challenge is the variance in feed digestibility and its impact on animal productivity.

This challenge has seen an increase in

the use of alternative ingredients and byproducts in poultry feed such as distiller's dried grain with soluble (DDGS), rice bran, rapeseed meal, canola meal, sunflower meal, palm kernel meal and wheat pollard.

Inclusion of the alternative raw materials introduced several challenges – maintaining the nutrient specification of the diet and managing anti-nutrient factors. The challenges of these materials are highlighted by their composition as they tend to be lower in both starch and protein quality and have higher levels of anti-nutrient factors such as arabinoxylans and phytate.

Problems with anti-nutrients

Insoluble arabinoxylans are structural components of the cell walls of plant that are poorly digested by monogastrics. Arabinoxylans produce a barrier for endogenous enzyme activity on storage proteins, starch and fat, increased digesta viscosity, slower transit time, lower nutrient digestibility and undesirable shifts in gut microbiota. All this negatively impacts animal performance and gut health.

Phytate is another anti-nutrient binding minerals, starch and proteins, increasing their resistance to digestion. This can lead to increased ileal amino acid flow which, in

turn, provides substrates that can encourage pathogen growth. Failing to hydrolyse phytate also carries an environmental burden – roughly 45% of all phosphorous consumed in the normal diet of a 42-day-old broiler is excreted in manure.

Cultivation methods and harvest conditions can produce varying feed substrate levels, which in turn lead to similar digestibility, performance and environmental issues. Corn, for example, is the most common feed grain used globally, but its feed value is recognised as being variable – sometimes just as variable as viscous grains such as wheat.

Moving to more complex diets including a variety of alternative raw materials to reduce feed costs, has a significant effect on the dietary substrates available for digestion by the animal. For example, the inclusion of a wider variety of protein and energy sources produces an increase in fibre (NDF, ADF and arabinoxylans) and phytate levels and decreases in starch in the diet. Digestible amino acids, expressed as a proportion of total amino acids in the diet, also decreases.

The solution lies with enzymes

Exogenous enzymes improve animal performance and uniformity by increasing nutrient digestibility while counteracting variability in raw materials. As diets become increasingly complex and the quality more variable, the enzyme usage becomes even more valuable.

Phytase offers an affordable way to eliminate the anti-nutritive effect of phytate and maximise its digestibility, which also improves animal welfare by reducing the risk of skeletal problems. Buttiauxella-based phytase offers high activity earlier in the digestive tract, minimisation of the anti-nutrient effects of phytate and maximisation of the time available for nutrient digestion and absorption.

The combination of carbohydrase enzymes with the right amount of phytase can also radically improve complex diet performance and slash overall production costs.

For example, combining xylanase, amylase and protease enzymes on top of phytase gives dramatic results:

- Xylanase breaks down the non-starch polysaccharides such as soluble and insoluble arabinoxylans in the feed, reducing digesta viscosity and releasing

previously trapped nutrients.

- Amylase increases the hydrolysis of starch improving its digestibility, and complements the secretion of endogenous amylases.
- Protease increases protein digestibility by hydrolysis of storage and structural proteins, and disrupts interactions of proteins with starch and fibre in the diet. It targets other anti-nutritional factors in the diet, for instance, residual trypsin inhibitors and lectins in soybean meal, and some other vegetable proteins. Using this combination with a standard dose of Buttiauxella-based phytase, producers can achieve consistent feed quality and body weight or calorie conversion improvements to save between US\$80,000 to US\$100,000 per million birds.

Observing how exogenous enzyme combinations, for example, xylanase, amylase and protease and other feed additives interact with the new generation of bio-efficacious phytases will be important to ensure that performance and cost benefits are delivered despite volatile market conditions. **E**

References on request from info.animalnutrition@dupont.com.

Moba launches new egg grader

MOBA, A LEADING producer of high-quality integrated systems for the grading, packaging and processing of eggs, has launched the Omnia XF2 grading machine.

The XF2 features a new and improved infeed system and new hygienic properties. The Omnia series is now available in all capacities with a capacity from 45,000 to 255,000 eggs per hour.

The infeed has an open frame design which makes it easy to access during cleaning. The infeed can be foamed and high pressure cleaned.

With food safety in mind, the XF2 offers new features:

- Infeed: open frame construction for cleaning
- The orientator grippers can be cleaned out of place
- The packer parts can be cleaned out of place

Omnia graders (XF2/FT/PX) are now available in all capacities.

Moba said the Omnia grader reaches for top efficiency, food safety and strong service network for worry-free operation.

Moba is a producer of high-quality integrated systems for the grading, packaging and processing of eggs.

The vision of Moba is to enable food



The infeed can be foamed and high pressure cleaned.

producers worldwide to feed consumers around the world with healthy and affordable egg-based food. Moba is developing from a producer of egg grading machines to a technology company that develops high-quality integrated systems for the

egg industry.

Moba has a global sales and service network, including offices in Japan, Italy, China, Malaysia, Dubai, the UK, Germany, France, and the US, as well as support from agents and distributors.

There is a growth in the field of feed phytogenics, mainly driven by advancements in the animal feed industry.

Role of phytogenic feed additives



Phytogenic feed additives referring to essential oils, spices, herbs or plant extracts, combine bioactive ingredients and flavouring substances.

Image Credit: sGr/Adobe Stock

PHYTOGENIC FEED ADDITIVES, known as PFA's are a group of natural growth promoters derived from herbs, spices or other plants. They are commonly regarded as favourable alternatives to in-feed antibiotics in livestock production.

Phytogenic feed additives referring to essential oils, spices, herbs or plant extracts, combine bioactive ingredients and flavouring substances. Phytogenics include a broad range of plant materials, most of which have been used in human nutrition since ancient times.

Need for PFA's

Numerous trends, including antibiotic reduction, the uptake of novel growth promoters to optimise feed costs, the drive to improve efficiency and requirements to reduce emissions are expected to boost

demand worldwide for plant-derived additives in the future.

Important for gut health


As there are increasing occurrences in intestinal disorders gut health becomes more important. "Phytogenics can modulate the intestinal microbiota which can help to regulate inflammatory

responses and oxidative stress – an important factor in today's gut health management," says David Harrington, species leader poultry at Delacon. Delacon conducts extensive research on phytogenics.

The use of phytogenic feed additives offers a number of benefits to producers, including enhanced animal performance, improved feed efficiency and reduced emissions.

PFA's are capable of reducing microbial threat and promoting intestinal health, which is imperative for optimal performance and profitability.

Phytogenics represent one of the most promising groups of feed additives. There is little doubt that they offer great opportunities for improving livestock diets.

Lower environmental impact is another big factor in favour of these additives. 

The use of phytogenic feed additives offers a number of benefits to producers, including enhanced animal performance, improved feed efficiency and reduced emissions.

DOB Equity invests further in Tanzania's Tanga Fresh

THE ADDITIONAL INVESTMENT from DOB Equity, a leading Dutch impact investor in East Africa, is expected to help Tanga Fresh expand its production in the long-life milk market. There has been an increasing trend of East African consumers moving from fresh milk to long-life milk, presenting major potential for market growth.

With the DOB Equity investment, Tanga Fresh aims to expand its overall production capacity, providing access to a fair and reliable market for dairy farmers in the Tanga region.

According to DOB, the East African dairy market has great potential for growth. The company is an investor in Countryside Dairy, a Kenyan dairy processor in Nyahururu.

One of the major issues hampering growth in the East African dairy sector is the supply and quality of milk from farmers. To address this problem, Tanga Fresh has partnered with Solidaridad, an international civil society organisation. This partnership is expected to

enable Tanga Fresh to provide services and support to 6,000 farmers with the goal of improving quality, yields and sustainability throughout the supply chain.

Tanga Fresh produces a wide range of products such as *mtindi* (sour milk), yoghurt, ghee, fresh and long-life milk. Its production facilities have expanded significantly in recent years, from initially producing 15,000 litres of milk per day to today making 80,000 litres per day in a modern high-quality plant. DOB explained that it invested in Tanga Fresh with an aim to provide a reliable market and fair pricing to small dairy farmers in the region.

Toine Huijbers, chief financial officer at DOB, said, "Less than seven per cent of milk in Tanzania is processed, leaving a lot of room for growth in the market."

"We expect to see increasing demand for higher-quality processed milk in the market. It's likely this will be largely driven by regulation and consumer awareness around the risks of



The investment focuses on increasing demand for higher-quality processed milk in the market.

Image Credit: Tanga Fresh

drinking unsafe, contaminated milk and Tanga Fresh is well positioned to meet this rising demand."

Innocent Mushi, CEO of Tanga Fresh commented, "The investment from DOB strengthens our working capital flows and production capacity. This will be key in supporting Tanga Fresh's innovation and increasing its national market penetration."

Frederik Claasen, Head of Policy at Solidaridad, comments: "We provide impact investors with practical solutions to create a meaningful impact. We believe our work in strengthening the supply chain complements DOB's investment for the benefit of the market and Tanzanian people."

Tanga Fresh's partnership with DOB Equity began in 2007.

Lato Milk to export to Ethiopia, South Sudan and Malawi

PEARL DAIRY FARMS Limited (PDFL), the manufacturers of Lato Milk products, are now exporting their product portfolio to Ethiopia, Malawi and South Sudan underpinned by the

Africa Continental Free Trade Area (AfCFTA) ratification agreement.

Algeria is next on the list of potential markets as the Ugandan government is

working with the private sector to find more markets for Ugandan milk, according to a statement by Lato Milk.

Bijoy Varghese, Pearl Dairy Farms' general manager, said, "With the opening up of new markets, farmers in Uganda have been provided with a bigger outlet for their milk, and this creates more opportunities for them.

"This expansion presents a great boost to the entire dairy value chain in Uganda, considering the current situation in the sector. Pearl Dairy is also in a position to supply its world-class quality products to these markets."

He said that the firm already has the required regulatory approvals from the targeted countries. PDFL will export yoghurt and milk powder in the initial phase. This was decided after the firm conducted conclusive market research indicating that these products will do well in the targeted markets.

"We have fully adhered to the norms and government compliances as stipulated in these markets, and we confidently believe we have achieved all the requirements for us to launch in these countries," Varghese concluded.



PDFL will export yoghurt and milk powder in the initial phase.

Image Credit: Artem Shadrin/Adobe Stock



Image Credit: dimasobko/Adobe Stock

Maize crop accounts for the bulk of Malawi's cereal output.

Higher productivity of maize points towards increased use of fertilisers and hybrid seeds, supported by subsidy programmes, according to FAO report.

Malawi's bumper cereal production in 2020

MALAWI'S CEREAL PRODUCTION in 2020 is helping to bolster households' food supplies and keeping national import requirements at below average level in 2020-21, according to the FAO's Global Information and Early Warning System (GIEWS) Country Brief - Malawi.

Harvesting of the 2020 maize crop, which accounts for the bulk of the country's cereal output, concluded in June and production is officially estimated at 3.7mn tonnes, about 25% higher than the five year average. The large output is the result of an above average planted area and high yields, underpinned by favourable weather conditions. Reports from the country indicate an increased use of fertilisers and hybrid seeds, supported by government funded subsidy programmes, which have supported the increase in crop productivity.

The aggregate cereal import requirement in the 2020-21 marketing year (April-March) is estimated at about 185,000 tonnes, virtually unchanged from the previous year's low level and 40% below the previous five year average.

Looking further ahead to the 2020-21 cropping season, the government announced an increase in the number of households that will benefit from the input subsidy programme, up from 0.9mn in the 2019-20 season to 3.5mn.

Cereal import requirements below average in 2020/21

The aggregate cereal import requirement in the 2020-21 marketing year (April-March) is estimated at about 185,000 tonnes, virtually unchanged from the previous year's low level and 40 percent below the previous five-year average. The reduced volume reflects two years of above-average maize harvests in 2019 and 2020, which have enabled the country to bolster stocks.

Food insecurity expected to increase

According to the last official estimates from SADC, an estimated 2.7mn people are assessed to be food insecure in 2020, of which 1.9mn live in rural areas and the remaining 800,000 people live in urban areas. This level is similar to the previous year. The high prevalence of food insecurity is mainly associated with the direct and indirect effects of the COVID-19 pandemic, which are expected to curtail access to food, through both income losses associated with the economic slowdown and disruptions to the food supply chains. **E**

The ICIPE is making significant progress in developing effective pest management solutions to African farmers.

Biopesticides to control fall armyworm

ICIPE-led initiative strengthens regional collaboration for harmonisation and commercialisation of agricultural products and technologies.



Image Credit: mapo/Adobe Stock

THE INTERNATIONAL CENTRE of Insect Physiology and Ecology (ICIPE) has developed a range of biopesticides to provide effective and environmentally safe alternatives for farmers in Africa to manage the invasive and highly destructive fall army worm.

Significantly, the centre has undertaken the label extension of two of its commercially available biopesticides, with support from development partners, government and regulatory authorities, as well as private sector actors in East Africa, which are now being upgraded for fall armyworm control. Furthermore, a number of newly discovered biopesticides are undergoing fast track registration.

Biopesticides are specific types of pesticides obtained from natural sources, such as fungi, viruses, bacteria, nematodes and plants, and some minerals.

Biopesticides have numerous advantages compared to their synthetic counterparts: they do not leave toxic residues on produce; they pose minimal risk to people's health and the environment; and they are less likely to induce resistance to pests and diseases.

The ICIPE biopesticides were developed from the extensive repository of microorganism strains infecting insects at the centre.


Additionally, biopesticides are compatible with other options for integrated pest management (IPM).

The ICIPE biopesticides were developed from the extensive repository of microorganism strains infecting insects at the centre. A superior aspect of these products is that they are effective against various stages of the life cycle of the fall armyworm.

The biopesticides, for example, manage both the pest's egg and early larval stages, preventing the emergence of the destructive larval stage while also hampering population build-up.

In addition, the centre has established that biopesticides can be used in conjunction with other fall armyworm management options such as push-pull technology, pheromone traps, attractants and pest's natural enemies. The biopesticides can also be auto-disseminated; that is, fall armyworms that pick-up the fungi can spread it to others.

"The progress made in the development and use of biopesticides is exciting for ICIPE and partners," noted Dr Segenet Kelemu, director general and CEO, ICIPE. "Since this notorious pest invaded Africa four years ago, our vision has been to provide farmers with science-led, context specific, affordable and environmentally friendly solutions for its management."

"At ICIPE, we are aware that our efforts have succeeded due to regional cooperation, as well as efficiency of regulatory bodies to harmonise and fast track biopesticide registration and commercialisation across East Africa," she added. 

The story of a woman farmer who has created a thriving farming business, despite the challenges of limited access to funding and opportunities.

Path to self-empowerment

IN TAUNG, THE North West Province of South Africa, the ESD programme of Tiger Brands, with investments of R4.5 million in its Enterprise and Supplier Development has helped the farming collective known as the Baphuduhucwana Production Incubator scale its harvests to meet the demands of big business, by building up skills, assisting with equipment finance, and securing large orders of wheat and white beans.

Kedidimetse Radebe, who returned to farming late in her life, gained new knowledge through weekly training on crop cultivation according to grain type and seasonality, even winning an entrepreneurship award in her district in 2018. Through various funding and training interventions provided by Tiger Brands and its partners, she is among a growing list of women farmers in the BPI collective.

“The programme has helped me have more focus and I know what I want to achieve with the different seasons and how to achieve them, overcome challenges and do better the next planting season.”

“If you do not treat the seasons like a project with clear outcomes then you will not achieve the required yield as a farmer,” Kedidimetse Radebe said.

“Farming isn’t easy, but it’s very satisfying,” she added. “Every morning I am up at 5 am, checking my farm for wandering animals and ensuring that the sprinklers aren’t burst or blocked. When my farmhands arrive, we begin moving sprinklers around the farm to ensure even water distribution.”

“The best skill I have learnt is time management, which is very important in farming. Project management and how to handle finances is also another skill that I have learnt through the courses that Tiger Brands has sent me to. If you do not treat the seasons like a project with clear outcomes then you will not achieve the required yield as a farmer. Most importantly, I have learnt how to prepare the soil for farming to ensure the best quality of wheat, as well as to plant properly.”

“I am grateful that during these



Kedidimetse Radebe, who returned to farming late in her life has learned a lot from it.

challenging times of COVID-19, I do not have to worry about unemployment and was not in any way negatively impacted by the lockdown,” she added.

Radebe’s advice to other women farmers is, “The power is in your hands to turn your life around. No one is going to do it for you. If you want something done right, you have to be willing to do it yourself.”

Since returning to Taung, Kedidimetse has learned a lot and done a lot. She likens her crops to her own children, demanding care and attention but offering an abundant harvest in return.

Tiger Brands ESD

Tiger Brands Enterprise and Supplier Development (ESD) programme, focuses on developing African farmers to be at the heart of the supply chain, to progress the economic transformation of the country through targeted initiatives.

The Smallholder Farmer Development Programme, for instance, designed to create access for women farmers to actively participate in the supply chain through technical support and guaranteed offtake agreements has created 412 jobs from mainly rural communities. **E**

Image Credit: Razor, M&C Saatchi

The impact of COVID-19 on agricultural and food-processing industries in African and Asian markets is leading to concerns on food security. *Wallace Mawire* reports.

The survey has revealed that the coronavirus crisis is hitting the global food and agricultural sector.

Beyond the pandemic

Image Credit: Courage/Adobe Stock

A SURVEY ON THE impact of the pandemic on agricultural and food-processing industries, with special focus on Asian and African markets was conducted by the UNIDO Investment and Technology Promotion Office Germany, in cooperation with the German Agricultural Society and SmartHectar.

Online and telephone surveys were conducted among 800 companies from the food and agricultural sector, with business activities in African and Southeast Asian markets. The study was done between June and July 2020. The majority of participants were small and medium-sized enterprises headquartered in Europe, and one third of the participants represented larger corporations. Two thirds of the respondents generate more than half of their annual turnover from foreign markets.

The survey has revealed that the coronavirus crisis is hitting the global food

and agricultural sector.

Further, the effects of the pandemic on the sector are not limited to considerations related to food safety and security, but encompass far-reaching social and economic aspects. Around 93% of companies located in African and Southeast Asian markets see the coronavirus pandemic as their biggest challenge. The survey uncovered that the coronavirus pandemic especially affects smaller companies and those located in Southeast Asian and African markets.

Around 93% of companies located in African and Southeast Asian markets see the coronavirus pandemic as their biggest challenge.

New communication channels

Even in light of these statistics, African and Southeast Asian markets continue to be seen as high growth markets with considerable potential. Only 6% of respondents who had investment in these markets are considering reducing their commitment. Of those companies targeting these markets, around 90% would like to increase or at least maintain their market presence there in the next one to three years.

According to the survey, COVID-19 will increase the role of more established and internationally active companies in the global economy, thereby aggravating the already difficult position of companies located in emerging markets of Africa and Southeast Asia.

It is added that trade liberalisation must be complemented by active measures which support local supply chains and industrial upgrading of the food and agricultural sector. **E**

The Intra African Trade Fair will enable farmers to explore new business opportunities to increase participation in regional and international markets. Allan Majuru, CEO of ZimTrade and an IATF2021 ambassador, explores the potential of superfoods in Zimbabwean agriculture.



Superfoods to increase Zimbabwe's exports

ZIMBABWEAN FARMERS ARE positioning themselves to increase the production of superfoods, demand for which has gone up in the last few months. Small-scale farmers in the country are increasing their participation in regional markets.

The trend of consumers around the world focusing on healthier lifestyles is seeing an increase in a demand for superfoods.

Superfoods are mainly plant-based foods, low in calories, which are nutritious and ideal for boosting the immune system.

Between March-May this year, retailers in European countries reported an increase in superfood sales of up to 25 and 30%, indicating that the demand for superfoods would continue rising even after the pandemic.

The participation of smallholder farmers in regional markets is expected to enhance Zimbabwe's trade with other African countries, in the context of the African Continental Free Trade Agreement.

Leveraging on the good soil and favourable climatic conditions that are necessary for the production of superfoods, as well as good quality and organic products, Zimbabwe is positioning itself to tap into foreign markets, with products including avocados, beans, peas, berries and citrus fruit.

Around 80% of avocados produced and consumed worldwide are Hass avocados which are the main variety grown for exports in Zimbabwe.

The global export value of avocados has doubled in the last five years, from around US\$3.86bn recorded in 2015 to around US\$7.27bn in 2019.

Currently, there is demand for Zimbabwe-grown avocados in markets like the Netherlands and indications are that the demand will continue to surge, offering more



Image Credit: FS-Stock/Adobe Stock

opportunities for Zimbabwean farmers.

Further, Zimbabwean farmers are exporting citrus fruit to international markets like China and the UAE. The government is in the process of establishing a citrus fruit agreement with China, which is expected to open up access to that market.

For smallholder farmers, the starting point is exporting to regional markets like Namibia, Botswana, Zambia, Democratic Republic of Congo, and Angola, which can act as their first stepping stone to export markets. This participation of smallholder farmers in regional markets is expected to enhance Zimbabwe's trade with other African countries, in the context of the African Continental Free Trade Agreement.

The focus is on increasing the production of blueberries too, as the local produce is of high quality and can compete well on the export market. Zimbabwe is concentrating on exporting peas and other legumes, as well.

At present, farmers in Zimbabwe produce mange-tout and sugar-snap peas which are destined for the export market.

Between 2015-2019, Zimbabwe was the overall second largest exporter of peas to the United Kingdom, and the third largest supplier to the Netherlands, according to the Trade Map.

To fully harness the potential in exporting leguminous vegetables, Zimbabwean farmers are considering improving their product and packaging so that they qualify as convenience foods. Convenience foods, which are becoming more popular in the European market, are designed to optimise the ease of consumption and shorten meal preparation time and are popular among working people, bachelors and teenage children.

More than 10,000 buyers, sellers and conference delegates are expected to attend the second Intra African Trade Fair in Kigali from 6 to 12 September 2021. The Fair is designed to drive intra-African trade and to support the implementation of the African Continental Free Trade Agreement. It will provide a platform for sharing trade, investment and market information and will enable more than 1,000 exhibitors to showcase their goods and services to buyers, sellers and investors from more than 50 countries, allowing them to meet, discuss and conclude business deals. IATF2021 is a joint initiative between Afreximbank and the African Union and is being hosted by the Government of Rwanda. For further information about IATF2021 please visit, <https://www.intrafricantradefair.com/>. 

Aviagen discusses effective broiler and breeder management in first-ever virtual school

POULTRY BREEDING COMPANY Aviagen held its first virtual production management school from 3-7 August.

The online school has seen 480 geographically and culturally diverse participants from all regions of the globe. Thus, the virtual nature of the course extended the scope of the company's knowledge sharing further than the long-running physical school. The virtual school is one of many ways in which Aviagen uses technology to remain engaged and connected to its customers during the current COVID-19 pandemic.

More than 35 topics presented by Aviagen and industry experts explored best practises in poultry production that serves to enhance bird welfare, health and performance while enhancing chicken producers profitability. Among the highlights was a live ventilation workshop led by the Poultry Department staff from the University of Auburn.

Effective learning

The virtual school encouraged lively discussions, exchanges of ideas and networking

between participants while offering the convenience of engaging with the content at their own pace, from their homes and offices in their respective time zones and using the device of their choice. It also encouraged relationship building, with students being able to chat back and forth, as well as comment on classmates' posts.

Staying connected

Aviagen has been providing a variety of online events worldwide since the start of the pandemic, with the aim of staying in close contact with customers and offering them a forum to exchange experiences, ideas and information.

"The virtual production management school was very successful, and we benefited from a large amount of new information. Thanks to the Aviagen team for the effort and opportunity," commented Islam Raslan of Tiba Poultry Grandparent Co.

"The lessons were great, covering topics that are widely discussed here in the UK. I enjoyed exploring the biology of the bird at the farm level, of which is important to

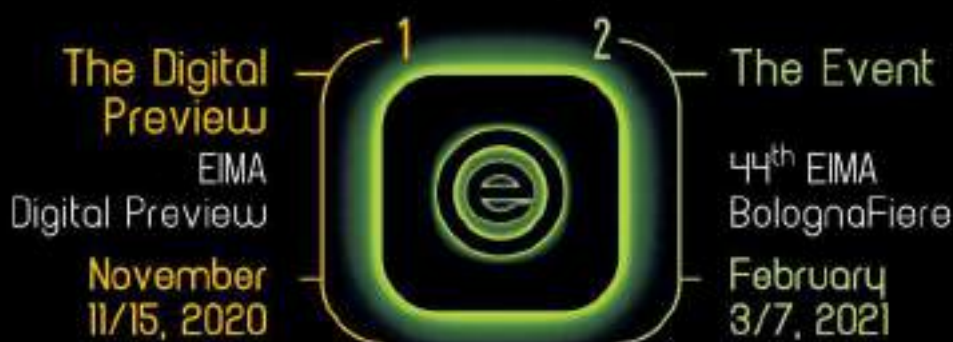
have a good understanding. I will certainly be recommending it to colleagues and other professionals in the future," remarked Milena Nikolic from Agromont.

"I feel we all learned new things and got to know someone to share common experiences with. Thanks to Aviagen for the opportunity!" concluded Lewis Fisher, an Aviagen Contract Farmer.

Aviagen marketing tradeshow and digital events manager Wouter Lassauw said, "Since, due to these unfortunate times, we were not able to have our annual in-person School, we had a great opportunity to create a solution that ended up being extremely successful globally. It was rewarding to see everyone around the world come together, while still being able to discuss the topics and feel connected. We've appreciated the positive comments on the school, and are happy we were able to deliver what our students wanted."

Lassauw added that Aviagen is already planning future virtual schools. The Aviagen schools are by invitation only, and customers may contact their regional managers for more information.

EIMA INTERNATIONAL changes date and doubles up



The international trade fair calendar, due to the Covid 19 pandemic, has been completely revised and many events have been cancelled and postponed. EIMA International has also redefined its program, moving the 44th edition from November 2020 to February 2021. However, in the days in November initially established for EIMA, EIMA Preview comes to life, a great online event that anticipates the traditional exhibition and is the first example in the world of a review of agricultural mechanics entirely accessible on a digital platform.

As of 2022 EIMA will return to the traditional November appointment



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New Holland Agriculture continues to provide a broad product offering and solutions to meet the increasing demand in Africa.

New Holland Agriculture preserving its heritage in Africa

1895-2020 125 YEARS OF INNOVATION

New Holland



NEW HOLLAND AGRICULTURE turns 125 years old, making the agricultural business more efficient and sustainable.

The values and vision of New Holland's founders are the beating heart of the brand to this day, providing support for farmers across the globe, constantly investing and innovating so they would have the products, technologies and services to farm efficiently, sustainably and profitably.

Carlo Lambro, brand president of New Holland Agriculture stated, "New Holland has a rich heritage, started in a small town of Pennsylvania and has grown to be a global brand with presence across 170 countries. It is a history marked by

important innovations that has changed agriculture. It brings together the unique legacy of brands such as Ford, Fiat, Braud and Claeys. Most important of all, it is a history marked by people - our customers, our dealers, our employees, day after day, year after year. Together, we are

facing the many challenges of agriculture, helping farmers get the job done, efficiently and profitably, and get the best from their business."

With around 2,000 dealers and 5,000 touchpoints globally, New Holland is always ready to provide the broadest product offering and the solutions

farmers need.

New Holland Agriculture has grown its heritage in Africa as a global brand whose unique legacy is marked by important milestones that have changed agriculture in this territory. Three such milestones have recently been reached in Ethiopia, Morocco and Algeria.



TCS Series

Image Credit: New Holland

TCS Series combines deliver sustained high performance in Ethiopia

In Ethiopia, agriculture is considered as one of the major sectors driving growth. New Holland Agriculture has been contributing to the improvement of the country's smallholder farmers' productivity and profitability and to the performance of its agricultural sector by supplying highly efficient equipment. It has recently sold

49 TC5 Series combine harvesters – TC5.70, TC5.80 and TC5.90 models – to Ethio Lease, a finance partner focused on increasing the mechanisation level in Ethiopia. New Holland distributor MOENCO will provide service and spare parts support for these machines.

The TC5 Series delivers the sustained power and low fuel consumption of the NEF engine, combined with the superior comfort and low noise level of the Harvest Suite™ Comfort Cab. Its multi-crop harvesting capability ensures a high performance and productivity in all conditions when harvesting a variety of crops such as wheat, barley, sunflower, rice, canola, etc. The rotary separator feature ensures the best harvesting result with its high separation capability in wet conditions. TC5 Series combines are providing the ideal solution for Ethiopia with its many features that deliver the highest output for the farmers.

Braud 9090X Olive Harvester back in Morocco

New Holland Agriculture and its long-time partner, S.O.M.M.A., part of Auto Hall Group, are committed to supporting agricultural development in Morocco at every stage of



Braud 9090X

Image Credit: New Holland

mechanisation and for every crop produced - cereals, fruits, vegetables as well as olive.

Since 2019, New Holland Agriculture has been working in close collaboration with Comptoir Pré-Agri and S.O.M.M.A to promote the best-in-class olive harvesting solution - the Braud 9090X Olive harvester. New Holland Agriculture, which has a long history in Morocco's agriculture sector, delivered the first Braud 9090X olive harvester in 2019, followed by two more units in 2020, despite difficulties raised by the current global situation.

Today, olive tree plantations cover a total surface above one million hectares, and the super high-density plantation system


that allows a perfect mechanised harvest with the Braud 9090X Olive harvester is booming under new investment. Used by the most advanced olive oil producers, this is the most efficient method to achieve an effective harvest with virtually no losses while protecting the trees and plant life in the plantation. The Braud 9090X Olive harvester manufactured at the Coex plant in France is fully compatible with the local CO2 emission regulations and easy to maintain.

SP Forage Harvester in Algeria

Algeria has millions of hectares of available land for agriculture for a population of 40 million people. For the last two years,

New Holland Agriculture has been offering the multipurpose, self-propelled Forage Harvester, which can be equipped with a variety of headers – maize, direct-cut and pick-up headers. The latter offers the perfect solution for animal feeding in operations such as dairy farms. In 2019, New Holland Agriculture introduced the FR600 model with 6-row maize header and direct-cut header, for use in the Sahara region to chop maize and prepare heavy silage bales in the autumn, and in the northern regions to cut grass, hay and spring cereals in the Spring.

In 2020, New Holland Agriculture signed a new partnership agreement with one of the biggest dairy producers in Algeria for the supply of FR450 self-propelled forage harvesters equipped with direct-cut and 6-row maize headers that will secure their animal feed supply with maize and forage.

New Holland Agriculture will continue to offer a full range of products and solutions such as tractors, combine harvesters, self-propelled forage harvesters, hay tools, olive and grape harvesters to meet the demand generated by the new programmes for agriculture initiated in the Sahara region. 



FR Series

Image Credit: New Holland

The delivery of Case IH tractors in Ethiopia aims to enhance productivity and improve the quality of life for people working on farms.

Case IH tractor delivery in Ethiopia

The tractors provide all the power needed for land preparation, cultivation, sowing and haulage, while being economical on fuel and intuitive to drive.



Image Credit: Case IH

MORE THAN 40 CASE IH Maxxum tractors were delivered to EthioLease in Ethiopia, during April 2020, as part of a programme to increase access to agricultural machinery for the country's farmers.

EthioLease is a subsidiary of Africa Asset Finance Company Inc. (AAFC) and was formed to address equipment shortages in Ethiopia by providing financing and leasing services for capital goods across multiple sectors including agriculture.

This Case IH tractor delivery was part of a Memorandum of Understanding between the Ministry of Agriculture, Agricultural Transformation Agency (ATA) and EthioLease, signed in February this year.

As Ethiopia strives to increase the mechanisation of its agriculture industry, smallholder farmers who are unable to purchase their own equipment will now have access to these tractors via ATA farmers' mechanisation centres.

The delivery included 44 Maxxum 125 tractors featuring 126 hp (93 kW) rated engines, in a combination of cab and ROPS configurations. Designed for pure functionality, these Maxxum 125 tractors provide all the power needed for land preparation, cultivation, sowing and haulage, while being economical on fuel and intuitive to drive.


With an estimated population of 105 million, Ethiopia must improve its agricultural productivity to sustainably feed its people.

"We are very proud to supply the first of a large number of tractors to Ethiopian farmers through EthioLease," said Nardos Admasu, Case IH Business Manager for Ethiopia.

"Over the last two years, Case IH has

sold nearly 200 tractors in Ethiopia, increasing visibility of the brand and gaining the trust of the many farmers who are using our machinery," Admasu said.

"We believe the farmers leasing through EthioLease will benefit greatly from access to our machinery. "Our official distributor in Ethiopia, Wereta International Business PLC, will provide spare parts, expert service both in their workshop and in the customers' fields, as well as operator training, ensuring that these Case IH Maxxum tractors remain productive in the field for many years to come," Admasu added.

"EthioLease provides a valuable service, bridging the gap between local communities striving for hard currency and global agricultural equipment brands such as Case IH. Just as we are sure Ethiopian farmers will be happy to drive our Maxxum tractors, we are thrilled to be able to deliver our quality machinery to the people who need it." 

"We believe the farmers leasing through EthioLease will benefit greatly from access to our machinery."



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Innovations are bringing in transformative change in agriculture, leading to increased productivity and crop yields.

Boosting harvesting technology



Innovations in harvesting machinery and equipment are adding to agricultural productivity and improved performance.

Image Credit: juanjp/Adobe Stock

AS THE GLOBAL pandemic continues to transform the way the world operates, the agricultural sector is adapting in varying ways.

In Africa, the combination of the pandemic with desert locusts outbreaks, drought and flood extremes due to climate change as well as increasing food importation costs continue to add to the challenges.

While governments across the continent have several initiatives to prevent an impending food crisis, private sector organisations are bringing in innovative products and technological advances.

Some initiatives

Several efforts are seen in many parts of the continent, to provide a boost to mechanisation and technology use.

For instance, the Nigerian government approved a loan facility of US\$1.2bn to finance the mechanisation of agriculture in the country, according to Sabo Nanono, minister of agriculture and rural development. In what he called a “major revolution in the agriculture sector that we have never seen before,” Nanono said that the planned mechanisation would entail the establishment of tractor serving centres in 632 local governments in the country and involve 140 processing plants.

In Zimbabwe, there is increasing awareness that measures to revitalise the agricultural sector, including increasing the area under production are pivotal to achieve food self-sufficiency and reduce imports.

Tractors, combine harvesters and other pieces of agricultural equipment were

delivered to Zimbabwe in April this year, as part of an attempt to mechanise and modernise the farming industry.

Innovations in harvesting machinery and equipment are adding to agricultural productivity and improved performance in Africa and beyond:

New Holland Agriculture

The TC5 Series combine harvester are providing the ideal solution for Ethiopian farmers, through the multi-crop harvesting capability ensures a high performance and productivity in all conditions when harvesting a variety of crops. The rotary separator feature ensures the best harvesting result with its high separation capability in wet conditions.

The Braud 9090X Olive harvester is helping with mechanised harvesting.

New Holland Agriculture's multipurpose, self-propelled Forage Harvester, can be equipped with a variety of headers – maize, direct-cut and pick-up headers.

Case IH

THE AXIAL-FLOW 4088 combine harvester was put through field trials in Kenya using wheat, barley, canola, and sorghum, as well as maize, using a six-row maize header.

Case IH Axial-Flow single-rotor technology combines compact dimensions, operator comfort and advanced features with high harvesting capacity, thorough crop threshing, low grain losses as well as gentle grain handling.

Pöttinger

Pöttinger's ALPHA MOTION technology on the NOVACAT and EUROCAT has been helping farmers all over the world in mowing and forage quality.

"With the ALPHA MOTION headstock, the entire carrier frame adapts to the ground contours. The carrier frame slants downwards on downhill gradients and upwards when ascending," stated the company.

Digital farming

Digital technologies are increasingly prevalent across the agricultural value chain, boosting production yields to new highs.

According to insights by McKinsey & Company on 'Preparing for disruption in the food value chain, in the coming years, only the producers that have mastered precision agriculture will be ready to take advantage of the fourth era, next-generation agriculture technologies. Though far-off, this era will feature the proliferation of biotechnologies, gene editing and automation, including agricultural robots that will monitor fields and harvest crops, the study adds.



Image Credit: Andre Nery/Adobe Stock

Technology is making significant impact on farmers.

Technology making significant impact on farmers.

The International Fund for Agricultural Development (IFAD) recently announced to help 1.7mn small-scale farmers in Kenya and Nigeria with personalised agricultural advice through their mobile phones, to improve their incomes, food security and resilience to economic shocks caused by COVID-19.

Robotics and artificial intelligence will drive a deep and transformative change in the agricultural world during the coming decades, according to IDTechEx. Machine vision technology increasingly uses deep learning algorithms often trained on expert-annotated image datasets, allowing the technology to far exceed the performance of conventional algorithms and to match or

even exceed even that of expert agronomists.

Precision agriculture tools are helping farms and machines run more efficiently with lower inputs and higher yields. Sustainable productivity arises through technology, innovation and integrated solutions to grow more food and deliver higher farm income.

In conclusion

Together with the demand for technology, government interventions and private sector initiatives are needed for financing, connectivity and creating awareness.

The way forward for Africa points towards greater investment into agricultural innovations and technology adoption. **E**

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Bagtech's success represents more than 35 years of innovation in agribusiness, by developing its own technology through an innovative partnership with Festo.

Bagtech Fertiliser solutions expands its horizons

The pandemic created a first-time opportunity for Bagtech to commission one of their flagship NPK plants completely online.

ONLINE MONITORING SYSTEM



Image Credit: Bagtech

BAGTECH HAS BEEN able to bring precision, quality machines to the market. Aside from its machines, the company offers its expertise in the management of bulk fertiliser and warehousing around Africa as well as consultancy worldwide. Well known in Africa, Bagtech is continuing its journey into the Americas.

The 2020 crisis has brought numerous challenges worldwide and has forced to adapt to the new reality of digitalisation, or the Internet of Things, where working from distance is the new normal. For food related companies it is vital to be prepared for this new era. Thanks to Bagtech's unique automation system that enables clients' equipment and the sharing of information, with no interruptions from anywhere in the world, the company was able to remain compliant to new legislation while maintaining its services to clients.

Through its success in ensuring clients' equipment was fully functional during this

trying time, Bagtech strengthens its relationships with the consumer, while expanding brand awareness in the North of Africa and the Americas. "Our team keeps a close relationship with clients in order to improve the experiences daily to deliver their needs," said Fred Coelho, CEO of Bagtech.

The pandemic created a first-time opportunity for Bagtech to commission one of their flagship NPK plants completely online. "Every challenge brings us a new opportunity to do things differently," added Coelho on the completion of the commissioning. While busy innovating in IT, the company still found time to reach new regions delivering NPK plants to both Angola and Brazil, a first-time to each country for Bagtech.

Furthermore, Bagtech has been focusing

"Every challenge brings us a new opportunity to do things differently."

on improving product performance, increasing the productivity of its clients. The latest development is a mixer screw allowing for a more gentle mix and lower rotation of the product to deliver a higher quality fertiliser. It runs off a smaller motor lowering energy consumption and making the plant more sustainable.

This new concept has also been designed to run at ground level, eliminating the need for civil engineering (pits) resulting in a further cost reduction for the project. However, even with this pandemic, the world still needs feeding and quickly. And considering that up to 50% of the food we eat would not be available without fertilisers, this industry will remain robust and be deemed as essential, which means that, the more high-tech the industry becomes, the higher rate of results will be achieved, leading to a continuous supplying to the end consumers. **B**

For more information, visit Bagtechint.com

A whitepaper by Intellias examines how combining agricultural technologies will drive the future of agricultural sustainability.

Creating a smart farming ecosystem

As noted in the whitepaper, 41.3 % of respondents lack knowledge about actions and measures that can be taken to make agriculture more sustainable.



Image Credit: Kimwun/Adobe Stock

DIGITAL TECHNOLOGIES ARE set to solve complex challenges farmers and growers are facing today, according to a whitepaper published by Intellias.

The whitepaper on Sustainable Agriculture, From Tech Solutions to Ecosystem is published in the light of the global challenges imposed on farmers and agricultural companies.

To support sustainable agricultural practices, independent solutions are not enough. Such solutions can solve particular needs farmers are experiencing today, but in the face of severe upcoming challenges, agribusinesses require complex solutions that can unite the benefits of all possible technologies.

As noted in the whitepaper, 41.3 % of respondents lack knowledge about actions and measures that can be taken to make agriculture more sustainable.

The first part of the whitepaper focuses

on analysing factors holding back farming operations and investigating ways that technologies can mitigate the most severe of those factors. In this part of the whitepaper, agribusinesses will get acquainted with customer personas of farmers, learn their needs, and recognise the current gaps in making technologies available at the scale necessary to support sustainable agricultural operations.


The second part of the whitepaper covers recent technological breakthroughs by world-known agritech providers. The focus is on combining these technologies in one ecosystem based on proven practices applied

To support sustainable agricultural practices, independent solutions are not enough, according to the Intellias research.

by other industries that are already adopting a collaborative approach to technologies.

This whitepaper is a guide for AgriTech innovators on how to combine discrete agricultural technologies into borderless ecosystems to help farmers solve both the unique business challenges of today and the global challenges of tomorrow.

Intellias team of software engineers has accumulated knowledge within the agricultural industry that allowed the company to create unified farm management systems, horticultural lighting to support sustainable agricultural practices, solutions for indoor farms, weather monitoring tools, and a wide range of precision farming solutions. Intellias has been recognised by Inc 5000 as one of the fastest-growing privately held companies in Europe.

Intellias research provides valuable insights for agribusinesses and technology companies operating in the agricultural industry. 

World Bank provides additional support for smallholder farmers in Ethiopia



The funds will fill the unforeseen financing gaps created by high inflation and accelerate the implementation of project activities.

Image Credit: OlegD

THE WORLD BANK Group has approved a US\$80mn grant from the International Development Association to support the government of Ethiopia to boost agricultural productivity and enhance market access for smallholder farmers.

Agricultural growth has been a crucial driver of poverty reduction over the past decade, according to the World Bank's 2019 Poverty Assessment for Ethiopia. Additional funding for the Second Agricultural Growth Project (AGPII) will further increase the economic potential of Ethiopia's agricultural sector.

Vikas Choudhary, senior agricultural specialist at the World Bank, said "AGPII has made notable contributions to poverty reduction in Ethiopia. The project has been

delivering solid results on the ground, especially in increasing productivity and enhancing commercialisation.

"Additionally, by promoting the use of irrigation, the project has enabled farmers to harvest two or three crops in a year; as opposed to a single crop under rainfed conditions, and diversify from cereals to high-value horticulture and nutritious crops."

This additional funding will help tackle these challenges and is vital to ensure that the agricultural sector in Ethiopia reaches its full potential. The funds will go towards scaling up results achieved so far and improving the technical design of different activities.

In addition, the funds will fill the unfore-

seen financing gaps created by high inflation and accelerate the implementation of project activities which have been delayed due to significant cost-over run.

Ousmane Dione, World Bank country director for Eritrea, Ethiopia, South Sudan and Sudan, said, "The agricultural sector is crucial to Ethiopia's economy as it accounts for 45% of total output and employs nearly 80% of the labour force. While encouraging results have been achieved so far, more work is needed to address remaining challenges and accelerate productivity gains, reduce exposure to erratic climatic conditions, decrease land degradation and enhance the natural resource base on which the sector depends."

Crover unveils robotic grain monitoring solution

START-UP COMPANY CROVER has developed a robot that can 'swim' through cereals and grains to monitor their condition while they are still in storage.

This is a first-of-its-kind robotic grain monitoring solution and enables a greater understanding of the condition of stored grains.

The company is developing its technology as part of the European Space Agency Business Incubation Centre United Kingdom (ESA BIC UK - part of ESA Space Solutions), the world's largest business incubation programme for space tech start-ups who are using space technology to develop game-changing new products and services.

Managed by the Science and Technology Facilities Council (STFC), part of UK Research and Innovation, in collaboration with ESA, and partly funded by STFC, the University of Leicester and the UK Space Agency, the ESA BIC UK programme helps businesses boost their competitiveness in an increasingly fierce and global marketplace.

Based at STFC's Higgs Centre for Innovation at the Royal Observatory in Edinburgh, Crover has been developing the robot that can take accurate temperature and moisture measurements as it travels through the grain. This data is then transmitted, via satellite communication, to the grain store manager. Through the ESA BIC UK programme, Crover has also gained access to the advanced 3D printing expertise and capabilities, enabling them to identify and develop the bespoke components required for their design.

The company said that this technology was also put to the test at the TechCrunch Start-up Battlefield 2020.

Dr Lorenzo Conti, the founder of Crover, said, "The opportunity to work alongside astronomers, engineers, as well as 3D printing and prototyping experts has been invaluable to our business and our mission to invent something that could help change the world for the better."

DuPont Animal Nutrition, Proteon Pharmaceuticals partner on bacteriophage technology



The technology has been tested in Europe and Asia and proven in terms of efficacy and stability.

Image Credit: monticello/Adobe SAtock

DUPONT ANIMAL NUTRITION, a DuPont Nutrition & Biosciences (DuPont) business unit, has announced a partnership with Proteon Pharmaceuticals.

It will bring the emerging bacteriophage technology to poultry producers, helping to mitigate antimicrobial resistance (AMR).

The antimicrobial resistance threat has spurred recent investments in bacteriophage technologies. Modern analytics and omics technologies have enabled the bacteriophage candidates to be screened and identified for a specific bacterial challenge, with significant implications for feed and food safety. This new technology is

already being used in the animal feed industry.

DuPont invited Proteon Pharmaceuticals to partner with them for their compatible work culture, solid scientific approach and leading position in the field of phage technology

Poultry farmers in selected markets already benefit from using Proteon's technology to ensure biosecurity through the waterline and to improve the efficiency of the production.

Aart Mateboer, business leader, DuPont Animal Nutrition, said, "Proteon Pharmaceuticals is a pioneer in bacteriophage technology used in animal farming. They have been developing this technology for more than 10 years. It has

been tested in Europe and Asia and proven in terms of efficacy and stability.

"This technology fits with our nutraceutical approach. We are pleased to add it to our range of solutions for poultry producers."

Jaroslaw Dastych, CEO, Proteon Pharmaceuticals, commented, "We strongly believe that our technology might be considered as the future of animal health and nutrition and will help to reduce antibiotic use and antimicrobial resistance.

"We are excited to take this next step with DuPont to bring the benefits of bacteriophage technology as a feed additive to poultry producers globally."

Syngenta launches Cropwise Seed Selector

AGRICULTURE COMPANY SYNGENTA and NK Seeds have launched the Cropwise Seed Selector to help farmers select seeds through data-driven recommendations.

Syngenta said the tool ensures that different market-developed systems can connect to provide quality data to growers.

The tool builds on technology combining artificial intelligence, two decades of agronomic information and a simple user interface.

In addition to the added benefit of being connected to Syngenta's larger network of digital technologies, the Cropwise Seed Selector introduces NK resellers and customers to a number of new features

designed to streamline and optimise seed selection processes, including satellite imagery for crop diagnostics and a tool that expedites field-by-field hybrid decisions.

Justin Welch, Syngenta digital product manager, said, "Our goal from the start with digitising seed selection has been to support growers from the ground up – combining the expertise of our retailers and agronomists with data-driven technology.

"By looking at what data and science are saying through an unbiased, fact-based lens, innovations like the Cropwise Seed Selector are helping farmers make better business and agronomic decisions."

The company said an agronomic informa-

tion archive allows Cropwise Seed Selector users to tailor their seed portfolio based on geographic location, soil productivity, precipitation levels, historical crop stress and product performance by year and region.

Users can adjust these factors to understand how a specific corn hybrid or soybean variety would perform under a range of different conditions – information critical to making confident seed selections. The platform is highly adaptable, enabling retailers and farmers to proactively plan for weather volatility, soil variability and planting specifications by being able to see real results from real places.



An agronomic information archive allows Cropwise Seed Selector users to tailor their seed portfolio based on geographic location.

Image Credit: candy1812/Adobe Stock

CNH Industrial signs agreement for agriculture networks in Southern Africa

CNH INDUSTRIAL ANNOUNCED its plan to expand direct presence in southern Africa's agriculture and construction equipment sectors.

The company is moving to strengthen its local presence with the planned purchase of four divisions of Capital Equipment Group (CEG), previously owned by Invicta Holdings Limited. These include:

Northmec: South Africa's most established agricultural equipment distributor and the sole distributor of Case IH equipment and implements

NHSA: A spare parts distributor in Southern Africa mainly focused on agriculture

CSE: A well-established equipment distributor operating for more than 50 years in the market and the sole distributor of CASE tractor loader backhoes and skid steer loaders;

Landboupart: A distributor of spare parts and implements.

By taking full operational management of its commercial distribution and aftermarket network, CNH Industrial aims to further develop its Case IH and CASE Construction Equipment brands' presence together with aftermarket sales and services in South Africa and other Southern African markets, strengthening its position and ties with its customer base.

This model is already in place for the company's agriculture equipment brand New Holland Agriculture as well as its commercial and specialty vehicles business via its IVECO, IVECO ASTRA and IVECO BUS brands.

CNH Industrial is a global leader in the capital goods sector present in all major markets worldwide.

Ethiopia's CPWE boosts coffee processing efficiency

THE COMPANY TURNED to processing specialist Bühler's Sortex sorters to ensure a superior and more consistent quality of the coffee. The company was subsequently able to overcome its four most significant hurdles in coffee processing: product quality, export standards, operational efficiency and stability.

Most processing plants across Ethiopia use handpicking as a primary means of sorting coffee beans. Getaw Yalew, general manager at CPWE, said, "Before investing in the Sortex machines, we relied heavily on handpicking, and the quality control of our coffee was not great. The efficiency was poor, output per hour was low, and costs were high."

Bühler was able to meet CPWE's sorting requirements with a portfolio of solutions responsible for processing around 75% of all Arabica beans exported from Ethiopia each year.

"Since investing in the Sortex machines, we have reduced our dependency on handpicking," Yalew stated. As a result, the company has noticed a vast improvement in the quality of their coffee beans, with easier removal of sour, vinegar, immature and discoloured beans, in addition to insect-damaged and broca beans.

Export requirements for coffee beans in Ethiopia are among the highest criteria, with a 99.9% accept quality as standard. "Thanks to the simultaneous re-sorting functionality, we can count on our Sortex sorters to ensure that we continue to meet the toughest export requirements," Yalew noted.

"CPWE has seen the market constantly growing in terms of volume. We have been able to supply our products at a consistent quality standard, with markets now perceiving us as a reliable supplier of high-quality coffee."

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AfDB says SME's are lynchpin of African agriculture

A PANEL OF some of Africa's most promising small and medium-enterprise (SME) agripreneurs gathered online to call for more selective investment, accelerated business acquisitions and increased cooperation to help Africa feed itself and the world.

The African Development Bank organised the virtual session, Integrating African Food Systems through the Lens of SME champions, as a side-event ahead of Africa's largest agriculture conference - the African Green Revolution Forum (AGRF) - which was held online for the first time, from 8-11 September. Webinar moderator Atsuko Toda, bank director for agricultural finance and rural development, said the panel members, were selected because they are using innovative solutions, tailored their business models, have a proven track record, and shown to have an impact on food systems.

"We see the importance of the roles that you play, the risks you take and the Bank wants to give you more visibility so that policy makers can understand the challenges of what you are facing and help SME Champions to grow," Toda said.

The group of African "SME Champions" - heads of SMEs across the continent's food system production, processing, logistics, agricultural digitisation and cold storage chain solutions sub-sectors, set the scene for webinar attendees, by describing the challenges and opportunities they face in trying to meet Africa's food systems demands.

"Especially if you are an SME it is really challenging to penetrate the market and do something significant," said Nicholas Alexandre, global head of commercial at LORI, a Kenya-based tech-driven logistics company.

Others shared their experiences in overcoming challenges. For

example, Nnaemeka Ikegwonu, head of Nigeria-based ColdHubs, says his solar power, cold storage facility company helps farmers' produce stay fresher, longer, reducing the need to rush product to market at less competitive prices.

"We are taking the risk out of ownership of huge cold rooms from smallholder farmers because we design, operate and maintain these cold rooms. We offer a pay-as-you-use service model," said Ikegwonu.

Kenya's SunCulture company, which provides farmers with solar-powered irrigation services, uses a similar "pay-as-you-grow" service fee program. SunCulture CEO and SME champion Samir Ibrahim told webinar attendees that there has been sufficient development and investment support to African entrepreneurs to know what works - and that it is time to step up scaling up efforts.

Other champions said building up Africa's agriculture sector lies in building up its agriculture value chains. SME Champion Patricia Zoundi, who started up Canaan Land, a Cote d'Ivoire-based company that trains women in rural areas in order to develop sustainable and inclusive agriculture said, "We have north-north cooperation. We have south-south cooperation. Now it is time to have SME-to-SME cooperation."

Toda closed the session by reassuring SME Champions that their insights shared would be transformed into key messages intended to reimagine policy, resulting in the accelerated transformation of Africa's food systems. "There is so much for us to share, proven solutions for us to amplify, to bring forward to scale and consolidate through partnerships and finance."



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