Frozen food processor Shandong Santao Food trusts the TOMRA 5B sorting equipment as "the guardian" of its production line Pg.6

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John Deere Expands Upon Precision Technology Suite With SmartGrade™ Remote Support Pg.25

New initiative set to strengthen fertilizer regulation in Southern Africa Pg.40
HOW TO PLANT A POLE

The detail in these diagrams assists proper drainage of moisture that may be absorbed by a wooden pole. A structural engineer must be consulted for detailed structural requirements.

Poles intended for planting in the ground must be purchased at required lengths. Never plant a cross-cut end of a treated pole or post into the ground as this will expose the untreated heartwood to fungal and termite attack resulting in premature failure.

CROSS CUT ENDS

All machining, cutting or drilling of preservative treated timber should be done prior to preservative impregnation. Areas exposed after impregnation due to cross cutting etc., must be treated by liberally applying a suitable paint-on or brush-on remedial or supplemental preservative (excluding ground contact).

CHOOSE THE CORRECT HAZARD (H) CLASS

H6 - High Hazard: Prolonged immersion in sea water (Marine piling, jetty cross-bracing, landing steps, retaining walls etc.)

H5 - High Hazard: Outside in contact with heavy wet soil or in fresh water (piling, substructure for walkways & jetties, vineyards etc.)

H4 - High Hazard: Outside in ground, subject to periodic wetting and leaching (fencing and structural posts, landscaping, stakes, pergolas, etc).

H3 - Moderate Hazard: Outside above ground, subject to periodic wetting and leaching (cladding, decking, stairs, balustrades, log homes, etc).

H2 - Low Hazard: Inside above ground, protected from wetting and leaching (roof trusses, framing, panelling, laminated beams, flooring, etc).
CHOOSE THE CORRECT PRESERVATIVE TREATED TIMBER FOR YOUR END APPLICATION (H classes)

H2 – Low Hazard: Inside above ground
H3 – Moderate Hazard: Outside above ground
H4 – High Hazard: Outside in ground
H5 – High Hazard: Outside in contact with heavy wet soil or in fresh water
H6 – High Hazard: Prolonged immersion in sea water

FOR MORE INFORMATION ON ANY ASPECT RELATED TO TREATED TIMBER PRODUCTS AND THE CORRECT USE OF TREATED TIMBER, OR WHERE TO CONTACT SAWPA MEMBERS, PLEASE CONTACT:

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From the Editor

SADC AGRIBUSINESS magazine is pleased to publish the 3rd instalment, which brings you and your business closer to the news.

With agriculture ever playing an increasingly critical role in every aspect of business, countries and companies recognize that they need to accelerate the development of agricultural solutions to ensure they and the industry remain the competitive vanguard. The SADC AGRIBUSINESS magazine brings together skills in agic sector and technology strategy, product ideation, technology development and deployment, and organizational change management to help support clients through successful transformations.

As the year nears the end, our publication together with our partners is sure to deliver informative news for our readers, allowing us to provide the very best business, exposure and portfolio strategies on which we’ll conceive better strategies and build the next generation of transformative enterprise and agricultural products and platforms.

Together, working as one team, we will unlock the full potential of the sector transformations, innovations and open the market for our readers to par with global trends and innovations, which will lead to the best path for success in the ever "having" to improve agri, and especially Africa farming landscape.

Additionally, SADC AGRIBUSINESS Magazine has become part of the agricultural business and product Ecosystem, a network of partnerships that provides proprietary access to tools, technologies, and delivery capabilities that help our editorial deliver breakthroughs for its audience.

THANK YOU TO THE READERS FOR FINDING TIME TO GET INFORMED. WE HAVE YOU IN MIND WHEN MAKING THIS CONTENT. ENJOY….

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Frozen food processor
Shandong Santao Food trusts the TOMRA 5B sorting equipment as “the guardian” of its production line

Since its establishment in 2003, Santao has become one of the leading enterprises in China’s frozen food industry by virtue of its unique advantages: an ecological base, professional management mechanisms, advanced automatic fruit and vegetable processing lines, and strict implementation of GFSI, BRC, GAP, GMP and HACCP.

Today’s Investment is Tomorrow’s Peace of Mind

Technology in your farming operation is the driving force behind long-term resilience.
By Henkie Breedt, Marketing and Communications Manager, John Deere Africa Middle East
In times of economic uncertainty, making the right decisions has never been more critical. Having a successful farming operation in South Africa means you need to set long-term goals that foster resilience.

Niche Food Processing Will Always Remain Prime Business

Wheat – that grain used for our daily bread and descendant of the ancient grains originally grown and selected in the fertile crescent and the mainstay of the agricultural revolution, in modern times was the domain of large scale industrial mills, very often due to centralized government policies and bread subsidies to the masses. The village wheat flour mill practically disappeared.

Ethiopia, OCP Group to establish fertilizer plant in Dire Dawa

The Government of Ethiopia has signed a Joint Development Agreement with Morocco’s OCP Group to implement a fertilizer project in Dire Dawa.

The agreement was reached during a visit to Morocco led by Ato Ahmed Shide, Ethiopia’s Minister of Finance, and accompanied by officials from the Ethiopian Chemical Industry Corp. (CIC), the Ethiopian Agricultural Businesses Corp. (EABC) and the Ethiopian Mineral, Petroleum and Biofuel Corp. (EMPBC).
Frozen food processor Shandong Santao Food trusts the TOMRA 5B sorting equipment as "the guardian" of its production line

Since its establishment in 2003, Santao has become one of the leading enterprises in China’s frozen food industry by virtue of its unique advantages: an ecological base, professional management mechanisms, advanced automatic fruit and vegetable processing lines, and strict implementation of GFSI, BRC, GAP, GMP and HACCP.

As the frozen food industry has developed rapidly, higher requirements have been placed on participants. Santao chose TOMRA as its partner to upgrade production line automation to ensure quality, improve product value, and build its brand with cutting-edge technology.

Labor challenges during frozen food’s explosive growth period

Santao was one of the first enterprises engaged in the frozen food industry in China. In the 1980s and 1990s, when frozen and refrigerated food were in an emerging phase, Santao took the lead. With the increasing perfection of cold-chain logistics, the continuous improvement of refrigeration technology, and the popularization of frozen food, Santao’s frozen food business ushered in a period of explosive growth. Yet at the same time as great opportunity, labor has posed a challenge.

Before Santao’s production line was upgraded, it was completely manual, which inevitably had limitations when dealing with large or emergency orders. Due to the strong seasonal characteristics of fruit and vegetable processing, recruitment of workers has become a major difficulty. In addition, the insufficient availability of labor would be even more of a challenge when expanding capacity at the new plant.

In order to solve this labor challenge and find a solution for processing more than 10 food varieties - such as spinach, green beans, diced onion, strawberry, soy bean/kernel and sweet corn - Santao researched much food processing machinery and equipment, both at home and abroad. After detailed
investigations and site visits, Santao found that most excellent frozen vegetable exporters in Shandong Province had equipped their production lines with TOMRA automatic sorters.

Following comprehensive consideration of technologies, return on investment, and other factors, Santao decided to select the TOMRA 5B as the “guardian” in the sorting stage of its production line.

“With completely manual sorting, capacity was limited and unstable, but TOMRA sorters provide us with a perfect solution. The low rate of false rejects from TOMRA’s equipment has reduced the waste of raw materials and improved the yield”, affirms Zheng Jintao, President of Shandong Santao Food Co., Ltd.

**Expectec surprises from production line automation**

Since the TOMRA 5B sorter was put into operation, the labor force has been reduced by about 60%, yet packhouse capacity has tripled, enabling Santao to take leaps in efficiency, quality, and yield.

Santao currently produces about 10 different products of quick-frozen fruit and vegetables. Each product has its own characteristics and sorting priorities, but the universality of TOMRA’s equipment ensures the stable and efficient operation of Santao’s production lines.

The TOMRA 5B sorter rejects foreign objects and product defects, and takes care of quality grading, for spinach, soy bean, soy bean kernel, shelled corn, diced strawberry, and other foods. It is a great advantage that operators can quickly and easily set tailored sorting programs and parameters on the equipment for different food applications.

“Products sorted by the TOMRA 5B have very good and consistent quality. The customer complaint rate has dropped significantly. According to current use, this sorter should pay for itself in about two to three years. It is a wise investment”, said Zheng Jintao.

**Build quality fortress with technical superiority**

The TOMRA 5B sorter is designed to improve production capacity, food safety, and product quality. Equipped with an advanced algorithm and 360° camera for all-round hexahedral stereoscopic detection, it not only accurately removes foreign objects such as glass, metal, stones, plastics, stems and insects, but also identifies defects in soy beans such as different colors, dried beans, lack of kernel, single grain, fractures, plus insect attack, rust and damage.

By combining high-resolution color camera and multi-laser technologies, the TOMRA 5B can identify foreign materials such as thin and transparent glass, plastic film, and objects the same color as the product, which cannot be effectively identified in color sorting, shape sorting or by metal detection and X-ray machines. This precisely controls product quality, ensuring it stays consistent even when the quality of raw materials is uneven.

As explained by Zheng Jintao:“With its cutting-edge technology, TOMRA’s sorter can identify foreign objects and product defects that are invisible to the naked eye and easily ignored, boosting the quality of finished products and keeping this consistent, which is in line with our strategic market positioning. We will purchase more TOMRA sorters as we further expand our production capacity in the future.”

In accordance with the latest food hygiene standards and requirements of European and American countries, TOMRA’s equipment is designed to support whole-machine cleaning. This prevents cross-contamination and microbial hazards during food processing.

**Quality service enhanced by local spare parts store**

Zheng Jintao highlights that TOMRA has conducted intensive studies on all kinds of sorting challenges in the whole process, from planting to delivering products to consumers, so as to customize solutions that meet or exceed market expectations - and this makes TOMRA an ideal automation partner.

TOMRA’s strong global service network and fast local service response reassures Santao. By establishing a project communication group and remote technology support system, and by offering remote video-link after-sales service, TOMRA’s technical specialists can control the equipment remotely, perform troubleshooting promptly, and give operation guidance if needed. And thanks to TOMRA’s well-stocked local spare parts store, Santao now operates with steadily running production lines and healthy capacity growth.
TOMRA Sorting Solutions is a leading provider of sensor-based food sorting machines and food processing technology for the fresh and processed food industries. Developing state-of-the-art technologies, optimizing customers’ production flow and helping to deliver consistent high quality food have been TOMRA's strengths for more than 40 years.

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Agroecology movement is not against modern technologies — Peasant farmers

Though many agroecology promoters take a strict stance against the use of modern farming tools and technology, advocates in Ghana have signaled they’re open to a more inclusive approach.

“There are some misconceptions about agroecology that I would want to correct,” said Dr Charles Nyaaba, head of advocacy and programs at the Peasant Farmers Association of Ghana, one of the organizations promoting agroecology in the country.

“Usually, when we talk of agroecology, what comes to the mind of many people is that it does not involve the use of machinery, it doesn’t involve the use of external inputs, it is necessarily mixed cropping [rather than monoculture] and it cannot be scaled. That is not the case. Agroecology, just like conventional farming, can be scaled.

If there was a definition — before we started promoting our own — which includes not scaling up our farming activities or confusing agroecology with organic farming, then that is not what we are seeking to promote.”

Nyaaba, who is also an agribusiness lecturer at the University of Energy and Natural Resources in Ghana.

“When you are starting to do [an] agroecology farm and there is dead soil, in that case you want to bring that dead soil back to life. What we do is we support that soil with minimal inorganic fertilizer. We don’t encourage the use of heavy machinery like tractors to overturn the soil and destroy soil structure, but we use rippers and other machineries for planting.”

Differing definitions

His stance marks a departure from the approach promoted by the Food and Agricultural Organization (FAO), the Alliance for Food Sovereignty in Africa (AFSA) and international aid organizations like ActionAid and Oxfam, which have been promoting a narrower definition of agroecology as the future of agricultural production in Ethiopia, Uganda, Burkina Faso, Ghana, Senegal and other African countries.
The FAO defines agroecology as the application of ecological principles with the aim of protecting the environment. It ensures the sustainable renewal of the natural resources necessary for production like water, soil and biodiversity. And it makes sparing use of non-renewable resources.

By gradually eliminating the use of chemicals, it strives toward implementing organic farming, thus contributing to improving the health of farmers and consumers alike.

On its website, AFSA’s list of agroecology principles include championing small African family farming/production systems based on agroecological and indigenous approaches, resisting industrialization of African agriculture, emphasizing African-driven solutions to African problems, and rejecting the genetic engineering and privatization of living organisms.

Some Western academics and NGOs, including Pesticide Action Network, the Community Alliance for Global Justice and Regeneration International, are also pushing Africa to adopt a narrow definition of agroecology, to the exclusion of other forms of production.

Bernard Guri, executive director of the Center for Indigenous Knowledge and Organizational Development in Ghana, noted during the AIS Live webinar that agroecology is not anti-science, as portrayed by some opponents. “The agroecology movement is not saying science is not important… Agroecology is looking at indigenous knowledge.

But also looking at good scientific practices that we can bring into it, he said. “So, for example, we say we don’t accept pesticides but if we are in a pandemic situation, you should be able to use some specific pesticides to knock down [the pests]. But not to take it as a practice and then supply and use volumes of pesticides every day.”

Agroecology is evolving Nyaba added: “Just as conventional agriculture is evolving, we keep getting new technology in agroecology, too. Personally, my position on agroecology is not ideological. It is flexible. But what I recognize is that we need to protect our biodiversity and agroecosystems. So, any practices that do not compromise the agrobiodiversity and agroecosystem, I personally do not have any problem with that.”

Dr. Irene Egyir, an associate professor in the University of Ghana’s Agricultural Economics Department who has been a strong critic of agroecology, said the redefinition of the concept makes it worth embracing.

“When we did agroecology farming, when we said agroecology, we didn’t want to plough and use improved seeds. It was the frontier and conservation model. But if now the scope is changing and the typology is changing, then it is good. That is what I call climate smart agriculture,” she observed.

Nassib Mugwanya, a Ugandan agricultural communications specialist who previously worked with the National Crops Resources Research Institute, believes the holistic definition of agroecology creates an opportunity to embrace emerging technologies, such as genetically modified (GM) seeds.

“For example, what agroecology cares about today is to minimize damage to the environment.” Mugwanya said. “What if I tell you about the GM crop that has been engineered to reduce pesticide application? If what agroecology cares about is farmers choosing what works for them, what if I told you there is a farmer in Uganda who is interested in the virus-resistant cassava variety which is genetically engineered? That is the conversation I want to hear, which is rooted in the contextual realities of what farming is in Africa.”

Agroecology and agricultural biotechnology

To date, anti-GMO activism has been at the core of agroecology movements in Africa. But the Ghana advocates indicated some receptivity to the improved seeds.

“In terms of GMOs, agroecology is talking about the ecology,” Nyaba explained. “So, we don’t put more emphasis on GMOs or plant species. We think that modern methods of farming are encouraging GMOs to increase productivity because with our current land if you use indigenous seed, you won’t get the yield you are looking for.

But with agroecology, whether with GMOs or the indigenous seeds, without the fertilizer, you are still going to increase your yields. So, there is no need for you to spend money and try to bring seeds from elsewhere. That’s why our emphasis is not on GMOs.”

Guri has a more open position. “If that biotechnology is not working against nature and producing artificial things, it’s acceptable. But most of the biotechnology like GMO is about playing with genes and creating something. And we don’t know the long-term effects of those GMOs.

Those kinds of things are not accepted in agroecology. But if it’s about a natural process, and using biotech to improve a natural process, that is acceptable in agroecology… anything that reduces the use of artificial inputs is acceptable…. Agroecology is not anti-technology. It is the way the technology is developed.”
Agriculture Will Make Or Break Africa’s Free Trade – FaO

The African Continental Free Trade Area (AfCFTA) holds the potential to lift millions of people out of poverty and end chronic food insecurity in Africa. However, its success rests on countries’ ratification and implementation, in particular in the agriculture sector.

Africa depends on its exports to the rest of the world of agricultural commodities such as cocoa, coffee, cotton, tobacco and spices to generate much-needed foreign exchange. But the continent is a net importer of staple foods such as cereals, vegetable oils, dairy products and meat.

Intra-African agricultural trade as a percentage of total African agricultural trade consistently remains below 20 per cent, one of the lowest for any region. Total trade between African countries was just 2 per cent during 2015–2017, compared to 67% for intra-regional trade among European countries, 61% for Asia, and 47% for the Americas, according to the UN’s trade organization UNCTAD.

The AfCFTA aims to change that. It created the largest free trade area in the world, representing a market of 1.2 billion consumers, and commits countries to remove most tariffs and non-tariff barriers to improve the flow of goods and services across countries, boosting economic growth along the way.

But since trading under the AfCFTA started on 1 January 2021, only 36 out of the 55 African Union member states have ratified the agreement.

Importance of agriculture
It is in agriculture where the AfCFTA’s ambitions can find the most fertile ground, in particular through developing inclusive regional value chains around priority commodities, led by a dynamic and diverse private sector of smallholders, commercial farmers, processors and service providers.

Africa’s single market has the potential to create a positive, more competitive business environment for agriculture, encouraging further investments and ultimately a modern, dynamic, productive, inclusive, resilient and sustainable agriculture sector that can lift millions of Africans out of poverty.

Strengthening national food production capacities and linkages to regional markets will provide a strong basis for countries to boost regional trade. Policies and programmes need to encourage the private sector to inject new investments, add value to commodities, compete with imports, and create jobs.

Regional approach
Many of the continent’s regional economic communities have already identified strategic commodities for further development into regional value chains: Eastern Africa has prioritised rice, beans and dairy, among others. West Africa has prioritised sorghum, livestock, fish and aquaculture products, among others. Southern Africa’s priorities include soybeans and groundnuts.

This regional approach has the potential to absorb smallholder farmers including women and youth, and micro, small and medium-sized enterprises, and connect them to the larger private sector which dominates input and output markets.

Increased integration of stakeholders along agricultural value chains, from farmers to processors, transporters to retailers, is likely to create sustainable jobs and improve long-term agricultural productivity and, ultimately, food security and nutrition.

Many of the continent’s regional economic communities have already identified strategic commodities for further development into regional value chains: Eastern Africa has prioritised rice, beans and dairy, among others. West Africa has prioritised sorghum, livestock, fish and aquaculture products, among others. Southern Africa’s priorities
include soya beans and groundnuts.

In this International Year of Fruits and Vegetables, reduced tariffs on fresh food and the gradual elimination of non-tariff barriers could see more people in Africa able to afford nutritious, diverse foods – FAO’s latest analysis shows that almost a billion people in Africa cannot afford a healthy diet.

Paradigm shift away from business as usual. Increased trade between African countries is a paradigm shift away from business as usual. The success of the world’s largest free trade area rests on governments and the private sector.

Countries and companies face major hurdles such as addressing incompatible rules of origin and food safety and labelling requirements, and must overcome poor infrastructure such as telecommunications and road networks, and the need for quality market information.

The Food and Agriculture Organization of the United Nations (FAO) and the African Union recently launched a framework to support countries to adapt to the new single market.

A key objective of the Framework for Boosting Intra-African Trade in Agricultural Commodities and Services is to support countries to triple intra-African trade in agricultural commodities and services which is one of the seven commitments undertaken by African governments under the Malabo Declaration adopted in 2014.

Enabling a robust private sector is an important early step, because small-to-medium enterprises are vital partners in the structural transformation of agriculture and food systems in Africa.

Governments need to build buyer-supplier networks, connecting small and medium producers, including smallholder farmers, to buyers locally and regionally. Women and youth must be included in these efforts.

Looking further ahead, Africa’s single market has the potential to create a positive, more competitive business environment for agriculture, encouraging further investments and ultimately a modern, dynamic, productive, inclusive, resilient and sustainable agriculture sector that can lift millions of Africans out of poverty.
Kenya: Former Battlefields Along Kenya and South Sudan Border Turned Into Farms

Once upon a time, Ms Emuria Aburo had a big herd of cattle.

They were the pride of her home, her source of wealth and income, but in no time, they were all gone.

A dawn raid by Toposa cattle rustlers in South Sudan on her village in Lochor Ekal and drove away her entire herd, never to be seen again.

A similar fate befell Ms Nasuru Nyakou, also from the village, with her family’s 20 goats being part of the herd the Toposa raiders went away with.

This is the story of 160 households in eight villages hit hard by militia attacks from neighbouring South Sudan.

Here, in Turkana West, the families that were left with nothing are now picking up the pieces.

“My family lost its only 20 goats, and now, we think, farming might just be our answer as the militia might not care much about the crops as they did our livestock,” said Ms Nyakou.

Since last month, Ms Aburo has been travelling from her Lochar Ekal village to Lokeriiriet farm to clear a thicket on a one-acre piece of land overlooking the Mogilla ranges in Turkana West.

With her ageing husband, five children, and two grandchildren, but with no cows, Ms Aburo knew that staying at home waiting for relief food — distributed intermittently — was simply not an option.

So when the opportunity to transform the once battlefields to produce food during the rainy seasons, she was, understandably, among the first to embrace it.

“My family lost its only 20 goats, and now, we think, farming might just be our answer as the militia might not care much about the crops as they did our livestock,” said Ms Nyakou.

She had tried a firewood venture after the livestock was stolen, but that did not work. When Covid-19 struck, the few hotels in Lokichogio town that used to take her firewood shut down or scaled down business.

Food scarcity Coupled with the drought where more than 600,000 people are facing starvation due to scarcity of food, she pointed out that relief food supplies were unreliable as she is yet to get even one free kilogramme of maize.

“Despite lack of a permanent river at our Lokeriiriet farm, we are hopeful that the expected rains will provide adequate water for our crop,” a hopeful Aburo said.

Mr John Elar, the chairman of the farmers group said for them, there was no turning back.

Taken up farming Through the Lokeriiriet Farmers Group, the villagers have taken up farming.

Here, in Turkana West, the families that were left with nothing are now picking up the pieces.

“Despite lack of a permanent river at our Lokeriiriet farm, we are hopeful that the expected rains will provide adequate water for our crop,” a hopeful Aburo said.

Mr John Elar, the chairman of the farmers group said for them, there was no turning back.
“Through training, we were challenged that we can expand the farm and grow high-value crops that we can sell to a ready market at Lokichogio town that otherwise relies on Kitale, 512 kilometres away, for vegetables and fruits,” said Mr Elar.

Another farmer, Ms Apua Loperito, walks five kilometres every day from Nachuchukait village to prepare her land where she will plant maize, green grams, and sorghum.

Ms Loperito said she has never practised farming but was quick to point out that through training from officials from the county department of agriculture and Welthungerhilfe organisation, she now has farm tools and is closely monitored to ensure she realises full benefits from her “strange occupation”.

“We are also assured of free certified seeds. Farmers who feel like giving up, cash for work stipends where I was given Sh4,000 in February, Sh1,000 in March and Sh2,000 in April by Welthungerhilfe organisation to work on my farm is a great motivation,” she narrated.

She spent part of the money on school fees for their three children at Lokichogio Mixed Primary School.

**Drip irrigation scheme**
The passion of farmers at Lokiririet has attracted the attention of the county government, which is currently establishing a pilot model drip irrigation scheme.

County Agriculture Chief Officer Dr Jacob Lolelea said that the pilot project is part of the devolved unit mission of increasing crop yields through technological innovation and timely training of farmers on land preparation and planting before the onset of the rainy season.

Dr Lolelea called for support from development partners to completely eradicate Prosopis Juliflora weed that has invaded extensive land that would otherwise be grazing fields or farm fields.

County Agriculture Executive Philip Aemun noted that due to the adverse effects of climate change, locals have no option but to diversify their sources of livelihood.

Mr Aemun said that pastoralism has been the main source of livelihood for the community but the sustained threats from cycles of drought had left many of them vulnerable.

“Climate change not only creates a shortage of pasture and water to the large herds of livestock but is also responsible for re-emergence of fatal diseases,” the county official said.

Welthungerhilfe organisation has rehabilitated 12 farms in Kalobeyei, Songot, Lopur and Lokichogio wards to benefit 750 farmers.

The organisation also provided free farm inputs, tools and certified seeds as well as train them on better agricultural practices.

Some 500 of the beneficiaries were enrolled on the cash for work programme.

In late September last year, tension was high along the border of Kenya and South Sudan after heavily armed militiamen from Toposa ethnic community invaded Turkana villages along the Mogilla ranges at Mogilla Location in Turkana West Sub County.

The aggressiveness of the militiamen resulted in mounting tension at the border over impending armed conflict over water and pasture.

According to Turkana pastoralists, the militiamen were also targeting to occupy the only reliable water pan that was constructed by the area National Government Constituency Development Fund at Kapatedie, more than 50 kilometres from the border.

After nation.africa highlighted the story, the State through National Security Council, swiftly deployed the army to flush out the more than 200 heavily armed militia from neighbouring South Sudan.

Turkana leaders led by Governor Josphat Nanok and Turkana West MP Daniel Epuyo praised the State for the swift intervention that forced the armed men who had occupied extensive grazing fields at Napakin and Lokiriwak areas along Mogilla ranges to go back to their territories.
Tanzanian Farmers Reap the Benefits of Rapid Agricultural Mechanization

Farmers in Tanzania have benefited from rapid transformation, thanks to financial support from the African Development Bank, a national agricultural bank program. With the support, paddy rice farmers are reaping the benefits of improved access to farm inputs, including the supply of quality seeds and technology.

“Nothing beats the power of a skilled, knowledgeable farmer who is equipped with the right information at the right time in the right season,” said Noeliahe Bomani-Nkamazina, the Learning and Talent Development Manager at the Tanzania Agricultural Development Bank.

The African Development Bank Group’s concessional window, the African Development Fund, provided a $93 million loan to the Tanzania Agricultural Development Bank to increase access to agricultural credit. The Tanzania Agricultural Development Bank said the loans reached at least 105 farmer groups and cooperatives, covering 1.68 million farmers, who made up about 75% of the country’s agricultural production.

Chauru Agricultural and Marketing Cooperative Societies was among the many companies that mechanized its operations. The cooperative acquired two tractors and some 30 tonnes of improved paddy seeds after receiving loans of around $350,000 from the Tanzania Agricultural Development Bank. Chauru also purchased 270 tonnes of fertilizers to expand its paddy acreage.

“We were struggling with low yields and low income from farming paddy at this (Chauru) scheme. Being a smallholder trying to make ends meet for our families, the loan sharks left us in deep debt. But that is now expected to change,” said Rukia Mbangwi, a member of Chauru.

The Bank Group’s intervention has helped ABM Equipment Services Limited, which manufactures organic fertilizer to automate its fertilizer production processes, leading to nearly a four-fold increase (from 4,000 to 15,000 tonnes) in production capacity, Bernard Maimu, the firm’s director, said.

“Before this support, we were using traditional harvesting methods which were slow and led to wastage of paddy due to delays in harvesting because paddy is not supposed to last 14 days after maturity. But with the combine harvester, we do timely harvesting and the yields are fully collected. After harvesting, we used to sell paddy but now, with the milling machine, our farmers are trading at a better price,” Maimu said.

Maimu said the company purchased new machinery and soil testing equipment with a loan of $103,509, and increased its range of products to include calcium nutrients for animal feed supplements. Work is also underway to increase the number of fertilizer production plants.

Samson Mwembe, the farm manager at Mombo Irrigation Scheme in Tanga, on the northern coast of Tanzania, said it bought three combine harvesters, two tractors and two paddy milling machines with its $175,124 funding. This enabled the 429 farmers enrolled on the 220 hectares scheme to expand production.

“Before this support, we were using traditional harvesting methods which were slow and led to wastage of paddy due to delays in harvesting because paddy is not supposed to last 14 days after maturity. But with the combine harvester, we do timely harvesting and the yields are fully collected. After harvesting, we used to sell paddy but now, with the milling machine, our farmers are trading at a better price,” Mwembe said.

During the 2018 season, the Tanzania Agricultural Development Bank disbursed loans worth $4.6 million to facilitate the procurement of pesticides to over 400,000 cotton farmers in 17 regions, leading to a bumper harvest of 221,000 tonnes, which was a 67% increase on the previous year’s harvest.

At least 55 tractors were purchased to support cotton farmers. The Tanzania Agricultural Development Bank is also collaborating with the Cotton Board and the National Development Cooperation (the suppliers of the tractors) to raise the productivity of the cotton-growing regions through increased mechanization.

Furthermore, the expansion of irrigation projects covering the out-grower zones in six regions in Tanzania was enhanced with a loan of $5 million, which enabled the out-growers to expand their irrigation schemes to reach more acreage under agricultural production.

Meanwhile, 19 agro-processing industries in 16 regions across the country received $45 million in credit to accelerate agro-processing, and are expected to significantly contribute to the achievement of the country’s industrialization targets, set out in Tanzania’s Development Vision 2025.

The African Development Bank views agriculture as a key sector. Jacob Ondor, Officer in Charge of the Bank’s Tanzania office, explained the massive investments in the country’s agriculture sector: “Investing in agriculture allows the sector to transform subsistence farmers into agri-business owners, and is a sure way of supporting the country’s aspirations for more inclusive growth.”
Today’s Investment is Tomorrow’s Peace of Mind

Technology in your farming operation is the driving force behind long-term resilience.

By Henlie Breedt, Marketing and Communications Manager, John Deere Africa Middle East

In times of economic uncertainty, making the right decisions has never been more critical. Having a successful farming operation in South Africa means you need to set long-term goals that foster resilience.

Without a solid foundation, your farming operation may be facing an uncertain future. Resorting to short-term solutions may seem like the best decision today, but your farming operation will be ill-equipped to handle the challenges of tomorrow. Technology is the underpinning factor that will provide your farming operations with the resilience it needs for a sustainable future. The decision to use technology applies to all aspects of a farming operation, especially when deciding on the correct mechanisation equipment to purchase for your farm.

If you rely on equipment alone to ensure the success of your operation, you may miss out on the opportunities that come with technological innovation. To ensure the prosperity of your farm, your approach needs to be less equipment-orientated and more solution-driven.

Gone are the days when a tractor was just a tractor, or a harvester was just a harvester; your equipment has now become the means to a long-term, sustainable goal. Therefore, this means you need to prioritise the latest technology to realise maximum efficiencies, optimal work performance, minimum downtime, higher outputs and achieve a higher resale value.

Solutions-driven technology can be applied to every level of mechanisation; for example, by using an efficient planter that optimises seed and fertiliser placement, yield percentages can be drastically increased. As a farm increases in size and capacity, efficient data collection and management becomes essential. By introducing technology, data can be handled seamlessly. Data can be tracked and converted into appropriate and workable inputs for each step of the farming and cultivation process. Effective data management provides farmers with the insights they need to prepare for fluctuations in demand.

Whether it is soil preparation, planting, spraying or harvesting, technology will reduce fuel consumption while maximising profitability.

A sustainable, resilient farming operation is possible with the latest technology provided by John Deere. By monitoring the performance of your equipment over a distance, coupled with data collection processed by the John Deere Operations Center and JDLink™, your farming operation is built to last. Technology is available to farmers at all levels and is designed with the farmer’s needs in mind. These innovations range from bolstered propulsion systems to driver comfort optimisations. With greater visibility and better lighting, you can keep your tractor going for longer; John Deere effectively connects machinery, people and technology.

Decision-making around future investments is crucial to ensure long-term success. One aspect of this is the resale value of equipment when it is no longer needed or needs to be replaced. Make sure you invest in equipment that, although it has a higher initial purchase price, will result in savings over its lifetime due to the latest technology. An almost assured high resale value offers an excellent long-term investment on the road to farming success.

The sustainability and success of any business is only as strong as its ongoing support structure, even more so in the farming environment. John Deere has one of the best dealer support networks in the world. We work hand-in-hand with our dealers to offer agricultural solutions, not only from an equipment and technology perspective but also with extensive after-sales support. With trained technicians equipped with all the spare parts needed, our technology communicates service alerts in advance, directly from your equipment to your John Deere dealer, ensuring minimum downtime of machinery and tools, especially during critical times.

Contact your nearest dealer today and invest in your future – invest in John Deere.
Technology has changed the world till now at a rapid pace. It came up as a revolution to transform the world. The expeditious rise in tech has led to the modification of all the sectors. Every industry that contributes to the development of the world is using different technologies to make everything easier for the betterment of the people.

One of the primary sectors of the world is agriculture, wherein farm mechanization is now at its all-time high. To this date, Agri industries have made numerous innovations that have reduced the workload for farmers. Many jobs which were being done by labour is now being done with the help of machines. We all know that traditional methods require strenuous and backbreaking efforts, which waste a lot of time as well. On the other hand, machines have made all this easy, where you can sit comfortably and the rest of the work will be done by your tractor. Tractors do everything fleetly and work will be done by your tractor. We have made all this happening, agricultural production was increasing worldwide and Solis grabbed the chance to start their farm equipment manufacturing company. With the collective efforts of the workers and the love received by farmers, Solis launched their first tractor in 1995.

In the following year, they also started their manufacturing plant in Hoshiarpur, Punjab, which is now the world’s largest tractor manufacturing company. In 2000, SOLIS entered into joint ventures with worldwide pioneers that helped them enter new markets and reach new customers. Gradually, Solis extended their hands towards the Japanese market as well and we launched their first compact tractor in 2005. Since then, we have introduced a diverse range of multi-utility tractors to suit the needs of the customers. Solis became India’s 3rd largest tractor manufacturing company and 6th largest globally. Solis is the No.1 tractor exporter from India and is constantly maintaining this position from last 3 year. We have an eminent presence in more than 130+ countries. Solis is now unwaveringly providing solutions to all your farming needs. It is now a proud manufacturer of agricultural tractors, offering a wide range of the toughest tractors, starting from 20-120 HP. We are one of the renowned tractor brands with over 1,100,000 tractors running successfully in multiple field applications. Each tractor from the entire range holds the capacity of executing the toughest challenges. They are proficient in performing tasks such as agriculture farming, orchard and vineyards farming, cattle farming, garden/golf course applications, forestry and industrial sectors.

With the manufacturing of tractors, we also produce various implements for soil preparation, planting, crop care, harvesting, post-harvesting, residue management and carrier-head. Solis believes in redefining the future of farming and so it is working persistently to attain this goal. Our tractors are strengthening farmers’ potential across the globe. We have become the No. 1 Tractor Brand in Nepal, Bangladesh, Algeria, Iceland, Afghanistan, and Hungary. Also, we have maintained our position among the top 5 tractor brands in Brazil.

The invention of a tractor gave hope to farmers. As technology changes, so did the agriculture sector. Many of the Brands have brought change with such beneficial innovations that helped the farmers to perform their bid in the world’s development. As the population is increasing speedily, so did the demand for food. In this instance, we need to increase the growth. To amplify growth, we need to use technology that can connect us with our target audience.

With the Green revolution happening, agricultural production was increasing worldwide and Solis grabbed the chance to start their farm equipment manufacturing company. With the collective efforts of the workers and the love received by farmers, Solis launched their first tractor in 1995.

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Solis – One of the Fastest Growing Tractor Brand
Solis tractors are engineered to work efficiently in orchards and vineyards. N series comes in two horsepower – N 75. This tractor helps in spraying and orchard applications with a unique hydraulic circuit that helps in elevating its transmission speed. N 90, this tractor is integrated with a power steering with a minimum turning radius which can easily execute tasks like mowing, mulching, transmission and crop protection.

H series
This series offers hydrostatic transmission with a Mitsubishi engine, which makes it a complete all-rounder with advanced features and over-the-top lifting capacity. Solis H 26 transforms all your complexities at ease. We are soon going to launch more members of this series with upgraded features.

ADOPTING THE LATEST IN MANUFACTURING

Technology
We are using futuristic technology to bring the-age Agri-tech. We have collaborated with Yanmar, since then we are using the latest Japanese technology. Our mechanism is advanced and ensures the smooth execution of complex tasks. Recently, we have introduced some models in Stage V for European markets. This technology is perfectly suitable for European emission standards.

Innovation
We are noted amongst one of the renowned tractor brands in the world. The reason behind this is that we have invented a few technologies in the agricultural world. We are one of the leading Indian company to introduce a CRDI engine. This engine requires only one fuel pump for multiple cylinders, which is beneficial for the environment as it reduces noise, smoke and particulate matter. Also, it consumes low fuel and delivers high-quality performance. We aim to transform farming into a more sustainable way.

STRENGTHENING NETWORKS

Distributor Network
We have a global presence in more than 130+ countries. One can easily find Solis tractor dealers nearest to the location. Also, we are rapidly working towards expanding our area of the network by connecting with more dealers. We have a wide distribution network with numerous tractor dealers in many countries.

Branding collaboration
To provide you with the best of class technology, we collaborated with one of the fastest technologies in farming, which is the latest Japanese technology. Using advanced technology helps in building towards a sustainable future.

Digital Presence
With a strengthened network chain, we also have a decent presence digitally. All our products are listed on the website. Apart from this we are present on most of the digital platforms and soon going to make our digital presence more strong with the upcoming technologies.

OUR RANGE

Solis tractors are far and wide known for their tough performance, high backup torque, great fuel efficiency, low maintenance cost, futuristic mechanics and comfort. Solis tractors are the only Indian company to deliver services in 33 countries in Europe, reaching a sale of 12,000 tractors in a year across the continent. They are an absolute example of value for money. Solis tractors can surprise you with more abilities than expected. Their tractors come in 3 ranges – S series, N series and H series. All of these tractor ranges have tractors that are extremely durable, economical and versatile, which makes them a perfect fit for any farming situation.

S series
Primary reason of S series is to deliver excellent value for money and advanced ergonomics in the fields. All the tractors from this series are highly productive, economical and fuel-efficient as well. This series offers five versatile tractors. S 20, this tractor is perfect for hobby or small-sized farms and private farms. The sturdy engine and better transmission amplifies growth & allows you to work efficiently with top-class performance. S 26 This is the most versatile tractor from the series, delivering extra comfort and potential in every endeavour. The hydraulic power steering and the extra efficient engine help in reducing operational stress. S 26 shuttle XL, this specially built with a synchronesh shuttle lever and 9+9 gear, adds extra comfort to every farming venture. S 50, this mighty tractor is the perfect farming companion. The easy gear shift, smooth transmission and unmatched potential enable us to endure all terrain conditions. S 75, this sturdy tractor is well known for its high backup torque and lifting capacity. The powerful CRDI engine boosts productivity and works like an Agri-professional when attracted with heavy implementation. S 90, This tractor is designed to tackle jobs like haulage, industrial and loader applications. Also, its synchronesh transmission adds excellence to every performance.

N series
It is known as the narrow track series. N series offers two highly versatile tractors which come with a low turning radius of 3.6m that allows you to move freely in small areas or narrow lanes. Both of the
Case IH has introduced the Steiger and Quadtrac AFS Connect6 series tractors to Southern Africa with the new models now available for customers to order.

The range will include 12 models from 400 to 600 rated engine horsepower. The Steiger AFS Connect wheeled will be available from 400 to 600 horsepower, including 3 special Scraper versions. While the Quadtrac AFS Connect will range from 450 to 600 horsepower. Several upgrades will be included, such as a redesigned cab for superior comfort, as well in-built AFS Connect to reach new levels of productivity.

Case IH AFS (Advanced Farming Systems) set the industry benchmark for precision farming back in 1995. Over the years the brand developed its AFS Connect telematics solution. ‘AFS Connect’ is now part of the new Steiger and Quadtrac series names because connectivity is integral to the new tractors themselves.

**Workhorse power and performance**

The new lineup of Steiger AFS Connect tractors can be configured to fit any operation and is built for a range of applications.

The fuel-efficient PowerDrive powershift transmission delivers fast shifting and a huge 670 peak-horsepower on the Quadtrac 600 model.

The Steiger and Quadtrac AFS Connect tractors also feature larger fuel tanks to cover more hectares before needing to refuel. Producers can keep working long days with 600-hour oil change intervals and ground-level maintenance to lower operation cost and keep your equipment in the field.

The connectivity system includes three key components; the AFS Pro 1200 display, the AFS Vision Pro operating system and the AFS Vector Pro receiver. These elements allow users to configure tractor management and precision farming functionality in the way they prefer.

AFS Connect technology also makes it possible for remote display viewing of the tractor’s AFS operating screen by farm owners, managers and, with permission, the dealers supporting their equipment. This can help identify problems and allow deeper insight to be gained into how they are caused and how they might be addressed.

**Advanced technology and ultimate connectivity**

The connectivity solution from Case IH, AFS Connect, will be embedded into the cab of the tractor, bringing new levels of productivity. It enables two-way data transfer between the machine and its manager. This allows farm managers to manage their farm, fleet and data from their office or mobile device.

The enhanced levels of connectivity in the new Steiger set this tractor apart, providing more support features, reducing downtime and maximising productivity,” Mr Savinov said.

“From the remote service support that allows dealers to remotely identify maintenance and service needs, to the ability for business owners and managers to monitor operations—even from outside the cab—make the Steiger AFS Connect series a game-changer for our industry,” he said.

For more information about the new Steiger and Quadtrac AFS Connect, or any Case IH machinery to suit your operation, contact your local authorised Case IH dealer or visit www.caseih.com. IH has introduced the Steiger and Quadtrac AFS Connect6 series tractors to Southern Africa with the new models now available for customers to order.

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Nebraska Tractor Tests (the official tractor testing program for the United States which tests tractors according to the Organization for Economic Co-operation and Development parameters) confirmed that Case IH Steiger and Quadtrac tractors are the industry’s most powerful and fuel-efficient tractors available.

“This new Steiger AFS Connect series represents the future direction for the entire Case IH tractor line-up,” said Alexey Savinov, Case IH Asia, Middle East and Africa Product Manager for Steiger.

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Niche Food Processing Will Always Remain Prime Business

Focus on Artisanal Wheat & Ancient Grain Milling

Wheat – that grain used for our daily bread and descendant of the ancient grains originally grown and selected in the fertile crescent and the mainstay of the agricultural revolution, in modern times was the domain of large scale industrial mills, very often due to centralized government policies and bread subsidies to the masses. The village wheat flour mill practically disappeared.

Since the early 1990’s ABC Hansen Africa piloted the way for artisanal milling of flour in plants of 12 to 75 tons per day and focusses on high value, low volume, highly efficient milling.

Ordinary commercial wheat flour can broadly be classified as follows:

- **Cake Flour:**
  Protein 8-10%; Particle size < 140 micron; Ash < 0.65%. Colour – white with very few noticeable bran specks. Extraction 50-60%. Used for confectionery baking, often with baking powder rather than yeast due to lower protein. White Bread flour: Protein 10-12%; Particle size < 212 micron; Ash < 0.78% Colour white with some noticeable specks. Extraction 70-78% Used for baking most yeast product where a good rise is required. Brown bread flour: Protein 9-11%; Particle size 85% < 212 micron; 15% > 212 micron. Ash – not measured. Colour white with large flakes of bran. Used almost exclusively for brown yeast bread.

- **Self-raising flour:**
  This is simply low protein (below 9%) cake flour with baking powder added to it to allow for easy baking of non-yeast products and is a home-bake, small package value adding product by industrial mill.

- **Industrial flour:**
  Protein – not measured. Particle size < 300 micron. Ash – > 1%. Off-white flour with many bran specks. Used in brown bread mix as well as for biscuits and other confectionery products where its off-white colour and rise is not important. Also used as filler in foods and sweet meats, soups, gravy etc.

- **Semolina:**
  This type of flour is coarse – normally above 300 micron and below 1 mm and is traditionally made from durum wheat – a wheat type with very low gluten (the protein in wheat that lends wheat its “stretchability” needed to expand in the fermentation process while retaining the “bubbles” intact. This is used in manufacturing pasta and couscous for instance and is separated from fine bran by air and vibration through a machine called a purifier.

**By-products:**

Wheat bran used in animal feeds and fillers. Pollard (very fine bran) used as fillers in food such as processed meats, biscuits etc. Screenings used as animal feeds.

*Our focus however is on Stone Ground Artisanal Flour milling.....*

**StoneGround® artisanal flour:** As the name indicates, this can be virtually any flour that works for the application it is milled for, be that for confectionary, artisanal (rather than industrial) bread, flat breads, pita breads, pizza crust, sourdough breads etc. and is normally of higher ash value** than industrial white bread, has a colour varying between white, slightly creamy up to almost Khaki coloured and has the same particle size as cake flour and white bread flour, has the wheat germ (with its many nutrients) intact, is not chemically bleached and has many variations the miller can apply to make custom flour for his ultra discerning baker-customer.

Ancient grains such as spelt, Khorasan wheat (Kamut), freekeh, bulgur, farro, einkorn, emmer; barley, oats, rye and the pseudocereals quinoa, amaranth, buckwheat, and chia for which a limited upper end demand exist, can be profitably milled with a stone ground artisanal milling system.

** Ash content denotes the percentage of minerals, primarily originating in the bran, remaining after the flour has been incinerated, therefore providing an index as to the bran content in the
flour and subsequently its “purity” in terms of advanced refined carbohydrates – nothing to be really proud of for those seeking healthier food products.

**Why an Artisanal StoneGround Mill?**

- Stone Ground* flour is known to absorb more water due to the higher starch damage millstones inflict on the grain which in turn provides a softer mouthfeel in the final product.

  It has more fine bran particles allowing better digestion and reducing the incidence of colon cancer for instance. It can be processed to have as low ash content as industrial white bread and cake flour but it defeats the object.

- It has minimal contact with steel in die grinding process and in smaller plants specifically, steel roller mills need not be used at all. Rollers are primarily used to increase low ash content yield for those millers who still rely on having to be competitive with the large industrial mills.

- It retains the wheat germ with its all wholesomeness.

- It is never chemically bleached neither are chemicals and enzymes added to improve poor flour’s baking quality.

- The artisanal miller can produce flours and flour blends that suit a variety of baked products and lend a special taste, appearance, and mouthfeel to such custom products.

- An artisanal mill in your town encourages local industry, provides local employment and entrepreneurship, supports organic and high-quality grain growers, encourages healthy eating habits, and contributes to the community.

So, what equipment should be used to produce StoneGround artisanal flour?

To produce StoneGround* flour, a miller needs the following equipment:

An intake system for wheat as well as storage in at least 3 silos or bins, from which a gist is blended to ensure the same quality flour over a longer period and to optimize on raw material cost.

A day bin in which the gist is placed prior to milling is also important.

ABC Hansen Quail® II Cleaner and aspirator, damper and conditioning bins where cleaned and moisturised grain is detained for 24 – 36 hours prior to milling ensures high quality mature flour.

A scourer or polisher – in the case of ABC Hansen’s mills a Tempest® Stone Grain Polisher removes some of the outer bran and dirt collected on the grain kernels.

A Hurricane® roller mill with four roller passages may be used to remove all the bran from the endosperm providing for a whiter flour. Alternatively the wheat can be milled through several passes over StoneGround* stone mills until the endosperm is completely milled down.

If a roller mill is used, high capacity and a cleaner flour can be achieved. Once flour and bran is screened out, the middlings (coarse endosperm particles) are then introduced to the stone mill or several stone mills followed by sifting processes.

An ABC Hansen blender is always a requirement to blend bran and flour at the correct proportions or rye flour and wheat flour or any of the other ancient grains for specialty flour.*StoneGround stone mills is a registered brand of ABC Hansen fitted with the world-famous Danish Engsko stones (circa 1900).

Tempest grain polishers, Hurricane roller mills, Quail cleaners and Hippo hammer mills are all registered brands manufactured by ABC Hansen.
Case IH harvesting and hay equipment impresses farmers in Kenya

Some of Case IH’s most trusted hay and harvest machinery has been put through its paces during recent field demonstrations in Kenya.

From the Axial-Flow 4088 combine harvester to the SB541 small square baler, MDX21A disc mower and WR102 wheel rake, the equipment proved its value to more than 80 attendees across two events. The first event was held at the farm of Geoffry and Elizabeth Irangi in Njoro, in the province of Nakuru, and focused on mowing Rhodes grass, raking and baling.

Ms Irangi was impressed by the capabilities of the Case IH mower and rakes. “The very low cut of the mower, less than five centimeters from ground, and the cleanliness of the field after the rake collected the grass impressed me the most,” she said.

“The cleanliness and total absence of cracked grain made me feel relieved and made me really understand what was explained to me about gentle grain-on-grain threshing.”

I was so impressed by the quality I could not believe my eyes!

Prior to the baling, the Axial-Flow 4088 combine harvester was used to harvest the four tonne per hectare wheat crop at the Narok demonstration.

Case IH’s Axial-Flow single-rotor technology provides high harvesting capacity, thorough crop threshing, low grain losses, gentle grain handling and unsurpassed sample quality within the Axial-Flow 4088’s compact dimensions.

The wheat in the field was 15 days over-ripe and Mr Salaton was concerned grains would be cracked during harvesting. “At the beginning I was afraid, but after two runs with the Axial-Flow 4088 I collected samples from the tank and I was so impressed by the quality I could not believe my eyes!” he said.

I delivered the load to the wheat mill the same day and I was assigned Grade 1 for the quality of the grains. This means I can obtain the highest possible profitability from my field,” Mr Salaton said.

The demonstrations were so successful that a number of farmers have already purchased equipment, with even more considering further purchases as a direct result of seeing the machinery in action in the field.

For more information about Axial-Flow 4088 combines, SB541 small square balers, MDX21A disc mowers, WR102 wheel rakes or any Case IH equipment to suit your needs, talk to your local authorised Case IH dealer.
John Deere is pleased to offer SmartGrade Remote Support on its newest SmartGrade dozers, motor graders, excavators, and compact track loaders. SmartGrade Remote Support, which includes both Remote Display Access (RDA) and Wireless Data Transfer (WDT), will be available on most SmartGrade products for six years from the factory invoice date.

Currently available on the 700L/750L/850L SmartGrade dozers, the SmartGrade motor graders and the 210G LC and 350G LC SmartGrade excavators, and the compact track loaders, these features enable dealers and customers to work together to remotely transfer project files to machines and troubleshoot any grade control-related issues. This is important for more efficient management of large GPS equipment fleets. Real-time remote visibility and management of important grade control parameters can save valuable troubleshooting time and keep machines up and running. Dealers can also use the latest technology for operator training and troubleshooting.

"Offering real time support to our customers is key, especially when it comes to the Precision Construction lineup. By incorporating technology like SmartGrade in our excavator lineup, we are helping to boost job site productivity and efficiency while enhancing the capabilities of our operators," said Sean Mairet, product manager grade control, John Deere Construction & Forestry. "There isn’t always a one-size-fits-all solution, and contractors need options to pair the right technology with their business needs. This is where customers really benefit from the flexibility of our grade management path."

SmartGrade Remote Support is crucial in providing customers with the most efficient method of troubleshooting and increasing uptime and enables the dealer to remotely monitor and support the machine from miles away. Wireless Data Transfer provides the ability to remotely send updated design files to the machine, saving trips to the job site. Any user with a MyJohnDeere.com account paired with the machine can utilize remote support.

To learn more about SmartGrade Remote Support, as well as the full range of John Deere Precision Construction technology solutions, visit www.JohnDeere.com.
Prevention is better than cure

Many stressors emerge throughout the life of a production animal: weaning, grouping, heat and cold stress all tax the immune system and increase the animal’s susceptibility to disease. You have seen it before – the first symptoms may occur two days after exposure to stress and the number of cases can rise dramatically within as little as two weeks. Hence, maintaining a healthy respiratory function during these periods is the key to economic success in production. Anta®Fresh can help you with this. Although it cannot compensate for management issues, it strengthens the animals’ immune system and airways, and increases their overall resilience.

There is healing power in plants
We know this from the many teas, cough drops and cough syrups: essential oils from thyme and rosemary have probably helped most of us overcome respiratory troubles at least once. And because we learnt this from the pharmaceutical industry, you can now reap the benefits with the powerful plant-based product Anta®Fresh.

Anta®Fresh effectively stimulates receptors in the digestive tract, thereby promoting mucus secretion in the lungs. This improves the immune function and ensures that mucus is expectorated more easily. This reduces the risk of recurrent respiratory infections, noticeably relieving the animal’s organism.

Anta®Fresh helps save money
Since Anta®Fresh is a valuable tool in preventing respiratory trouble, there is less need for a cure. Practical experience shows that more than 50% of treatment costs can be saved by using Anta®Fresh in a timely manner.
Nigeria: Govt Begins Pilot Implementation of Livestock Transformation Plan in Nasarawa

Following a €400,000 funding support from the Netherlands, the federal government has commenced talks with the Nasarawa State government for the kick-off of the pilot implementation of the National Livestock Transformation Plan (NLTP).

The plan, which includes the establishment of grazing reserves across the country, is seen as a panacea to the current farmer-herder conflicts in the country.

The implementation will also help the country maximise opportunities in the country’s over N30 trillion assets in livestock which had been neglected over the years.

The Special Adviser to the President on Agriculture, Dr. Andrew Kwasari, who met with key state officials in Lafia, the Nasarawa State capital recently, said it was important for the state to understand the requirements for the establishment of the Awe Grazing Reserve that will be located in state as pilot project.

The move came on the back of the Memorandum of Understanding (MoU) signed during the visit of President Muhammadu Buhari recently to the Netherlands, whereby the Dutch Investment Agency (RVO) approved a grant of about €400,000 to cover 50 per cent cost of the pilot start-up of NLTP model in Nasarawa State for 30 pastoralist households with a start date of March, 2021.

Kwasari, during the meeting with Deputy Governor of Nasarawa State, Dr. Emmanuel Akabe and the State Commissioner for Agriculture and Water Resources, Allanan Otaki, said the engagement was to further ensure that the state livestock transformation team was fully understood the requirements for successfully implementing the pilot.

He added that the pilot would serve as a proof of concept for the livestock sub-sector transformation process.

Minister of Agriculture and Rural Development on Special Projects, further explained that the objective was to, “review in particular the project appraisal document for the start-up site and ensure that the state team is clear on the roles and responsibilities of Nasarawa State senior management team of the state livestock transformation office and the project office”.

However, Akabe welcomed the initiative in the state and pledged government’s support to make it a success.

According to the deputy governor, “We are quite enthusiastic about this programme starting in Nasarawa state. We feel it is a great honor that Nasarawa State was picked to pilot this project.

“We as a state have resolved not only to be in charge but also in control. We want to own it and make Nasarawa an envy of other states because we are supposed to showcase not only Nasarawa State, but the whole of Nigeria.”

He further assured the team of the support of the state governor in making the project a huge success.

Under the current initiative, Cownexxion, the lead consultant in the bilateral collaboration, leading the Dutch Consortium, will serve as technical partner for the implementation of the NLTP pilot ranches in four states namely Nasarawa, Adamawa, Plateau and Gombe.

In each of these states, a pilot farm, which will also serve as a training centre, will be developed.

The statement added that Cownexxion will work with the federal and state governments led by Kwasari to implement the pilot initiative.
Livestock

Safety key in controlling African swine fever

The latest outbreak of the African swine fever (ASF) in Uganda has been depressing and dramatic. Whereas farmers are still counting the losses from the unpredictable Covid-19 and its related lockdown measures, the outbreak of the ASF announced first in northern Uganda is especially depressing.

Pig farming is one of the fastest growing livestock activities in the peri-urban areas and among smallholder farmers.

Uganda has the largest and fastest growing pig production in eastern Africa with the pig population standing at 3.2 million as of the 2008 census. But ASF is hampering the development of the pig industry.

Kitgum District has reported 500 new outbreaks with further deaths of between 700 to 1,500 in Otuke District. According to a study published in the Journal of Veterinary Medicine in 2013, the African swine fever is ranked as the most important disease of pigs that mostly occurs during the dry season, as a result of movements due to trade and restocking as the major risk factors.

Big threat
ASF is a highly fatal viral disease of domestic pigs and can cause mortality of up to 100 per cent of affected pigs. The transmission of the African swine fever is both direct and vector-borne. The disease is highly contagious and is transmitted by direct contact between infected pigs and susceptible ones or by contact with or ingestion of infectious secretions. The virus is highly resistant in tissues and the environment, contributing to its transmission over long distances through contaminated material, vehicles, or visitors to pig farms.

Despite being a deadly disease of pigs and wild boar, it does not affect people but has severe consequences for those who are reliant on pigs as food and income.

As a result of the outbreak, pork prices are expected to rise as production is limited to keep pace with demand. But secondary industries that deal with the supply of feed ingredients will also feel the pinch.

Diagnosis
The African swine flu can be suspected based on clinical signs but animal health experts assert that confirmation must be made by laboratory tests because signs of ASF are very similar to classical swine fever. Affected animals with acute symptoms have high fever, hemorrhages and high morbidity and mortality rates. The main clinical signs are fever, loss of appetite, lack of energy and sudden death with few signs beforehand.

Affected pigs normally die of pneumonia while survivors are chronically emaciated, have stunted growth, and bony swellings on the skin, among other signs. Other signs can include vomiting, diarrhoea, red or dark skin, particularly on the ears and snout, discharges from the eyes and nose, laboured breathing and coughing, abortion in pregnant sows, weakness and unsteady gait.

Safety first
Currently, there is no approved vaccine and treatment options for ASF and experts caution that emphasis should be put on practising good biosecurity at the farm level.

This, they argue, is essential for reducing the likelihood of an ASF outbreak. These measures are primarily aimed at preventing entrance of infection into the farm.

According to Joseph Musisi, a mobile veterinary officer at Elite Veterinary Clinic, the recommended measures are limiting the number of visitors to a minimum and making any [visitors] that enter your pig sty to change into clothing and boots that are kept on the farm.

He explains that feeding pigs on kitchen scraps puts them at risk of contracting the disease. “It is important to be cautious after visiting any premises where there are pigs. Therefore, immediately after you return, change or clean your clothes thoroughly,” he advises.

Sanitary measures including early detection, culling and disinfection as well as movement controls. According to the World Organisation for Animal Health (OIE), most times the soft tick vector should also be considered in the control programme.

Animal health experts are concerned that although the desired interventions of biosecurity yield positive outcomes, they result in reduction of farmer profit margins making commercial pig rearing difficult.

This is partly the reason why sometimes farmers may be unwilling to adopt biosecurity practices aimed at solely controlling African swine fever outbreaks.

Advice
Currently, there is no approved vaccine and treatment options for ASF and experts caution that emphasis should be put on practising good biosecurity at the farm level.
Multi-breed EBVS will allow producers to compare bulls between breeds

A NEW $7.3 million research project launched in Armidale last week will ultimately enable beef producers to directly compare bulls of different breeds for a range of traits.

The five-year project Southern Multi Breed Project will enable the development of multi breed Breedplan Estimated Breeding Values (EBVs) for the Angus, Hereford, Shorthorn, Wagyu and Charolais breeds, and provide links to Brahman.

The project is being run from six NSW Department of Primary Industry research stations and will allow data to be collected from cattle from varied climates throughout the State, from cool climates to the sub-tropics.

Data will be collected on a head-to-head basis allowing breed comparisons in common environments for a range of traits, including those traits currently included in BreedPlan but which are hard to measure, such as feed intake, carcase and mature cow traits.

The project is also collecting data on novel traits around fertility, such as heifer age at puberty and postpartum anoestrous or how long it takes a cow to re-breeding.

Importantly, for all of the breeds involved, we’re measuring those traits and genotyping a large number of highly recorded individuals from different breeds to enhance current reference populations. Quality reference populations are essential for us to be able to provide genomic EBVs for animals.

How will producers benefit?

Currently, it is not possible to compare EBVs from different breeds.

Developing a multi breed evaluation means producers looking to buy bulls will be able to select the right bull for their operation, irrespective of whether an animal is Angus, Hereford, Shorthorn, Wagyu or Charolais.

It will provide new data for the ongoing development of BreedPlan, including important datasets that provide genetic linkages between the breeds as well as the basis for DNA-based genomic prediction.

A multi breed evaluation will help achieve the objective of increasing the annual rate of genetic gain in the Australian commercial beef industry.

Importantly, the data the project generates will also be made available to the BreedPlan genetic evaluations for each of the individual breeds and help to continue improving accuracies of EBVs from those evaluations.

Improving animal production and health and performance through genetic management helps to create a sustainable, high performing industry at an overall lower cost to producers.

The project is being supported by MLA as an MLA Donor Company funded project, in collaboration with NSW DPI, and the University of New England. The project will be run by NSW DPI, UNE and the Animal Genetics and Breeding Unit.
Breeding livestock for disease resilience

An EU-funded study investigates how livestock breeding programmes could benefit from disease resilience research and offers four genetic improvement alternatives.

Infectious diseases are the cause of lower rates of fertility, productivity and survival in livestock around the world. The high costs of fighting these diseases greatly reduce the profitability of livestock production. While this has led to a lot of research focusing on breeding disease-resilient livestock, its implementation in breeding programmes is still uncommon. In response to this problem, researchers supported by the EU-funded SMARTER project explored how future breeding programmes could benefit from recent research on disease resilience.

Their findings were published in the journal ‘Genetics Selection Evaluation’. According to the study, there are new exciting opportunities to breed more disease-resilient livestock. These are afforded by recent advances in genomic and phenotyping technologies and gene editing, accompanied by promising developments in statistical methods. Such approaches and the resulting data will make it possible to optimise animals’ responses to specific pathogens and identify animals that have a high genetic resilience to many diseases.

“Managing infectious disease continues to place a heavy toll on livestock producers and the animals they raise,” stated Prof. Andrea Doeschl-Wilson of project partner The University of Edinburgh in a news item posted on the university’s website. “By applying new statistical methods to big data from genomic and automated recording technologies, we can breed livestock that are more resilient to infection.” The researchers developed mathematical models to establish how disease resilience affects livestock productivity. In these models, they defined disease resilience in terms of two traits: resistance (an animal’s ability to remain unaffected by the harmful organisms infecting it), and tolerance (an infected animal’s ability to limit the damage caused by infection). Data was used from a previous study on pigs infected with porcine reproductive and respiratory syndrome – an infectious disease that has had a major economic impact on the global swine industry. The findings showed that the economic value of selective breeding based on disease resistance and tolerance in infectious conditions can be more than three times higher than breeding based on production traits in disease-free conditions.

Four approaches to disease resilience breeding

The team studied the consequences of ignoring resistance and tolerance in breeding programmes that measure resilience as production in infectious conditions where the number of harmful organisms infecting the livestock is unknown. In particular, they investigated the risk of an unfavourable genetic correlation between resistance and tolerance, in which a trade-off between the two traits might jeopardise any genetic improvement in disease resilience. Four alternative approaches to settling up a disease resilience breeding programme were proposed. The first approach involves recording infection levels and production traits in livestock over time to determine how resistance and tolerance affect the animals’ response to infection.

A second alternative proposed to minimise the risk of unfavourable outcomes caused by trade-offs is to select groups of genes that are known to have a positive effect on both resistance and tolerance. The third approach is to rapidly modify disease resistance or tolerance to near-complete levels. The fourth alternative is to consider fundamentally different approaches that define resilience as the animal’s capacity to resist or recover from an infection. The SMARTER (SMAll RuminantTs breeding for Efficiency and Resilience) project is investigating how genetic selection can help to increase resilience and efficiency in livestock, in particular sheep and goats. The 4-year project ends in 2022.
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Better profits, better nutrition through improved poultry farming methods

The US-based World Poultry Foundation (WPF) has developed a series of online training videos to help emerging African poultry farmers learn poultry farming best practice and optimise their farming operations.

WPF has collaborated with local organisations such as South Africa’s KwaZulu Natal Poultry Institute for several years to foster improved poultry farming and help small local farmers expand their operations.

The new series of training videos, designed to assist small and mid-size brooding operations and rural farmers, cover key areas such as management of feed, water, brooding, vaccination, recordkeeping, biosecurity and poultry housing.

WPF CEO Randall Ennis says the video series was developed to address challenges faced by emerging poultry farmers. “In our training sessions and engagements with new and emerging farmers across the African continent, we discovered that many farmers had certain challenges in common. These included feed and water management and accurate record-keeping, among others. We found they were able to significantly improve their outputs and profits once they had access to information on best practices,” he says.

The series is grouped into four categories: Production: Feed, Water, Litter, Zone of Comfort (brooding); Management: Vaccination, Managing for Success (recordkeeping); Housing: Poultry Housing, Preparing the House, and Biosecurity; and Small scale producer: Household Nutrition, and Backyard Management.

Randall notes that the videos, training and workshop programmes available to emerging farmers in Africa are in line with improving overall poultry management and in the introduction of more productive dual-purpose birds at the rural village level. WPF’s key goals include:

1) Poultry production and productivity: By having access to improved low-input dual-purpose breeds that have been properly brooded, fed, and vaccinated; the WPF seeks to achieve a significant increase in productivity when compared to the local indigenous breeds.

2) Increasing rural household income: Improved management and the introduction of dual-purpose birds will provide a net benefit from egg production and sales, as well as from the sale of males for meat.

3) Improving household nutrition: By increasing productivity and producing more meat and eggs, it is assumed that a portion of output would be consumed by the families, particularly the children. What is not consumed would be sold and the additional income generation may also be used for a more diverse diet for the household.

4) Empowerment of women: A goal of the WPF is to establish poultry enterprises primarily owned and operated by women.

An introduction and orientation to the training videos, the series of 11 videos and supporting worksheets and checklists is available here.
Sepik Plan Agro Project progressing Well

The hundred million Kina Sepik Chicken, Grain and Cocoa innovation project has the potential to go a long way.

The Secretary for National Planning and Monitoring Koney Samuel said this during his recent visit to the Sepik Plains.

Secretary Samuel was impressed with the development of the site including the chicken houses, egg hatchery, slaughterhouse, storage facility and the way the project has taken off producing eggs and poultry for the local market under the 'Sepik Fresh' label.

He indicated that the government was ready to provide support to the project including road works into the plains.

The Secretary further said the project has a long way to go as some of the key policy focus of the government including ‘Taking Back PNG is all happening there.

Member for Yangoru Saussia Richard Maru, in thanking the visiting team, said, the partnership with the Israeli Company LR Group is a strategic one, focused on producing agricultural projects that will, in the long run, replace imports.
Osun government empowers 100 livestock farmers

The initiative was anchored under the Osun Broilers Outgrowers Production Scheme.

The Osun government on Tuesday distributed day-old chicks to 100 livestock farmers to boost poultry farming in the state.

The News Agency of Nigeria (NAN) reports that each of the farmers was given 2,000 chicks.

At the distribution in Ede, Mr Dayo Adewole, the Commissioner for Agriculture and Food Security, said the initiative was designed to support farmers, particularly youths and women who could not afford the chicks.

Adewole said adequate vaccines, drugs and feed that would last for the next five to six weeks had been put in place for distribution to the beneficiaries.

The commissioner, represented by Mr Amos Daramola, Director, Livestock Services, Ministry of Agriculture and Food Security, described the initiative as a means at reducing poverty, hunger, and unemployment in the state.

He said the scheme would go a long way to further attract and encourage the young ones to agriculture, particularly livestock production. Adewole said the initiative was anchored under the Osun Broilers Outgrowers Production Scheme (OBOPS-III).

Some of the beneficiaries of the scheme, among whom were Mr Nurudeen Ibrahim and Mrs Oguntuwase Adenike, commended the state government for the gesture. They said the chicks would help in boosting their livestock business.
NEOGEN Corporation (NASDAQ: NEOG) announced today that they have partnered with Hendrix Genetics, a multi-species animal breeding, genetics, and technology company.

Through this partnership, NEOGEN will support the implementation of genomic selection into Hendrix’s Sustainable Access to Poultry Parent Stock in Africa (SAPPSA) program. This addition will help accelerate the company’s existing recurrent test program by genotyping the elite animals across the breeding program, ensuring the SASSO breeds they cultivate are adapted to the local needs and environmental pressures of Sub-Saharan Africa, including heat, feed, various diseases, and different housing systems.

"We are pleased to join Hendrix Genetics in their mission to help secure the supply of high-quality parent stock to African smallholder farmers," said Marylin Munson, Vice President of Genomics at NEOGEN. "By helping to incorporate genotyping into Hendrix Genetics’ excellent breeding program, we can ensure that the correct birds for the environment are chosen, and we are able to support the sustainable development of farming practices while helping educate on the best practices for nutrition, housing, and poultry biosecurity. The SAPPSA project positively impacts the lives of millions of people, and NEOGEN is thrilled to be a part of building a more sustainable future for us all."

Hendrix Genetics began collecting data on their existing poultry population located in Burkina Faso in 2020. The offspring of these elite birds were then tested for growth and egg production characteristics in this tropical climate. The company will now work with NEOGEN Genomics to genotype the elite animals in the population. With the addition of genotyping, Hendrix Genetics will be able to increase genetic gain in their genetics programs, which will have a positive impact on the smallholder farmers who raise these birds, increasing nutritional intake and income.

"As Hendrix Genetics, we are very pleased with our partnership with NEOGEN in the SAPPSA project. Through this partnership we can capitalize on the knowledge and expertise of NEOGEN in the domain of genomic selection. This will enable us to even better meet the needs of the smallholder farmers in Africa,” said Johan van Arendonk, Chief Innovation & Technology Officer at Hendrix Genetics.

The SAPPSA project was initiated to provide African farmers with sustainable genetic solutions in order to offer them a pathway out of poverty. In 2018, the project received a multi-year grant from the Bill & Melinda Gates Foundation with the objective to secure access to poultry parent stock, improve dual-purpose breeds for African smallholder farmers, and grow African Poultry Multiplication Initiatives (APMI) across the continent.

NEOGEN Corporation develops and markets comprehensive solutions dedicated to food and animal safety. The company’s Food Safety segment markets dehydrated culture media and diagnostic test kits to detect foodborne bacteria, natural toxins, food allergens, drug residues, plant diseases, and sanitation concerns. NEOGEN’s Animal Safety segment is a leader in the development of genomic solutions along with the manufacturing and distribution of a variety of animal healthcare products, including diagnostics, pharmaceuticals, veterinary instruments, wound care, and disinfectants.
Morocco’s permanent representative to the United Nations, Ambassador Omar Hilale, highlighted on September 30 that agricultural sciences and new technologies are an important part of the country’s new economic projections.

Morocco’s Green Plan reached a goal of strengthening localized irrigation, one of the three major components of its Irrigation Strategy.

The high-level meeting addressed "the role of Artificial Intelligence (AI) in achieving post-Covid food security.”

"Today, these sciences and technologies are helping to increase the production of small and medium farmers,” Ambassador Hilale emphasized during the meeting. He also explained the crucial role that AI plays in “helping to produce more food with less water and energy.”

The plan has made agriculture the primary driver of the Moroccan economy, creating job opportunities and reducing poverty.

Ambassador Hilale praised the positive impact of the Green Morocco Plan in boosting the country’s agriculture. The plan has made agriculture the primary driver of the Moroccan economy, creating job opportunities and reducing poverty.

Morocco’s strategic goal in the agricultural field has been to guarantee national food self-sufficiency and open the possibility of exporting quality agricultural products, stated Hilale.

The Ambassador also mentioned that improvement of the efficiency and use of the soil input relies on new fertilizer technology based on artificial intelligence. He also stressed that irrigation plays a critical economic and social role in water-stressed areas, contributing to driving up agricultural productivity and rural income.

Farmers are facing an increasing number of difficulties as a result of water scarcity and other, climate change-linked challenges, he noted. Morocco, according to Hilale, has poured money into providing the correct nutrients to the soil. In order to put a more sustainable irrigation model, the country has also been using modern technologies to enhance water management.

In the context of the COVID-19 pandemic, Ambassador Hilale also stated that a paradigm change toward development is required to transform this worldwide crisis into "an opportunity for sustainability.”

The meeting, which was co-organized by Morocco’s and Nigeria’s permanent missions to the UN, underlined the need for cooperation in sectors such as sustainable agriculture, information technology, climate change, water management, and renewable energy.

Ambassador Hilale noted that the pandemic “has changed the way consumers and producers connect each other,” and that AI is now being used to optimize agribusiness value chains and boost online marketing for small and medium farmers.

Artificial Intelligence for the benefit of Morocco’s Agriculture
Zimbabwe: A farmer harvests success in refugee camp

When Jean Damacene arrived at the Tongogara Refugee Camp in Zimbabwe, he was 38 years old and hoping to return to his country Rwanda soon. Eighteen years later, the maize farmer is married with children – a boy and five girls – who live with him in the camp. To support his family, he works the land on a plot next to the camp, growing maize, beans, and bananas, along with members of the host community.

Over the past two years, Damacene’s production has increased from 400kg of maize to 500kg, thanks to newly built irrigation infrastructure, including 3.1km concrete canals and a 2.1km high-density polyethylene pipeline, funded by the African Development Bank. As a result, Damacene is able to cultivate a bigger plot, which he can water anytime of the day and night, without having to wait for rain.

“We are working well and hard in the field. My family and I are benefiting from the irrigation system that was installed and we have grown large spans of maize,” he says.

My family and I are benefiting from the irrigation system that was installed and we have grown large spans of maize.

Instead of selling his bananas locally, Damacene now ships them to Harare, where he has developed a new clientele fond of fresh bananas. Sending his produce to Harare is more profitable than selling it in the local markets.

As Damacene’s story shows, entrepreneurship can be a viable source of livelihood for both refugees and host communities in fragile situations but the type of business activity, and the quality of the training provided, is critical to ensuring that enterprises survive. The following factors are central to training: market analysis and linkages; coaching; social marketing at community level; and user feedback mechanisms to address any user complaints or potentially adverse impacts.

To improve the technical capacity of the refugee and host communities, the United Nations High Commissioner for Refugees (UNHCR) with the African Development Bank’s financial support, has organized training on innovative business solutions for self-reliance and enhanced livelihood at the camp. Damacene was trained in modern and climate-resilient livestock and crop production, but also farming as a business, market analysis and linkages.

There are still some obstacles, of course, such as the inevitable challenges posed by nature. But Damacene is up to the task, using some clever improvisation.

“All is going very well, but we have been facing the problem of birds that are eating from the maize cobs,” he says. “We devised a plan to protect the cobs from birds, by covering the mouth of the cobs, using empty soda cans.”

Scaling up entrepreneurship is one of the topics that will be discussed at the upcoming Africa Resilience Forum (https://bit.ly/38Dhs7g), a flagship event conceived by the African Development Bank Group to bring together key stakeholders to create solutions to address fragility and build a resilient continent.

“All is going very well, but we have been facing the problem of birds that are eating from the maize cobs.”
Madagascar: Severe Drought could Spur World’s First Climate Change Famine

It’s also a strategy right now to gather the family’s forces on finding income-generating activities involving children, so this has obviously a direct impact on education.

More than one million people in southern Madagascar are struggling to get enough to eat, due to what could become the first famine caused by climate change, according to the World Food Programme (WFP).

The region has been hit hard by successive years of severe drought, forcing families in rural communities to resort to desperate measures just to survive.

Madagascar, the fourth largest island in the world, has a unique ecosystem which includes animals and plants found nowhere else on the planet. The country experiences a dry season, usually from May to October, and a rainy season that starts in November.

Daily life disrupted

However, climate change has disrupted the cycle, affecting smallholder farmers and their neighbours, said Alice Rahmoun, WFP Communications Officer in the capital, Antananarivo, speaking to UN News on Thursday.

“There is of course less rain, so when there is the first rain, they can maybe have hope and sow some seeds. But one little rain is not a proper rainy season,” she said.

“So, what we can say is that the impacts of climate change are really stronger and stronger….so harvests are constantly, so people don’t have anything to harvest and anything to renew their food stocks.”

Varying impacts

Ms. Rahmoun was recently in southern Madagascar, where WFP and partners are supporting hundreds of thousands of people through short and long-term assistance.

The impact of the drought varies from place to place, she said. While some communities have not had a proper rainy season for three years, the situation might be even worse 100 kilometres away.

She recalled seeing villages surrounded by dried-out fields, and tomato plants which were “completely yellow, or even brown”, from lack of water.

Surviving on locusts

“In some areas they are still able to plant something, but it’s not easy at all, so they are trying to grow sweet potatoes. But in some other areas, absolutely nothing is growing right now, so people are just surviving only eating locusts, eating fruits and cactus leaves,” said Ms. Rahmoun.

“And, just as an example, cactus leaves are usually for cattle; it is not for human consumption.”

The situation is even more dire because, she added, “even the cactus are dying from the drought, from the lack of rain and the lack of water, so it’s really, really worrying”.

Families barely coping

The plight of families is also deeply troubling. “People have already started to develop coping mechanisms to survive,” she said.

“And that means that they are selling cattle, for example, to get money to be able to buy food, when before, they were able to get food and feed themselves from their own field production, so it’s really changing the daily life for people.”

Valuable assets such as fields, or even houses, are also put up for sale. Some families have even pulled their children out of school.

“It’s also a strategy right now to gather the family’s forces on finding income-generating activities involving children, so this has obviously a direct impact on education,” Ms. Rahmoun said.

Providing life-saving aid

WFP is collaborating with humanitarian partners, and the Malagasy Government, to provide two types of response to the crisis. Some 700,000 people are receiving life-saving food aid, including supplementary products to prevent malnutrition.

“The second one is more long-term response to allow local communities to be able to prepare for, respond to and recover from climate shocks better,” said Ms. Rahmoun. “So, this includes resilience projects such as water projects. We’re doing irrigation canals, reforestation and even microinsurance to help smallholder farmers to recover from a lost harvest, for example.”

WFP ultimately aims to support up to one million people between now and April, and is seeking nearly $70 million to fund operations. “But we are also involving more partners to find and fund climate change solutions for the community to adapt to the impacts of climate change in southern Madagascar.”

COP26: Prioritize adaptation

In just over a week, world leaders will gather in Glasgow, Scotland, for the COP26 UN climate change conference, which UN Secretary-General António Guterres has called the last chance to “literally turn the tide” on an ailing planet.

Ms. Rahmoun said WFP wants to use the conference to shift the focus from crisis response, to risk management.

Countries must be prepared for climate shocks, and they must act together to reduce severe impacts on the world’s most vulnerable people, which includes the villagers of southern Madagascar.

“COP26 is also an opportunity for us to ask governments and donors to prioritize funding relating to climate adaptation programmes, to help countries to build a better risk management system, and even in Madagascar, because if nothing is done, hunger will increase exponentially in the coming years because of climate change,” she said, adding: “not only in Madagascar, but in other countries.”
Troops of the African Union Mission in Somalia (AMISOM), have conducted an agricultural extension visit for women’s groups in Dhobley, Jubaland State to promote and share best practices in farming, with the aim of empowering women.

The field extension visit was organised by Kenyan AMISOM troops, based in Dhobley town as part of their Civil Military Cooperation (CIMIC) activities.

During the field visit, the women visited a demonstration farm on Wednesday at the AMISOM Headquarters in Dhobley, which comprised a vegetable section, tree nurseries, a poultry section and a fishpond.

“It is cheap to maintain a mixed farm as the diverse components symbiotically depend on each other. Having the farms helps to empower you economically and at the same time offers avenues of self-employment,” said Sergeant Kennedy Juma, while inducting the women on various projects in the farm.

The women were taken through the procedure of establishing vegetable gardens and tree nurseries in their homes, critical for environment conservation. They were also shown how to hatch chicks using incubators with the aim of establishing poultry farms, to boost incomes and livelihoods.

At the end of the tour, the women were encouraged to set up vegetable farms in their homesteads, to supplement their incomes and for domestic consumption.

Additionally, they were also advised to embrace the use of simple drip irrigation on their farms, to tackle the issue of water scarcity in the area.

“Such socio-economic development initiatives are crucial in achieving lasting peace and stability and guaranteeing food security,” said Captain Getrude Abiyo, the Officer in Charge of the Female Engagement Team (FET) in Dhobley.

The visit to the farm is part of the initiatives by FET, aimed at empowering Somali women, to enhance their participation in community development and leadership.
New initiative set to strengthen fertilizer regulation in Southern Africa

A new initiative aimed at establishing a harmonized framework, that will improve regulation of fertilizers across Southern Africa, has been launched in Malawi by the Food and Agriculture Organization of the United Nations (FAO), the Southern Africa Development Community (SADC), and the Government of Malawi. The programme, the Harmonized Fertilizer Regulatory Framework (HFRF) project, also seeks to enhance integration and improve access to regional fertilizer markets. This regional initiative is being implemented in the 16 SADC Member States.

“This project will be implemented in collaboration with the Hand in Hand initiative, an evidence based country-led and country-owned initiative to accelerate agricultural transformation and sustainable development to eradicate poverty. It contributes to Sustainable Development Goal 2 - Zero Hunger, and is aligned with the Malawi 2063 Agenda pillar 1 of agricultural productivity and commercialization, specifically to improve production and incomes of the majority of people, with emphasis on effective governance systems and institutions as an enabler,” said Zhijun Chen, FAO Representative in Malawi.

The project will go a long way towards strengthening the fertilizer regulatory framework by putting in place quality control standards and enforcement mechanisms at the regional level with input from all the 16 SADC countries. The lack of a regulatory framework that harmonizes the trade and use of fertilizers in SADC Member States means that each country functions with different regulatory frameworks.

By establishing the Regional Harmonized Fertilizer Regulatory framework, the project will therefore help to amalgamate ongoing efforts on fertilizer quality control and enforcement of standards across the region. The sustainability of this initiative is assured because countries will participate in the framework development and align their national fertilizer regulatory frameworks to the agreed regional framework.

In Malawi, adulteration of fertilizers, underweight packaging and poor quality of fertilizers are some of the challenges that smallholder farmers face. Overall, the low agricultural productivity, which predominates in SADC countries, is due in part to misuse and underuse of low quality fertilizers.

“Access to, and judicious use of, high quality fertilizers is key to high agricultural productivity,” said Sandram Maweru, Principal Secretary for Irrigation at the Ministry of Agriculture.

He emphasized the importance of having a conducive environment for agricultural development, citing the need to address challenges that farmers face including high cost of fertilizers, untimely access to fertilizers, poor quality of fertilizer, and late fertilizer application, all of which have an impact on food, nutrition and income security.

The launch of the project took place virtually on 28 July 2021, with participation from a wide range of stakeholders including the academia, research, government, non-governmental and civil society actors. The event also served as a platform for validation of the country’s fertilizer assessment report, which was endorsed during the meeting.

The Malawi component of the Regional Harmonized Fertilizer Regulatory Framework project is being implemented by the Government of Malawi’s Ministry of Agriculture, with technical support from FAO and African Fertilizer and Business Partnership (AFAP).
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Uralchem set to open office in Nigeria

Uralchem JSC is preparing to open its representative office in Nigeria in the near future. Plans for the development of cooperation between Russia and Nigeria were discussed in Moscow at a meeting at the Russian Chamber of Commerce and Industry.

Dmitry Konyaev, Chairman of the Board of Directors, Uralchem JSC, Sergey Katyrin, President of the Chamber of Commerce and Industry of the Russian Federation, and Professor Abdullahi Y. Shehu, Nigeria’s Ambassador to Russia, attended the session.

Elected in May 2021 as the new chairman of the Russia-Nigeria Business Council, Konyaev told the attendees that Uralchem intends to open an office in Nigeria. Also, Nigeria plans to build a plant and launch its own production at a local site. Konyaev believes that such intentions are due to the great potential of the Nigerian market for the supply of mineral fertilizers: “Nigeria is the largest market in Africa. Local agriculture must meet the ever-growing demand for food, for which it has to use modern fertilizers and advanced technologies. For Uralchem and Uralkali, Nigeria is a strategic market. Today we are preparing to implement a joint project for the production of fertilizers with a Nigerian partner.”

In addition to developing bilateral relations in the field of economics and business, Konyaev highlighted the importance of sharing experience in such areas as science and agriculture. One of the tools for developing cooperation can be education and practical training for students from Nigeria in Russian agricultural universities.

In turn, Ambassador Abdullahi Y. Shehu noted the maintaining of stability between the two countries. The diplomat showcased Uralchem as a positive example of mutually beneficial and active cooperation and invited other Russian companies to actively participate in the development of relations not only through the export of their goods but also through their production in Nigeria.
The Government of Ethiopia has signed a Joint Development Agreement with Morocco’s OCP Group to implement a fertilizer project in Dire Dawa.

The agreement was reached during a visit to Morocco led by Ato Ahmed Shide, Ethiopia’s Minister of Finance, and accompanied by officials from the Ethiopian Chemical Industry Corp. (CIC), the Ethiopian Agricultural Businesses Corp. (EABC), and the Ethiopian Mineral, Petroleum and Biofuel Corp. (EMPBC).

The visit was used to discuss and reach an agreement to execute a Joint Development Agreement to establish an Ethiopian joint venture company for the implementation of a project that will establish a local fertilizer plant in Ethiopia. The agreement is based on Feasibility, Conceptual, Environmental and Social Impact Assessment and hydro and geotechnical studies that have been conducted. According to the agreement an integrated fertilizer complex will be established in Dire Dawa, using local resources (Ethiopian gas and Moroccan phosphoric acid).

The project will have an initial estimated investment of approximately US$2.4 billion during the first phase to develop a 2.5 million t fertilizer production unit, combining urea and NPK/NPS products, and which could reach a production capacity of 3.8 million tpy, for a total investment of up to US$3.7 billion during the second phase.
Evans Vanodine: Specialising in the manufacture of farm disinfectants, and food process cleaning and hygiene chemicals

Evans Vanodine is an international family business founded in 1919. Originally manufacturing soaps and disinfectants in the North West of UK, the business has expanded into a PLC which operates through over 300 distributors in the UK and exports to 78 countries worldwide. Evans now has 5 licensed manufacture units around the world; Jordan, Israel, Saudi Arabia, South Africa and Colombia.

Specialising in the manufacture of farm disinfectants, and food process cleaning and hygiene chemicals the Company rose to fame during a UK 1967 foot and mouth outbreak, when one of its formulations proved to be uniquely effective against the disease. This brand ‘FAM’ has remained as the UK’s number one for livestock disinfection ever since and the product is used as the reference disinfectant by Defra, the UK ministry of agriculture. Evans are also a global leader in the technology for dairy cow teat disinfectant for prevention of mastitis and dairy hygiene. A whole range of specialist cleaning and hygiene products has evolved from the livestock range, and the company now offers high performance livestock disinfectants for all sectors of the industry - Swine, Poultry and Dairy. The disinfectant range are independently tested and proven to offer protection against all of the key pathogens and virus which affect the animal health industry worldwide.

In 2005 Evans were responsible for introducing the Biosystem 3000 on a global scale. The Biosystem 3000 is a standard operating procedure for cleaning and disinfection of livestock production facilities and is the basis for effective control of disease causing microorganisms on the farm. Evans Vanodine now exports globally and has strategic alliances with multinational companies.

All of the exported products are manufactured at the UK Preston factory in a state of the art production unit. The Company employs 135 staff and includes full research and development facilities for its products.

Evans Vanodine has GMP, ISO9001 and 14000 accreditation plus a UK veterinary medicines licence and a UKAS (United Kingdom Accreditation Service) certification for its laboratory facilities.

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