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Premium Agriculture News In Real Time

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**9 Agribusiness Ideas To Consider in
Africa In 2023**

**The Future Of Sustainable
Aquaculture In Emerging Markets**

Kenya Hosts The 6th Africa Agri Expo

**South Africa: Perlemoen Farm Gives
Hope to West**



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AgriBusiness Ideas for the modern farmer

As the new year begins, it's a great time to think about new opportunities in the African agro-food industry. This list of nine possible ideas for 2023 is intended to encourage initial consideration and further investigation, rather than presenting specific opportunities or broader business plans.

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Entrepreneurs such as Seun Sangoleye, founder of Baby Grubz in Nigeria and Pascaline Nenda, founder of Lemana in Cameroon, are already capitalizing on this opportunity by using local ingredients to produce quality baby food. I am using it.

However, infrastructure challenges such as product transport difficulties and power shortages, as well as funding issues, have hampered expansion. Despite these hurdles,

both entrepreneurs are optimistic about the future of the company and its potential for innovation and growth of local baby food production in Africa.

The private sector is playing a key role in helping Africa adapt to the increasing frequency and severity of natural disasters such as floods and droughts, according to a new study from the International Finance Corporation.

The study estimates that there is up to \$100 billion in potential upfront investment opportunities in Africa by 2040, or \$5 billion annually.



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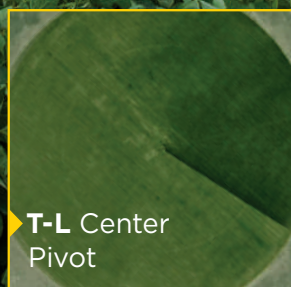
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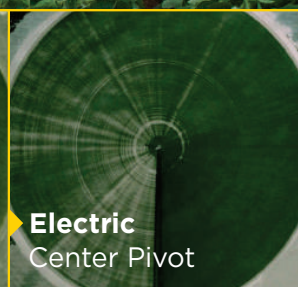
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Kenya hosts the 6th Africa Agri Expo

The 6th Africa Agri Expo in close partnership with the Ministry of Agriculture and Livestock Development - Kenya, began on Wednesday, February 8 with an aim of connecting Africa to the global agribusiness industry. The two days of impactful networking, business talks, knowledge gains, and many exciting new agricultural avenues in the thriving Africa's agriculture industry made the much-anticipated event AAE2023 in Kenya - a resounding success.

Moreover, during the launch of the expo, the Ministry of Agriculture and Livestock Development Cabinet Secretary Mithika Linturi in his speech which was read by the State Department for Crop Development Principal Secretary Phillip Kello Harsama stated that Kenya is reengineering its approach on how agriculture will be conducted in the Country with an aim of maximizing its potential.

CS Linturi further noted that the theme for the Agri Expo is aligned to Kenya's Vision 2030 as well as the government's manifesto on agriculture.

"Our strategic objective as a government is to create an enabling environment that will create favourable opportunities for agricultural growth," he stated.

Likewise, the CS called on all relevant stakeholders and agencies to give the government support to enable it to realize this initiative.

He further urged the exhibitors to set up businesses in the Country and venture into untapped sectors.

Furthermore, CS Linturi's speech mentioned that the Agricultural sector plays a vital role in the economy with the sector contributing 50 per cent of the Country's Gross Domestic Product (GDP).

"We want to put 3 million hectares of land under irrigation in the next six to ten years. You can imagine the kind of products and materials we require to engage 3 million hectares to support food production in the Country and Africa at large." PS Kello Harsama stated in his remarks.

PS Kello also urged the exhibitors to invest and open branches of their companies in various parts of the country to reach farmers in the remote areas.

"Next time when you have these expo's, hold them in agricultural counties so as to reach the farmers directly," Kello noted.

Similarly, the event organizer TAB Group Chief Executive Officer Tahir Bari said that over one hundred investors and potential businesses are keen on setting up a base in Kenya.

"Interest from investors in the Agricultural Value chains is growing with many seeking opportunities, and others coming to sign deals after successful discussions with Kenyan companies," Bari said.

He added that investors from various parts of the world including the Middle East, Asia, Europe, and USA have come to the Agri Expo with a keen interest in tackling key issues in the supply food chain by introducing modern technologies to help the

agricultural sector grow and become more attractive to the young people.

Indian High Commissioner to Kenya - Ms. Namgya C. Khampa, PS Kello Harsama, TAB Group Chief Executive Officer Tahir Bari and IFAD Country Director - Mariatu Kamara at Africa Agri Expo 2023.

Mariatu Kamara - Country Director, IFAD said "With less than ten years to 2030, many of the sustainable goals will not be achieved unless we take action to make this a reality for all working in agri-food systems and rural economies."

The expo broke all previous records with the ministry keynote speeches, dignitaries touring the exhibition area with global front-runners showcasing cutting-edge agri-technologies and innovative solutions like CENSA from India and more from 35+ countries, and the floor buzzing with one-on-one meetings, great business deals being facilitated all for the purpose of boosting the food security in the region.

Nevertheless, right from the technology sessions to one-on-one spectacular business meetings - AAE 2023 showed us what agriculture as a whole could do when industry enthusiasts gather together in one place and talk business while also sharing valuable insights.

The focus was on how businesses in this sector can champion latest technologies and solutions boosting productivity and profitability of farmers.

Africa Agri Tech 2023

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Due to continued global uncertainty on a number of fronts we have made the difficult decision to postpone the Africa Agri Tech Conference and Exhibition to 14 - 16 March 2023.





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9 Agribusiness ideas to consider



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Entrepreneurs such as Seun Sangoleye, founder of Baby Grubz in Nigeria and Pascaline Nenda, founder of Lemana in Cameroon, are already capitalizing on this opportunity by using local ingredients to produce quality baby food. I am using it. However, infrastructure challenges such as product transport difficulties and power shortages, as well as funding issues, have hampered expansion. Despite these hurdles, both entrepreneurs are optimistic about the future of the company and its potential for innovation and growth of local baby food production in Africa.

Climate adaptation opportunities of up to \$100 billion

The private sector is playing a key role in helping Africa adapt to the increasing frequency and severity of natural disasters such as floods and droughts, according to a new study from the International Finance Corporation. The study estimates that there is up to \$100 billion in potential upfront investment opportunities in Africa by 2040, or

\$5 billion annually.

Examples of these adaptation investments include solar-powered irrigation systems that protect crops from being destroyed by drought, and guaranteeing farmers a liveable income when yields are severely reduced by weather-related events. I have crop insurance. As African government budgets grow and fiscal space is tight, public investment is not enough to meet the continent's climate adaptation needs, making private sector investment essential. (Keep reading:

Climate adaptation in Africa offers investment opportunities for the private sector)

West African pineapple industry
The West African pineapple industry offers significant business opportunities due to the growing demand for fresh pineapples and related products in both local and international markets. Nigeria is the largest producer in the region, followed by Ghana, Benin, Ivory Coast and Togo. In 2019, West Africa earned around US\$66.9 million from exporting fresh pineapples to the EU. Known for its long shelf life, the MD2 variety is the most popular for export, while traditional varieties such as pain de sucre (sugar loaf) are making a comeback in local and regional markets.

Jus Délice of Togo is an example of a successful company in this industry. The company manufactures pure organic pineapple juice and supplies it in bulk to European customers and from there to individual juice brands. (Keep reading:

4.Export of pineapple juice from West Africa to Europe)

However, the industry also faces some challenges. These include annual shortages of fresh produce, high production costs, and low productivity. In addition, there is a lack of

well-organized cooperatives, limited access to credit and incomplete market information. In addition, infrastructure such as processing and packaging facilities, refrigeration and transportation is inadequate. 4. Zambia's Growing Processed Food Market

Local production of processed foods, which are now imported, presents an attractive opportunity in Zambia, according to Tue Nyboe Andersen, managing director of Lusaka-based Kukla He Capital. "In processed food, I see opportunities in niche products with limited competition. Zambia is a landlocked country, so import barriers are built in. Imports have to be transported long distances. , there is a company called Meraki that makes cakes and supplies them to major retailers such as Shoprite. Its competitors are much more expensive imported products, so they are growing fast with decent profit margins. Zambia has limited food processing and many items are imported. "

Andersen explains that the target market for groceries is not only in Zambia, but also in the neighboring Katanga region of the Democratic Republic of the Congo (DRC). Zambia provides food as there are few commercial farmers in most of her southern DRC. The market includes her 18 million inhabitants of Zambia and the Katanga region, bringing him nearly 30 million in total. (Keep reading:

Zambia-based investor highlights promising business opportunities)

5. Solving transportation and storage challenges

There are many gaps in providing transportation and logistics solutions for the agro-food industry in Africa. Rwanda, for example, has a shortage of commercial refrigerated vehicles, a potential business opportunity for entrepreneurs, according to Mark Sproston, CEO of food distribution company GET IT. In Zimbabwe, Mobility for Africa's low-cost electric tricycles meet the transportation needs of smallholder farmers. His OX Delivers in Rwanda operates an all-terrain electric vehicle that allows customers to reserve space to transport goods in rural areas.

Demand for refrigeration and storage solutions is also high in sub-Saharan Africa, with the United Nations Food and Agriculture Organization estimating that more than 40% of his food spoils before reaching consumers. In response, African Infrastructure Investment Managers (AIIM) recently established



Commercial Cold Holdings. It plans to evolve into a pan-African cold chain logistics platform with a network of temperature-controlled warehouses in key demand centers and food production regions.

Africa also has many companies that provide refrigeration solutions to small businesses, farmers and market traders. For example, Koolboks, a Nigerian company founded in 2018, offers off-grid photovoltaic units that can be used as refrigerators and freezers and can keep cool for up to four days without electricity or sunlight.

Increase. Koolboks incorporate pay-as-you-go technology to make their units more affordable. Another Nigerian company, ColdHubs, operates solar-powered cold rooms and offers small farmers and marketers fresh produce on a pay-per-store basis. Each unit can hold 3 tons of groceries and the customer pays 200 Nigerian Naira (approximately US\$0.50) to store perishables in 20 kg crates per day.

6. Rethinking traditional fruit and vegetable markets

Zambia's informal markets, where most of the fresh fruits and vegetables are sold, have few food safety measures in place and lack refrigeration facilities. These farmers also have little insight into how much their produce sells for, and little information about how much is wasted.

Savenda Capital sees this inefficient and unfair system as a business opportunity and is building a state-of-the-art fresh food market dedicated to Lusaka called ZAMBIAFresh. The market has cold and aging rooms, enforces strict food handling and hygiene standards, and uses a trading software system to offer fair prices to both buyers and sellers. ZAMBIAFresh earns a commission on every sale and

encourages farmers to sell through the market with a lower and more transparent commission structure and access to cold storage. The market he plans to start trading in 2023, and Savenda Capital plans to expand the model to other countries in sub-Saharan Africa. (Keep reading:

reimagining traditional outdoor fruit and vegetable markets)

Digital disruption in the African agricultural sector

Agtech is a promising opportunity in Africa, according to Brian Waswani Odhiambo, partner at venture capital firm Novastar Ventures. Examples of Agtech solutions include his Zowasel, a digital marketplace connecting smallholder farmers and buyers in Nigeria.

Procure is a Kenyan platform that connects agricultural material manufacturers with local agricultural traders who supply smallholder farmers. Troto Tractor is an Uber-like service connecting farmers and tractors in Ghana, Nigeria, Togo, Benin, Zambia and Zimbabwe. Currently, the platform, which includes 65,000 farmers and 3,200 tractors, allows farmers to request a tractor within 72 hours or pre-book for a specific date, and tractor owners pay a fee. You can join the platform.

Rwanda has a competitive advantage in horticultural exports

It could boost Rwanda's exports of horticultural products such as mushrooms, passion fruit and chili peppers. Demand for imported mushrooms is strong in the European Union (EU) and the Middle East, with the EU importing about 323,000 tonnes a year, worth US\$699 million, and the Middle East with 18,500 tonnes imported at US\$100, according to a study by Manufacturing Africa.

I am importing a million. With ideal agricultural conditions and a competitive labor market, Rwanda is well positioned to produce and export specialty mushrooms such as shiitake to these markets. Fresh shiitake mushroom exports to the EU can achieve 18% gross margin at wholesale price of \$12,000/ton, and dried shiitake mushroom can achieve 18% gross margin at wholesale price of \$21,000/ton.

In addition to mushrooms, Rwanda has the potential to export passion fruit and chili peppers to his EU. The EU demand for passion fruit is estimated at 375,300 tonnes per year, worth US\$861 million, while the EU demand for hot peppers is estimated at 1.5 million tonnes per year. Estimated \$2.7 billion.





Zambia: Female Farmers Adapt to Climate Change



As Africa grapples with the impact of climate change, a UN-funded project is helping women farmers in Zambia to adopt new cultivation methods and remain profitable and productive.

Extreme weather conditions threaten the livelihoods of millions of small-scale farmers in Zambia. Rain-fed farmlands haven't been spared as flood waters take them over. In other regions, the lack of rainfall has caused severe droughts.

Nedson Nkonde, acting executive director of Zambia's meteorological department, told DW that extreme weather patterns are causing havoc for the country's agricultural sector.

"We have had for example a lot of areas receiving over a hundred millimetres of rainfall in 24 hours," Nkonde said, stressing that such an amount of rainfall is quite huge. "Those are some of the amounts some areas in the southern province receive in a month!"

The results are flooding, flash floods, damage to infrastructure, and damage to dams.

Women bear the greatest brunt of these climate change-related conditions, many of whom depend heavily on agricultural production for their livelihoods. In addition, poverty in Zambia's rural areas is high, and women's economic opportunities are severely limited.

However, some women farmers are getting supported by a United Nations Funded program to mitigate the impact of climate change.

Adapting to climate change

Zambia's ministry of green economy and environment is providing real-time weather advice, using mobile phones to help female farmers adapt to climate change.

Inonge Lubasi, a farmer and one of the project's beneficiaries, told DW it hasn't been easy coping with the devastation caused by global warming.

She lost everything during floods, but with new training and support, Lubasi has moved from just growing maize to venturing into more than five different drought-resistant crops.

She also owns more than 500 herds of cattle and goats as she looks to turn things around.

"So most of the farmers here including myself, we grow crops such as sorghum, cassava, sweet potatoes and also millet," Lubasi said. She explained that these crops are climate resilient.

"We have also adapted agroforest where we plant a lot of trees including making our own organic fertiliser, we are not only depending on the artificial fertilisers but we also make our own fertiliser."

Agriculture accounts for 20% of Zambia's Gross Domestic Product (GDP) and employs over half of its population of nearly 18 million people.

Two-thirds of the labor force in Zambia is engaged in agriculture, 78% of whom are women farmers.

Authorities though want to encourage many

women farmers to remain resolute amid the climate change crisis.

Supporting women farmers succeed

The United Nations-led partnership with the Green Climate Fund aims to support the transition to renewable energy. It also funds projects to help nations adapt to a warmer world by having farmers switch to drought-resistant seeds or creating more cooling green spaces in cities to deal with heat waves.

The Green Climate Fund (GCF) is one way to funnel developed countries' \$100 billion (€97 million) pledged to climate-vulnerable, low-income nations. Climate change reparation is a hot topic at the ongoing COP27 UN Climate Conference in Egypt.

Nearly one million farmers in Zambia, women included, are to be supported under this project.

So far, 20,000 farmers have benefited from the program. But, according to Carol Mwape, the program's coordinator, there are still some challenges.

"We can't convince a farmer to change his farming practices if we can't offer evidence that the alternative can work," Mwape told DW.

She said the other obstacle is that it takes time for farmers to understand climate change's effects and pass on that information to other farmers.

Source: AllAfrica/DW



Nigeria: No credit available for poverty-stricken farmers in rural Abuja

Smallholder farmers in Abuja suffer from lack of access to agricultural credit and lack of government support.

Jeremiah Yunanna makes a living as a small farmer growing maize, beans, yams and other crops in Byazin, a rural community on the outskirts of Kubwa in Abuja. But Unanna said declining farm income and rising costs of living in Nigeria have made life more difficult for him and his family. The situation could not be reversed, as his efforts were in vain each time he pursued the program.

"I have never received a farm loan in the area she has been farming for over 30 years," said the 53-year-old woman. "I tracked it down in 2013 and paid everything that had to be paid. In short, I spent about N70,000 and could not access the loan."

More than ever, farmers are feeling the impact of lack of access to agricultural finance. High inflationary pressures in the country mean that the meager crops that support people like Unanna and her family are being eroded, adversely affecting daily farming activities. Many farmers are becoming poorer due to lack of access to credit.

Agricultural loans are loans available to farmers to start or expand their farming. Intended for agricultural development, this loan finances farmers and ranchers as they grow their crops, buy tools, harvest, or do other things to expand their agricultural business. But Unanna said many farmers, especially small farmers in rural areas, do not enjoy intervention programs.

"I don't have the funds to expand my farming business, which makes it difficult for me and my family," he said.

"We struggle to feed them because we cannot afford to buy fertilizers and improved seedlings to improve yields. Absent."

disturbing statistics

Rising cost of living, high food prices and associated inflationary pressures are driving Nigerians into increasing poverty.

Nigeria's inflation rate rose to 21.09% in October, up 0.32% from 20.77% the previous month, according to figures released by the Nigerian Bureau of Statistics (NBS). Food inflation in the same month was 23.72%.

The NBS reported in November that 133 million Nigerians, comprising 63% of the country's population, live in poverty, with 72% of the population living in poverty, compared with 42% in Nigeria's urban areas. He said multidimensional poverty is higher in poor rural areas. Many of those caught in the poverty net are smallholder farmers in rural areas.

Between June and August 2022, 19.4 million Nigerians are expected to experience severe hunger, according to a report by the United Nations Food and Agriculture Organization (FAO).

More than 14 million people (including 385,000 refugees) in 21 states were already suffering from hunger by that time, according to the report. For farmers, low capital bases and lack of access to finance exacerbate the impact of ever-rising costs.

Data obtained from the Central Bank of Nigeria (CBN) stated that the Agricultural Credit Guarantee Scheme Fund (ACGSF), one of the loan schemes for farmers introduced by the federal government in 1977, had facilitated a total of 1,224,795 loans valued at N129.084 billion to farmers across the country as of February 2022.

Also, the CBN data shows that as of January 2021, banks under the Commercial Agriculture Credit Scheme (CACS), another credit scheme with the mandate to strengthen the agricultural sector by providing finance to the sector's value chain (production, processing, storage and marketing), had disbursed N672.9 billion in loans to fund 636 commercial farming projects.

However, farmers who spoke with PREMIUM TIMES said even when government created intervention programmes to support local farmers, the grants or loans do not get to the real farmers in the local communities.

And according to data released by ActionAid, a non-governmental organisation working in Nigeria to tackle poverty and injustice, less than 23 per cent of smallholder farmers in Nigeria have access to agricultural credit.

Government Intervention

In November 2022, President Muhammadu Buhari said the Anchor Borrowers Programme, which he launched in 2015 to boost agricultural production, create jobs, and reduce food import bills for the conservation of the foreign reserve, supported over 4.8 million smallholder farmers across Nigeria to boost the production of 23 agricultural commodities.

However, Yunanna and many other local farmers in Byazhi told this reporter that they have not benefited from the intervention programme.

Yunanna said even after being advised to form or join a cooperative group to avail the loans, they were still unable to get the facility.

"Right now my hip pain is so bad that there is not much I can do on the farm. he added.

The inability of smallholder farmers in local communities to access credit makes them more

vulnerable to rising costs of living, and many struggle with malnutrition and ulcers as a result of hunger and related worries. .

According to Louise Milan, director of the screening unit at Byazhi Primary Health Center, the number of ulcer cases registered at the facility was increasing daily.

"Recently, the rate of ulcer patients we receive each day at this facility is staggering. We receive at least 13 to 15 ulcers each day," Milan said.

"Many people in this community feel they are not eating well because body ulcer cases are associated with poor diet," she said.

other farmers are not doing well

Juliette Ebere, a poultry farmer in her community of nearby Gubazango, said she never received a farm loan.

"She was looking for agricultural loans and subsidies from the government, and she tried many times without success," Evere said. "I want to expand my poultry farm, but I have no money. I downsized the farm because the cost of poultry feed is high. Is not."

Another poultry farmer in Byazhin, who identified himself simply as Anthony, said she also wanted access to agricultural financing.

"I really need a loan so I can expand my business and support my home. It is very difficult these days.

The business is not going as well as it used to because of the high cost of feed. I have over 500 birds on my farm, but now I don't even have enough money to feed my family, so I scaled it down to 200, and some of them are dead," says Anthony. said Mrs. Augustin Ekpo, another farmer who grows yams, vegetables and other crops in the community, said he earned at least N50,000 a month selling vegetables when he had the money to keep the farm running. Told. However, he said production has declined due to lack of financial support.

His Ekpo, a farmer and father of his six children, had made several attempts to obtain loans to expand the farm.

"I have been farming for over 16 years and he has never received a farm loan or fertilizer to support the farm," he said. "I tried many times, but it didn't work.

Government officials have even come to the community, given forms to fill out and taken pictures of the farm. I waited and saw nothing. "

High impact, low reward

Smallholder farmers produce the majority of food in low-income and developing countries and form the backbone of food security. His 2017 study by the Consultative Group to Assist the Poor (CGAP) found that more than 80% of his farmers in Nigeria are smallholders.

Kabir Ibrahim, president of the All Farmers Association of Nigeria (AFAN), said better access to credit would improve food production in the country.

"Easy access to credit will undoubtedly help small farmers optimize their productivity. Without it, productivity can be negatively impacted," said Ibrahim. He urged CBN to review its agricultural intervention program to meet the program's goals.

"We have some windows from the Central Bank of Nigeria (CBN), but if the situation needs to improve, we need to reassess to go directly to the actual farmers," Ibrahim said.

"This article was supported by the Africa Data Hub (ADH)"



In Kebbi, Tinub promises to boost agriculture and revive Argungu fishing festival



Adedayo Akinware of Abuja

*Former Lagos governor to halt brain drain and medical tourism, says APC Senator Bola Tinubu, presidential candidate for the All Progressives Congress (APC), promised the people of Kebbi state a significant investment to boost the state's agricultural profile.

The development comes as the APC Presidential Campaign Council (PCC) said Tinubu

has the most comprehensive program to end brain drain and medical tourism. Speaking yesterday at his APC presidential election rally at the Khalil Abdu Stadium in the state capital Vilnin Kebbi, Tinub praised farmers' innovative enterprises, especially rice farming.

He praised the innovative ventures that local farmers in the state have brought to the agricultural sector, especially rice.

The statement, signed by Abdulaziz on behalf of his Tinubu Media Office, quoted the former Lagos governor and said, "We will invest in education and agro-related industries to make prosperity very simple." Stated. The APC candidate, who recognizes Kevi's achievements in rice production and the creation of a close partnership between the state and Lagos, said his government will continue to encourage such labor relations across the country. He said:

"We will invest in education and agribusiness to make prosperity much easier. We will manage water resources to make Nigeria one of Africa's leading agricultural nations."

APC's presidential candidate also promised to revive the now-dead Argungu fishing festival and make it a tourist destination in Nigeria. Midway through the campaign, Kebbi Governor Atiku Bagdu and Federal Attorney General and Minister of Justice Abubakar Malami took to the podium to encourage people to vote for Tinubu because of his history of promoting democracy in the countries he has invested in. urged you to do so.

Marami reminded the rally that the APC government has invested heavily in agriculture, social services and infrastructure, and said it was time to pay it back by voting for Tinubu and other party candidates. .

He said Tinubu had many similarities to President Muhammadu Buhari, adding that if elected he would consolidate the achievements recorded by the Buhari government. APC National Chairman Abdullahi Adamu and APC Presidential Campaign Council Director and Plateau State Governor Simon Lalong thanked the large crowd for the rally and urged Mr Tinubu to thank Mr Tinubu for his sterling performance vote. .



New Project Aims to Leverage Green Carbon Finance for Improved Agronomy in Smallholder Coffee Systems in Uganda

The African Plant Nutrition Institute (APNI), along with OCP-Foundation, both of Morocco, launched the project "Green Carbon, Livelihoods and Resilience in Ugandan Smallholder Coffee Systems". The project relies on the active involvement of several partners such as Makerere University College of Agricultural and Environmental Sciences (CAES), Ankole Coffee Producers Co-operative Union Limited – ACPCU Ltd., National Agricultural Research Organization in Uganda – NARO, Mohammed VI Polytechnic University in Morocco – UM6P, international NGO Producers Direct, and the Environmental Conservation Trust of Uganda – Ecotrust.

Between the 1st and the 4th of February 2023, researchers and practitioners from the partner institutions met in Kampala and Mbarara, Uganda, to deliberate on the project's implementation and to share experiences on best practices in line with the project.

Key objectives of the project include increasing and then monetizing above-ground carbon in Robusta coffee (led by Ecotrust); farmer-led experimentation for improved coffee yield and quality (led by Producers Direct and APNI); market-responsive diversification of Robusta coffee systems (led by Producers Direct); and researching the potential for additional carbon credits created through adequate soil management practices (research jointly implemented by APNI, UM6P, and CAES of Makerere University).

The overarching goal of the project is to increase the incomes of ACPCU Ltd. farmers. The workshop, therefore, created a common vision, set expectations, and identified ways of aligning the project with ACPCU Ltd. objectives. ACPCU Ltd., headquartered in the Sheema Municipality, Uganda, is a Fair-Trade and Organic certified coffee processing and exporter organization that will host the project's field activities. ACPCU Ltd. has grown from 10 co-operative societies to 26 in a period of just 15 years. The farmer-owned export coffee co-operative union has over 15,000 members from distinct, multi-ethnic communities living across the mountains of southwestern Uganda.

The participating institutions are hopeful that the project will lead to improved knowledge along the coffee value chain, address challenges related to climate change, and improve the production of not only farmers under ACPCU Ltd. but in the whole country – through the engagement of NARO. The project will also support graduate student research in the sector.

Perspectives that were shared by some project partners during the meeting point to a broad range of positive impacts that target coffee farmers within the region:

"The project comes at a time when coffee production is stressed with issues of climate change and its farmers are in strong need of adaptation strategies. This new project

has a component on tree planting, and this will largely support our efforts to avert the effects of climate change. It is also important because it focuses on diversifying incomes of farmers in a way that conserves the environment." Bamuhangaine Nicodemus, ACPCU Ltd.

"Our project is designed to support farmers' aspirations for their farms and to address the different shocks they often experience along the coffee value chain. It will also improve productivity, the quality of products, and farmers' revenue. Each partner brings their unique experience on board which creates a special degree of synergy." Dr. Kaushik Majumdar, Director General APNI.

"This project will strengthen collaboration among farmers leading to improved markets and better agricultural practices. It will also accelerate the diversification of opportunities to strengthen the coffee system, and new agriculture systems that will increase revenues of the farmers resulting in improved livelihoods. With the project, Uganda will become an inspiring model for many other countries." Ms. Hassina Moukharig, International Portfolio Lead at OCP Foundation.

"Our work will help generate data to inform decision making and partnerships across the coffee value chain. It will also build a critical mass of people with better understanding of how best we can innovate to increase income for farmers." Dr. Ngonidzashe Chirinda,



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HYDAC International Group, founded in 1963, established a direct presence in South Africa in 2009. HYDAC South Africa has significantly expanded its footprint through its branches across the country and sales support into SADC countries.

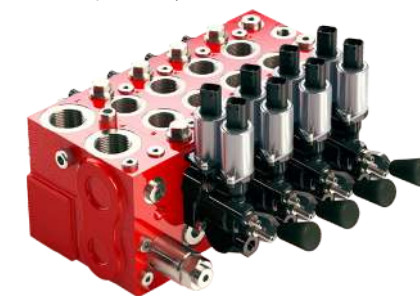
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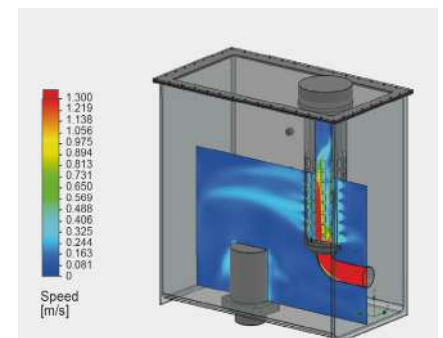
HYDAC's Hydraulic product range, manufactured in Germany, offers the latest in pump, valve, filter, and cooling technology.

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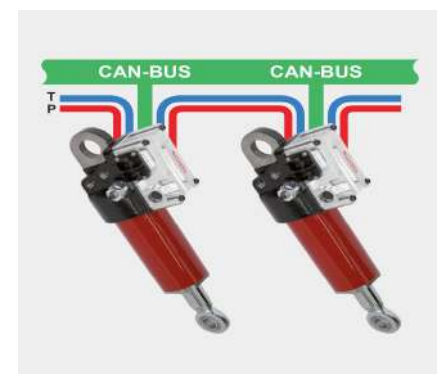


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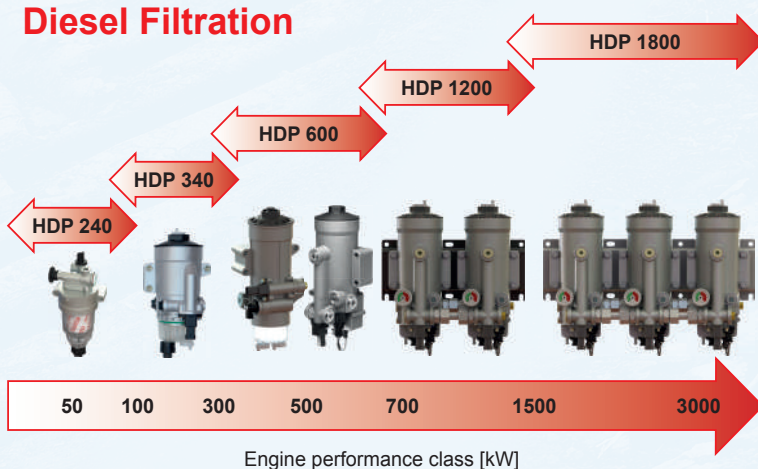


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- ISOBus control technology with remote monitoring.



Cattle Turn Into New Currency Amid Inflation in Zimbabwe



In 2007 as inflation walloped the Zimbabwean currency, rendering it valueless, then 54-year-old Langton Musaigwa of Mataruse village west of Zimbabwe in Mberengwa district switched to cattle as his currency.

He wasn't alone; scores of other villagers in his locality followed suit. In no time, cattle became a new currency as the Zimbabwean dollar went down the drain, pounded by inflation.

"We had no choice. It appeared cattle was the only money we could stare at and not the real Zimbabwean bank notes, which were now losing value every day as prices skyrocketed," Musaigwa told IPS. Many villagers like Musaigwa, pummeled by inflation then, found the panacea in their livestock like cattle. The cattle, said Musaigwa, could be traded by villagers for any valuable goods or services.

One such villager whose life was saved by her cattle is 67-year-old Neliswa Mupepeti hailing from the same village as Musaigwa.

"I fell sick very seriously and was no longer able to walk on my own. I had to use one of my cows to pay a local school headmaster to transport me using his car to Zvishavane to get medical treatment in 2008," she (Mupepeti) told IPS.

Then, Zimbabwe's inflation peaked at 231 percent. Zvishavane is a Zimbabwean mining town located in the country's Midlands Province, south of the country.

Fourteen years later, inflation has resurfaced in the southern African country, and cattle have again turned into a currency as people evade the worthless local currency.

But from 2009 to 2013, during the country's unity government that followed the disputed 2008 elections, Zimbabwe enjoyed some

currency stability because authorities allowed the use of the USD and many other regional currencies. Many Mberengwa villagers, like Musaigwa and Mupepeti, had been visited by inflation before, and they know the survival tricks.

"We have just had to return to using cattle as our money. I can tell you I have recently managed to buy a cart and a bicycle using just one cow here because villagers can't accept the local currency. Many don't have the popular USD, and cattle have become the readily available currency," said Musaigwa.

Zimbabwe's inflation currently stands out at 257 percent, according to the Zimbabwe National Statistics Agency, with the local currency ever falling against international currencies like the USD. As cattle turn into currency, just a single cow in Zimbabwe ordinarily costs about 400 US dollars.

In order to store the value of their worth, many Zimbabweans who can at least access US dollars, like Mwenezi district's 67-year-old Tinago Muchahwikwa, whose children working abroad send him money for personal upkeep, have had to buy more cattle.

"Money, either USD or any other currency - tends to lose value at any time, but cattle, for as long as they are well-fed and regularly treated for any diseases, remain with their value, and one can trade them off when a need arises," Muchahwikwa told IPS.

For Muchahwikwa, cattle are the currency he can rather trust than any money, worse the Zimbabwean dollar, he said.

Even for 40-year-old Admire Gumbo, a Zimbabwean based in Cape Town in South Africa, investment in cattle has become the way to go back in his village home in Mwenezi

as Zimbabwe contends with an inflation-ravaged currency.

"Back home, the money I send is buying cattle because when I settle back home, I don't want to suffer. As my herd of cattle increases, that also means the increase of my own worth in terms of money," Gumbo told IPS.

A worker at a grape farm in Cape Town, Gumbo bragged about owning a herd of 15 cows that he had bought back home.

As many like Gumbo surmount inflation in Zimbabwe using cattle, the UN's Food and Agriculture Organization (FAO), has been on record saying livestock accounts for 35 percent to 38 percent of this Southern African country's Gross Domestic Product (GDP).

Faced with a collapsing Zimbabwean dollar, cattle seem to have become a more stable currency than the local currency for many, like Gumbo.

"I have made sure my mother buys cattle for me and not keep the money when I send cash to her because of the risks faced by the local currency back home, which has kept losing value, meaning even if one changes money from Rands to Zimbabwean dollars, it won't make any sense as the manipulated exchange rate there would still mean one remains with nothing meaningful," said Gumbo.

For agricultural experts, with inflation ravaging Zimbabwe's currency, cattle have become the alternative currency.

"Inflation has meant that many people now abhor the local currency and rather prefer foreign currencies like the USD, but many have no access to the USD, and cattle have become the readily available currency," Steven Nyagonda, a retired agricultural extension officer in rural Mwenezi, told IPS.

To Nyagonda, as long as cattle are well-fed, it means they gain more weight and, therefore, more value if one wants to trade them off.

Pummeled by inflation here, even urban dwellers like 51-year-old Kaitano Muzungu are having to hoard things like solar panels, which they trade off with cattle in the villages while they shun the worthless local currency.

"When I get the cattle on trading off my solar panels in the villages, I feed the cattle in order to increase their weight so that I sell them to butcheries in the city in Harare in USD to business people here, save the profits and keep ordering solar panels to keep trading in the villages where I get cattle currency," Muzungu told IPS.

With cattle currency gaining traction across Zimbabwe, entrepreneurial Zimbabweans have formed cattle banks, where investment in cattle has become a sensation.

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Is Islamic Banking the Next Gold Mine for Uganda?



Uganda's banking industry performance weakened during the 2011-2014 period due to turbulent economic challenges, and now, due to the COVID-19 pandemic, traders are protesting high-interest rates.

If both economic growth and lending growth, especially in the private sector, are low, there is no way the government will be able to solve unemployment because the general public will fear seeking loans due to the high interest rates - and the banks will be stuck with the money as there will be no investments coming up - hence leading to the closing down of businesses, which leads to low consumption and purchasing power, static or declining economic growth, high taxes, high prices, demonstrations, strikes, murder, theft, corruption, etc.

It's high time banks diversified their portfolio and embraced Islamic banking, reducing their risk exposure to sensitive sectors like oil and gas since the world is moving towards renewable energy. When oil prices fall, it becomes very risky to hold oil as a financial asset, which is why some countries are becoming less reliant on oil and gas production.

It's no longer in the interest of major oil-producing countries to restrain output as they seek to produce and export as much as they can because soon, we see factors like climate change, new electric car technologies, clean hydrogen energy, solar and wind energy, and shale going to erode long-term demand for crude oil in the next decade as technology makes fossil fuels obsolete.

Saudi Arabia has come up with an ambitious yet achievable plan called Saudi Vision 2030, introducing a futuristic \$500 billion NEOM development project among them called "The Line," showing how urban cities can look in the future with zero carbon emissions, which means no cars or roads.

The aim is to reduce Saudi Arabia's dependence on oil, diversify its economy, and develop public services such as education, infrastructure, health, tourism, communication, science, and technology. It's high time Uganda too increases local production in agriculture through Islamic banking agriculture business loan products that are suitable for farmers' needs, increases production in manufacturing, building materials, animal production, pharmaceuticals, tourism, communication, science, and technology, and reduces costs on goods imported and encourages more exports.

As of 2018, the US surpassed Russia and Saudi Arabia as the world's top crude oil producers. This means that if the US or Russia increases production and there is a low demand for oil in China and Europe, combined with a steady supply of oil from OPEC, or if China automatically buys oil from Iran, there will be an excess supply of oil and oil prices will fall due to supply and demand laws.

As a result, non-OPEC countries will be discouraged from producing due to production hurdles and costs; for example, it is cheaper to extract oil in the Middle East than in Alberta, Canada; oil price volatility; sometimes high-interest rates impact oil prices; older wells that are less productive; and others experiencing high costs for new

projects coupled with increased demand for oil in home countries due to increased demand for oil.

As we continue seeing Islamic finance as one of the fastest-growing segments of financial opportunity in the world today, growth in the Islamic banking sector largely outpaces that of conventional banks in most systems in which Islamic banks have been embraced due to proactive governments, high demand for Shariah-compliant products, and strong retail demand, which provides greater stability for their funding profiles and legislation for the industry, and this positions Africa as the third fastest-growing region after the Middle East and Asia.

According to Muhammad Zubair Mughal, chief executive officer of AlHuda Centre of Islamic Banking and Economics (CIBE), the total volume of Islamic finance is expected to hit more than \$3.8 trillion this year, and global Islamic finance assets are projected to be nearly \$5 trillion by 2025, proving that Islamic banking is no longer an alien in the global financial industry.

The majority of non-Muslim countries, including Uganda are working tirelessly to become the financial hub in their respective regions by introducing Shariah-compliant financial products into their markets to meet the demands of the Muslim population of 1.97 billion adherents, accounting for more than 25 per cent of the world's population and the second-fastest growing religion, growing faster than the world's population projected by the Pew Research Center.

It is, therefore, imperative for Ugandan educational institutions; colleges and universities to start adopting programs in Islamic finance that reflect the importance of the role of Islamic finance in our global economy. As Shariah-compliant banking is becoming very attractive within the East African region, in Uganda, people's perceptions are changing, public awareness is increasing day by day, and a large number of customers of conventional banks, insurance companies, and microfinance institutions are demanding its introduction as competition will automatically lower interest rates.

Uganda is best suited for Islamic finance because of its good regulation and legislation, economic stability, and mature open market that will accelerate economic growth if Islamic banking is developed. Global growth has slowed down due to the COVID-19 pandemic, the Russia-Ukraine war, disruptions from climate change, and trade and technological disputes between China and the USA. Therefore, nations that are suffering from low growth should adopt this segment in their banking sector faster.



Namibia Heads for Maize Self-Sufficiency

The recent good rains in the country and the resurgence of green scheme projects mean the country is heading towards self-sufficiency in white corn.

This was stated by Calle Schlettwein, Minister for Agriculture, Water and Land Reform, at the Annual Staff and Stakeholders' Address held in Windhoek yesterday, with hopes that this will be achieved by 2024/25, expressed.

He said the ministry's focus this year will be on sectors in all three dimensions: food and water security, poverty eradication, wealth creation, agriculture as a catalyst for the systemic erosion of income inequality, and water and land reform, said to activate and upgrade.

According to Schlettwein, the agricultural sector registered moderate growth in 2022, estimated at 3.6%, thanks to increased activity in both livestock and plant subsectors.

Highlighting this year's achievements and key priorities, Schlettwein said: The Uvhungu Vhungu and Orange River Irrigation Project and the Uvhungu Vhungu Dairy Project were called for private sector involvement, in line with their stated political intentions.

"These are now in the evaluation and decision-making stage. As this process unfolded, the Ministry, with public support, moved these assets, which had been underutilized for many years, into production. Uvhungu Vhungu Dairy was recently awarded a joint venture in Namibia and India for 25 years," he said.

He said his three other green plans, Shady Kongolo, Sikondo and Etanda, have not yet been promoted and remain with the ministry.

"In some of these projects, the winter crop (wheat) was grown and harvested and now the summer crop (corn) is being grown," Schlettwein said, adding that with a total of 776 hectares, these An average of 7,000 tonnes of white corn will be produced from its green system, he added. .

He said this will double last year's corn yields from the Museet, Mashalet and Citemo green programs.

"If all goes according to plan, the yield of 14,000 tons, excluding the products of small and medium-sized farmers, will exceed the current National Strategic Food Reserve of 11,000 tons," the minister pointed out.



KEEPING TRACK OF HIGH EFFICIENCY OF CONVEYORS

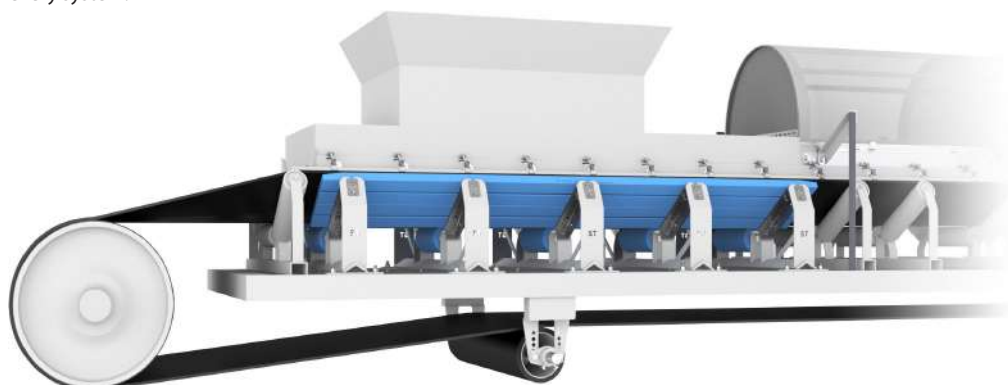
BLT WORLD – specialists in bulk materials handling – has launched Scrapetec's new SureSupport conveyor system, that has been developed to improve material take-up and maximise the efficiency of skirting and sealing. This is achieved by correcting belt tracking, providing an effective seal at the transfer points, preventing material spillage and enhancing dust control.

"The newly designed SureSupport system delivers support and stability to the belt at transfer points, which increases the effectiveness of side sealing, enhances dust suppression and minimises material spillage," explains Ken Mouritzen, Managing Director, BLT WORLD. "In conventional conveyors, the force of falling bulk materials causes a high belt load in the transfer area, resulting in belt degradation and increased material, energy and maintenance costs. To compensate for the belt load and to maintain efficient sealing within the transfer area, the idler density can be increased in the feed area. Although this measure may improve efficiency, it does not fully eliminate belt damage."

The SureSupport system efficiently reinforces the belt and prevents belt sag at the infeed, which is normally caused by the impact energy of falling materials being conveyed. Specially-designed sliding rails prevent belt damage and tightness of the transfer is increased with the use of a combination skirting and sealing system that ensures even belt tracking.

SureSupport operates in conjunction with Scrapetec's AirScrape side seal, providing a high performance, dust free and contactless skirting solution, with reduced material spillage. A smooth straight and flat belt surface keeps the AirScrape lamellas continuously in the correct position, with no physical belt contact. Other advantages of this system include quick and simple installation, as well as reduced maintenance time and costs.

Scrapetec's advanced conveyor belt systems - which meet stringent quality, safety and environmental standards - are available directly from BLT WORLD, which provides an assessment and solutions service to customers in diverse sectors, for planning and implementing projects. A technical advisory and support service enhances performance of every system.





Energy Valves sets a new benchmark in pneumatic actuators



shuttle cars, bucket wheels and haulage trucks.

"BMG specialists offer customers a solutions-based service, which encompasses technical consultation to ensure trouble-free operation of seals. Most premature seal failures occur as a result of incorrect installation and improper handling or storage. To ensure optimum performance and extended service life, the correct installation method, using appropriate tools and careful handling and storage of seals is critical. Failure to install the correct sealing system, or incorrect fitment that results in a leaking seal, is highly dangerous, particularly in extreme conditions."

Two different types of Trelleborg mechanical face seals are available from BMG. Type DO, which is the most common form, uses an O-ring as a secondary sealing element, while Type DF has an elastomer portion, with a diamond-shaped cross-section as a secondary sealing element, that replaces the O-ring.

Both types consist of two identical metal seal rings that are mounted in two separate housings, face-to-face on a lapped seal face. The metal rings are centred within their housings by an elastomer element. One half of the mechanical face seal remains static in the housing while the other half rotates with its counter face.

BMG's extensive range of quality branded sealing products also includes rotary shaft, hydraulic and pneumatic seals, as well as allied products like O-rings, waved washers, circlips, mechanical seals, gland packing and adhesives.

The company's commitment to providing high quality seals is evident in the extreme care taken in brand selection, in terms of standardisation, reliability, flexibility and consistent quality controls. These sealing products meet the demands of the OEM and end user for efficient performance from equipment that needs to work harder and for longer periods, as productivity levels increase.

BMG's extensive range of seals and gaskets comprises Trelleborg mechanical face (torric) seals, that have been engineered for rotating applications in arduous conditions in many industries.

"Trelleborg mechanical face seals are designed to withstand excessive wear and to prevent the ingress of harsh and abrasive external media in harsh environments. This robust sealing system offers optimum protection to equipment exposed to contamination and corrosion, thereby enhancing performance, reducing downtime and extending service life," explains Michael Bissett, Operations Manager,

BMG's Seals and Gaskets division. "Applications for mechanical face seals include agricultural machinery, for example tractors, planters and harvesting equipment. In construction, these specialised seals enhance performance of road milling machines, concrete mixers, concrete pumps and dump trucks.

"Mechanical face seals are also proven for high-performance in gearboxes, wind driven power stations and other applications with similar conditions, or where maintenance-free lifetime sealing is essential. Other applications for mechanical face seals are in heavy-duty mining equipment, including draglines, wheel loaders,



True Prosperity Will Be Found In The Embrace Of The Digital Economy.

Digital agriculture platforms such as Farm Pass are helping millions of farmers in rural areas access fair prices and credit to grow their business.

Scaling these types of life-changing digitization programmes is vital given the potential for their far-reaching economic impact across the world.

Empowering entrepreneurs and small businesses to embrace the digital economy can help foster inclusive, sustainable economic growth.

In India, farmer Saravanan Madhavan digitally connects with buyers to sell his crops.

Payments are credited to his account the same day. It's a welcome departure from how other farmers like him get paid: often late and only partially.

Buyer Ramesh Kumar once trekked through fields to find farmers. Now, technology helps him locate and purchase the exact produce he needs at the best price, saving him time and money on travel.

For farmers, and especially smallholders like Madhavan who account for 86% of India's agrarian economy, the digitization they have embraced in recent years has been transformational.

More farmers have signed on to platforms like Farm Pass, which are helping millions in remote areas of India and Africa access fair prices and credit to grow their businesses.

With these types of platforms, farmers have access to more buyers, empowering them to negotiate the best price for their produce.

With digitization, farmers pay and get

paid digitally, and a digital record of their transactions means they have the financial history they need to apply for loans to finance and grow their businesses. They're no longer price takers; they're price makers.

Scaling these types of life-changing digitization programmes is critical given the potential for their far-reaching global economic impact. Agriculture accounts for 4% of global GDP, totalling nearly \$4.5 trillion, and employs more than a quarter of the global workforce.

Meanwhile, more than 608 million smallholder farmers produce about a third of the world's food. Yet for many people, farming no longer guarantees a sustainable livelihood. Some 65% of poor working adults make a living through agriculture.

For impact, we need to overcome challenges



to scale

There are a few significant obstacles to both building and operating these types of programmes and platforms at scale in rural areas across the world.

The consequences of not addressing these hurdles are dire — more farmers would persist living in poverty and ultimately move away from farming if their livelihood is no longer sustainable. Fewer farmers globally would only add to the world's significant food scarcity challenges.

The first obstacle is a lack of viable agent networks on the ground to service rural and frequently offline communities. All the digital infrastructure in the world can't help people if it doesn't reach them.

For example, agents provide cash-in and cash-out points for digital payments at the last mile, where ATMs are sparse.

Agents also bring digital services, like Farm Pass, to the farmgate, helping farmers to request credit or input services and find buyers, without needing their own phone. These agent networks not only enable rural commerce and help farmers and their families, but they also provide much-needed employment in countries across Asia and Africa.

A second hurdle to scaling these digital platforms is low levels of technical expertise on the ground when it comes to managing and operating digital programs.

Agent networks and other staff in-country need the know-how to be able to quickly and seamlessly troubleshoot their own problems when they arise. When these critical skills are lacking, consumer and merchant day-to-day transactions suffer.

Third, rigid on-soil regulations that specify data must be hosted locally substantially raise the cost of entry, set-up, and operation in the market for digital services companies. For many companies, this high entry cost — up to and including the creation and management of in-country processing centres — combined with ongoing expenses, completely shuts them out of bringing digital technology to marginalized communities where margins are already very slim.

Empowering entrepreneurs and small businesses across the globe to embrace the digital economy can help foster inclusive, sustainable economic growth. But making impact at scale for farmers, in particular, will require immediate and meaningful engagement and collaboration across the private, public and non-profit sectors.

At Mastercard, we know from experience that

there is power in partnership. That's why we look to align our efforts with organizations like Heifer International, which is the latest addition to the Farm Pass network.

In working together, we'll bring Mastercard's digital solutions to the smallholder farmers that Heifer International serves, enhancing the impact we might otherwise have by working alone.

More resources needed to bring digital solutions to scale

To overcome the hurdles and bring digitization to more smallholder farmers around the world, more resources are needed to build out agent networks and to educate and equip local staff with the needed technical expertise.

Governments can help by taking a growth-minded approach to on-soil regulations or allowing infrastructure that's shared by multiple markets.

Foundations and donors can participate, too, by assisting with funding. For example, they could fund digital skilling programmes and help stand up local agent networks.

As progress is made, more farmers will be able to do business in new markets, find more customers, earn greater profits, optimize their operations, and bolster their resilience in times of crisis — including in the face of worsening consequences of climate change.

The charge to stakeholders across sectors is to take action to enable this embrace of the digital economy sooner rather than later.

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The Future Of Sustainable Aquaculture In Emerging Markets

With per capita fish consumption having doubled in the past six decades, aquaculture is becoming more important in combatting food insecurity. Recent innovations seek to improve sustainability and productivity while assuaging quality concerns. Venture capitalists invested \$39bn in food tech start-ups in 2021, double the amount seen in 2020. While over half of this amount went to digital grocers and online marketplaces, a number of companies developing innovative aquaculture technologies stand to benefit from investor interest.

One such company, Vertical Oceans, collected \$3.5m in a seed round last year from US-based VC fund Khosla Ventures in what might be the first time a major Silicon Valley fund has invested in an aquaculture start-up.

Vertical Oceans is currently raising shrimp in tanks the size of school buses in a proof-of-concept facility in Singapore. These modular tanks could conceivably be stacked in urban settings and recirculate water, producing little waste and addressing both supply-chain and contamination concerns.

Similarly, a number of companies farming Atlantic salmon have taken the drastic step of moving inland to become more sustainable. From its land-based facility near Miami, Atlantic Sapphire hopes to eventually produce 20% of the salmon consumed in the US. Powered by renewable energy and sourcing

water from the same aquifer that provides Miami's drinking water, the company has also cut emissions by shipping fish to distributors by road.

Global aquaculture activity

Aquaculture provided 56% of the aquatic food available for human consumption worldwide in 2020. Asia accounted for 90% of global aquaculture production in 2018, thanks in part to China, which produced 66.1m tonnes. Indonesia was the next-largest producer, with 14.7m tonnes, followed by India (7m tonnes) and Vietnam (4m tonnes).

The key aquaculture products in Asia include seaweed and oysters, as well as freshwater carp. Known as low-trophic, these species mostly consume plankton, making them cheaper and more environmentally friendly to farm than carnivorous, or high-trophic, fish species

Shrimp farming, which is worth an estimated \$45bn globally, is responsible for 30% of the deforestation of mangroves in Southeast Asia, according to a 2020 report from Planet Tracker. The lack of mangroves, which act as a vital carbon sink, and the flow of waste, chemicals and antibiotics from farms increases the environmental risks associated with conventional shrimp aquaculture.

The Americas account for approximately 3% of

global aquaculture production, with demand primarily focused on whiteleg shrimp and Atlantic salmon. These high-trophic species pose environmental risks when farmed at industrial scale because they produce more hazardous waste and are primarily fed small fish or fish by-products from capture fisheries.

Egypt dominates aquaculture in Africa, accounting for 73.8% of the continent's aquaculture production as of 2018. While the continent is only responsible for some 2% of global output, the sector in sub-Saharan Africa has grown by 11% per year since 2000, nearly double the global rate of 6%.

OBG has previously noted that the high consumption of fish and the stress on local capture fisheries has made aquaculture an important tool for poverty reduction and fighting food insecurity in sub-Saharan Africa.

Tilapia and catfish, both low-trophic species, account for 70% of the continent's production, with the majority of aquaculture activity centred around lakes.

Addressing sustainability

As OBG noted last year, with climate change, overfishing and ocean acidification threatening wild fisheries, many governments have outlined blue economy strategies to protect marine resources and drive economic recovery following the Covid-19 pandemic.



South Africa: Perlemoen Farm Gives Hope to West

Doring Bay Abalone, 37% owned by the community, produces about 60 tonnes of abalone per year, mostly to legally export to China.

Doring Bay Abalone, a land-based aquaculture farm, produces about 60 tonnes of abalone per year and legally exports to China.

This project stands apart from other abalone farms because it is partly community-owned and employs about 50 workers from the area.

South African abalone is a critically endangered species because of rampant poaching and illegal exports to China. The illicit abalone trade still surpasses the legal aquaculture abalone market.

"If we protect what we have, eventually generations to come will benefit from it," says Ruben Saul, chairperson of the Doringbaai Development Trust.

Saul is speaking to GroundUp about the Doring Bay Abalone farm based in the small West Coast fishing village, 40 kilometres north of Lamberts' Bay.

The land-based farm extends along the harbour. The abalone, also known as "perlemoen", are hatched and spawned in several old factory buildings. When we arrived, rows of tubs filled with more mature abalone were outside in the sun.

Nearly all the abalone hatched, spawned, and grown on the farm are exported to Hong Kong, China where it is highly-valued and regarded as a delicacy.

Doring Bay Abalone is one of a few companies in South Africa that provide abalone to the Asian market legally. The species of abalone grown on the farm, *Haliotis midae*, is currently a critically endangered species due to rampant poaching.

A 2018 report from TRAFFIC, a United Kingdom-based conservation non-governmental organisation, estimated that between 2000 and 2016, almost 100 million abalone were illegally harvested from South African seas. The report noted that two-thirds of abalone imported from South Africa came via the illegal market.

A 2022 report by the Global Initiative, a Switzerland-based civil-society organisation, estimated that illegal harvesting currently exceeds 3,000 tonnes per year. The report notes that there is a "fast-growing abalone aquaculture sector, producing close to 2,000 tonnes of abalone annually", much smaller than the illicit market.

While the Doring Bay Abalone fosters sustainability of the critically endangered species, the production of 60 tonnes of abalone per year is just a drop in the ocean.

When the farm opened in 2013, it had eight workers. Now it employs over 50 local people.

Unlike other commercial aquaculture farms, the community has a 37% shareholding stake in the Doring Bay farm, held in the Doringbaai

Development Trust. The rest is privately owned.

The trust was established after the old Oceana crayfish factory closed down in 2006 after about 75 years of operation. This was devastating for the community as it left many people without jobs, says Saul. The trust was set up in 2007 to help the community cope with the closure.

Saul said that hundreds of people from the small fishing community have benefitted from the opportunities created since this project's inception.

At the 2011 census, the town's population stood at about 1,200 people.

According to Anchen Frisley, a supervisor and worker at the farm for almost five years, most people in Doringbaai make a living as fishers, in the abalone industry or at mines nearby.

Though Frisley spends most of the day grading abalone by size and the quality of its shell, she has never tasted it. "I haven't eaten [abalone] and I don't want to because I work with it every day," she says jokingly.

Frisley explains that the market size of abalone ranges between 100 and 250 grams. Dried abalone is the preferred method of preserving it for export, but it can also be frozen, canned, or exported live.

Saul says there are plans to expand the farm

Business DIRECTORY



Listings

Agricultural Consultancies

- ICS France
- Valtra Inc. - Africa

Agricultural Equipment - General

- Alvan Blanch Development Ltd.
- Baldan/Pan Trade Services Ltd.
- Bentall Rowlands Storage Systems Ltd.
- Briggs & Stratton AG
- Case IH
- Deutz-Fahr
- Eurodrip SA
- Fairtrade GmbH & Co. KG
- ICS France
- Micron Group
- New Holland Agriculture
- Nogueira/Pan Trade Services Ltd.
- SAME
- Valtra Inc. - Africa

Agricultural Projects

- Bentall Rowlands Storage Systems Ltd.
- Eurodrip SA
- ICS France
- Symaga SA

Animal Health Products

- BioPoint
- Socorex Isba SA

Applicators for Granular Insecticides, Herbicides

- Guarany Ind. Com. Ltd.

Automatic Chain Feeders

- Big Dutchman International GmbH

Bagging plant

- Bentall Rowlands Storage Systems Ltd.

Bale Handling Equipment

- Nogueira/Pan Trade Services Ltd.

Biofuel/Biodiesel

- Bentall Rowlands Storage Systems Ltd.

Briquetting Plants

- Alvan Blanch Development Ltd.

Bulk Storage Equipment

- Alvan Blanch Development Ltd.
- Bentall Rowlands Storage Systems Ltd.
- Chief Industries UK Ltd.

- KEPLER WEBER

- Symaga SA

- The GSI Group South Africa (Pty) Ltd.

Cages & Batteries

- Big Dutchman International GmbH

Cassava Processing Equipment

- Alvan Blanch Development Ltd.

Centre Pivot Equipment

- Valmont Irrigation

Cocoa Production

- Alvan Blanch Development Ltd.

Coffee Processing, Handling & Storage

- Swingtec GmbH

Computers & IT Equipment

- Big Dutchman International GmbH

Conveyors and Elevators

- Awila Anlagenbau GmbH
- Big Dutchman International GmbH
- KEPLER WEBER
- Lubing Maschinenfabrik GmbH & Co. KG

Coolers - Environmental

- Big Dutchman International GmbH

Coolers - Evaporative

- Lubing Maschinenfabrik GmbH & Co. KG

Cotton Handling & Storage

- Swingtec GmbH

Crop Drying and Ventilation

- Alvan Blanch Development Ltd.
- The GSI Group South Africa (Pty) Ltd.

Crop Handling & Storage

- Alvan Blanch Development Ltd.
- Bentall Rowlands Storage Systems Ltd.
- Chief Industries UK Ltd.
- Griffith Elder & Co. Ltd.
- Swingtec GmbH

Crop Protection Equipment

- Bentall Rowlands Storage Systems Ltd.
- Jacto/Pan Trade Services Ltd.
- Swingtec GmbH

Cultivators

- Baldan/Pan Trade Services Ltd.
- LEMKEN GmbH & Co. KG
- Poettinger

Cultivators - Tined

- Bomford
- Briggs & Stratton AG
- Maschio Gaspardo S.p.A

Disinfectants

- Intraco Ltd. n.v

Drills

- Maschio Gaspardo S.p.A

Drinking Systems

- Big Dutchman International GmbH
- Fairtrade GmbH & Co. KG
- Lubing Maschinenfabrik GmbH & Co. KG

Dryers

- Alvan Blanch Development Ltd.

Egg Collection

- Big Dutchman International GmbH

Egg Layer Breeding Stocks

- Lohmann Tierzucht GmbH

Egg Layer Parent Breeders - Brown

- Lohmann Tierzucht GmbH

Egg Layer Parent Breeders - White

- Lohmann Tierzucht GmbH

Egg Layers

- Lohmann Tierzucht GmbH

Exhibitions and Conferences

- Fairtrade GmbH & Co. KG

Extruders for Food, Feed

- Alvan Blanch Development Ltd.

Feed Additives

- BioPoint

- Coprex
- Evonik Industries AG
- Intraco Ltd. n.v
- OLMIX
- Varied Industries Corporation (Vi-COR®)

Feed Concentrates

- Intraco Ltd. n.v

Feed Growth Promotant Probes

- Varied Industries Corporation (Vi-COR®)

Feed Ingredients

- Coprex
- Intraco Ltd. n.v

Feed Premixes

- Coprex
- Intraco Ltd. n.v

Feed Processing Plants

- Alvan Blanch Development Ltd.
- Bentall Rowlands Storage Systems Ltd.

Feed Supplements

- BioPoint
- Varied Industries Corporation (Vi-COR®)

Feeding Systems

- Big Dutchman International GmbH

Fertiliser Spreaders

- Baldan/Pan Trade Services Ltd.
- Guarany Ind. Com. Ltd.
- Maschio Gaspardo S.p.A
- PICHON

Fertilisers

- Hebei Monband Water Soluble
- Fertilizer Co. Ltd.
- Omex Agrifluids Ltd.

Fish Farming

- Socorex Isba SA

Fish Feeds - General

- Alvan Blanch Development Ltd.

Fogging Machines

- Big Dutchman International GmbH
- Swingtec GmbH

Foliar Fertilisers

- Hebei Monband Water Soluble
- Fertilizer Co. Ltd.
- Omex Agrifluids Ltd.

Food Processing Equipment

- F.H. Schule Muehlenbau GmbH

Forage Harvesters

- Case IH
- New Holland Agriculture
- Nogueira/Pan Trade Services Ltd.
- Poettinger

Forestry Equipment

- Bomford
- Guarany Ind. Com. Ltd.
- Valtra Inc. - Africa

Fruit Processing

- Alvan Blanch Development Ltd.

Generating Sets

- Briggs & Stratton AG

Genetic Research

- Lohmann Tierzucht GmbH

Grain - Drying & Ventilation

- Alvan Blanch Development Ltd.
- Bentall Rowlands Storage Systems Ltd.
- Chief Industries UK Ltd.
- KEPLER WEBER

Grain - Handling, Cleaning & Processing

- Alvan Blanch Development Ltd.
- Awila Anlagenbau GmbH
- Bentall Rowlands Storage Systems Ltd.
- Chief Industries UK Ltd.
- F.H. Schule Muehlenbau GmbH
- KEPLER WEBER
- Privé SA

Grains, Grain Projects & Edible Oils

- Bentall Rowlands Storage Systems Ltd.

Grasscutting Machines - Forage

- Bomford
- Nogueira/Pan Trade Services Ltd.
- Poettinger

Grasscutting Machines - Lawn

- Briggs & Stratton AG

Groundnut Handling Equipment

- Alvan Blanch Development Ltd.

Harrows

- Baldan/Pan Trade Services Ltd.
- John Deere (Pty) Ltd.

Harvesting Equipment

- Alvan Blanch Development Ltd.
- Bentall Rowlands Storage Systems Ltd.
- Deutz-Fahr
- John Deere (Pty) Ltd.
- New Holland Agriculture
- Nogueira/Pan Trade Services Ltd.
- Bomford

Horticultural Equipment & Machinery

- Guarany Ind. Com. Ltd.
- ICS France
- Micron Group
- Swingtec GmbH

Horticultural Fertilisers

- Hebei Monband Water Soluble
- Fertilizer Co. Ltd.

Integrated Pest Management

- Omex Agrifluids Ltd.
- Swingtec GmbH

Irrigation & Drainage Systems

- Valmont Irrigation

Irrigation Equipment

- Eurodrip SA
- ICS France
- Valmont Irrigation

Listings



Maize Shellers

- Alvan Blanch Development Ltd.
- Bomford
- Nogueira/Pan Trade Services Ltd.

Manure Composters & Dryers

- PICHON

Material Handling

- Bentall Rowlands Storage Systems Ltd.
- PICHON

Material Handling - Bulk

- Bentall Rowlands Storage Systems Ltd.

Medicators

- Big Dutchman International GmbH

Micronutrients

- Omex Agrifluids Ltd.

Milk Replacers

- Coprex

Milling & Mixing

- Alvan Blanch Development Ltd.
- Big Dutchman International GmbH

Mills

- Alvan Blanch Development Ltd.
- Big Dutchman International GmbH
- Privé SA

Mills - Grain

- Bentall Rowlands Storage Systems Ltd.
- F.H. Schule Muehlenbau GmbH
- Nogueira/Pan Trade Services Ltd.
- Privé SA
- Silos Cordoba S.L.

Mills - Hammer

- Awila Anlagenbau GmbH
- Nogueira/Pan Trade Services Ltd.

Monitoring Equipment

- Valmont Irrigation

Oil Extraction Equipment

- Alvan Blanch Development Ltd.

Packaging Machinery

- Fairtrade GmbH & Co. KG

Palletizers

- Big Dutchman International GmbH

Pelleting

- Alvan Blanch Development Ltd.
- Awila Anlagenbau GmbH

Pig Equipment

- Big Dutchman International GmbH
- Lubing Maschinenfabrik
- Gmbh & Co. KG
- Symaga SA

Pig Feeding/Drinking Equipment

- Big Dutchman International GmbH
- The GSI Group South Africa (Pty) Ltd.

Pig Flooring

- Big Dutchman International GmbH

Pig Health Products

- OLMIX
- Socorex Isba SA

Pig Housing

- Big Dutchman International GmbH
- Silos Cordoba S.L.

Plant Protection Chemicals

- Omex Agrifluids Ltd.

Planters

- Baldan/Pan Trade Services Ltd.
- John Deere (Pty) Ltd.
- Poettinger

Plastic Flooring, Poultry

- Big Dutchman International GmbH

Ploughs - Disc

- Baldan/Pan Trade Services Ltd.
- Vellag Ltd.

Ploughs - Mouldboard

- John Deere (Pty) Ltd.
- LEMKEN GmbH & Co. KG
- Poettinger

Poultry Consultancy Services

- BioPoint

Poultry Equipment - Drinking

- Big Dutchman International GmbH
- Lubing Maschinenfabrik GmbH & Co. KG
- Silos Cordoba S.L.
- The GSI Group South Africa (Pty) Ltd.

Poultry Equipment/Handling

- Bentall Rowlands Storage Systems Ltd.

Poultry Feeding

- Bentall Rowlands Storage Systems Ltd.
- Big Dutchman International GmbH

Poultry Health Products

- BioPoint
- OLMIX

Poultry Housing

- Big Dutchman International GmbH
- Silos Cordoba S.L.
- Symaga SA

Public Health

- Guarany Ind. Com. Ltd.
- Swingtec GmbH

Pumps

- Briggs & Stratton AG

Rice Parboilers

- F.H. Schule Muehlenbau GmbH SAME
- Rice Processing & Milling Equipment
- Alvan Blanch Development Ltd.
- Bentall Rowlands Storage Systems Ltd.
- F.H. Schule Muehlenbau GmbH

Rice Threshers

- Nogueira/Pan Trade Services Ltd.

Roll-out Nests

- Big Dutchman International GmbH

Seed

- ICS France

Seed Cleaning Equipment

- Alvan Blanch Development Ltd.

Seed Planting Equipment

- Baldan/Pan Trade Services Ltd.
- LEMKEN GmbH & Co. KG

Silos

- Alvan Blanch Development Ltd.
- Awila Anlagenbau GmbH
- Bentall Rowlands Storage Systems Ltd.
- Big Dutchman International GmbH
- Chief Industries UK Ltd.
- KEPLER WEBER
- Privé SA
- Silos Cordoba S.L.
- Symaga SA
- The GSI Group South Africa (Pty) Ltd.

Slurry Disposal

- PICHON

Soluble Fertilisers

- Hebei Monband Water Soluble
- Fertilizer Co. Ltd.
- Omex Agrifluids Ltd.

Spare Parts for Fork Lift Trucks

- Vellag Ltd.

Sprayers

- GOIZPER GROUP
- Guarany Ind. Com. Ltd.
- Jacto/Pan Trade Services Ltd.
- LEMKEN GmbH & Co. KG
- Maschio Gaspardo S.p.A

Sprayers - Crop

- GOIZPER GROUP
- Guarany Ind. Com. Ltd.
- Jacto/Pan Trade Services Ltd.
- Micron Group

Spraying Nozzles & Components

- GOIZPER GROUP
- Guarany Ind. Com. Ltd.
- Jacto/Pan Trade Services Ltd.
- Micron Group

Stored Products Protection

- Swingtec GmbH

Sugar Cane Equipment

- Case IH

Sugar Cubing Machinery

- Valtra Inc. - Africa

Threshing Machines

- Nogueira/Pan Trade Services Ltd.

Tillage

- LEMKEN GmbH & Co. KG
- Maschio Gaspardo S.p.A

Trace Elements

- Hebei Monband Water Soluble

- Fertilizer Co. Ltd.
- OLMIX
- Omex Agrifluids Ltd.

Tractors

- Case IH
- Deutz-Fahr
- John Deere (Pty) Ltd.
- New Holland Agriculture
- SAME
- Valtra Inc. - Africa
- Vellag Ltd.

Tractors - Spare Parts/Attachments

- Case IH
- Deutz-Fahr
- New Holland Agriculture
- SAME
- Vellag Ltd.

Trade Shows

- Fairtrade GmbH & Co. KG

Traders in Agricultural Equipment, General

- Vellag Ltd.

Turnkey Operations

- Bentall Rowlands Storage Systems Ltd.

Turnkey Operations

- Agricultural/Industrial Schemes
- Bentall Rowlands Storage Systems Ltd.
- Valmont Irrigation

ULV Spraying Equipment

- GOIZPER GROUP
- Guarany Ind. Com. Ltd.
- Swingtec GmbH

Vacuum Cleaners

- PICHON

Ventilating Equipment

- Big Dutchman International GmbH

Veterinary Products/Equipment - General

- Socorex Isba SA

Waste Disposal Equipment

- Big Dutchman International GmbH

Weed Control

- GOIZPER GROUP

Weighers - Animal

- Big Dutchman International GmbH
- Griffith Elder & Co. Ltd.

Weighers - Grain

- Griffith Elder & Co. Ltd.

Weighing - Sack Filling

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- Griffith Elder & Co. Ltd.

Weighing Equipment

- Big Dutchman International GmbH
- Griffith Elder & Co. Ltd

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