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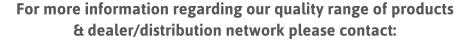


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July - September 2021

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From the Editor

COVID-19 is bringing even the wealthiest nations to their knees, but it's ultimately dealing the deadliest blow to the world's most vulnerable people. While most African countries escaped the worst during the first few months of the global pandemic, the World Health Organization warned that the rate of infection across the continent was escalating at an alarming pace.

According to WHO's data, it took 98 days for Africa to reach an initial 100,000 cases and only 19 days to move to 200,000 cases. Cases doubled again to 400,000 over the next 20 days and took only a week to reach 500,000. Today, with cases soaring, the virus has reached every nation on the continent. Perhaps most worrisome is the fact that this health crisis is rapidly turning into a hunger crisis. Food supply systems are breaking down as rural producers scramble to access the resources to grow food and deliver it to the people who need it, with the potential to lead to widespread hunger and even famine.

Averting these worst-case scenarios will take a coordinated effort from governments, the private sector and humanitarian groups. But the challenge is not merely to help small farmers survive this crisis. These farmers are the backbone of the global food system, and they need resources not only to get them through COVID-19 but to build resilience in the face of the myriad threats that will continue to come their way, from climate change to conflict and natural disaster.

As we take a look through the situations today, I am convinced that we will soon overcome & farming will lead to economic recovery.

Readers, need I unpack the publication. We have several articles in this issue showing different innovations in the agricultural sector, which have the potential to expand yields, increase efficiencies, reduce waste and address concerns

The African Agricultural Magazine is a worth read, a great meet-up in print and a proven investment window.

Enjoy our Issue.

Regards,

Editor

Nicholas Mayo

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Tracing the history of farming across Africa gives clues to low production outputs

Agriculture in sub-Saharan Africa is under-performing, leaving 30% of people in the region food insecure. Food insecurity means that not all people, at all times, have physical, social, and economic access to sufficient, safe, and nutritious food that meets their food preferences and dietary needs.

Many reasons have been put forward for this state of affairs. These have ranged from the continent's biophysical environment to the ineptitude of its farmers.

Several aspects of Africa's environment present challenges for its farmers. Rainfall patterns are extremely varied and unpredictable. African soils are geologically very old, and most are infertile and respond poorly to mineral fertilizer. Fertile soils are mainly found in the East African Rift

Valley, and on the floodplains and deltas where silt is deposited, and require careful agricultural water management.

But, based on our extensive involvement with agriculture and Africa for many years, we thought it would be useful to try to identify the underlying – and real – reasons for the underperformance. We did this by digging into the historical literature . This included material on the historical development of agricultural systems in Africa and changes of the economic drivers of production, among others.

Our hypothesis was that the poor performance of agriculture in many African countries was rooted in the interference of external forces, particularly during colonial and postindependence times.

We found that before colonialism, farmers grew a diverse range of food crops, staggered planting for easy labour demands during harvesting, and managed risk in various related ways. But under colonial rule they were coerced into growing export commodities for which they received limited real value. They had no option but to neglect their own food crops.

This resulted in serious food shortages and the redirection of agricultural production systems that were relevant to local conditions. These constraints are still in evidence today. In Ghana, Kenya and Senegal, for example, export crops are grown on more than 50% of cultivable land. At the same time food is imported.

How we got here

Prior to the arrival of the European maritime traders, diverse agricultural systems evolved to manage the biophysical challenges. They were internally driven and based on local needs and trade opportunities. Surpluses were used to further local development.

These systems were initially responsive to external influences brought by the Europeans. Examples included the demand for cotton, groundnuts and palm oil nuts.

But the concentration of political, military and economic control in European hands led to production being coerced. Farmers were forced to focus on a few export crops demanded by European manufacturers rather than in response to market forces. For example, on the Office du Niger irrigations scheme, cotton had to be produced even when farmers could have received better prices for other crops such as sesame seeds.

The objective for the colonial powers was that local farmers produced raw materials for export and processing in Europe. This meant that the colonial system made no effort to develop value adding industries in Africa. The economic benefits from production were expatriated, rather than supporting local development and food security.

The forces driving the evolution of the system changed from internal to external. This disrupted the process of system evolution and continues to hamper agricultural and economic development.

Agricultural development became based on western economic, technological and political ideologies, rather than African solutions for African conditions.

Despite this, African farmers were innovative and entrepreneurial and seized opportunities when they arose.

Post independence

Since independence, the new countries have had to deal with the colonial legacy. Four main factors which have influenced agricultural production since independence emerged from our historical research.

First, a change from systems that evolved in the local social, ecological and economic context to externally controlled systems. These focused on the agenda of developed countries and their needs, skills, markets and economies. They however neglected the development of local food production systems, including infrastructure, market institutions and food processing and storage.

Second, the notion of selforganisation, based on local feedback mechanisms, has been blocked by external and central control. This has left systems unable to respond to their own needs – with devastating impacts.

The third factor related to unaccountable borrowing for donor-led investments. This resulted in high debts for unsuitable and non-productive assets. Examples include large-scale irrigation schemes, especially on the Sahelian floodplains, where less than 50% of the land was used. Servicing this debt drained billions of dollars and prevented investment in local economic growth.

Lastly, the reduction in the diversity of commodities,



production systems, markets and the feedback mechanisms that maintain them, critically reduced resilience and, consequently, increased dependence on external resources.

The way forward

The focus must move from what the developed world dictates to what Africa needs. This requires countries developing production systems and livelihood opportunities for its people.

Africa should not stop exporting. But exports should not jeopardise local food availability and regional development. Proceeds from export should support rural economic development and the livelihood of local people.

Countries in the region should improve institutions and infrastructure, such as certified storage facilities for grains and food processing. This would facilitate value addition such as the ability to sell crops as prices increase following harvest or sell milled rice rather than paddy.

Barriers to independent national decision making, such as conditionalities set down by the International Monetary Fund and the terms set by the World Trade Organisation for free trade agreements, need to be challenged.

This would open the way for countries to make agricultural policies in pursuit of domestic development goals. And local farmers could begin to respond to local demands.

In addition, research needs to be redirected. Donor funds are currently channelled into training and educating young people from the continent in developed world institutions where they gain significant knowledge and capacity. However, this is often irrelevant or impossible to apply on the continent.

The same applies to the development of agricultural technologies that aren't applicable to local conditions.



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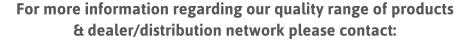


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Tambuwal urges farmers to embrace dry season farming

Governor Aminu Tambuwal has advised farmers to embrace dry season farming to boost food security in the country.

Tambuwal, represented by the Commissioner for Agriculture, Alhaji Arzika Tureta, made the call at the launch of the 2021 dry season rice production, sales and distribution of subsidized farm inputs in Sokoto.

He said that the state government has expended about N220 million to procure improved rice seedlings for distribution to genuine farmers across the 23 local governments in the state.

The governor said that other inputs include herbicides, Urea and NPK brand of fertilisers which were necessary requirements for dry season farming to ensure and encourage mass production of rice in the state.

Meanwhile, he urged farmers to prepare toward achieving food sufficiency.

The governor warned against diverting inputs to the market, noting that genuine farmers should appropriately take custody of the input being giving at subsidised rates.

"About 80 percent of our people are farmers who engage in crop and livestock farming occupation. We have a favourable climate for whatever kind of farming activity.

"We have been and will continue to be supportive to farmers through meaningful intervention schemes that will add value to farmers yields in return.

"I urge farmers in the state to avail themselves this rare opportunity to make the state a shining example in food production and security, " Tambuwal said.

Earlier, the Permanent Secretary in the Ministry of Agriculture, Mr Umar Wali said the state was blessed with abundant arable land given the crop variety it produced such as millet, Guinea corn, rice, onions, Beni seeds, beans and other food and vegetable crops.

Wali said that the 2021 dry season activities were a deliberate step to revive and sustain agricultural activities with a view to adding value for the benefit of farmers.

He appealed to benefitting farmers to judiciously utilise the inputs for better yield.

The event witnessed the symbolic presentation of the inputs to farmers from Kebbe, Wamakko and Wurno local government areas.

House Committee Calls For Increased Budget Allocation On Agriculture

The National Assembly's Departmental Committee on Agriculture, has urged the government to increase budget allocation on the agricultural sector so as to help in developing it in the coming financial year.

They made the call, as they were analyzing and discussing budget estimates for the sector in the fiscal year 2021/2022.

While they commended the President for allowing an allocation of Sh1.5 billion to be given to the sector during the eruption of Covid-19, they blamed the National Treasury for not giving them the money.

Addressing the media at English Point in Mombasa, the Committee's Chairman, Silus Tiren, has expressed concerns on the budgeting of the sector, saying they are being underfunded.

If the government had more resources, they argued, it would invest more on Agriculture to at least achieve the 10 per cent threshold recommended by the Maputo Declaration on Agriculture and Food Security.

"We received an allocation of 3.5 per cent which is very small considering how complex the sector is," he said.

The proposed budgetary estimation to be allocated to the agricultural sector accounts to Sh 62.6 billion of the next financial year.

The allocation has been channeled in three main sectors, including crop production which will claim Sh46 billion, fishery which has an estimate of Sh10 billion and livestock farming with Sh 6.6 billion.

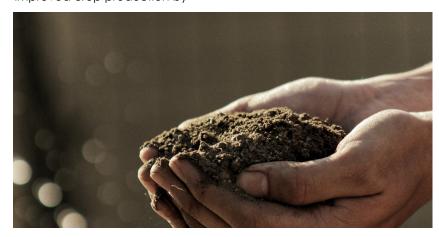
Moiben Member of Parliament (MP), also called for continued focus on improving the quality of agricultural produce which he said can only be achieved if funded properly.

"We are being underfunded by Sh.26 billion. There has to be improved crop production by

introducing new crops, we also plan on introducing fish ponds at schools so that students can learn about fishing," he said.

Other key interventions under the proposed budget for next fiscal year include, growing traditional exports and growth of the service sector.

The MPs comments on the budget estimates will be submitted to the government and feed into the final preparation of the budget that is to be read in June 2021.





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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 made his comments during an Alliance for Science (AfS) Live webinar, said that modern technological inventions, including synthetic fertilizers and pesticides, can be applied even in agroecological production, as long as the fundamental principle of protecting the environment is not violated.

"There is a clear distinction between agroecology farming and organic farming," explained 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 nonrenewable 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 AfS 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 Nyaaba 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 wholistic 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 realties of what farming is in Africa."

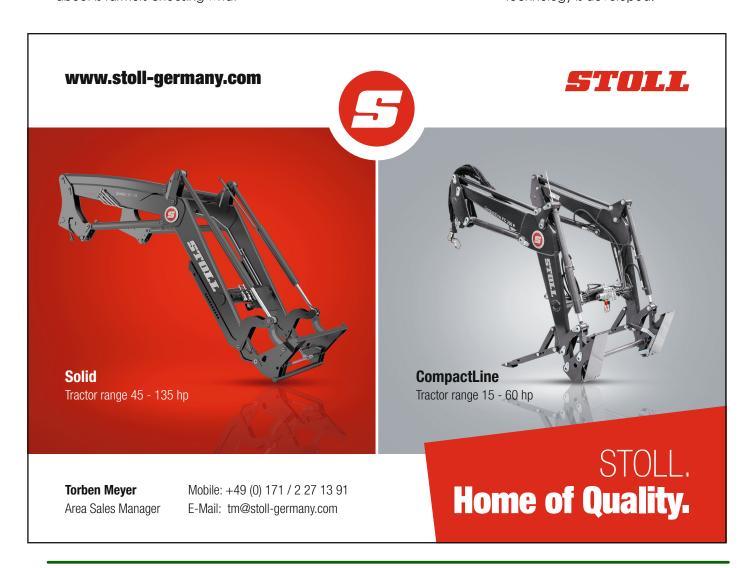
Agroecology and agricultural biotechnology
To date, anti-GMO activism has been at the core of agroecology movements in Africa. But the Ghana advocates indicated some receptivity to the improved seeds.

"In terms of GMOs, agroecology is talking about the ecology," Nyaaba 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 antitechnology. It is the way the technology is developed."





More than 4 000 hectares have so far been put under winter wheat, as farmers are urged to intensify planting to beat the May 31 planting deadline.

Planting wheat after the deadline is not recommended as yields will be compromised and the late crop affected by early rains.

According to the latest wheat update from Agritex, 4 132 hectares have been planted under Command Agriculture (CBZ Agro Yield), while inputs distribution has intensified.

"A total of 62 997Ha (1 637 farmers) is awaiting completion of the contracting process as farmers' details are being verified and captured by CBZ while co-ordinates have been captured for 61 358 hectares," said Agritex.

"To date CBZ has completed contracting of 49 377 hectares (904 farmers) which is 78 percent of the targeted 60 000 hectares."

The department recommended that input distribution be expedited and farmers encouraged to plant before the May 31 deadline.

According to Agritex, The Presidential Input Scheme has registered over 7 500 hectares for wheat and farmers are now awaiting inputs.

"Some farmers who had been registered under the CBZ agroyield programme were reassigned to the Presidential scheme since the Command Programme had registered more than 60 000 hectares already," said the report. Farmers were urged to complete land preparations as they wait for inputs.

A total of 11 065 hectares have been contracted by private players under wheat while 7 005 hectares under barley.

Zimbabwe Farmers Union director Mr Paul Zachariah said the planted hectarage was much higher than 4 000 hectares.

"Of course, inputs distribution is still ongoing and planting can continue into the final week of May. We urge the contractors to speed up inputs distribution so that farmers do not miss out on the optimum planting window.

"We also continue to pin our hopes on the availability of power throughout the wheat and barley production period. Power interruptions will



negatively affect efforts on the ground," he said.

Zimbabwe Commercial farmers Union president Dr Shadreck Makombe said farmers should not relax but move with speed to beat their planting deadline.

"We have had meetings with government and also stakeholders involved in wheat production to see iron out some challenges.

"Some farmers who planted early have already done top dressing. We are now encouraging farmers to burn out the midnight candles. Where possible farmers should even extend planting into the evening so that we beat the deadline.

"It is our wish that farmers will be able to plant beyond of may so that we get high yields. We are now operating under a tight schedule," he said.

The Ministry of Lands, Agriculture, Fisheries, Water and Rural Resettlement is also intensifying training of farmers on important agronomic practices to boost yields.

A target of 340 000 tonnes of wheat has been set for the coming winter cropping season, the first time since commercial wheat farming started in the 1960s.

Targeted tonnage is going to meet national requirements and rue out imports.

The country requires 360 000 tonnes of wheat annually. The largest single harvest in history was in 1990 when 325 000 tonnes were harvested.

During this season, 60 000 hectares will be produced through a Government guaranteed CBZ Agro-Yield programme, 15 000 hectares will be funded by private contractors and 10 000 hectares will be funded through the Presidential Winter Wheat Scheme.





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Thousands of units are now in use for bulk product distribution, where the unique design provides a safer work environment, saves hundreds of work hours in handling flexible bulk bags and reduces packaging and disposal costs. Designed for safe, one person operation it guarantees not only efficient material handling, also excellent protection against rodents and contaminants. Durable construction ensures a long service life and eliminates waste and bag disposal costs. Last but not least it is 100% recycable.

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Designed for safety, efficiency & convenience.



The innovative FLEDBAG® lets you empty big bags easily, quickly and precisely. Any residual amounts can be left in the big bag for the next dispensing task. For reusable big bags we recommend the use of the FLEDBAG® Easy.

SUITABLE FOR:









animal feed, fertilizer, seeds, pellets, salt and granules

The innovative FLEDBAG® Funnel Box is the most efficient container for free-flowing materials such as seeds, pellets or granules. Reusable, heavy-duty and stackable. Also available with extensions and additional functions.

WIDE RANGE OF APPLICATIONS:







agricultural, component parts, plastic pellets









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How to Improve Hay Quality

Delmhorst Instrument Co. is a 2nd generation familyowned business that has been manufacturing moisture meters for agriculture and the building trades/lumber industries for 75 years. Our products are known world-wide and have been accepted by the major schools of agriculture and forestry. They are proven for ruggedness and accuracy and will provide many years of reliability.

Monitoring the moisture content of hay helps to preserve leaves, color, and feed value, and reduces the possibility of mold development while in storage. When harvest time comes, Delmhorst probe-type meters are proven, essential tools that are a critical component to ensuring high quality hay.

The popular model F-2000



hand-held meter uses a 9v battery and offers easy to use controls, and a sharp digital display even in bright sunlight. For high volume producers who need the timesaving convenience of on-the-go monitoring, the FX-2000 adds the ability to check hay

moisture during baling, without even leaving the tractor. It is powered by the tractor's 12V system as well as a 9v battery for portable use. The F-2000 and FX-2000 hay testers are covered by a 3-year warranty.

Whether in the windrow, while baling, or in storage, Delmhorst meters measure hay moisture every step of the way with speed, accuracy, and reliability. Prods are available

for the windrow, small and large square bales, and round bales too.

Delmhorst also produces moisture meters for the cotton, soil, grain, hemp/hops/ tobacco markets, as well as a temperature measuring probe system, ideal for grain, hay, and cotton. Download our complimentary guide How to Improve Hay Quality For more information on the F-2000, FX-2000, and Delmhorst's full line of moisture meters and accessories visit our website at delmhorst.com and click on the Speak to a Specialist link or email us at

info@delmhorst.com





MOISTURE METERS FOR HAY, GRAIN, COTTON, SOIL





FX-2000 HAY TESTER PRODUCT FEATURES

- → Bright, clear digital display.
- Can be used for on-the-go moisture monitoring or as a portable meter.
- ✓ Moisture Range: 6%-40% on hay.
- ✓ Built-in calibration check.
- ✓ Audible, adjustable alarm alerts you when a pre-selected MC has been reached.
- Rugged construction ensures years of reliable use.
- 3-year warranty (tester)

WHY USE A DELMHORST HAY TESTER:



Reduces mold development



Produces better quality hay



Preserves color and feed value of leaves



Minimizes economic losses



KS-D1 with GB-1

Soil – monitor the soil moisture available with a reliable and economical gypsum block system.



C-2000 with 52-EC

Cotton – measure MC in seed cotton and lint cotton in the field, during ginning, and while in storage.



G-7

Grain – measure MC at harvest and while in storage. A great 'on the farm' meter.

Meters also available for hemp, hops, and tobacco.

All products are built in the USA by Delmhorst Instrument – a 2nd generation family business - manufacturing moisture meters for the agriculture, wood/lumber processing, and paper industries for 75 years.



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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 intraregional 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 soya beans 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 buyersupplier 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.





The Ministry of Agriculture of Sudan, the Food and Agriculture Organisation (FAO) of the United Nations, and the United Nations World Food Programme (WFP), have called for greater investment in Sudan's agriculture and humanitarian assistance, as a new food security assessment shows that a record number of Sudanese will face acute food insecurity in the coming lean season.

In a statement by the WFP from Khartoum yesterday cites the latest Integrated Food Security Phase Classification (IPC) results for Sudan, that 9.8 million people are projected to be acutely food insecure (IPC Phase 3 and above) across the country throughout the lean season from June through September.

More than 20 per cent of Sudan's population is projected to be facing acute food insecurity starting this month, the highest figure reported in the history of the IPC in Sudan, the statement says.

"Sudan, through its Ministry of Agriculture, has as its main objective to combat poverty and avail food for the nation. It also contributes significantly to food security for the region. Such achievements can be attained by intensive investments in agriculture by the support of the government, active organizations, mainly FAO and WFP and other partners," said

Taher Harbi, Minister of Agriculture.

The key drivers of food insecurity in Sudan include floods, recurrent droughts, economic decline, inflation, and displacement because of conflict.

The WFP statement highlights that the economy of Sudan is highly dependent on agriculture, which is the most important economic sector. Agriculture employs 43 per cent of Sudan's labour force and accounts for about 30 per cent of GDP (ILO estimates of 2019, & World Bank report). Sudan is one of the largest livestock producing countries in Africa and the Arab world, where the livestock sector contributes to the livelihoods of at least 26 million people.

"Agricultural production promotes livelihoods, save lives and restores livelihoods. Urgent action is needed to safeguard livelihoods and promote recovery through cash interventions, supplementary livestock feeding, and livelihood recovery and farming packages," said Babagana Ahmadu, FAO Representative to Sudan.

The latest IPC results revealed that major acute food insecurity exists in 10 out of the 18 states in terms of caseload and proportion of food insecure populations compared to only two states in the penultimate IPC analysis from June to August 2019.

"Urgent action is required to save lives and that is our priority as WFP. It's not just about saving lives; it's about changing lives. All partners – UN, INGOs, Government, and private sector, including potential investors, must come together to reduce food insecurity in the country so we can reach zero hunger by 2030," said Eddie Rowe, WFP Representative and Country Director in Sudan.

This latest IPC analysis was released just a week after a high-level meeting in Paris, hosted by French President Emmanuel Macron, which advocated for broader economic reforms. The high levels of food insecurity underscore the need for investments in Sudan's agricultural sector and productivity.

"Creating an investment climate for the private sector to be actively involved in agriculture and agribusiness should be emphasized at all levels so as to pave way for small farmers and agro-industry owners to play significant role in the development of the agriculture sector," said Ahmadu.

Tech-Driven Agriculture to Boost 50,000 Women and Youth Farmers in Nigeria



Building on its work to boost food security in Nigeria through technology-driven agricultural services, Thrive Agric has launched a 1-year project to support 50,000 smallholder farmers growing rice, maize, and soybean.

This comes as part of Thrive Agric's commitment to strengthen agricultural value chains in the country, including for these three staple crops. The USAID-funded West Africa Trade & Investment Hub (Trade Hub) is backing this effort with a \$1.75-million co-investment grant.

Thrive Agric

A natural partner for the Trade Hub, Thrive Agric has already helped over 140,000 farmers in Nigeria increase their capacities to meet supply, quality, and food safety standards required by domestic and export markets.

The company has accomplished this through bundling a variety of products and services normally out of reach of smallholder farmers, distributing them in rural areas through its networks, and partnering with agriculture organizations to expand upon these efforts.

The company also focuses on leveraging technology to support and create better livelihoods for smallholder farmers across Nigeria and Africa at large. Through its *Tradr* mobile app Thrive Agric gives farmers direct access to seed and other input providers, farm machinery service providers, and off-takers within their locations.

Likewise, its *Tmoni* mobile app provides customers with a digital wallet on their phone, which they can use to send, receive, save, and borrow money. "Existing efforts to support smallholder farmers tend to follow traditional approaches to boost their agricultural productivity, such as commercial firms integrating them into value chains through modern inputs," said Ayodeji Arikawe, Co-Founder and CTO of Thrive Agric.

"We know that most smallholder farmers, particularly women and youth, require more nuanced support to facilitate their participation in markets and, ultimately, increase food security and incomes at the household and national levels."

Smallholder Farmers

As part of the project, Thrive Agric will use its proven strategies and technologies to assist targeted farmers in Kaduna, Kebbi, and Kano States. The company has promised that all project beneficiaries will be either women or youth.

The 50,000 <u>smallholders</u> <u>farmers</u> tapped to join the project will receive agronomy advisory services, pre- and post-

harvest storage and logistics support, links to credit and agriculture insurance products, and access to the company's current and future mobile apps. As part of its partnership with the Trade Hub, Thrive Agric has committed to raising at least \$10-million to fund this support. The project's success will see at least 50,000 metric tons of rice, maize, and soybean produced by the end of the 2021 season, which will be sold to premium markets and result in farmers enjoying, hopefully, higher-thannormal incomes.

New Jobs

In addition, the project will create 1,000 jobs for others involved in the agricultural value chain, including for prospective farm, field, and warehouse managers. Nearly 70% of these jobs will go to women, who are often overlooked for higherpaying managerial positions.

"I look forward to seeing the company's success in using tech solutions to benefit these farmers," said Michael Clements, Trade Hub's Chief of Party.

"The lessons learned through their tech-savviness can be leveraged to assist future partners seeking innovative avenues to assist stakeholders in the agricultural value chain."



Namibia: Harvesting Kicks-Off in the North

Many communal farmers in northern Namibia have started harvesting pearl millet (mahangu) and other crops.

The rainfall season was erratic in some areas in the first half (October-December 2020/2021) and resulted in significant delays in cropping activities.

This is according to the Ministry of Agriculture, Water and Land Reform's agricultural inputs and households food security monitoring assessment, from 7 November to 4 December 2020.

Since the start of the season there was not enough rains to trigger-off cultivation activities by the end of November. But by early December, most parts of the country recorded moderate to good rainfall and farmers started with cultivation activities.

But some regions like as Omusati, experienced long dry spells due to the lack of follow-up rains since the start of the rain season and when the rains finally came towards the end of March, it was too much and many mahangu fields ended up being flooded.

But despite these challenges, some mahangu farmers in Oshana region are happy with their harvests.

Junias Paskalis (a pensioner from Otuwala village) in Okatana

constituency of Oshana region told The Namibian that although the late rain destroyed part of his crop, his harvest was not dissapointing.

"God help us to get something out of our fields. It is better than nothing" said Paskalis.

However, Elizabeth Shigwedha, a young mother from Oniimwandi village in Oshakati West constituency, said she did not get much.

"Just look at it," she said, pointing to a small pile of mahangu heads.





On discovering a problem with their crop, many farmers panic and call in a consultant. This can produce good results, but sometimes even a professional cannot identify the problem and ends up offering a calculated guess.

A client of mine once transplanted a land of cabbages, but they failed to grow. We examined the roots and found them to be stumpy.

I was puzzled as there was no distinct pattern to enable me to draw conclusions about the cause of the problem. Other consultants were also unable to provide answers (although some tried, offering clearly incorrect explanations).

The solution

Eventually, the farmer identified the problem himself. He had been dipping his polystyrene seed trays in a solution that prevented the roots from penetrating the tray, making it easier for the plants to be pulled out.

To prepare this mixture, he and his employee would place a measure of undiluted solution in a drum and add water, refilling the drum as required. But he then discovered that, instead of waiting for the drum to empty before mixing a fresh solution, his employee was putting a full measure of concentrate into the drum and topping it up with water while there was still some mixture left. As this process was

repeated, the mixture in the drum grew more and more concentrated!

None of us knew that the farmer was treating the trays, so this possibility never occurred to us. This is a typical case of 'panic and call in the experts'.

The moral of the story is that if you have problems with a crop, first analyse every step of the process, eliminating potential causes one by one. The farmer could have saved himself a good deal of stress in this way.

When a farmer asks me to identify a problem, we examine every step taken to get to that point, and we'll invariably arrive at the cause of the problem together.

If the farmer had retraced these steps before phoning me, the problem could have been solved without me!

First-hand knowledge

Farmers are always in the best position to diagnose their crop problems, because they know all the steps taken. But they sometimes fail to realise that a particular step or action was the cause of the problem as it seems unimportant.

A nursery owner who supplied a large cabbage farmer with plants once arranged for us to visit the farmer together. At the time, the farmer was paying another consultant for advice.

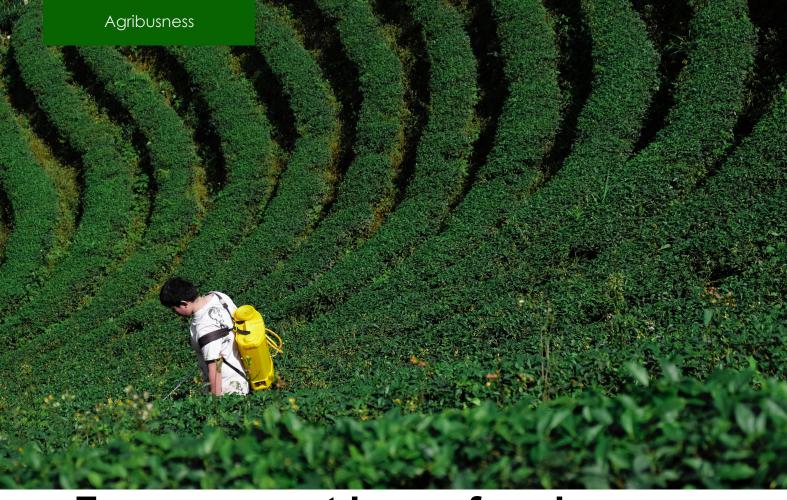
When we arrived at the farm, I could see that the leaves showed symptoms of phytotoxicity (damage caused by chemicals, salt, or some other compound).

The crops were being targeted by aphids and the consultant had advised the farmer to apply phorate. Because the land comprised sandy soil, which leaches, he told the farmer to apply phorate to each plant rather than down the row, as per the label instructions. But the consultant made his mixing calculations using the regulation per-hectare amount, so each plant received far too high a concentration in the root zone.

Unfortunately, the consultant refused to accept my reasoning. So I ended up carrying out a trial at home to recreate the symptoms and sent the photographs to him.

I'm not saying, of course, that a farmer should never call in a consultant; I'm simply saying that the farmer should investigate the problem first, before asking for help.

It is also important to provide the consultant with as much information as possible, no matter how irrelevant some actions may seem.



Farmers must brace for sharp rises in agrochemical prices

Agrochemical prices in South Africa continued on an upward trajectory during the past year, and should this trend continue, farmers could expect to pay much more for inputs during the 2021/2022 summer grain production season.

This was according to Ikageng Maluleke, Grain SA economist, who said agrochemical prices, including that of fertilisers, remained high due to increased demand during the Northern Hemisphere production season.

The latest figures indicated that increases of as much as 35,9% in US dollar terms were recorded in the prices of all active herbicide ingredients year-on-year in April. A similar trend was observed in South African prices.

The price of glyphosate increased 25,8% from R62 025/t in April 2020 to R78 022/t in April 2021. During the same period acetochlor increased from R60 195/t to R66 430/t.

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Price increases were further being fuelled by rising commodity prices and favourable weather in key consuming countries, while higher Brent crude oil prices further exacerbated production and transport costs.

The upward trend in international prices would probably last for the next few months until Northern Hemisphere farmers completed planting.

"The situation will likely stabilise in the fourth quarter. The only saving grace for South Africa at the moment is the strong rand, which has reduced the price pressure somewhat," Maluleke said in a statement

Increasing input costs had an effect on the ability of grain farmers in South Africa to continue farming sustainably and profitably, said Anton Botha, a grain producer near Bultfontein.

He said it was expensive to plant maize, and the input costs for the 2020/2021 season were about 30% higher than the previous season.

"At the moment, it costs about R8 500/ha to plant maize in the Bultfontein [area]. Should input costs such as agrochemicals continue on an upward trend, the profitability of grain production will be severely compromised. For me, as a maize producer, it is terrifying to witness the year-on-year increases in input prices," he said.

Maluleke added that there had been a significant upward trend in international fertiliser prices over the past year.

Internationally, ammonia prices had increased the most at 128%, followed by diammonium phosphate (DAP) at 88% and urea at 51,2%, while potassium chloride (KCL) increased moderately by 17,8%.

Zimbabwe bumper harvest to hit South African agriculture

The largest harvest of the staple maize in 37 years, which has led Zimbabwe to suspend all imports of the grain, is projected to have significant bearing on South Africa's maize market.

Northern neighbour, Zimbabwe, has for years been the most dominant maize export market for South Africa.

The Agricultural Business Chamber (Agbiz) highlighted that in the 2,6 million tonnes of maize that South Africa exported within the 2020/21 marketing year, which started in May 2020 and ended in April 2021, about 20 percent of the volume went to Zimbabwe.

This made Zimbabwe the single largest maize export market for South Africa in the 2020/21 marketing year.

Other notable export markets were Taiwan, South Korea, Botswana, Vietnam and Japan, amongst others.

"It is this significance of Zimbabwe as a market for South Africa's maize exports that makes last week's announcement by Zimbabwean authorities to suspend all maize and maize meal imports with immediate effect consequential," Wandile Sihlobo, the Agbiz economist, said.

Zimbabwe's suspension of imports comes as the country approaches its maize harvest period.

Data from the United States Department of Agriculture (USDA) indicates that the domestic crop in Zimbabwe could reach between 2,7 millionto-3,1 million metric tonnes of cereal grains that includes maize, sorghum, pearl and finger millet

This is the largest harvest since 1984, four years after Zimbabwe's independence, when the country was hailed as Africa's breadbasket.

The expansion in the area planted, coupled with

favourable rainfall since the start of the season, primarily support the expected bumper maize output.

Zimbabwe is forecast to have the largest maize surplus in nearly three decades.

Its annual maize consumption is between 1,8 million and 2 million tonnes, against the aforementioned crop of 2,7 million tonnes.

Agbiz noted South Africa, which benefited from the Zimbabwean maize demand in the recent past, could have 2,8 million tonnes of maize surplus available for export markets.

This would be the largest volume since 1994/95, when South Africa exported 4,7 million tonnes of maize, according to data from the South African Grain Information Services (SAGIS).

Sihlobo said with Zimbabwe as a potential export market out of the picture, and various regional maize producing and consuming countries in the Southern Africa region, including Malawi, Mozambiaue Zambia and Tanzania, expecting large harvests, regional demand for maize will be weaker than usual.

Malawi's maize harvest is estimated at 3,8 million tonnes (up 25 percent year-on-year).

Mozambique's maize crop is estimated at 2,1 million tonnes (up 8 percent y/y) while Tanzania's maize harvest is estimated at 6,3 million tonnes (up 8 percent y/y) and Zambia's 2020/21 maize production could reach 3,4 million tonnes (up 69 percent y/y).

"The consistent markets that South Africa will (thus) likely have are the Far East markets, including Taiwan, South Korea and Japan," the economist said.

South African maize prices have remained up in the past few days

Currently, prices for yellow and white maize in South Africa have increased by 38 percent y/y and 31 percent y/y, trading at R3 586 per tonne (US\$259,33) and R3 422 per tonne, respectively.

Maize was South Africa's fifthlargest exported agricultural product in value terms in 2020.

It was behind citrus, grapes, wine and apples, which were the top four products in the overall US\$10,2 billion worth of South Africa's agricultural products exported last year, according to Agbiz.





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.

Taken up farming

Through the Lokirierit Farmers Group, the villagers have taken up farming.

"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 Lokirierit 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.

"It is on these slopes of Mogilla ranges where families either lost all or part of their livestock, the main source of livelihood, to militias. I have come here to survive, to get myself, something, back," Ms Aburo told the nation.africa as she cleared a thorny thicket of Prosopis juliflora, locally known as the Mathenge shrub.

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 Lokiririet 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 wéed that has invaded extensive land that would otherwise be grazing fields or farm fields.

County Agriculture Executive Philip Áemun 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 Lokichógio 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 Moailla 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 Kapatedié, 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 Túrkana 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.



Rwanda: School Feeding Scheme Creates Market for Women Smallholder Farmers

Women smallholder farmers in Ngoma District have found a market for their vegetables following a government directive allowing schools to directly source agricultural produce from farmers as part of the School Feeding Programme implementation.

The programme aims to feed over 3.3 million children in both primary and secondary schools.

At least Rwf38 Billion is required to support the programme per year based on Rwf56 support to school feeding per student per day but there is still a huge funding shortfall.

Sourcing food supplies from farmers close to the schools was proposed as one of approaches to ensure efficiency of the programme considering the limited resources and ensure timely supply.

Marie Jose Mukeshimana, the representative of the 11 women's association 'Twite Ku Buzima' said that supplying vegetables mainly cabbages to GS Bare, a 12-year-basic-education (12YBE) school with 1310 students in Mutenderi Sector will empower them with increasing revenue and agricultural productivity following the stable market.

The cooperative also got support from Jean Chrysostome Bikomeye-a Rwandan Scholar in the US who mobilized financial support using a fundraising campaign on Facebook to help boost school feeding programmes in the community where he hails from.

The fund-raised support is also to help vulnerable women smallholder farmers in the community to boost vegetable productivity and supply to the nearby schools.



A recipient of the 2008 Presidential scholar, Bikomeye was a valedictorian for the William Penn University (WPU) 2012 graduating class.

Bikomeye is now pursuing his doctoral studies at the Medical College of Wisconsin in Milwaukee.

Bikomeye's research interests include the intersections between climate change and public health. His work revolves around the benefits of climate change mitigation and adaptation for human health.

He focuses on greening interventions to improve chronic diseases outcomes including cancer and heart diseases with a focus on the disadvantaged populations with limited resources to advance health equity.

It is in this context that In order to seek for a sustainable way of keeping students fed with locally grown fruits and vegetables, part of the Rwf850,000 raised will be invested in a pilot intervention to grow vegetables in a partnership with a local women's association "Twite Ku Buzima" which they will be supplying to the school to boost school feeding programme.

Mukeshimana the president of the cooperative composed of 11 women said that they are about to buy irrigation equipment so as to boost agricultural productivity which they will supply to the school

"Since our association started three years ago, we have been manually irrigating our fruits and vegetables. With these funds, we will purchase a small irrigation pump and other necessary farming tools in our journey as we fight against malnutrition," she said.

Starting from casual labour
The women started two years
ago doing casual labor tilling
for others to get a wage and
later invested Rwf40,000 savings
to start growing their own
vegetables on a small piece of
land.

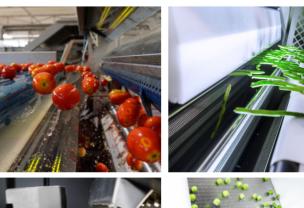
"We started growing cabbages on a small plot of land where we could harvest cabbages worth over Rwf200,000 every three months. Today we have increasing productivity because we are now growing on a bigger plot of land.

Once we buy irrigation equipment we will buy another big land near water bodies where we can grow in all seasons. With increased production we will supply our harvest to many schools," she said.

"Supporting each other is rooted in Rwandan cultural values. I took advantage of my Facebook connections to support the most vulnerable like the children we helped with affording lunch at school," said Bikomeye.

"Let's think of an impact we could make if the most privileged members of the society gave their birthday spending to charities at least once every three years! The money can feed thousands of students, pay "Mutuelle de Santé" for the poor or other important social causes that can change the lives of many," he added.























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Livestock Feeds builds poultry farm for Lagos school

Livestock Feeds Plc, a subsidiary of UAC Nigeria, has established a smallholding poultry farm for Sango Senior Secondary School, Agege, Lagos State, as part of its Corporate Social Responsibility.

The objective of the initiative, according to the company, is to support the educational sector in Nigeria with a key focus on bridging theory and practical teachings of the agricultural science subject in secondary schools.

It said in a statement, "This initiative aims to equip students with the basic skills, management techniques and agribusiness proficiency involved in rearing poultry in animal production as well as prepare them for further studies and future occupation in agriculture.

"Also, through this CSR initiative, Livestock Feeds aims to achieve one of the 17 Sustainable Development Goals with particular focus on Agriculture which seeks sustainable solutions to end hunger in all its forms by 2030 and to achieve food security."

The Managing Director, Livestock Feeds, Adegoyega Adedeji, at the inauguration of the project on Monday, described the teaching of agricultural science practical in schools as very pivotal in the Nigerian educational system to equip students with the basic skills required.

"Livestock Feeds Plc CSR initiatives are anchored on the pillars of Education, Sustainable environment, and Infrastructure. As an organization, our continuous commitment is to remain socially responsible to the communities in which we operate," he said.

The Sales and Marketing Manager, Foluso Alabi, said the poultry farm would equally serve as a mini-research base for the school, government and students.

"It will provide an opportunity for the students to practically experiment with agricultural science in a real sense," Alabi added.



OP Finnfund Global Impact Fund I invests in EthioChicken

OP Finnfund Global Impact Fund I, the first global emerging markets impact fund in Finland, has invested USD5 million in EthioChicken, an Ethiopian poultry company. The aim is to generate good jobs, improve food security and reduce poverty in Ethiopia.

Established in 2010, EthioChicken has become a forerunner and one of the largest poultry companies in East Africa. EthioChicken currently operates eight poultry farms and four hatcheries, which produce and supply young chicken for households in rural Ethiopia. EthioChicken is also a significant feed producer with its two feed mills. The company has been financed by Finnfund since 2017.

"We are very happy to welcome OP Finnfund Global Impact Fund I into the shareholding of the Company. Finnfund has been one of our strongest allies and supporters, and we look forward to continuing to work with them and the fund as we scale up operations and continue our quest of making farmers healthier and wealthier through poultry," says David Ellis, CEO of EthioChicken.

"Improving nutrition and livelihoods in rural Ethiopia fits well to the investment strategy of OP Finnfund Global Impact Fund I. EthioChicken has done remarkable work in developing their business, and we are excited to support the work through this funding," says Tuomas Virtala, Head of Asset Management at OP Corporate Bank.

"EthioChicken is a true success story. Finnfund has been one of the key financiers for several years and actively supporting the development of the company. Ethiopia has experienced political unrest in the past years and the markets were impacted by Covid-19, but EthioChicken has done remarkably well. It is also clear that their work for better



nutrition and job creation is needed more than ever," says Jari Matero, Associate Director, Head of Agri and Forestry portfolio.

OP Finnfund Global Impact Fund I seeks positive impacts on, for instance, climate change, food security, gender equality, and the availability of financing. The second round of funding ended in December, and the total fund size now stands at EUR135 million. OP Finnfund Global Impact Fund I focuses on three main industries in developing countries: renewable energy, financial institutions, and sustainable agriculture.

EthioChicken is committed to sustainable production and striving to continuously develop its processes and operations. By producing chicks that produce eggs as well as poultry meat, the company supports families to improve their nutrition and livelihood, particularly in rural areas.

Today, EthioChicken employs directly roughly 1,600 employees of which 587 are women (38 per cent). In addition, through their network of 8,000 entrepreneurs who nurture, grow and sell the chicks the company employs approximately 16,000–24,000 primarily young Ethiopians. The young chickens are then

sold mostly to local farmers and households. Last year, the company reached about three million farmers or households in rural Ethiopia, generating income and improving the nutrition of millions of people.

Improving food security is particularly important in Ethiopia, which is among the world's poorest countries. In recent years, the country has suffered drought and desert locust invasion, which has affected particularly farmers and other people living in rural areas. There has also been political unrest in the country. At the same time, Ethiopia is one of the countries where the population is growing fastest in the world; Ethiopia's current population is about 117 million and is expected to surpass 200 million by the end of 2049.

EthioChicken is one of the few poultry companies in Africa to receive GlobalG.A.P. certification, a global set of standards for sustainable, good agricultural practices. Developing the sustainability of the operations and achieving the certification has been a requirement for Finnfund's previous financing. In 2018, the company also received the 2018 Boldness in Business Award from the Financial Times.

Astral interims decline on imports and high feed costs

ASTRAL Foods shares declined by more than 5 percent on the JSE yesterday morning after the integrated poultry producer reported a 37 percent decline in half-year earnings, hurt by imports and high feed input costs in its poultry division.

Its headline earnings per share for the six months to the end of March fell to 597 cents a share, down from 951c compared to last year.

The group said broiler feed prices increased by 17 percent on a rand a ton basis because of high raw material costs.

Broiler feed made up about 69 percent of the cost of producing a broiler.

Poultry imports remained high during the period, with average monthly poultry imports equalling about 26 percent of local consumption, at an average of 39 705 tons a month.

As a result, the group reported a 37 percent decline in operating profit to R344.69 million, and revenue increased by 7 percent to R7.54 billion, largely because of a 7.5 percent increase in poultry broiler sales.

MORE ON THIS

- Astral Foods revises its earnings guidance down 35% to 40%
- Astral shares up despite expected fall in earnings
- Astral declares 775c dividend, but earnings fall
 However, the group said
- However, the group said poultry price increases were not sufficient to cover the increases in feed and other production-related costs.

Chief executive Chris Schutte said despite the increase in revenue, the interim results mirrored the many challenges faced by the poultry industry.

"These include very high feed input costs not recovered in broiler selling prices and



continued high levels of poultry imports," Schutte said.

Astral declared an interim dividend of 300c a share after reporting net surplus cash of R386m at the end of the period.

In the poultry division, revenue increased by 8.3 percent to R6.1bn, driven by an increase in revenue from higher broiler sales volumes and selling prices and an increase in the group's breeding operations.

Its operating profit decreased by 78.6 percent to R61m, with broiler selling prices failing to cover the elevated feed prices.

The feed division reported a 12.9 percent increase in revenue to R4bn as a result of higher selling prices on the back of increases in raw material costs.

The group said Safex yellow maize prices increased to an average of nearly R3 400 a ton compared to about R2 700 a ton a year earlier, while feed sales volumes decreased by 2.9 percent.

The division's operating profit increased by 9 percent to R265m.

The other Africa division maintained a revenue of R238m. The division consists of both feed and poultry operations in Zambia, Mozambique and eSwatini.

Its operating profit slightly increased to R19m.

Looking ahead, Schutte said Astral's view of the near-term prospects was heavily weighted towards the impact of the exceptionally high raw material costs and a weak economy.

"The bird flu outbreaks reported in the South African poultry industry raise a new threat over the medium term and are being closely monitored," he said





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Empowering youths & sustaining economy through poultry farming

On a farm in Ruwa, in Mashonaland East Province, north-east of Harare, a clutch of chicks has just been delivered.

Some peck at one another, loitering around a warehouse which will soon become cramped as they grow.

Outside the shed, Mr Lawrence Saya opens stacks of bags containing the feed they will eat during their sixweek-long lives. Mr Saya has been rearing chickens for a few years now.

Although he failed to get a formal job after completing his studies, he never lost hope. Instead he has taken advantage of Government youth empowerment programs which have contributed to him having a successful poultry business.

"Competition is stiff for work at large companies, and the positions youths are able to fill seem to decrease by the day.

That is why I decided to venture into poultry farming," said Mr Saya.

Youths have taken a few notes from him as he is one of the entrepreneurs of today who is fearlessly venturing in an empowering poultry business.

Encouraged by the impact they have seen, other youths from his community have started rearing poultry too.

Ms Chido Zimuto, is one of the youths who has been inspired by Mr Saya. She said although she has faced challenges in her poultry business, she is still managing.

"It has been challenging with the lockdowns we have been experiencing but with proper education I can manage to sustain my business," said Ms Zimuto.

For Ms Zimuto, engaging in the poultry business has

improved her life. Explaining her past she said: "I was poor and unemployed. When food prices in the market kept rising, I hardly had a choice to buy nutritious food for my siblings."

After managing chickens she now has many reasons to smile.

"Because I raise the chickens I am in a position now to add eggs and meat to our plates and allow my siblings to grow well with adequate protein intake. I am also able to get some profits from the chickens that I sell. They enable me to send my siblings to school," she

Outside of this community, more and more youths are opting to raise chickens as an economic activity. With more than a year being dominated by Covid-19, food insecurity and other challenges, Zimbabwe is increasingly becoming a place where youths are exploring the possibilities of rearing poultry.

Poultry keeping is also seeing widespread growth due to some youths losing formal employment.

Ms Lilian Moyo from Masvingo, is one youth who started keeping chickens during the pandemic after losing her job.

"I am part of a funded poultry project under the Ministry of Youth. During the Covid-19 pandemic, I lost my job, and so the poultry-rearing project provided occupational therapy, reducing stress and enhancing good health.

"I did not know where I would get income amid lockdowns to stop the spread of Covid-19. Now, I am benefiting from eggs and meat sold to restaurants and people in the community, and even manure, which is used in the production of organic crops," she said.

One of the primary objectives of popularising poultry farming is to provide better income opportunities to youths from communities living in remote areas. Among its benefits is that it can help make youths economically and socially empowered and can address the issues of food insecurity and malnutrition.

Thousands of youths across Zimbabwe are now empowered through keeping chickens, which has become an important means of supplementary income. Poultry farming also plays a role in bringing socioeconomic improvement among the more vulnerable sections of society especially during this pandemic.

Lands, Agriculture, Fisheries, Water, and Rural Resettlement Minister Dr Anxious Masuka said poultry production has increased significantly since the beginning of the year as more youths turned to chicken rearing to supplement incomes during the Covid-19 induced lockdowns.

"Since the advent of Covid-19, many youths have been staying at home where they have taken up incomegenerating businesses and as a result demand for and the

production of chickens has shot up," said Dr Masuka.

"Covid-19 has induced opportunities for localisation of production and we have seen an upsurge in demand for a number of products inclusive of poultry. It is something that we are excited about and we think that it should be sustained."

According to the Food and Agricultural Organisation (FAO) the importance of poultry on livelihoods and food security lies in the provision of meat, and eggs, while being a strategic household investment.

Poultry is also an important safety net in the event of a drought – it is easily disposable for cash when need arises or during droughts.

According to research, Zimbabwe's poultry industry has shown massive growth since 2009. A range of sizes of units have sprung up everywhere – from the medium size units of 1 000 birds to massive industrial scale operations. Chickens are basically big business.

However, despite the rise in chicken demand over the years as a more affordable source of protein, the poultry industry in Zimbabwe still faces a number of challenges which the youths say include stiff competition from rising input costs of maize and soya meal and illegal imports being sold at sub-economic prices.

Ms Zimuto said lack of markets, high production costs necessitated by imported inputs such as soya and maize and competition from imported poultry are pushing small-scale producers out of business.

She added that while increased production might result in adequacy in poultry products locally, there is also a risk of saturating the market, which has resulted in farmers getting little or no returns from their investments.

These challenges have urged Government to have a youth bank which supports their ventures.

Zimbabwe Progressive Youth Foundation (ZPYF) founder, Mr Thabani Madhlayo challenged youths involved in poultry farming to make good use of the bank.

"I encourage youths to participate in programmes offered by the Government. I am glad that in Zimbabwe, we have a youth bank. The purpose of the bank is to support business ventures financially. I am so passionate about seeing youths prosper and develop sustainable poultry businesses that can surely create employment and grow the economy. A handful of youths are getting inspired by poultry farming and are setting up their own projects with the help of the bank," said Mr Madhlayo.

Due to the fact that the country is in need of more youths involved in poultry farming, efforts of youth entrepreneurs in Zimbabwe have garnered private organisation and Government backing.

Last year, the United States Agency for International Development (USAid) launched a US\$5 million Local Works Zimbabwe Youth Programme to economically empower youths in poultry farming and other businesses.

Mr Art Brown, USAid Zimbabwe director said the initiative will help create employment opportunities for youths as well as combat rising poverty among young people in urban and rural areas.

"We want young people to take the lead in defining and addressing the diverse challenges they face so that we support them to meet their social and economic needs. There are many businesses they can start for example, poultry farming. Youths, particularly young women, remain more likely to be unemployed than any other group in Zimbabwe so we want all youths to be empowered," said Mr Brown.



Forty-four poultry farmers in Dormaa receive FAO certification on FFS Concept

Forty-four poultry farmers in Dormaa and Wamfie have completed an 11-month Food and Agriculture Organisation (FAO) training on Farmer Field School (FFS).

It is an intervention to equip farmers with requisite knowledge and skills to champion behavioural change and attitudes on the prudent use of antimicrobials and management of antimicrobial resistance (AMR) in poultry production.

Beneficiary farmers comprising 26 men and 18 women were grouped into two selected demonstration farms in Dormaa Central municipality and Dormaa East District of the Bono Region, each received a certificate, lab coats and rubber shoes.

The virtual graduation ceremony was facilitated by the FAO in collaboration with the Ministry of Food and Agriculture (MOFA) with funding from Fleming Fund from the United Kingdom (UK).

The graduands were ushered into the training in February last year and completed in December same year.

Ms Joycelyn Gayden Brown Hall, FAO Representative for Ghana, said the organisation supported the Government to develop AMR policy and action plans, collaborating in various areas such as AMR awareness creation, building the capacity of media practitioners and the press to be advocates and working to ensure passage of antimicrobial legislation.

She congratulated the farmers for completing their training course and for their achievement that would help ensure better nutrition and health.

Mr Emmanuel Kofi Agyemang, District Chief Executive, Dormaa East, said apart from achieving wholesomeness of poultry products, the training would cut down cost for the farmers as they would spend less purchasing antibiotics.

He said the FAO's partnership was in line with government's policy to industrialise the economy through the Ghana Beyond Aid agenda and ensure food security.

"Ghana needs 500, 000 metric tonnes of chicken, but are only able to produce 58, 000 metric tonnes. The country imports about 180, 000 metric tonnes costing the country not less than \$30 million.

"The government through its industrialisation programme is facilitating the construction of a poultry broiler project in Dormaa East District," he said.

He advised them to be agents of change to influence others through the knowledge and skills acquired.

Mr Gilbert Sonkpi, the Dormaa East District Director, of Food and Agriculture, said the programme offered members information on production cycles, biosecurity practices and how to avoid giving day old chicks antibiotics.

He expressed optimism that with the right knowledge and skills given to the farmers, they would apply suitable and preferred technology to enhance food security and public health.

Mr Charles Aboyella, the Dormaa Central Director, of Food and Agriculture, thanked the FAO and partners for their support and promised to make antimicrobial issues inclusive in the Directorate's action plan.

Madam Akua Prempeh, the Dormaa East District Director of Health, said it was important Antimicrobials were handled with care because any problem identified could trickle down first from the farmers on the field, then to the masses in the community.

She said AMR was a public health concern, as over 700, 000 people died annually with 10 million people predicted to lose their lives in 2050 if antimicrobial issues were not drastically addressed or tackled head-on.

Dr Mark Caudell, Africa Regional AMR Social Scientist, emphasised that FFS participants in both Ghana and Kenya were trained in prudent and effective usage of antimicrobials working with security consciousness and clean personal protective equipment (PPE).

He said the FFS Concept was a powerful tool to address the rise and spread of antimicrobials, stating, "as FFS members they have become pioneers of FAO's effort to address AMR challenge".

Dr Emmanuel Kabali, an FAO official headquarters, Rome, congratulated the graduating members adding their efforts and commitment indicated that the FFS Concept could provide solutions and positive outcomes.

Mr Stephen Ameyaw Nyarkoh, the Dormaa Central Director of Health, said the new, allinclusive global health concept on – One Health programme – focused on maintaining a critical balance between environment, humans and animals and promoting their sustainability particularly at time when the world was facing a COVID-19 crisis.

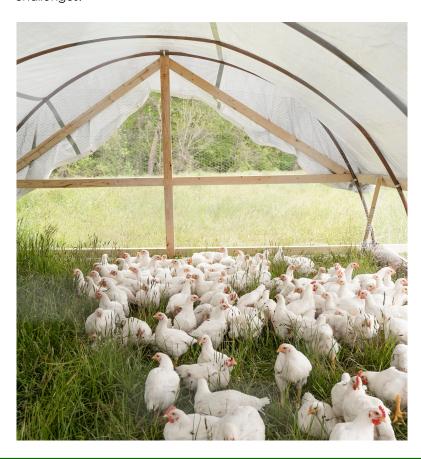
He said diseases including; Ebola, yellow fever emanated from animals, and there was the need for all to be guided by lessons learnt from Covid-19 pandemic to fight AMR, else "we risk suffering another pandemic with serious complications from it".

Dr. William Adukuma, Director, Veterinary Services Directorate, said the training was preceded with a study centred on knowledge, behavioural change and attitude and practices among identifiable farmer groups defining suitable interaction to check and contain AMR and urged the graduands to contact the Vet Office rather than relying on the services of unapproved poultry drug dispensers and pharmaceuticals to address challenges.

Dr. Eric Koka, National Social Scientist at FAO AMR Project and Senior Lecturer, University of Cape Coast, stated that the objective of the project was to take some selected farmers through FFS.

"We observed that there's an indiscriminate use of antimicrobials among some farmers. The purpose is to educate them to practise what they have learnt at the FFS," he added.

He said some of the topics treated were; Agro Ecological System Analysis (AESA) which enables farmers to identify 'friends' and 'enemies' that affect health of poultry birds, biosecurity and disinfection and antimicrobial resistance, threating human and public health, record-keeping, taking inventory of activities to track production cycle, nutrition needs of birds among others.



Small-scale livestock rearing and impacts of climate change

The rapid expansion of the country's population leads to an increase in food demand, resulting in intense pressure on the agro-ecosystems.

The increase in demand for food will be met under challenges brought about by climate change which has impacted agricultural production. Small-scale livestock rearing is becoming a popular adaptation strategy among farmers and households.

Small-scale communal and urban livestock rearing is playing an essential role in sustaining lives. Livestock is central to food security, nutrition, organic fertilizer (manure) production, nonmechanical ploughing and income generation.

Small-scale livestock production is gaining prominence and has established a positive footprint.

It is becoming the mainstay of the local economy. It consist of poultry, piggery, goat, sheep, rabbit rearing, fish and bee keeping, among others. These are being traded on various markets.

As more people are faced with food insecurity due to an underperforming agricultural sector and the adverse impacts of climate change, small-scale livestock has become a source of livelihood to counter climate shocks.

Increasing livestock rearing has seen farmers increasing their incomes and cashflows, from their sales.

Some animals are slaughtered at household level while others are sold.

As such, adaptation to climate change is not only crucial for food security but also for the country's economic development.



Small-scale livestock farmers are reducing economic and social impacts of climate change through making livestock rearing a recovery strategy.

But why are communities opting for small-scale livestock?

Livestock production is an extremely important agricultural segment in Zimbabwe which is easier to manage even under the negative impacts of climate change. Small-scale livestock consume less water.

Climate change is reducing rain-fed crop farming in arid regions where livestock production is most viable. Small-scale livestock rearing can help communities alliviate food shortages.

Communal farmers are replacing crops with livestock production in order to sustain lives.

The government, through the Lands, Agriculture, Water, Fisheries and Rural Resettlement ministry, is encouraging farmers in dry areas to invest in livestock because animals can withstand harsh weather conditions induced by climate change.

Poultry consists of broilers, road runners, boschvelds, austrolorp, sasso, ducks, pigeons, guinea fowls and quails, among others. The rearing time for poultry is short and the expenses involved are minimal.

While birds can survive on commercial feeds, they can also feed on locally produced grain such as sorghum, millet, berries, rapoko and crushed corn. Due to the unsustainable cost of medicines, farmers can use traditional medicines.

Farmers are venturing into goat farming for food security and mitigating the effects of climate change.

Goats can survive under extreme weather conditions and can easily multiply.

Goat meat is popular because it is cheap.

Due to their small size, goats consume less feed and water as compared to cattle.

Goats can also multiply even during a drought.

Pig rearing is gaining ground in small-scale farming. Pigs have a short turnaround period and are prolific. A sow (female pig) normally gives birth twice-a-year with one batch consisting of at least 10 piglets. If a small-scale farmer has three sows, they will realise nearly 50 piglets per year.

Rabbit rearing is also becoming prominent among small-scale farmers.

Rabbits multiply quickly and can give birth to between 12 and 30 offspring per year.

Small-scale livestock has higher chances of survival under climate change conditions such as drought, compared to bigger livestock. Small livestock rearing is a good fall-back during crop failure.

When harvests are low, people can sell goats and buy grain. Goats are preferred because they provide meat, milk and manure for the gardens. Communities were used to milking cows but these days people are milking goats.



Using agro-waste to produce animal fodder in Ghana

In <u>Ghana</u>, livestock rearing in the north of the country contributes to the income of many rural households. Owing to the severity of the dry season in this part of the country, livestock feed is a major challenge during these months for the farmers.

"Animal fodder production is definitely an avenue someone can look into," says Abdulai A. Dasana, co-founder and COO of AMAATI Group. AMAATI, based in Tamale in the north, supports farmers in close to 50 communities with cultivating fonio on abandoned and degraded communal lands, processing these harvests into cereal and flour for both domestic and export sale. "We have a lot of waste in the region from the production of maize and rice, for example, but no company is adding



value to this and turning it into animal fodder. During the dry season, animals struggle with a lack of grazing and the owners have to travel many miles to obtain feed for them."

The crop residue (straw and agro-waste) after the harvest is often left on the fields only to be burnt when the time

comes to plant again. Various research studies have shown the hazard of uncontrolled burning of this waste, including air pollution and soil degradation.

Processing of the agro-waste would involve treating the by-product to increase its digestibility. Dasana believes the set-up cost for fodder production would be relatively low.

"I don't believe setting up the business would be too capital intensive," adds Dasana.
"Some of the agro-waste you would even be able to get for free. It is not used at all, just left on the fields. It really could be a very lucrative business from what I see."



1,4 million cattle sold during drought ... restocking hinders supply of beef to markets

THE inability by the country to produce enough animal feed and supplements led to cattle producers running to abattoirs during droughts to sell their livestock before they die. Then after rains, they restock, a process that takes time and affects the supply and affordability of beef in the country.

In the three year drought the country experienced, cattle producers de-stocked more than a million cattle according to the latest Meat Board of Namibia (MBN) newsletter.

"After a persistent drought saw more than 1 362 364 million cattle marketed during 2017-2019 a slow-down of more than half was recorded in 2020," the newsletter revealed.

The Meatboard added: "This resulted in producers entering into a herd-building season after the drought-induced marketing activity over the past three years".

The board explained that with limited slaughtering, prices are expected to increase as Namibia will find it difficult to satisfy demands, "although the Norwegian quota is expected to receive priority".

The newsletter also highlighted that the 2021 producer prices are in all cases higher than those of 2020.

Due to low supplies from local producers, especially those on the south of the redline, Botswana was identified as such a source due to their similar environmental conditions and a foot-and-mouth disease-free zone.

This is after the Botswana government temporarily lifted a moratorium on live exports, and Namibian abattoirs may take advantage thereof.

However, only male animals may be imported from Botswana's FMD zone, subject to strict requirements set by the Namibian Directorate of Veterinary Services.

From a preliminary application for 1 904 cattle, 1 389 have already been imported for slaughter at local abattoirs.

Total marketing of cattle declined by 39,84% during the first quarter of 2021 where 41 842 cattle were marketed compared to 69 550 during the corresponding quarter of 2020.

From the total cattle marketed, 61% were live exports, as producers opt for weaner exports to South Africa.

While 22% were taken up by export abattoirs, B&C class abattoirs enjoyed 17% of the market share, the Meat Board revealed

Up to 98% of all live cattle exported were sent to South Africa (25 129 animals out of 25 650) with Angola taking up 2% (521 animals) of live exports.

"Of these live cattle exports, 99% were weaners (the general categorisation of weaners includes steers and heifers) and these were destined for South African feedlots, while the remainder constituted only 1% of live exports," says the Meat Board.

This is despite Namibian weaner prices increasing by 23,13% during the first quarter of 2021 compared to 2020, while South African weaner prices increased by 22,12%.

On average Namibian weaners traded at N\$41,66 per kg during the first quarter of 2021.

This is N\$3,76 per kg higher than South African weaners, which

could be discouraging the demand for Namibian weaners from the neighbouring country, although the live export numbers tell a different story.

THE NORTHERN CASE

While the south scrambles for cattle, the northern side of the redline has around 1,7 million cattle, according to Meatco's annual report, with no market except for use during burials, weddings, and sale at kapana stalls

The Meatboard said: "It was concluded that for the short term, all efforts should focus on the commodity-based trade process".

This is due to various reasons, mainly the available infrastructure that already exists and costs to bring beef exports to enhanced yield markets in the short term, the newsletter read.

In the long-term, the creation of a new foot-and-mouth disease (FMD) and cattle lung disease (CBPP) free zone within the current FMD protection zone (north of the redline) can be considered.

"Other options such as the erection of a border fence on the Namibia-Angola border, as well as the creation of an FMD and CBPP free compartment, were considered less practical and too expensive, the board revealed.

They added that the fence will remain, regardless.

"Regardless of which option is followed, the preservation of the integrity of the cordon fence, the maintenance of the quarantine farms and camps north of the redline, and an effective vaccination programme against FMD remain crucial,"



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Revival of grazing reserves ongoing in 21 states

The Federal Government says it is working towards resolving farmer/herder clashes through the revival of grazing reserves in 21 out of the 36 states of the Federation.

Alhaji Sabo Nanono, Minister of Agriculture and Rural Development, disclosed this on Tuesday in a Webinar on Nigeria Dairy Industry.

The webinar was organised by the Policy and Advocacy Centre (PAC) of Abuja Chamber of Commerce and Industry (ACCI).

It is to mark the World Milk Day, 2021 with the theme: "Sustainability in the Dairy Sector."

This declaration by the Federal Government came as the ACCI's policy centre issued a policy brief on Nigeria Dairy Sector with far reaching policy recommendations to deepen and expand the dairy sector.

Nanono, representated by Mrs Mercy Otiteh, said the ministry had mobilised contractors to various sites across the country with a target to revive the grazing reserves.

According to him, work is presently ongoing with monitoring team supervising progress of works at various centres.

Nanono said the Federal Government was committed to providing infrastructures that would make the reserves suitable for pastoralist, thereby increasing Nigerians local dairy production capacity.

He noted that government was collaborating with local and international partners to improve relationship between farmer/herder through revitalisation of grazing reserves.

He urged Nigerians to support government efforts in its avowed resolve to find lasting solution to the clashes.



Dr Al-Mujtaba Abubakar, President, ACCI while commending government's efforts, officially released the ACCI policy brief on Dairy Sector in Nigeria.

Abubakar called for intensive backward integration within the dairy sector as currently championed by the Central Bank of Nigeria (CBN) and the ministry of agriculture.

"The major policy thrust of the ACCI-Policy brief on the dairy sub-sector are as follows: Continuation and expansion of backward integration being supported by CBN and Private-sector-driven implementation of the National livestock transformation plan.

"Creation of the private sector driven ranching system, Establishment of a National Dairy Board, Training and capacity building of pastoralists and Deployment of modern technology to every segment of the dairy business," he said.

Also speaking, the Vice President Agric, ACCI and Chairman, Agric Trade Group, Dr Kolawole Owoka, called for concerted efforts to increase local production of milk to save carve foreign reserve.

Owoka said that ending open grazing was in the collective interest of Northerners and Southerners and urged governments to fast track ongoing works on the grazing reserves.

The keynote speaker, Mr Azubike Nwokoye from ActionAid Nigeria, also called for increased government funding in agriculture sector, especially the livestock industry due to the current national security challenges.

Azubike said adequate funding was necessary to realise the goal of ranching and grazing reserves, noting that without funding it would be difficult to stop open grazing.

"Cow rearing demands lots of water. Therefore, we suggest that solar power borehole should be widely provided to meet the needs of pastoralists and cows," he added.

Mr Israel Dan'Auta, Representative of Chi Ltd., commended the Federal Government, CBN and Niger State government for their support to expand local production of milk.

Listing various efforts by Chi Ltd. to source milk locally, he said its ongoing project in Niger was being deployed to empower local milk producers as well as raise new breeds of cows with higher milk generating capacity.

The Director-General, ACCI, Victoria Akai, advised governments at all levels to put the private sector in the driver seat on the implementation of national livestock transformation plan.

She said that Public Private Partnership is at the heart of the ACCI policy brief that would be widely circulated to governments and stakeholders for actions.



The Zimbabwe National Statistics Agency (Zimstat) is for the first time conducting the 2021 Agriculture and Livestock Survey(ALS) electronically using the Computer Assisted Personal Interviews (CAPI) which is expected to improve data collection monitoring and quality of work.

Zimstat used to rely on Paper Assisted Personal Interviews (PAPI) which was labour interviews and took long to process data.

The organisation is carrying out the ALS to collect data for use in assessing the food security position at both household and national level, compilation of the contribution of agriculture industry to country Gross Domestic Product (GDP) and formulation of Government's agricultural policies among other things.

The ALS is an annual survey, which consists of nine modules and conducted at different times of the year in line with the agriculture season.

Some of the modules are conducted quarterly while others are conducted annually.

The survey which is running from May to June will also be used to gather data to be used for economic analysis of the agriculture industry, intake planning of crops and livestock output and forecasting of agricultural inputs use by farmers.

Zimstat production statistics director, Mrs Matiwonesa Phiri said this time, the ALS was being conducted the Computer Assisted Personal interviews.

"This is the first time Zimstat is conducting the Agriculture and Livestock Survey using CAPI. Using the technology, interviewers ask questions from respondents and record them using a computer or tablet instead of recording the responses on paper.

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Aquaculture provides a lifeline for fishing community in western Kenya

Fish farming is a major economic activity in the western Kenya region thanks to the presence of Lake Victoria.

The lake is a source of sustenance for tens of thousands of Kenyan fishermen, most of whom venture out into the deep waters each night to obtain the fish.

Over time however, the fishing business in Lake Victoria has lost much of its viability, attributed to depleted fish stocks and the availability of cheap imported seafood.

In response, various business minds have sought other means of ensuring constant supply of quality fish.

One such mind is Albert Altena, who set up an aquaculture business in Uyawi, Siaya County, with the aim of achieving a constant supply of adequate and quality fish.

Altena's African Blue Fish Farm was set up in 2014 and started harvesting fish in 2016.

The farm has set up fish cages in the lake, from where they introduce fingerlings, feed and nurture them until they are ready for harvesting.

Not only does the farm ensure reliable supply of fish to the neighbouring regions, but it also offers a much-needed source of income for locals.

"At the moment we employ 16 people here directly on the cages. We also have some casual workers who come to help us. That's another five or six. We have another six at the depot in Otonglo, so total



Albert Altena, the Founder of African Blue Fish Farm in Uyawi, Siaya County, Kenya. /CGTN

permanent workers are around 20," said Altena.

"At the moment we produce nearly 200 tonnes per year of nice fresh tilapia. We harvest three times a week. Monday, Wednesday and Friday. The fish go from the cages directly to the shore and there we sort, pack them on ice and then it goes into the truck and we have a sales depot in Kisumu," he added.

Since 2016, the farm has had n impact on the locals, who say it has bettered their standards of living.

"If I need fish on Monday, I get the amount and sizes I want. If I need fish on Friday, I get all in the sizes I want. If I need fish again on Monday, I get the amount I need and the sizes I want. This I cannot find from the other fishermen," said Jacinta Awuor, a fish monger in Uyawi Beach.

"I have worked with African Blue for five years and they have helped me. Business is easier. I live close by. So, I come pick fish and leave. There's no begging here and there are no sideshows. Their pricing is also fair," said Alice Orembe.



Workers at African Blue Fish Farm sort fish harvests before packing them for transportation. /CGTN

Besides economic benefits, aquaculture projects such as African Blue help reduce overfishing, thereby curbing depletion of natural stocks. This in turn ensures a balance in the ecosystem, as birds and other wildlife that depend on fish will be less threatened.

The farm hopes to be able to increase if fish production to 1000 tonnes ultimately, enabling it supply even more regions in the East African country.

"The market in Kenya is very huge. We cannot meet the demand. We need even more cage farmers in other places. This is why you see the Chinese imports. They try to fill the gap. So, we want to expand in the next 2-3 years to 500 tonnes per year, and in another two years, let's say within the next 10 years I want to be on 1000 tonnes. That is my personal target," said Altena.



350,000 tonne aquaculture target set by SADC

Plans to increase aquaculture output in Sub-Saharan Africa to 350,000 tonnes a year have been announced by the Southern African Development Community.

The Mozambican Minister of the Sea, Inland Waters and Fisheries, Augusta Maita, said that the Southern African Development Community [SADC] envisages achieving over 350,000 tonnes of annual aquaculture production by 2030, up from 100,950 tonnes in 2020.

Addressing the opening session of the joint meeting of SADC Ministers of Agriculture and Food Security and Fisheries, on 7 May, she said this goal required diversified production and integrated value chains.

"The implementation of the SADC Action Plan for Aquaculture is fundamental, because it will contribute to poverty eradication and food security. It is also an opportunity for the private sector to generate wealth and employment," she said.

The joint meeting was attended by 92 delegates from

the SADC's fourteen Member States, namely Angola, Botswana, Eswatini, Lesotho, Madagascar, Malawi, Mauritius, Mozambique, Namibia, Seychelles, South Africa, United Republic of Tanzania, Zambia and Zimbabwe.

The Ministers applauded the positive development trajectory witnessed in the area of fisheries and aquaculture which now employs approximately 3 million people in the region and contributes about 9 percent of the region's agriculture GDP.

Maita argued that the member states must be aligned to take advantage of aquaculture, given the current low levels of capture fisheries. She also praised the regional initiative for the creation of a regional Centre for Monitoring, Coordination, Control and Inspection of Fisheries, which will be based in Mozambique, and will assist member countries in reacting to illegal fishing, which requires a regional and multinational approach.

Ministers noted with concern, the high numbers of food and nutritionally insecure people in the region (50.8 million) and urged Member States to continue implementing and domesticating the SADC Food and Nutrition Security Strategy (FNSS) in National Food and Nutrition Strategies in order to improve food and nutrition security. They encouraged Member States to attend and actively participate at the upcoming United Nations Food Systems Summit to be held in September 2021 which is intended to transform global food systems. They also urged Member States strengthen and expand coverage of social protection and safety-nets programmes to cater for increasing numbers of food insecure population and to promote value addition through agro-processing value chains so as to increase period of consumption, reduce malnutrition, reduce postharvest losses and create employment

Rwanda issues a stern warning amid Lake Virus attack

The Rwandan government has issued a statement warning any persons bringing live fish illegally into the country after tilapia lake virus (TiLV) was identified in various countries.

Following the discovery, the Ministry of Agriculture and Animal Resources (MINAGRI) banned the importation of tilapia fingerlings (young tilapia fish).

The virus affects both wild and farmed tilapia fish, and it can cause a decline in tilapia catch quantities.

A statement which was issued last week says that in a bid to prevent the spread of the virus, the ministry has banned the entry of tilapia fingerlings into Rwanda.

It also said that any person who will be caught bringing live fish to Rwanda yet they do not have the required licence will be punished as provided for by the law determining the organisation and management of aquaculture and fishing in Rwanda, as well as the law determining the prevention and fight against contagious diseases for domestic animals in Rwanda.

Agriculture minister Gérardine Mukeshimana requested all fish farmers to put in place strategies to prevent such a disease by avoiding breeding young fish of which they do not know its origin, avoiding sharing fish farming and fishing equipment, and keeping hygiene in the fishing site.

She said that tilapia is a very important fish as it is the most farmed species and most consumed species by Rwandans and it is exported to DR Congo, mostly through Rubavu and Rusizi districts.

Mukeshimana also said that any person who wants to bring fingerlings of other fish species into the country will have to request a license from the ministry.



Dr Solange Uwituze, Deputy Director-General of Animal Research and Technology Transfer at Rwanda Agricultural Board, told The New Times that the disease is not zoonotic, meaning that it does not affect humans.

Uwituze said that confirmed countries with TiLV include Colombia, Ecuador, Egypt, Israel, Indonesia, Thailand, Mexico (in six Mexican States), Philippines, Malaysia, Peru, India and Tanzania.

Countries at high risk of TiLV, Uwituze said, are Algeria, Bahrain, Bangladesh, Belgium, Burundi, Canada, China, Congo, El-Salvador, Germany, Guatemala, Japan, Jordan, Laos, Mozambique, Myanmar, Nepal, Nigeria, Pakistan, Romania and Rwanda. Others include Saudi Arabia, Singapore, South Africa, Sri Lanka, Switzerland, Tanzania, Togo, Tunisia, Turkey, Turkmenistan, Uganda, Ukraine, United Arab Emirate, United Kingdom, United States, Vietnam and Zambia.

Uwituze said that live fish that were being imported was a small amount (around 5000) of fingerlings to serve for broodstock [for breeding purposes] for satellite (or secondary) hatcheries.

The ministry said that farmers should pay attention to signs such as, extreme death of fish in the lake, fish cages, ponds among others, and skin redness, the bulging of the eye out of the orbit, and skin loss on fish whose death is

undetermined.

In case one of those signs manifests, the ministry cautioned, fish farmers should report it to nearby organs responsible for livestock, or call an officer in charge of fishing and fish farming based at MINAGRI on telephone number 0788854562, or 073885462.

Uwituze said that Rwanda has three big hatcheries and eight satellites hatcheries are operating very well with a production capacity of around 40 million fingerlings per year.

She was replying to the question of how Rwanda was going to fill the gap that will be left by the ban on tilapia fish imports.

"Around 20 million fingerlings are being produced annually but the demand increases visà-vis the aquaculture sector growth, thus increase in production," Uwituze said.

"RAB will take the lead in producing needed broodstock for existing satellite hatcheries," she observed.

Fish production in Rwanda was at 31,465 tonnes last year, while demand is estimated to reach 112,000 tonnes by 2024. The latter is the same amount of fish that Rwanda targets to produce per year under the fourth strategic plan for agriculture transformation which runs from 2018 to 2024.

L-selenomethionine: a powerful antioxidant for commercial fish species

by Brecht Bruneel & Matthijs de Jong, Central Technical Managers, Orffa Additives BV (The Netherlands)

In intensive animal production, high daily weight gain and high feed efficiency are essential. However, high performance is associated with increased levels of stress. Stress – such as from high stocking density, pathogenic pressure and temperature - is associated with enhanced levels of reactive oxygen species (ROS) and linked to suboptimal antioxidant status. Selenium (Se), in this respect, is a very important essential trace element as it is a vital component of selenoenzymes (eg glutathione peroxidase, GPx) which play a role in reducing ROS and maintaining a healthy antioxidant status.

Selenium can be added to the diet in either inorganic or organic forms. The advantage of using organic selenium, specifically L-selenomethionine, is its ability to be incorporated directly, without conversion, into general body proteins as a methionine source. The incorporated selenium, in the form of L-selenomethionine, acts as a storage of selenium in the animal. This stored selenium ensures optimal supply, even during stressful periods.

Dietary L-selenomethionine supplementation is known to offer a way to reduce performance loss under stress, such as crowding conditions (Küçükbay et al. 2008). A recent study in Nile tilapia, performed at the

Mahasarakham University in Thailand, showed increased performance, improved innate immune response and high protection against pathogenic pressure (Streptococcus agalactiae).

L-selenomethionine (Excential Selenium 4000, Orffa Additives BV, The Netherlands) was tested and validated by independent researchers around the world in peerreviewed publications (eg Berntssen et al. 2018; Silva et al. 2019) and proven to be effective in increasing the selenium and antioxidant status of fish, even under challenging conditions. Using Lselenomethionine in your diets will result in improved performance, immune function and higher economical return for your aquacultural production!

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L-selenomethionine: A powerful antioxidant for commercial fish species!

(supported by science: Silva et al. 2019, Kücükbay et al. 2009)

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• 19-19-19 + TE	• 22-9-22 + TE	• 15-10-30 + 2% MgO + TE
• 18-18-18 + TE	• 20-5-30 + TE	• 12-0-38 + 4% MgO + TE
• 30-10-10 + TE	• 10-20-30 + TE	• 18-3-35 + 0.5% MgO + TE
• 28-14-14 + TE	• 6-12-36 + 2% MgO + TE	• 15-7-22 + 10% CaO + TE
• 10-50-10 + TE	• 12-12-36 + TE	• 12-12-24 + 10% CaO + TE

Additional formulations are available upon request.

All formulations contain Trace Elements at the following concentrations: Fe 1000 ppm (EDTA), Mn 500 ppm (EDTA), Zn 500 ppm (EDTA), Cu 500 ppm (EDTA), B 200 ppm (Salt), Mo 20 ppm (Salt)

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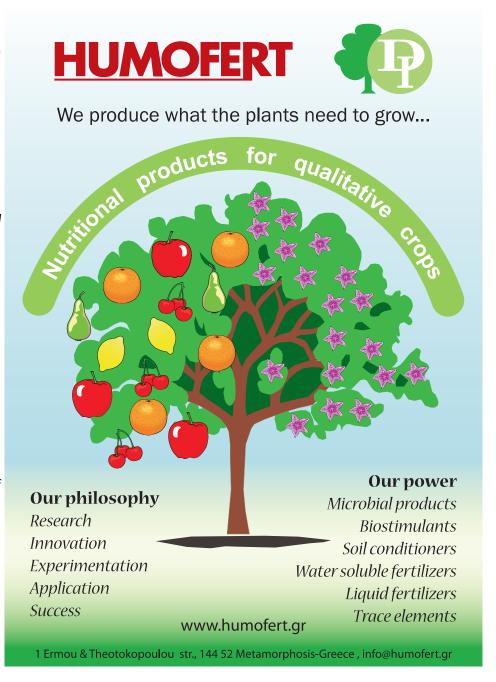
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fertilizers are produced by **Humofert S.A.**, a Greek chemical and biotechnology company. They come in many different formulations, each containing an ideal combination of Nitrate, Ammonium, Urea and Organic Nitrogen, depending on the soil type and crops they are intended to be applied on.

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fertilizers help growers achieve yield maximization with reduced production cost. Suitable for all crops, they are very effective thanks to:

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RainFine Introduces Just-Fine Pipe

Corrosive water, caused by a number of factors ranging from high or low pH to variable mineral content to waste water applications, can weaken and deteriorate standard galvanized pipe, leading to premature failure.

RainFine Just-Fine irrigation uPVC lined pipes protect your irrigation pipelines from any corrosive components in your water, ensuring a long life for your machine.

"Farmers drive everything we do at RainFine – and water quality issues continue to be an increasingly prevalent challenge for growers around the world. While several different options to handle corrosive water have existed in the market for years, farmers told us there was a real need to have a better solution," said Wang Zhi, director of global sales at RainFine. "We looked at this issue with a new approach and redesigned an entirely different solution about which we are extremely proud and, even more importantly, that our farmer clients are telling us is an absolute gamechanger for them."

Other poly pipe type offerings in the market rely on polyethylene pipes and flanges for structural integrity, but the poly flanges create a gap between the steel flanges at the joint and can compress and crack over time, resulting in leaks.

The new Just-Fine pipe features a manufactured insert uv-stabilised plastic flange that allows for positive flange contact and eliminates the potential for a gap between flanges at joints, resulting in improved strength and span consistency.

It is the same span joint design used for existing RainFine galvanized pipe, but with the added protection of the Just-Fine PVC liner through the span pipe to provide an unmatched level of quality and rigidity.

To address the pipe expansion and contraction challenges that cause the liner to move within the pipe, potentially leading to cracks and leaks, RainFine introduced two additional new design innovations

- innovations.
 Rigid uPVC provides the solid base for the pipe, and does not expand or contract like the poly pipes do and will not crack after time at any deviation like at flanges or pipe ends:
- pipe ends;

 2. Stainless steel fittings (304) are used at the pipe ends for rigidity and keeping with the corrosion free goals. The Riser Pipes and Elbows are also supplied with 304 stainless steel;
- The pipe uses an insert type flange with double rubber seals which allow for any expansion and contraction in the pipes, it provides a perfect fit and seal, eliminating any leakage; and
- 4. 4he pipe sprinkler outlet uses a 3/4" 304 stainless steel outlets fitting with ideal unrestricted flow characteristics; with a strong nut that will not break off over time as poly ones are inclined to do.

Re-piping your older Lindsay or IrriFrance pivots with Just-Fine pipes and fittings can extend their life significantly, providing a longer-term solution to the conservative farm operator.

Benefits

- Just-Fine pipe is a comprehensive protection against corrosion made from an inert PVC material, making it ideal for chemigation, fertigation and resisting corrosive water.
- No leaking wide self-seating pipe flange, stainless steel

- self-locking sprinkler outlet couplers ensure a water-tight seal.
- Long lasting the first machine with Just-Fine, installed in Australia is still operating with no leaks.
- All structural components from pivot pipe to last pipe – are lined and uPVC protected.
- The joints are made of stainless steel maintaining structural integrity, while Overhangs are short and of minimum 6-5/8".
- Pipes available are 8" and 6-5/8".
- Not affected by abrasion from sand or sediment in irrigation water.
- Highly resistant to sunlight and humidity as the pipe is completely away from any

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- No substantial extra machine weight.

Features

- Warranty: A 20 years pipeline corrosion warranty includes unconditional replacement due to corrosion for 20 years. This is the longest and most substantial warranty in the industry.
- industry.
 Robust design: Designed for agricultural, industrial and municipal water applications
- Greater profit and productivity: Allows you to take advantage of corrosive water, and allows chemigation and fertigation with aggressive chemicals.
- Minimizes pressure loss:
 Sprinkler outlets: Full size ¾" stainless steel self-locking couplings for minimal pressure loss and no leaks offering optimal flow characteristics.

For more information about protecting your pipes with Just-Fine pipes, contact your local RainFine dealer today.













Is it possible to pay less money for a corrosion protected pivot?



- ♦ Just-Fine PVC-lined pipes, stainless steel pivot joints and control panel come with a 20-year warranty, the best in the business.
- Just-Fine PVC-lined pipe is the the perfect solution for corrosive, acid and saline water.
- ♦ Special PVC 2.5mm wall thickness PVC-pipe liner is stable in hot or cold climates.
- Sprinkler outlet is made of stainless steel with curvature on inner pipe wall.



Simplify Temporary Irrigation with New MP Stake Kits



Native plant restoration projects and subsurface drip irrigation systems often require temporary overhead watering to support delicate plants. To simplify this process, two new stake kits are now available. All kit components except the nozzle are preassembled for ease of installation — simply install the MP Rotator nozzle of your choice for a flexible, highefficiency solution. Hunter also offers a riser-mounted solution for standard and pressure-regulated PGP® shrub rotors.

"We developed these innovative products to make temporary irrigation fast and easy," said Kelsey Jacquard, Senior Product Manager. "They help support native plant restoration, slope

revegetation, nurseries, sprinkler relocation, and more."

New MP Stake Kits

Designed for use with any water-efficient MP Rotator nozzle, MP Stake kits come preassembled for simple installation. Standard components include a 26" stake, ½" threaded connection, distribution tubing, and a nozzle adapter. For maximum water savings, add a built-in Hunter Check Valve and 40 PSI pressure regulator. Quickly give fragile plants the supplemental irrigation they need without adding significant labor.

Riser-Mounted Rotor Stake Kit

For larger areas with higher flow requirements, pair the riser-mounted stake kit with standard or pressure-regulated PGP shrub rotors. Manufactured with durable, UV-stabilized plastics that hold up to extreme environments, the kit features a plastic cap that covers the exposed rebar. It also includes a plastic strap that is much safer than the typical metal clamps used to secure sprinklers. This makes it an easy and cost-effective method for temporary irrigation in areas where foot traffic may cause damage or customer liability is a concern.

New Rain Bird® Flow-Indicating Basket Filters Provide All-In-One Irrigation Solution



Rain Bird's new Flow-Indicating Basket Filter product line makes irrigation systems easier to install and maintain by providing flow measurement, filtration and integrated pressure regulation in an all-inone, compact solution.

"It's important to monitor your irrigation system's performance to ensure all areas are getting just the right amount of water," said Whitney Braun, product manager for Rain Bird's Landscape Drip Division. "However, it can be challenging to discover and diagnose issues quickly, before they become real problems. Our new Flow-Indicating Basket Filter product line provides easy, visual monitoring of irrigation system changes over time."

Ideal for drip systems, Rain Bird's Flow-Indicating Basket Filters are designed to work with any residential or commercial irrigation system with a flow range of 3.0 gpm to 20 gpm (11,4 to 75,7 L/m). A dial at the top of the filter cap provides diagnostic information about the zone's operation, saving time and simplifying maintenance. During irrigation system installation, contractors can use the basket filter's accurate flow reading to simplify design and scheduling calculations. Then, by using the basket filter's indicator bezel to mark that zone's appropriate flow rate on the dial, they can also quickly diagnose any future maintenance issues, such as weeping valves, system blockages, leaks/excessive flow or a clogged filter. Cleaning the filter is fast and easy thanks to its unique upright design, which also prevents debris from entering the downstream line during routine maintenance.

Rain Bird's Flow-Indicating Basket Filters are available in five models. There are three one-inch models – two with integrated 40 psi pressure regulation and one without. A fourth model is a full commercial control zone kit, including a one-inch Rain Bird® PESB Valve, while a fifth model is a Retrofit Kit that makes it possible to upgrade existing Rain Bird Basket Filters by simply changing the filter and the cap. All five models provide flow measurement and filtration, with replacement stainless steel filters also available.

"By installing these new Flow-Indicating Basket Filters, irrigation professionals can determine when a system may need maintenance with just a quick glance at the filter's dial," said Braun. "As a result, they get additional control for better, faster troubleshooting, fewer callbacks and invaluable peace of mind."

For more information about Rain Bira's Flow-Indicating Basket Filters, visit rainbird.com/products/flow-indicating-basket-filter. To learn more about Rain Bira's many other water-efficient products and solutions for landscape, golf and agricultural irrigation, visit rainbird.com.

BURKINA FASO: Buy-Us Solar launches solar-powered irrigation project



Buy-Us Solar launched a project in Burkina Faso to irrigate using solar energy. The Burkinabe supplier of solar motor pumps hopes to contribute to the development of irrigated agriculture in this Sahelian country.

The project aims to "reduce farmers" working hours while boosting their production". This is the aim of the "Irrigate with solar energy" project recently launched in Burkina Faso by the company Buy-Us Solar.

As part of this project, the Burkinabe company will offer farmers its solar-powered motor pump, called "Futurepomp SF2". This equipment was presented to the public at the launch ceremony of the irrigation project. Each Burkinabe farmer will be able to purchase the motor pump for an average cost of 475,000 CFA francs, i.e. more than 724 euros

The support of AECF Africa

"During our various surveys, farmers have expressed the wish to have a reliable solution that allows them to obtain water at a lower cost. This was

"During our various surveys, farmers have expressed the wish to have a reliable solution that allows them to obtain water at a lower cost. This was impossible with ordinary motor pumps running on expensive fuel. So, we set up 'Futurepomp SF2',"

impossible with ordinary motor pumps running on expensive fuel. So, we set up 'Futurepomp SF2'," explains Fleur Tapsoba, marketing manager of Buy-Us Solar.

The device is equipped with two solar panels of 60 W each and a suction pipe 7 m deep and 8 m high. The solar motor pump has a capacity of 3.6 m³/hour with a horizontal delivery of more than 500 m and is capable of irrigating ½ hectare to 1 hectare depending on the crop and the watering plan. Buy-Us Solar benefits from the support of **AECF Africa** (The African Enterprise Challenge Fund) in the implementation of its solar irrigation project.



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