

Dakar set to host AFSTA Congress in March 2023

By Aghan Daniel I AFSTA Communication Officer



For a country where many farmers have recently taken up seed production as a business, Senegal stands out as a potential new frontier for commercial seed business, according to a post on the West African based Coraf website.

It is amidst this background that the country will host the 23rd AFSTA Annual Congress from March 6 to 9, 2023 in Dakar.

According to the National Organising Committee Chairman Mr Modou Thiam, plans are underway to ensure that the Congress lives up to its expectations.

“We hope to surpass 300 delegates that we hosted in 2017 when we last held the Congress here in Dakar,” he told E-Review.

According to the President of AFSTA, Dr Kulani Machaba, the team in Dakar has shown early signs of exceptional organisation and is confident that the Congress will be worth delegates time and investment. He urged AFSTA members to register in large numbers to attend the show piece.

He added that Dakar is ready to host the Congress 2023 and the National Organizing

Committee is working tirelessly to ensure that it meets the expectations of the delegates. Senegal has a strong infrastructure of seed-producing cooperatives as well as national seed companies that test and select seed from research institutes and produce and sell seeds in the country.

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Senegalese seed trade boosted by introduction of two digital platforms

By Special correspondent | afsta@afsta.org

Senegalese traders can expect to save time and money by using two new digital platforms – the first for obtaining import permits for seeds and plants and the second for producing, receiving, and exchanging electronic phytosanitary certificates, or ePhytos, for exporting plants and plant products.

The Government of Senegal, through the Department of Plant Protection (DPV), and supported by the Global Alliance for Trade Facilitation (the Alliance) have been working on both initiatives to digitalise imports and exports of agricultural products.

A critical milestone was reached on 13 June 2022 when the Minister of Agriculture and Rural Infrastructure, Moussa Baldé, officially launched both platforms.

“I commend the spirit of collaboration that prevailed between the public and private sectors and the Alliance during the formulation phase of the import and export platform



Stakeholders in Dakar during the launch of two digital initiatives

digitalisation projects,” Mr. Baldé said. “Using these platforms presents a significant change for stakeholders. Therefore, the private sector as the main beneficiary has been involved in the pilot groups that tested them. Now it is time to put them into practice.”

Previously, traders have had to visit a DPV office in person to apply for an import permit for importing seeds and plants, a time-consuming and costly process. The new platform means applications can now be completed online.

Separately, Senegalese traders also stand to benefit from the digitalisation of the phytosanitary certificates

required for agricultural exports by implementing the International Plant Protection Convention (IPPC) ePhyto Solution, enabling the exchange of ePhytos with a growing number of countries, quickly, accurately, and at low cost.

Senegal has adopted the IPPC Generic ePhyto National System (GeNS), a web-based application that allows countries to connect to the IPPC Hub, enabling the production, receipt, and exchange of electronic phytosanitary certificates with trading partners.

Based on interviews with exporters and the DPV,



by switching to ePhytos, traders can expect to spend up to 50% less time in obtaining the necessary phytosanitary certification. This process typically takes three days at present.

Over the last months, DPV officers have been trained on the use of the new platforms and more than 80 companies have also received specific training. Senegal progresses to full introduction of the new system.

The new imports platform will benefit agri-food producers who rely heavily on imported seeds to grow many export crops, such as onions, orange sweet potatoes, cherry tomatoes, and potatoes.

Meanwhile, food exporters in a market dominated by micro, small, and medium-sized enterprises (MSMEs) can anticipate time and cost savings by switching to GeNS.

In some cases, producers will be able to take full advantage of both new digital platforms, as many of them are heavily reliant on imported seeds to grow foods for export markets.

Both projects will benefit them by simplifying both import and export procedures. They will also contribute to Senegal implementing its commitments under the World Trade Organization's Trade Facilitation Agreement.

“I commend the approach of the Alliance, which has involved the private sector in the design and implementation of these projects that will have a positive impact on the competitiveness of agricultural enterprises,” said Cheikh Ngane, President of the Federative Confederation of Horticulture Stakeholders (CFAHS). “On behalf of the private sector, I am committed to making these digital tools a factor in the development of Senegalese agriculture.”

“The launch of these two solutions reflects a determination to overcome many complex and difficult challenges to reach a successful conclusion,” said Philippe Isler, the Alliance's Director, who attended the launch in person. “Digitalisation strengthens Senegal's vital agri-food sector and improves business conditions for the many people whose livelihoods depend on it.

Source: <https://www.tradefacilitation.org/article/senegal-introduces-two-digital-platforms-to-ease-agricultural-trade/>

Embrace new breeding technologies to enhance food production, African countries urged

By Njeri Murigi (healthjournalist@gmail.com)

To close the gap in staple crops and enhance food production, countries need to embrace new breeding technologies in addition to conventional technologies.

According to Leena Tripathi, Director for Eastern Africa Hub at International Institute of Tropical Agriculture (IITA), Dar es Salaam, Tanzania, these new technologies are projected to play a critical role in building sustainable agricultural systems that are able to accommodate the rapidly growing demand for food.

Breeding of 'climate change ready' and adaptable crop varieties and animal breeds is now more than ever critical in transforming agricultural productivity and ensuring global food security and nutrition.

"Only sustainable agriculture will save countries from the current situation of food insecurity, which is affecting almost every country. The advent of new breeding technologies is presenting countries with an additional, more efficient tool for improving agricultural productivity," said Tripathi.

She was speaking during a webinar organised by the African Seed Trade Association (AFSTA) on genome editing for the seed sector on June 2, 2022.

According to Dr Tripathi, gene or genome editing is one of the technologies that countries should embrace. She defined gene editing as a group of



technologies that give scientists the ability to make permanent and heritable changes at specific sites in the genome of an organism mediated by the cells' own DNA repair machinery and lacking in any foreign DNA.

"Gene editing is a solution that is set to be a game changer in the agricultural sector yet many people are still opposing it on the basis that it is similar to genetic modification. However, this is not true as the two technologies are different," she said.

Tripathi said gene editing is different from genetic modification because it doesn't involve insertion of a foreign gene. It is a technique used to

precisely and efficiently make specific changes on organism's genome.

On the other hand, genetic modification involves insertion of foreign gene that can change an organism's genome in an unpredictable way.

Gene editing is currently being applied to more than 40 crops across 25 countries, including Kenya. The technology is mostly addressing agronomy, food and feed quality, or biotic and abiotic stress tolerance.

Scientists at Kenya Agricultural and Livestock Research Organisation (KALRO) are using this technology to come up with a maize variety that is resistant

to Maize Lethal Necrosis (MNL) disease for improved maize productivity and grain harvest. According to Tripathi, countries should embrace gene editing technology because it is simpler and faster as compared to other technologies like genetic modification. Apart from that, gene edited products are also not regulated the same way as GMOs in many countries. Meanwhile, the meeting also heard that Kenyan farmers will soon grow Genetically Modified maize if the government approves it for commercialisation.

Dr James Karanja, Principal Investigator of the TELA maize project, said the variety, also known as Bt maize has completed national performance trials conducted by KEPHIS. Three varieties were recommended for approval for commercialisation by the National Variety Release Committee (NVRC). National Biosafety Authority also approved the three varieties subject to a Cabinet approval since they are as safe as the conventional counterparts. He said approval of the Bt maize for commercialisation shows the government's commitment to adopting GM technology as a way of realising the food and feed security in the country. As of February this year, the Kenya Food Security Steering Group's annual Short Rains Assessment report said there are around 3.5 million food-insecure people in pastoral and marginal agricultural areas, a 48 per cent increase since August 2021. "Bt maize research has been undertaken in full compliance with the national regulatory requirements. National

performance trials showed that Bt maize effectively controls infestation and damage by the two major insect pests affecting maize production in Kenya; the spotted stem borer (*Chilo partellus*) and the African stem borer (*Busseola fusca*), and has a great potential of controlling fall armyworm too," said Dr Karanja.

Bt maize was developed using a soil dwelling bacteria, *Bacillus thuringiensis* (Bt) that has a long history of providing protection against target insect pests. It helps farmers improve yields and control pests without use of chemical insecticides.

"The country is losing about 40 per cent of the potential 67 million bags of maize produced annually to the stem-borer and fall armyworm and other challenges. As a result the government has to import maize to bridge the gap. We laud the government for taking this noble step of approving commercialisation of the Bt maize since it will help the country save all those bags that are lost every year to pests," added Dr Karanja.

Approval for commercialisation of Bt maize makes it the second biotech crop to be adopted in the country after years of research and emotive debates. The third crop that might be approved soon will be cassava resistant to virus whose research is currently advancing to NPTs. Other African countries that have already authorised the sale of Bt crops, including Bt cotton, are Ethiopia, Nigeria, South Africa and Sudan.

According to Dr Karanja, apart from being pest resistant, all Bt maize varieties that will be released to the market are



Dr James Karanja, Principal Investigator of the TELA maize project in one of the trial sites

also drought tolerant since the project is building from the excellent work realised under the Water Efficient Maize for Africa (WEMA) project that developed and released over 70 varieties under the brand name Drought TEGO.

The research on Bt maize began with confined field trials in 2010 under WEMA project before moving to the National Performance Trials (NPT) in 2020. The NPTs were carried out at Kenya Agricultural and Livestock Research Organisation (KALRO) sites in Embu, Kandara, Kakamega, Alupe, Kibos and Mwea.

How agriculture in Africa could be improved using biotechnology

By Aimable Twahirwa | twahaime@yahoo.fr



Dr Simplicie Nouala, Head of Agriculture and Food Security Division at AU

The integration of biotechnology into the Africa's agricultural development has been an essential part to improve productivity and increase the resistance of plants to pests and diseases.

Agricultural biotechnology in Africa has been practised most recently, as some countries seek to improve agriculturally important organisms by selection and breeding.

Dr Simplicie Nouala, Head of Agriculture and Food Security Division at the African Union Commission said common crops, which are genetically modified

in Africa, include maize, cassava, rice, potato, soybean and sorghum.

“Food biotechnology can also improve food security by increasing the nutritional value of food, but [African] countries are sovereign and may decide to or not to introduce GMOs in their countries,” Dr Nouala said during a presentation at the Fifth African Conference of Science Journalists which was held from May 24 to 27 virtually.

The expert also urged governments to strengthen and harmonise biotechnology policies and biosafety regulations to create an enabling environment for biotechnology development on the continent.

Presenting findings on Continental Guidelines for the use of Biotechnology to Enhance Agricultural Productivity for Food Security and Nutrition in Africa, Dr Nouala said that Genetically Modified (GM) crops already exist in at least 12 African countries, with policy and legal frameworks in place at different stages.

Despite the existing framework, he said most countries in Africa still fall below the average in support

towards policy framework to govern biotechnology.

“Harmonising biotechnology policies and biosafety regulations is still key to creating an enabling environment for its development and deployment,” he said.

So far, the African Union Commission (AUC) has appointed African Agricultural Technology Foundation (AATF) to lead the continent's platform dubbed African Seed and Biotechnology Platform of the African Union (ASBP).

With the establishment of the African Continental Free Trade Area (AfCFTA) in 2018, experts hope to see an increase in trade related transboundary movement of agricultural commodities across the continent.

“GMOs, like drought-resistant crops, may become increasingly necessary in the current demand for food,” Dr Nouala said.

For agricultural biotechnology to play a crucial role in bridging food and nutrition, researchers believe that the right combination of innovations, policies and actions could be an option.

African Development Bank Board approves \$1.5 billion facility to avert food crisis

The African Development Bank Group's Board of Directors has approved a \$1.5 billion facility to help African countries avert a looming food crisis.

With the disruption of food supplies arising from the Russia-Ukraine war, Africa now faces a shortage of at least 30 million metric tons of food, especially wheat, maize, and soybeans imported from both countries.

African farmers urgently need high-quality seeds and inputs before the planting season begins in May to immediately boost food supplies. The African Development Bank's \$1.5 billion African Emergency Food Production Facility is an unprecedented comprehensive initiative to support smallholder farmers in filling the food shortfall.

The African Emergency Food Production Facility will provide 20 million African smallholder farmers with certified seeds. It will increase access to agricultural fertilizers and enable them to rapidly produce 38 million tons of food. This would be a \$12 billion increase in food production in just two years.

The African Development Bank's \$1.5 billion strategy will lead to the production of 11 million tons of wheat; 18 million tons of maize; 6 million tons of rice; and 2.5 million tons of soybeans.

The African Emergency Food Production Facility will provide 20 million farmers with certified seeds, fertilizer, and extension services. It will also support market growth and post-harvest management.

The African Development Bank will provide fertilizer to smallholder farmers across Africa over the next four farming seasons, using its convening influence with major fertilizer manufacturers, loan guarantees, and other financial instruments.

African Development Bank Group President Dr. Akinwumi Adesina said: "Food aid cannot feed Africa. Africa does not need bowls in hand. Africa needs seeds in the ground, and mechanical harvesters to harvest bountiful food produced locally. Africa will feed itself with pride for there is no dignity in begging for food..."

The African Emergency Food Production Facility has benefited from stakeholder consultations, including those with fertilizer producers and separately with African Union agriculture and finance ministers earlier this month.

The ministers agreed to implement reforms to address the systemic hurdles that prevent modern input markets from performing effectively.

The price of wheat has soared in Africa by over 45% since the war in Ukraine began. Fertilizer prices have gone up by 300%, and the continent faces a fertilizer shortage of 2 million metric tons. Many African countries have already seen price hikes in bread and other food items. If this deficit is not made up, food production in Africa will decline by at least 20% and the continent could lose over \$11 billion in food production value.

Source: <https://www.afdb.org/en/news-and-events/press-releases/african-development-bank-board-approves-15-billion-facility-avert-food-crisis-51716>

Zambia 2022 maize production drops 25% to 2.7m tonnes

By Chris Mafula

Zambia's maize production dropped nearly 25% to 2.7 million tonnes in the 2021/2022 crop season from 3.6 million tonnes the previous season, state-owned ZNBC radio reported recently.

Agriculture Minister Mtolo Phiri attributed the drop in production to a reduction in the area planted and lower yields, ZNBC radio said.

Zambia was still food secure as it had carryover stocks of 1.5

million tonnes with farmers, millers, grain traders and the nation's Food Reserve Agency (FRA), Phiri said.

Source: <https://www.agriculture.com/markets/newswire/zambia-2022-maize-production-drops-25-to-27-mln-tonnes>

Zimbabwe elects new officials for its association (ZASTA)

By Charles Nyachae | charles@afsta.org

AFSTA Board and Secretariat would like to congratulate the ZIMBABWE SEED TRADE ASSOCIATION (ZASTA) on electing new officials at its just concluded AGM held on 15th June 2022 in Harare.

The following are the new officials of ZASTA

Mr. John Makoni of Easi Seeds (Chairperson)

Dr. John MacRobert of Mukushi Seeds (Vice Chairperson)

Mr. Talk Chinoda of Intaba Trading (Treasurer)

Ms. Felistus Ndawi Prime Seed Co (Secretary)

Mr. Terrence Chimanya of Seed Co Ltd (Committee member)

Mr. Tich Mapongah of Valley Seeds (Committee member)

Mr. Rwafa Rwafa of ARDA Seeds (Committee member)

Mr. Nelson Munyaka of Zimbabwe Super Seeds (Committee member)

Mr. Rinos Mashongera Klein Karoo Seed Marketing (Committee member)



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Your logo will be linked to your website or if you want to advertise a particular product you can send us artwork to be linked to your logo. The cost of the website advert is US\$ 300 for AFSTA members and US\$350 for Non members for a period of one year.

Contact : Charles Nyachae, ICT & Logistics Officer on: charles@afsta.org

UPCOMING EVENTS

1. 26th - 28th September 2022: ASTA's 61th Vegetable & Flower Seed Conference, Manchester Grand Hyatt San Diego, California
2. 6th - 9th March 2023: AFSTA Congress 2023, Dakar, Senegal.
3. 22nd - 26th October 2022: Euroseeds Congress 2022, Berlin, Germany
4. 21st - 18th November 2022: Asian Seed Congress 2022, Bangkok, Thailand
5. 14th - 25th November 2022: Triennial Symposium of ICRT, Nairobi, Kenya
6. 5th - 7th June 2023: ISF World Seed Congress 2023, Cape Town, South Africa

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Disclaimer:

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