

Special bulletin: 2018 African Green Revolution Forum (AGRF), Kigali, Rwanda

AGRF2018 and FAW special

At the recent 2018 African Green Revolution Forum (AGRF) held from 5 to 8 September in Kigali, Rwanda, IITA was presented with the 2018 Africa Food Prize as the first institution to be honored thus. The following week, stakeholders from West and Central Africa converged at a high-level meeting on 11–12 September in Yaoundé, Cameroon to discuss measures for addressing the menace of the fall armyworm (FAW). This special includes reports from these events.



IITA news

III

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IITA clinches 2018 Africa Food Prize!

For its creative work in generating solutions on and off the farm, innovative solutions that have improved the lives of millions in the face of climate change, and rampaging crop pests and disease, <u>IITA</u> has been named winner of the 2018 <u>African Food Prize</u>.

IITA is the first institution to receive the distinguished Africa Food Prize as announced on 7 September at the <u>African Green Revolution Forum</u> (AGRF) in Kigali, Rwanda. It was presented with the iconic Africa Food Prize trophy that was hand made by the Norwegian glass artist <u>Cathrine Maske</u> with its green color references to the African Green Revolution.



The independent Africa Food Prize Committee, chaired by HE Olusegun Obasanjo, former President of Nigeria, selected IITA for its "deep commitment over many decades to producing a steady stream of innovations that have boosted the nutrition and incomes of millions of people across Africa." In recent years, that work also has included a critical focus on connecting crop science to creating employment for Africa's youth, and ensuring African farmers can adapt to the stress of climate change and the growing threat for an array of crop pests and plant diseases.

"IITA stood out to us for its steadfast and inspiring commitment to a research agenda that aligns with both our African traditions as well as the evolving needs of African farmers and consumers for the latest advances in food production," said Obasanjo.

"From the cassava we're still eating today, to the valuable and nutritious soybean we now grow in our fields, to maize varieties that can withstand drought and deadly toxins—our diets and our agriculture businesses would be much poorer today without IITA's leadership, and its willingness to forge powerful bonds with African farmers and African communities."







Pres Olusegun Obasanjo reading the citation for IITA during the awarding of the 2018 Africa Food Prize.

Speaking he received the as Prize on behalf of the institution, Nteranya Sanginga, IITA's Dr Director General, stated that "a great deal of IITA's success rests on its ability to develop relationships and collaborations that allow the fruits of its research to be scaled up

and made available to millions of farmers.

"I'm extremely honored to be receiving this prize on behalf of IITA and proud to be part of a group of researchers dedicated to building lasting and relevant solutions for the continent," said Sanginga. "But it would be remiss of me if I didn't acknowledge the important role of our various partners, from other research centers to governments to the private sector, without whom our research might never have seen the light of day."

Fall armyworm: Forum advocates cocktail of solutions before the next outbreak

Farmers across Africa are reeling under huge losses linked to the devastation by the invasive species called fall armyworm (FAW) or *Spodoptera frugiperda*.

With origins in Eastern and Central North America as well as South America, the caterpillar has since 2016, found its way into 44 African countries, causing significant damage to maize crops with great potential for further spread and economic damage.

In sub-Saharan Africa, fall armyworm has caused heavy losses to staple cereals,

especially maize and sorghum, affecting food security and trade, thus upsetting the continent's plan to feed itself.

The extent of the destruction on maize alone is estimated to be between US\$2.5 and 6.2 billion per year, destabilizing the livelihoods of around 300 million people.

This and many more reasons spurred experts attending the <u>2018 African Green</u>



The experts and representatives of participating organizations pose for a group photo.

<u>Revolution Forum</u> (AGRF2018) in Kigali, Rwanda, to explore ways of preventing or mitigating the next outbreak in Africa.

Setting the scene at a session on building the resilience of Africa's agriculture against invasive species, <u>Dr Dennis</u> <u>Rangi</u>, Director General of the <u>Centre for</u> <u>Agriculture and Biosciences International</u> (CABI) identified continuing globalization through increasing trade, travel, and transport of goods across borders as one of the factors facilitating the spread of invasive species, with an increasing negative impact.

The problem, according to him, "is global in scope and requires international cooperation to supplement the actions of governments, the private sector, and organizations at national and local levels."

The recent arrival of fall armyworm in India is a case in point. The caterpillar's leap from Africa to India confirms the global nature of invasive species and the need for partnerships to tackle the pest.

According to Rangi, "a straightforward, three-pronged, internationally recognized approach to addressing the problem of invasive species, namely prevention, early detection and rapid response, and lastly control will help a great deal."

However, transforming this approach into a reality in policy and practice remains a huge challenge in Africa as African famers usually find themselves trying to address the latest invasion, when the previous invasion is yet to be cleared.

To overcome these challenges, the CABI DG urged African countries to create a policy and regulatory environment that promotes sustainable approaches in



Dennis Rangi, CABI; and May-Guri Saethre, IITA, in a panel discussion.

tackling invasive species; and put in place a national invasive species strategy, an action plan, and a sustainable investment plan.

Dr May-Guri Saethre, Deputy Director General, Research for Development at IITA, bemoaned the fact that the burden of handling and combating invasive species on a day-to-day manner is to a large extent left to the individual smallholder farmers in Africa.

The way forward, according to her, lies in "working together with farmers, government, researchers, and the private sector as current outbreaks are wakeup calls for firm action to protect Africa's agriculture from the destructive impact of pest outbreaks."

"To prevent the next outbreak, technologies capable of stopping pest and disease entry into Africa by preemptive biological controls, horizon scanning, and effective early warning systems are available and must be deployed to prevent establishment of new pests through coordinated response and eradication programs," Saethre added.

Chief Scientist at the <u>USAID Bureau for</u> <u>Food Security</u>, <u>Dr Rob Bertram</u> sees it differently. To him, fall armyworm is a reminder that we live in a small world that is increasingly becoming smaller and we are more connected than ever. The answer therefore, "is more global connectedness through south–south and north–south learning; research networks; national level leadership; and a coherent regional approach to invasive species," he said.

In all, the experts were of the view that tackling fall armyworm in Africa requires a cocktail of solutions, which include an enabling policy environment, a science and evidence-based framework, research, and development that encourages private sector investment, local knowledge sharing, information dissemination, and surveillance.

The forum also agreed substantially with the Director General of the <u>Rwanda</u> <u>Agriculture Board</u>, Dr Dennis Kyetere, in his assertion that for Africa to feed itself, "agriculture must now be knowledge intensive and technology intensive."



Africa Food Prize presentation dinner.

Feed Africa: Stakeholders zero in on partnerships for technology delivery

Key stakeholders in Africa's agricultural sector have identified partnerships for sustainable agricultural technology delivery as a critical factor in Africa's quest to feed Africa.



This came out strongly at a breakfast session that heralded the presidential summit of the 2018 <u>African Green</u> <u>Revolution Forum</u> (AGRF) in Kigali, Rwanda's capital city.

Organized by the ClearingHouse of the Technologies for African Agricultural Transformation (TAAT), an initiative of the African Development Bank's Feed Africa Strategy that aims to achieve major agricultural transformation in Africa, the session had in attendance, African agriculture ministers, scientists, representatives of multilateral development banks, donor partners, and the private sector.

Dr Mpoko Bokanga, Head of the TAAT ClearingHouse, in his opening statements, traced the program's history to the October 2015 Dakar High Level Conference on Africa Agricultural Transformation Agenda, which led to the adoption of 4 goals and 18 action points to transform African agriculture.

With a focused approach on integrated development of agricultural value chains, Bokanga highlighted the main objective of TAAT which is to "take proven agricultural technologies to scale in a commercially sustainable fashion through the establishment of a mechanism to facilitate partnerships."

"These partnerships will not only provide access to expertise required to design, implement, and monitor the progress of crops, animals, and aquaculture, they will also contribute to ending extreme poverty by eliminating hunger and malnutrition and making Africa a net exporter of agricultural commodities," Bokanga said.

Innovative approach in partnerships

TAAT, according to Bokanga, is not an addition to Africa's long list of agricultural initiatives but an innovative program that serves as a clearinghouse for sustainable agricultural technology delivery.

Through its components, the program will promote an enabling environment for technology adoption; establish a regional technology delivery infrastructure to accelerate delivery; and raise Africa's agricultural productivity by deploying proven agricultural technologies at the agroecological and country levels in strengthened agricultural value chains.

The Togolese Minister for Agriculture, Livestock and Fisheries, Ouro-Koura Agadazi was full of praises for the AfDB and <u>IITA</u> for this well thought-out program, which according to him, "carries the prospects of transforming Africa's agricultural landscape."

"Togo has benefited from several of IITA

path-breaking agricultural solutions and it is our hope that TAAT will not be any different," Agadazi added.

Hon. Joseph Mwanamvekha, Malawian Minister of Agriculture, Irrigation and Water Development, commended the partnership between IITA as the executing agency and the over 10 research institutes and centers driving the implementation of the TAAT program.

Also underscoring the imperatives of partnerships for sustainable agricultural technology at the breakfast session were representatives of the <u>International Fund</u> for Agricultural Development (IFAD), the <u>Alliance for a Green Revolution in Africa</u> (AGRA), and IITA.



Top: DG Nteranya Sanginga being congratulated by AGRF participants. Bottom: Rwandan President Paul Kagame (middle) with dignitaries at the Presidential Summit.

Agribusiness investments, partnerships against fall armyworm take center stage as AGRF2018 ends

The <u>African Green Revolution Forum</u> (AGRF), the most influential gathering around Africa's largest economic sector, concluded Saturday, 8 September with ambitious commitments to deliver billions of dollars in new investments to African farms and agribusinesses, triple agriculture trade between African countries, and forge new partnerships.

The meeting also featured the launch of an aggressive new consortium to defeat the invasion of the fall armyworm (FAW) now threatening up to US\$6 billion of damage to African maize, sorghum, and other critical food crops. In addition, a new multibillion-dollar irrigation initiative could bring a new level of stability to Africa's rainfed farming regions.

"The majority of Africans still earn their livelihoods...from the land so agriculture deserves the concentrated attention of Africa's policymakers, scientists, and entrepreneurs," said HE Paul Kagame, President of Rwanda, the official host country of the Forum.

The forum, which attracted some 2800 delegates from around the world, had Lead, Measure, Grow as its theme, highlighting the critical importance of political leadership and rigorous, honest assessments of progress in the agriculture sector for achieving growth that can spread across the entire economy.

A crucial goal for AGRF 2018 was to secure greater investments for African farmers and agriculture businesses. And the community rose to the challenge. President of the <u>International Fund for</u> <u>Agricultural Development</u> (IFAD), <u>Gilbert</u> <u>Houngbo</u>, said IFAD anticipates delivering a total of \$3.5 billion in new investments over the next few years, half of which will flow to Africa.

In addition, officials from the <u>African</u> <u>Enterprise Challenge Fund</u> (AECF) detailed the launch of the \$50 million Investing in Women fund that already has secured a \$6.42-million commitment from the United Kingdom's <u>Department for International</u> <u>Development</u> (DFID).

Strive Masiyiwa, Founder and Chairman, ECONET Group and Chair of the AGRF Partners Group, said that starting with the 2016 AGRF in Nairobi, commitments to transforming Africa's poorly performing farmers into poverty fighting powerhouses now top \$60 billion. AGRF 2018 highlighted new agriculture partnerships emerging with China, Israel, India, and Brazil.

Leaders applauded the launch in January of the first Inaugural Biennial Review, which features an African Agriculture Transformation Scorecard (AATS). Together they provide a detailed, groundbreaking assessment of countries' progress in achieving agriculture transformation, as well as those areas that still need attention.

The report revealed that 20 of 47 African Union Member States are on track to achieve commitments made at the 2014 AU Summit in Malabo, Equatorial Guinea. And they commended the willingness of all 47 countries to provide this thorough and transparent account of progress and ongoing commitment to evidence-based leadership.

Other notable achievements at the 2018 AGRF included the launch of the new fall armyworm Research for Development (R4D) International Consortium that brings together 35 public and private sector institutions to create a coordinated strategy and consolidate millions of dollars in new support to fight fall armyworm, and the announcement of the 2018 Africa Food Prize Laureate, which was awarded to <u>IITA</u>, the first institution to receive the prestigious award.



A panel of experts look at the fall armyworm problem at AGRF.

West and Central Africa rally against fall armyworm

A two-day high-level meeting on controlling fall armyworm (FAW) in West and Central Africa took place on 11 and 12 September in Yaoundé, Cameroon.



Stakeholders, including IITA, came together in Yaounde, Cameroon, to discuss how to control FAW.

In attendance at this meeting organized by the <u>African Development Bank</u> (AfDB) in collaboration with <u>IITA</u> and <u>Technologies for African Agricultural</u> <u>Transformation</u> (TAAT) were ministers of agriculture from the subregions, focal points from the respective Agriculture ministries in the two subregions, scientists, and experts from different organizations.

Hon. Eyebe Ayissi, Cameroonian Minister for Agriculture, declared the meeting open and welcomed the subregional approach to tackling the fall armyworm menace whose invasion is a threat to the resilience of cereal cropping systems in Africa. "Sustainable management of this pest needs a multi-stakeholder approach with the cereal growers in the middle of such an approach. While efforts to build the natural regulatory factors of the pest (biological control, building resistance among host plants, etc.) are undertaken, farmers need advice, tools, resources, risk management options, and a conducive environment to sustainably manage fall armyworm," Hon. Ayissi added.

In a similar vein, Gaston Cossi Dossouhoui, the Beninese Minister for Agriculture, Livestock and Fishery, commended the organizers for the initiative which he described as timely. "In Benin, more than 33,000 hectares have been reportedly destroyed by fall armyworms, amounting to 44,500 tons of production lost, about 3.4% of the forecast national production for 2016– 17," Hon. Dossouhoi said.

The Deputy Director General, Partnerships for Delivery at IITA, <u>Dr Kenton Dashiell</u>, called for an integrated approach against the rampaging insect in Africa. He stressed the need for a coherent policy framework and a combination of chemical and biological control measures in the aggregated efforts against the caterpillar.

Also present at the meeting were representatives of the <u>Food and</u> <u>Agriculture Organization</u> (FAO), IITA, AfDB, Syngenta, and DVA Agro.

The impact of fall armyworm in Africa

Fall armyworm or *Spodoptera frugiperda*, is an insect that is native to tropical and subtropical regions of the Americas. In its larval stage, it can cause significant damage to crops if not well managed.

It prefers maize but can feed on more than 80 additional species of plants including rice, sorghum, millet, sugarcane, vegetable crops, and cotton.

Fall armyworm was first detected in Central and Western Africa in early 2016 and since then has been reported and confirmed in all of mainland Southern Africa (except Lesotho), Madagascar, and the Seychelles (Island State).

To date, fall armyworm has been detected and reported in almost all of sub-Saharan Africa, except in Djibouti, Eritrea, and Lesotho.



Partners from West and Central Africa.

AfDB deploys Integrated approach, proven technologies against fall armyworm in Africa

After two days of intense deliberations on the best possible ways to tackle the menace of fall armyworm (FAW) in Africa, representatives of the agriculture ministries from Central and West African countries have been urged to come up with proposals on how an integrated approach to winning the war against fall armyworm in their respective countries can be achieved.



The TAAT leadership in a discussion with the country officials.

This resolution heralded the closing ceremony at the high-level meeting on controlling fall armyworm in Central and West African states held on 11 and 12 September in Yaoundé, the Cameroonian capital. Béninese Minister for Agriculture, Livestock and Fishery, Hon. Gaston Cossi Dossouhoui, who presided over the closing ceremony commended the organizers, notably the <u>African</u> <u>Development Bank</u> (AfDB) and <u>IITA</u>,

for the rare opportunity to brainstorm together and come up with proposals for possible funding and collaboration.

Hon. Dossouhoui urged the respective agriculture ministries from the two participating subregions to come up with bankable proposals within three months to facilitate the implementation of the solutions proffered at the highlevel meeting, taking into consideration, their respective national contexts and circumstances.

A cocktail of solutions

Some of the solutions proffered against the rampaging fall armyworm include awareness creation on holistic management of the pest, training of stakeholders on the identification of fall armyworm, synchronizing cropping calendars and timely planting, and broad-based dissemination of information via technologies (SMS, apps, etc.).

The meeting also identified innovative solutions such as use of seeds, oil, and leaf extracts of neem tree (Neem oil emulsion at 5–20 mL per plant); a mixture of ash and sand on the whorl; use of botanical and synthetic pesticides; a mixture of tithonia and piper emulsions; a mixture of tobacco leaves and piper;



Participants at the high-level partnership meeting on FAW management in Cameroon.

push-pull technology; and the use of pheromone traps for monitoring and detection.

Technologies against fall armyworm

The consensus of the meeting was a regional approach that emphasizes Integrated Pest and Disease Management (IPDM) required to contain fall armyworm.

Immediate recommendations include awareness raising campaigns on fall armyworm symptoms, early detection and control, including beneficial agronomic practices; and national preparation and communication of a list of recommended, regulated pesticides and biopesticides and their appropriate application methods.

Participants also agreed that work should start immediately to assess preferred crop varieties for resistance or tolerance to fall armyworm, and introduce classical biological control agents from the Americas.

A conducive policy environment should promote lower risk control options through short-term subsidies and rapid assessment and registration of biopesticides and biological control products, they said.

According to Jean-Baptiste Bahama of the <u>Food and Agriculture Organization</u> (FAO), the operationalization of National



Participants listening to presentations at the FAW meeting.

Task Force on fall armyworm is key to efficiently coordinating preparedness and response through contingency planning.

To <u>Dr Chrys Akem</u>, TAAT Program Coordinator at IITA, this is where the AfDB comes in through the <u>Technologies for African Agricultural</u> <u>Transformation</u> (TAAT) program.

TAAT, according to him, "takes proven agricultural technologies to scale in a commercially sustainable fashion through the establishment of a mechanism that facilitates partnerships and provides access to expertise required to design, implement, and monitor progress of crop, animal, and aquaculture campaigns."

"It is in this light that we have established the TAAT Fall Armyworm Compact which will create an enabling environment to effectively access and scale up the adoption of an IPMbased fall armyworm management technologies and practices through public–private partnerships," Akem added.



Participants at the FAW meeting.

Got a story to share?

Please email it with photos and captions every Wednesday to iita-news@cgiar.org or Katherine Lopez (k.lopez@cgiar.org) and Uzoma Agha (u.agha@cgiar.org) for headquarters and Western Africa, Catherine Njuguna (c.njuguna@cgiar.org) for Eastern Africa, and David Ngome (d.ngome@cgiar.org) for Central Africa.