



Communique on the Aflasafe Investor Forum for Zambia

Hosted Virtually on 20th July 2022

On 20th July 2022, the Eastern Africa Grain Council (EAGC) in partnership with the National Institute for Scientific and Industrial Research (NISIR) and the International Institute of Tropical Agriculture (IITA) hosted the Aflasafe Investor Forum for Zambia. The Forum brought together key agribusiness stakeholders, primarily from the private sector but also from government and development partners, to showcase the business opportunity presented by Aflasafe in Zambia and attract prospective investors.

Over 45 stakeholders attended the forum, these being existing manufacturers of Aflasafe in Eastern Africa, food testing and inspection companies, grain trading companies, food processors and millers, seed and agro-input companies, research organizations and government regulators. The list of participants is annexed to this Communique.

THE CONTEXT BEHIND THE FORUM

Aflatoxins are a family of toxins produced by the *Aspergillus flavus* and *Aspergillus parasiticus* fungi that exist naturally in the soil. These toxins predominantly contaminate staple food crops especially maize, groundnuts, sorghum, and tree nuts. Aflatoxin is most prevalent in crops in tropical and subtropical regions of the world, with contamination mainly occurring in the field and at post-harvest level under suboptimal storage conditions.

Aflatoxin has significant health and economic implications. Epidemiological, clinical, and experimental studies reveal that exposure to large doses of aflatoxin may cause acute toxicity with lethal effect while exposure to small doses for prolonged periods is carcinogenic (Chronic toxicity). Aflatoxin contamination of crops limits market access and trade opportunities for value chain players and economies at large as significant volumes of food commodities are deemed unfit for human consumption, further disrupting food and industrial raw material supply systems for the buyers as well. Some of the most affected value chains in Zambia include maize, groundnuts, and sorghum.

To address the challenge of aflatoxin in Zambia, the International Institute of Tropical Agriculture (IITA) collaborated closely with the National Institute for Scientific and Industrial Research (NISIR) and the Zambia Agricultural Research Institute (ZARI) in the Aflasafe field trials leading to the eventual registration for commercial use. . *Aflasafe*, a bio-control solution that has proven effective in reducing aflatoxin contamination during the crop growth phase. Aflasafeworks by introducing naturally occurring atoxigenic strains of the *Aspergillus* fungi while crops grow in the fields, which outcompeting the toxigenic strains, thus effectively cutting out aflatoxin contamination at production

stage. Aflasafe has proven to be 80 to 100% effective during field trials, and has been successfully tested and registered in Zambia, Tanzania, Mozambique, Malawi, Kenya, Nigeria, Ghana, Senegal and The Gambia.

In 2021, EAGC supported IITA to develop a Commercialization Strategy for Aflasafe in Zambia. The Strategy examined the commercialization opportunity for the product in Zambia, confirmed its commercial viability and proposed appropriate business models and strategies to actualize the opportunity.

Following development of the strategy, IITA intends to engage a commercial partner to invest in Aflasafe production /or importation and marketing in Zambia. EAGC thus supported IITA to convene a virtual Aflasafe Investors Forum for Zambia with the primary purpose of showcasing the commercial opportunity in Aflasafe on 20th July 2022.

KEY HIGHLIGHTS FROM THE FORUM

Opening Remarks by NISIR

The meeting was officially opened by **Dr Henry Kambafwile**, Executive Director at NISIR. In his opening remarks, Dr Kambafwile



WELCOMED stakeholders to the meeting and appreciated their interest in the commercial opportunity presented by Aflasafe.

EMPHASIZED the importance of solving the problem of Aflasafe and was hopeful an Aflasafe investor would be found to commercialize Aflasafe.

HIGHLIGHTED NISIR's role in the successful field trials and registration of Aflasafe in Zambia, emphasizing that

NISIR will remain a key supporter and enabler of Aflasafe in the country.

POINTED OUT that the government is interested to support Aflasafe and will remain a key supporter in its commercialization process.

Welcome Remarks by IITA and EAGC



In his welcome remarks, **Dr David Chikoye**, Director of IITA's Southern Africa Research and Administration Hub based in Zambia:

REMINDED stakeholders of the aflatoxin problem in grains especially groundnuts, pointing out that aflatoxin has contributed to Zambia losing its status as a key exporter of groundnuts to Europe.

HIGHLIGHTED the journey of Aflasafe development, trials and registration in Zambia, emphasizing that the product has proven highly effective in combating aflatoxin.

INDICATED that there was need for the private sector to be involved in the commercialization of Aflasafe in Zambia by bringing to the table their know-how of the sector, technical and financial resources from which they can expect to reap a return on investment since Aflasafe has proven to be a commercially viable product.

Mr. Gerald Masila, the Executive Director of EAGC:



WELCOMED the delegates to the forum and briefly highlighted the background of the Aflasafe program in Zambia.

HIGHLIGHTED work done in developing the commercialization strategy, emphasizing that Aflasafe is indeed a commercially viable product in Zambia.

POINTED OUT that Aflasafe is a potentially lucrative opportunity for investors to expand their presence and product portfolios in Zambia.

INFORMED participants that the Forum will showcase in greater detail the commercial opportunity for Aflasafe in Zambia and shed more light on how prospective investors can engage with IITA to actualize the opportunity.

OFFERED EAGC's support to prospective investors to bring Aflasafe to the market through our advisory, technical assistance, trade facilitation and policy engagement services.

Presentations on Aflasafe and its commercial opportunities

Dr. Alejandro Ortega-Beltran, Plant Pathologist at IITA, briefly presented the causes and impacts of aflatoxin, and how Aflasafe combats aflatoxin. In his presentation, Dr Ortega-Beltran:



PROVIDED an overview of the effects of aflatoxin, pointing out that maize, groundnuts and sorghum are among the most affected crops.

INFORMED delegates that over \$670 million worth of trade losses globally can be attributed to aflatoxin, while the World Health Organization has listed aflatoxin as one of the most toxic substances in the world.

POINTED out that aflatoxin contamination has been found in grains, animal feed and subsequently food products derived from livestock such as milk, meat and eggs, thus posing a threat to public health from multiple directions.

SHARED data and information from Zambia and across Africa proving that Aflasafe is highly effective, affordable and practical solution for combating aflatoxin.

Mr. Kimwaga Mhando, EAGC's Trade Policy, Research and Advocacy Manager, presented the Commercial Opportunity for Aflasafe in Zambia. In his presentation, Mr. Mhando:



- **POINTED OUT** that the most viable target value chains are maize and groundnuts with the end-users (clients) being both smallholder and large-scale/commercial farmers.
- **HIGHLIGHTED** the potential market size for Aflasafe in Zambia is approximately 18,500 metric tonnes of Aflasafe per year which can be applied on the 1.85 million hectares of land under maize and groundnuts, in a best-case scenario, assuming all maize and groundnut farmers use the product.
- **PRESENTED** prospective demand trajectories for Aflasafe in maize and groundnut value chains, estimating that immediate and medium-term demand (estimated at approximately 90MT in total in the first year) will likely be

derived exclusively in the groundnut value chain, with long term demand being driven largely the maize value chain, with conservative projections estimating approximately 2,400 metric tonnes of Aflasafe requirement per annum by year 5.

- **INFORMED** the forum that the key market segments in the initial phase of Aflasafe commercialization are likely to be groundnut processors and exporters, many of whom operate extensive out-grower schemes, are keen on quality and already have incentives in place to reward their farmers for delivering aflatoxin-free crops.
- **ILLUSTRATED** the business case of Aflasafe use among maize and groundnut farmers, noting that the product is viable and yields significant return on adoption for both sets of farmers.
- **FURTHER PRESENTED** the most viable business model whereby a local distributor outsources Aflasafe manufacturing to existing manufacturers in Tanzania and/or Mozambique, noting that this model does not require capital expenditure, poses lower risks, and allows the local distributor to utilize its existing business structures to market the product.
- **HIGHLIGHTED** 6 main entry points to support successful Aflasafe commercialization, these being:
 - Groundnut exporters and processors that are keen on quality and/or have out-grower schemes
 - Leveraging the Farm Input Subsidy Program to subsidize the cost of Aflasafe to farmers, particularly in the maize value chain.
 - Partnership with development partners to support the early-phase costs of marketing Aflasafe noting that it is a new product unknown to its target market.
 - Leveraging the government's goodwill to strengthen enforcement of food safety standards and regulations, whereby stricter enforcement of food safety regulations and standards will create an incentive for compliance along the commodity value chains and thus stimulate uptake of Aflasafe.
 - Targeting women as early adopters noting their keen interest on protecting the health of their households.

- Leveraging the market availed by Food Reserve Agency, the largest off-taker of maize in the country, to incentivize adoption of Aflasafe in the maize value chain.

Next steps in actualizing the commercial opportunity of Aflasafe in Zambia

Ms. Jane Kamau, Commercialization and Agribusiness Manager at IITA presented the next steps for interested prospective investors to engage IITA which entail the following:



1. Companies interested in commercializing Aflasafe in Zambia are requested to write an email to IITA through Ms. Jane Kamau (J.W.Kamau@cgiar.org) by 30th July 2022.
2. IITA will share with the interested companies a detailed solicitation describing the requirements, eligibility considerations, evaluation criteria, submission requirements and other relevant information.
3. IITA will review submitted proposals and business plans from interested investors through a competitive and transparent process, with the successful bidder expected to be announced before end of the year.
4. IITA and the successful investor will sign a renewable Technology Transfer and Licensing Agreement to govern the partnership.

About the Eastern Africa Grain Council

The Eastern Africa Grain Council (EAGC) is a membership-based organization representing the grain sector in Eastern and Southern Africa. The Council exists to facilitate efficient, structured, profitable and inclusive grain trade in its 10 mandate countries, namely Kenya (Regional Headquarters), Uganda, Tanzania, South Sudan, Ethiopia, Burundi, Rwanda, Zambia, Malawi and the Democratic Republic of Congo.

EAGC draws its membership from grain sector value chain actors in its Member States, which include farmers, traders and processors. Support service providers and complimentary sectors such as agro-input suppliers, financial services and animal feed manufacturers also form part of the Membership. In facilitating structured grain trade in the Eastern Africa region, EAGC provides trade facilitation services through the EAGC G-Soko Grain Trading System; market and cross-border trade information through the Regional Agricultural Trade Intelligence Network (RATIN -www.ratin.net); pursuing appropriate policy reforms to support growth of structured grain trade through the Agricultural Trade Policy Advisory Forum for Eastern and Southern Africa (ATPAF-ESA); and capacity building of grain industry stakeholders through the Grain Business Institute (GBI).

For more information, please feel free to contact the EAGC Secretariat through the addresses below:

**EASTERN AFRICA GRAIN COUNCIL
REGIONAL OFFICE**

Mbaazi Avenue, off Kingara Road, Lavington, P.O. Box 218-00606, **NAIROBI, KENYA**

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Email: grains@eagc.org Web: www.eagc.org/www.ratin.net

<p>Burundi C/o Cerealis Burundi Q. Industriel Av nyuminkwi No 10, P.O. Box 7525, Bujumbura</p>	<p>DR Congo C/o ETS Bishweka N.VANNY Bishweka Vanny Q/LS Volcano, C/Goma, Kivu</p>
<p>Ethiopia C/o Soil and More Ethiopia Pvt Co. Ltd Ambassel Building, 7th Floor, EthioChinese Road, Kirkos Sub city, Woreda 09, Addis Ababa</p>	<p>Malawi Sogecoa Golden Peacock Hotel Office Building First Floor Office, Number 001, Plot No. 13/97, Area 13 new city center, along presidential way, P.O. Box 31565, Lilongwe</p>
<p>Rwanda No.16, Kabaya Village, Rwimbogo Cell, Nyarugunga Sector, Kicukiro District P.O. Box 4497, Kigali</p>	<p>Tanzania No. 2 Ruvu Street, Mikocheni B, off Rose Garden Road, P.O. Box 33619, Dar es Salaam</p>
<p>Uganda Plot 34 Agritech House, Martyrs Way, Ntinda, Kampala</p>	<p>Zambia C/o Grain Traders Association of Zambia, Suite C & 1 Stand No.6980, Katanga Road, P.O. Box 34863, Industrial Area, Lusaka</p>



Annex 1: List of participants

S/N	Full Name	Organisation
Private sector		
1	Abdul Cauio	Afla Livre, Mozambique
2	Bhubhinder Singh	A toZ Textile Mills Ltd
3	Zumilanji Silwimba	A to Z Textile Mills Ltd
4	Adrian Chibanga	Seed Co. Ltd
5	Dhlamini Phiri	Hazida Foods Ltd
6	Lloyd Muposhi	PINECREST CORPORATION
7	Fred Nandala	Seed Co. Ltd
8	Nokuthula Ndhlovu	Zambia Seed Company Limited (Zamseed)
9	William Creighton	Good Nature Agro
10	Kasaija Banage	Good Nature Agro
11	Michael Tembo	Good Naure Agro
12	Daniel Du Plessis	Export Trading Group
13	Prakash Tulsiani	Export Trading Group
14	Clara Nsama	Export Trading Group
15	Samson Chaziya	Export Trading Group
16	Alok Dikshit	Export Trading Group
17	Boss Fanizo Esikali Msimuko	Eastern Province Co-operative Union (2017) Limited
18	Eddie Khan	Share Africa Ltd
19	Jan Pistorius	Suravi Enterprises Zambia
Government and regional economic communities		
20	Abel Kabalo	Ministry of Local Government and Rural Development
21	Agnes Aongola	Ministry of Health
22	Benny Sichuunda	Zambia Compulsory Standards Agency
23	Julie Munsaka	Zambia Compulsory Standards Agency
24	Jerome Kambole	Zambia Compulsory Standards Agency
25	Mumba Ngosa	Zambia Compulsory Standards Agency
26	Themba Chabinga	Zambia Compulsory Standards Agency
27	Saili Kancheya	Zambia Compulsory Standards Agency
28	Harrison Manda	Zambia Bureau of Standards
29	Chrissy Shonga	Zambia Bureau of Standards
30	John Mukuka	COMESA ACTESA
Research organizations		
31	Dr Gerald Monga	Central Veterinary Research Institute
32	Dr Henry Kambafwile	National Institute for Scientific & Industrial Research
33	Dr Alick Muvundika	National Institute for Scientific & Industrial Research
34	Dr Mweshi Mukanga	Zambia Agricultural Research Institute

35	Dr Paul Kachapulula	University of Zambia
36	Dr Henry Njapau	Emeritus Research Scientist
The organizers (IITA and EAGC)		
37	Alejandro Ortega-Beltran	IITA
38	Ranjit Bandyopadhyay	IITA
39	David Chikoye	IITA
40	Jane Kamau	IITA
41	Juliet Akello	IITA
42	Gerald Masila	EAGC
43	Kimwaga Mhando	EAGC
44	Nelvin Obiero	EAGC
45	Janet Ngombalu	EAGC
46	Penina Gichuru	EAGC
47	Mufalali Simasiku	EAGC