PROGRAMME

28th - 31st March 2017 | Safari Park Hotel, Nairobi, Kenya
Welcome Note (Host)

Dear Delegates,

On behalf of the organizers of the 1st All Africa Postharvest Congress and Exhibition, I would like to personally welcome each one of you to the 1st All-Africa Post Harvest Congress and Exhibition.

I am glad that the effort and determination of the organizers have seen what started out as an idea come to fruition. This great convening has attracted diverse stakeholders in the food supply chain including policy makers, local and international agribusiness firms, potential investors, government officials, financial institutions, farmers, traders, processors, academic institutions, researchers, civil society organizations and thought leaders from all over the world.

The organizers have prepared a rich mix of conferencing activities for you including excursions, plenary discussions, parallel work streams, symposia and exhibitions. I am personally looking forward to the session where the 10 winners of the inaugural All Africa Postharvest Technologies and Innovations Challenge will be unveiled.

I would like to thank the Ministry of Agriculture, Livestock and Fisheries for the overwhelming support that has seen the congress organization succeed.

I highly appreciate the support from the World Food and Preservation Center to mobilize the global partners.

Without funding, this congress would have remained as just an idea. Therefore I am grateful to all the partners and sponsors who provided the funds to organize this great congress. A special mention goes to the Rockefeller Foundation, the strategic partner for their overwhelming support throughout the process of organizing the congress. I would also like to thank our partner institutions from around Kenya for their involvement in the organization of the congress.

I am looking forward to fruitful discussions, engaging conversations and a clear way forward to address food losses and waste in Africa. I urge you all to think outside the box and come out with strong and bold recommendations that will drive policy and the desired change.

As you enjoy the conference, I urge those coming from outside Kenya to consider spending an extra day to visit some of the out beautiful parks and touristic sites.

Welcome to Nairobi.

Peter M.F. Mbithi, PhD, EBS.
Vice Chancellor
University of Nairobi
Welcome Note (Strategic Partner)

Dear Delegates,

The Rockefeller Foundation is greatly honoured to welcome you to the first ever Africa-wide Post-Harvest Management Congress, as a supporter and Strategic Partner. This congress is unprecedented in Africa, and it provides an opportunity for all stakeholders in Africa’s agriculture sector to respond to the calls for action outlined in the United Nations’ Sustainable Development Goals (12.3) and the Malabo Declaration (2014), which have set a target of halving postharvest losses by 2030 and 2025 respectively.

We are proud to have you here, and to support this congress, which comes at an opportune time when the Foundation’s YieldWise initiative is a year into its implementation. YieldWise aims to reduce food losses by 50% by in Sub-Saharan Africa, and thus improve millions of rural lives. We see this work under YieldWise as the next chapter in our proud legacy of building global food security; we are committed to ensuring that food systems are resilient and that humanity has adequate food to thrive. Therefore, this congress is an avenue to connect with partners and test models that contribute to our initiative approach.

This is also a follow up to the first global Post-harvest Loss Congress that we supported and was held in Rome, Italy in 2015, which brought together a Community of Practice that cares about postharvest loss reduction and mitigating global hunger issues. We are looking forward to carrying forward the actionable next steps that were identified then, and rolling them out into action plans within the African continent.

We would like to applaud the University of Nairobi which has carried the mantle of post-harvest management and continued to create awareness around this issue, along with the World Food Preservation Centre and other partners. We invite you to mobilize your partners and stakeholders to join us and learn more about post-harvest management, and to form new partnerships for greater impact, so that our partnership in tackling the generational challenge of reducing food loss and waste in Africa will be all the more fruitful as we walk together.

Thank you.

Mamadou Biteye, OBE
Managing Director of the Rockefeller Foundation Africa Regional Office.
Welcome Note
Organizing Committee Chairs

Dear Delegates,

It is our great pleasure and honor to welcome you to Nairobi, Kenya for the 1st All-Africa Post Harvest Congress and Exhibition.

The Congress, whose theme is “Reducing Food Losses and Waste: Sustainable Solutions for Africa”, seeks to contribute to the global agenda of reducing postharvest food loss and waste. It seeks to define actionable solutions to reverse the current trend where an estimated 30 per cent or 13 billion metric tons of food produced for human consumption is lost or wasted along various supply chains. These losses result in at least 15% lost income for over 470 million actors across the agriculture value chain.

The Congress will provide an opportunity to respond to the calls for action outlined in United Nations Sustainable Development Goals (12.3) and the Malabo Declaration (2014) which have set a target of halving postharvest losses by 2030 and 2025 respectively.

The Congress has drawn the attention of over 500 diverse stakeholders in the food/agriculture sector including researchers, academics, farmers, traders, innovators, entrepreneurs, development agencies, civil society and policy makers from all over the world.

The Congress theme has been unpacked into five subthemes based on five key sub-sectors in Agriculture including:
1. Perishable food crop commodities (fruits, vegetables, roots & tubers, edible fungi)
2. Perishable livestock and fish food products (including milk, meat, eggs, fish)
3. Non-perishable food commodities (grains, including cereals and pulses; processed foods)
4. Capacity Development including training, research and extension programs
5. Gender, Youth, Policy and Governance issues affecting postharvest management

For each of the above thematic areas we have invited a great line-up of world re-known experts and thought leaders to speak and share their experiences.

The congress program will be delivered in four days of diverse interactive activities including excursions; panel discussions; plenary session; parallel work streams on thematic areas; poster sessions; special symposia organized by partner organizations; special breakfast meetings; business to business meetings; cocktail and dinner. In addition, there will be over forty (40) exhibitors from all over the world who will be showcasing innovations and technologies to address postharvest losses in various food value chains. One of the highlights of this congress is a special session where the top ten (10) innovators identified during the just concluded All Africa Postharvest Technologies and Innovations Challenge will be unveiled.

The innovators will pitch for their innovations in a special session where investors, donor agencies, government representatives have been invited. We would like to sincerely thank all the partners and sponsors who have made this inaugural congress to come to fruition. We would like to thank the Rockefeller Foundation for coming on board as the strategic partner in this congress. We highly appreciate the other organizations which have sponsored the congress as different sponsorship levels including International Institute of Tropical Agriculture, IITA (Gold sponsor); SNV World (Silver+ sponsor); Horticulture Innovation Lab, USAID (Silver+ sponsor); Swiss Agency for Development and Cooperation, SDC (Silver+); International Development and Research Center, IDRC (Silver sponsor); East Africa Trade and Investment Hub (Silver sponsor); Postharvest Education Foundation (Bronze sponsor); Global Cold Chain Alliance, GCCA (Bronze/Lunch sponsor; East Africa Grain Council, EAGC (Supporting sponsor); Alliance for a Green Revolution in Africa, AGRA (Supporting sponsor); Global Alliance for Improved Nutrition, GAIN (Supporting sponsor); AgResults (Supporting sponsor); AgriProFocus (Supporting sponsor); Compatible Technology International (Supporting sponsor).

We wish to most sincerely thank the Vice Chancellor of the University of Nairobi, Prof Peter M.F. Mbithi and for accepting the onerous task of hosting this inaugural event. The entire institutional support granted to this congress is very highly appreciated. We also appreciate the support of our global partner, World Food Preservation Center whose Chief Executive Officer, Dr. Charles Wilson has played a significant role to ensure a global outlook of the congress.

We are indebted to the local organizing committee members for their sacrificial efforts and commitment to organize this congress. The committee members are drawn from various institutions including University of Nairobi; Egerton University; Kenyatta University; Jomo Kenyatta University of Agriculture and Technology; Alliance for a Green Revolution in Africa (AGRA); Eastern Africa Grain Council (EAGC); Kenya Agricultural and Livestock Research Organization (KALRO); Food and Agriculture Organization of the United Nations (FAO); Ministry of Agriculture, Livestock and Fisheries (MOALF). Credit goes to our global partners under the leadership of Dr. Charles Wilson who helped to shape the agenda of this congress and were instrumental in mobilizing the international community to support and participate in this congress.

Finally, we thank you (delegates) for finding time to attend the congress. We hope that the four days will be time well-spent as you establish and strengthen linkages/partnerships while seeking to find sustainable solutions to food losses and waste.

WELCOME, BIENVENIDO, BENVENUTO, BEM VINDA, KARIBU

Dr. Jane Ambuko
Chair, Local Organizing Committee

Dr. Charles Wilson
Chair, Global Organizing Committee

Reducing food losses and waste: Sustainable Solutions for Africa
Organizing Committee

1. Jane Ambuko, Chairperson, Local organizing committee, University of Nairobi
2. Margaret Hutchinson, Vice Chairperson, Local organizing committee, University of Nairobi
3. Catherine Kunyanga, Chairperson, Postharvest Technologies and Innovations Challenge Committee, University of Nairobi
4. Judith S. Mbau, Exhibitions Coordinator, University of Nairobi
5. Joshua Amimo, Excursions Coordinator, University of Nairobi
6. William Maina, Excursions Coordinator, University of Nairobi
8. Willis Owino, Jomo Kenyatta University of Agriculture and Technology
9. Joyce Chepnegeno, Jomo Kenyatta University of Agriculture and Technology
10. Maina Mwangi, Kenyatta University
11. George Chemining’wa, University of Nairobi
13. Jacinta Ngwiri, Ministry of Agriculture, Livestock and Fisheries
14. Lusike Wasihiwa, Kenya Agricultural and Livestock Research Organization (KALRO)
15. Joseph Onyango Gweyi, Kenyatta University
16. Charity Gathambiri, Kenya Agricultural and Livestock Research Organization (KALRO)
17. John Macharia, Alliance for a Green Revolution in Africa (AGRA)
18. John Kimenju, University of Nairobi
19. Arnold Opiyo, Egerton University
20. Peter Kithenywa, Jomo Kenyatta University of Agriculture and Technology
22. Joyce Maina, University of Nairobi
23. Charles Gachiuire, University of Nairobi
24. Maureen Munjua, AgriProFocus
25. George Ooko, University of Nairobi
26. Jones Govereh, Alliance for a Green Revolution in Africa (AGRA)
27. Alice Ruto, Ministry of Agriculture, Livestock and Fisheries
28. Grace Chirchir, Ministry of Agriculture, Livestock and Fisheries
29. Joshua Ogendo, Egerton University
30. Felister Mbute, University of Nairobi
31. Rawlence Bett, University of Nairobi
32. Peter Wanjohi, Eastern Africa Grain Council, (EAGC)
33. Stanley Kimereh, Food and Agriculture Organization (FAO)
34. Esther Kariithi, Graduate Student
35. Emmanuel Amuoka, Graduate Student
36. Oliver Chanzu, Graduate Student
37. Penina Yumbya, Graduate Student
38. Sylvia Mwichuli (Brilliant Ideas Communication)
39. Jacinta Ochieng (Brilliant Ideas Communication)
40. Christabel Opudo (Brilliant Ideas Communication)

Global Organizing Partners

1. Charles Wilson, Chairperson/Coordinator, Global Partners
   Founder, Chairman & CEO World Food Preservation Center® LLC, USA
2. Lisa Kitinoja, Postharvest Education Foundation, USA
3. Elizabeth Mitcham, University of California, Davis, USA
4. Bernd Hallier, European Retail Academy, Veilchenweg, Hamburg, Germany
5. Anne Mbaabu, Alliance for a Green Revolution in Africa (AGRA)
6. Francis Appiah, Kwame Nkrumah University of Science and Technology, Kumasi, Ghana
7. Linda Dari, Professor, University of Development Studies, Tamale, Ghana
8. Obadina Adewale, Federal University of Agriculture, Abeokuta, Nigeria
9. Saneya Neshawy, Agriculture Research Center (ARC) Giza, Egypt
Reducing food losses and waste; Sustainable Solutions for Africa

Strategic Partner and Sponsor profiles
About The Rockefeller Foundation and its support to the Congress

For more than 100 years, The Rockefeller Foundation’s mission has been to promote the well-being of humanity throughout the world. Today, The Rockefeller Foundation pursues this mission through dual goals: advancing inclusive economies that expand opportunities for more broadly shared prosperity, and building resilience by helping people, communities and institutions prepare for, withstand, and emerge stronger from acute shocks and chronic stresses.

To achieve these goals, The Rockefeller Foundation works at the intersection of four focus areas – advance health, revalue ecosystems, secure livelihoods, and transform cities – to address the root causes of emerging challenges and create systemic change. Together with partners and grantees, The Rockefeller Foundation strives to catalyze and scale transformative innovations, create unlikely partnerships that span sectors, and take risks others cannot – or will not. For more information, please visit www.rockefellerfoundation.org.

In 2016, the Foundation launched YieldWise, a $130 million initiative aimed at reducing food loss and waste by half by 2030 across four value chains: cassava and tomato (in Nigeria) mango (in Kenya) and maize (in Tanzania).

Food loss and waste is an all-inclusive problem, eliminating it requires an all-inclusive solution that looks across the global food system to identify where the biggest losses occur and provide incentives for solving the problems at the root. YieldWise focuses on four great opportunities for transformation, they include:

a. Helping farmers access technologies and solutions to curb preventable crop loss;

b. Fixing broken links in the chain from farms to markets in African communities;

c. Engaging global businesses to account for the food wasted in their supply chains, beyond their own factories and farms;

d. Encouraging models and government policies that drive mutual economic growth, such as modern export policies.

Throughout our history, the Rockefeller Foundation has used the power of convening to bring together grantees and partners to discuss and share ideas to find solutions to address the challenges facing humanity today. The congress is one such opportunity, bringing stakeholders together to address the issue of post-harvest management.
The International Institute of Tropical Agriculture (IITA) is a not-for-profit institution that generates agricultural innovations to meet Africa’s most pressing challenges of hunger, malnutrition, poverty, and natural resource degradation. Working with various partners across sub-Saharan Africa, we improve livelihoods, enhance food and nutrition security, increase employment, and preserve natural resource integrity.

IITA is a member of CGIAR, a global agriculture research partnership for a food secure future. Since 1967, IITA has worked with international and national partners to improve the livelihoods of African farmers, especially women who make up half the agricultural workforce in Africa, and spur economic growth. IITA’s activities are guided by its current ambitious strategy—to lift 11.5 million people from the depths of poverty and revitalize 7.5 million hectares—by 2020.

IITA remains committed to science-driven improvement of agriculture and its research for development (R4D) programs focus on five crucial areas: improving crops, making healthy crops, managing natural resources, improving livelihoods, and enhancing nutritional value. IITA has initiated a special program to create jobs by making agriculture and agribusiness appealing to the youth.

The program is integrated in the Business Incubation Platform (BIP), the state-of-the-art technology delivery arm of IITA, which serves as a model to stimulate product development and private sector engagement, and to provide opportunities for market expansion. For more information visit: www.iita.org
SNV is a not-for-profit international development organisation. Founded in the Netherlands over 50 years ago, we have built a long-term, local presence in 38 of the poorest countries in Asia, Africa and Latin America and ground presence working in Agriculture, Renewable Energy, Water, Sanitation & Hygiene.

SNV’s specialty in agriculture combines focus on markets, women and resilience. We do this by bringing innovative products targeting the goals of income, food and nutrition security, and climate change resilience. SNV Agriculture’s products targeting are applied across a range of commodity value chains including eight key commodities – horticulture, livestock, palm oil, dairy, cassava, rice, coffee, and cocoa. Our participation and support for this convention brings ideas, solutions and/or technologies to address food losses in Africa.

SNV offers holistic approaches to address the multiple causes of food loss and unsafe food that are inherent to many smallholder supply chains. Two projects in Kenya, The Kenya Market led Horticulture Programme (HortIMPACT) and Voice for Change Partnership, seek to promote private sector led solutions and advocate for informed changes in government and business respectively towards zero food loss and waste. HortIMPACT programme promotes innovative solutions and technologies from the private sector by working together with entrepreneurial small and medium sized farmers and Kenyan and Dutch Agribusinesses. And in partnerships with relevant national and county government institutions in a concerted sector effort to reduce food losses.

Our Voice for Change Partnership programme recognises the need for verified, concrete information as proof to trigger changes in government and business in addressing food losses. This congress is a timely platform for these two projects to contribute knowledge from our global experience in horticulture and in evidence based advocacy towards food loss reduction in Africa.

The Swiss Agency for Development and Cooperation (SDC) is Switzerland’s international cooperation agency within the Federal Department of Foreign Affairs (FDFA).

In operating with other federal offices concerned, SDC is responsible for the overall coordination of development activities and cooperation with Eastern Europe, as well as for the humanitarian aid delivered by the Swiss Confederation. The goal of development cooperation is that of reducing poverty. It is meant to foster economic self-reliance and state autonomy, to contribute to the improvement of production conditions, to help in finding solutions to environmental problems, and to provide better access to education and basic healthcare services.

Grain postharvest loss reduction initiatives supported by the Swiss Agency for Development and Cooperation (SDC) in Sub-Saharan Africa Postharvest losses in grains and pulses are significant throughout Sub-Saharan Africa (SSA). At an estimated average rate of 15% loss, 15 to 20 million metric tons of cereals are lost every year for human consumption, thereby exacerbating food insecurity (FAO). While increasing agricultural productivity will be inevitable to feed a fast growing population, reducing postharvest food losses along the way from field to fork may not only be more cost-efficient, but can also help to reduce the ecological footprint of food production for human consumption.

Based on the successful POSTCOSECHA program in Central America that led to the adoption of the metal silo by more than 400’000 smallholder households, SDC started in 2008/2009 supporting a number of initiatives on postharvest management in SSA. Current initiatives are implemented in several countries (Benin, Ethiopia, Mozambique, and Tanzania) and at regional level by different international and national partners and networks (FAO/IFAD/WFP, HELVETAS-Swiss-Intercooperation, FANRPAN, AFAAS, AGRIDEA).

The total support of SDC for postharvest food loss reduction programs and initiatives in SSA is approximatively USD 25 million for the period 2012 to 2019. These postharvest food loss reduction programs focus on innovation and promotion of improved postharvest technologies and best practices for smallholder farmers, broad sharing of knowledge (e.g. through the FAO Community of Practice CoP) and addressing policy constraints related to postharvest food losses.

To trigger massive and large scale distribution of improved postharvest technologies, demand-driven and business model based approaches are inevitable as public resources will never be sufficient to reach millions of smallholder households in Africa. Such approaches, however, face a number of tough challenges ranging from unfavourable business environments to heavily paternalistic donor programs that jeopardize demand-driven adoption of new technologies. SDC highly welcomes and sponsors this congress. It provides a unique learning and sharing environment to empower more and more stakeholders to lead successful food loss reduction initiatives throughout Africa.
Reducing food losses and waste: Sustainable Solutions for Africa

The USAID East Africa Trade and Investment Hub (the Hub) boosts trade and investment with and within East Africa. It does this by deepening regional integration, increasing the competitiveness of select regional agricultural value chains, promoting two-way trade with the United States (U.S.) under the African Growth and Opportunity Act (AGOA) and facilitating investment and technology to drive trade growth intra-regionally and to global markets.

The Hub supports the U.S. government’s presidential Trade Africa and Feed the Future initiatives. The Hub’s agriculture and agribusiness component works across all East African Community countries with the overall goal of doubling intra-regional trade in staple foods by the end of the project, August 2019.

This congress’ emphasis on post-harvest loss reduction is aligned to that goal. Reduction of post-harvest losses enhances food availability and food quality thereby increasing tradeable volumes.

We are looking forward to discovering new post-harvest technologies and strategies from regional and international researchers and innovators who will present at the congress. The Hub actively looks for under-utilized technologies that could be scaled up regionally to combat food insecurity.

The Horticulture Innovation Lab builds international partnerships for fruit and vegetable research to improve livelihoods in developing countries. The program is funded by the U.S. Agency for International Development and led by a team at the University of California, Davis, as part of the U.S. government’s Feed the Future initiative. The program team and its projects help the world’s poorest people break out of a persistent cycle of poverty by improving smallholder farmers’ abilities to grow and sell high-value crops. Improving livelihoods — through higher profits and diversified, nutrient-rich diets — is a primary goal for the Horticulture Innovation Lab’s research efforts around the world. The program’s work is guided by ensuring gender equity, improving information access, targeting innovative technologies and increasing research capacity. Horticulture Innovation Lab projects span the value chain of fruit and vegetable production, from seed systems to postharvest processing. Individual projects are led by U.S. university researchers with collaborating partners in developing countries, with funding from $40,000 to $2 million. Collaborations have included more than 18 U.S. universities and 200 organizations in more than 30 countries of Africa, Asia and Latin America. Through partnerships and collaborative research, the program also aims to build the capacity of researchers, institutions and farmers to advance horticultural science.

To scale up research results and new horticultural technologies, the Horticulture Innovation Lab also funds Regional Centers to serve as hubs for horticultural knowledge, technologies, and training.
The International Development Research Centre (IDRC) funds research in developing countries to promote growth, reduce poverty, and drive large-scale positive change. The International Development Research Centre (IDRC) funds research in developing countries to promote growth, reduce poverty, and drive large-scale positive change.

A Crown corporation, we support leading thinkers who advance knowledge and solve practical development problems. We provide the resources, advice, and training they need to implement and share their solutions with those who need them most. In short, IDRC increases opportunities — and makes a real difference in people’s lives. Working with our development partners, we multiply the impact of our investment and bring innovations to more people in more countries around the world.

IDRC was established by an act of Canada’s parliament in 1970 with a mandate “to initiate, encourage, support, and conduct research into the problems of the developing regions of the world and into the means for applying and adapting scientific, technical, and other knowledge to the economic and social advancement of those regions.”

The Global Cold Chain Alliance (GCCA) is very pleased to be supporting the first ever All Africa Postharvest Congress and Exhibition! GCCA works tirelessly to drive new innovations and development, addressing postharvest loss and related issues through work on cold chain projects around the continent.

Supporting this Congress is an exciting opportunity for us at the GCCA, and we are excited to be a part of these developments to address one of the world’s most pressing issues. The GCCA represents all major sectors of the cold chain and unites partners to be innovative leaders in the temperature-controlled products industry. Through its four Core Partners, we support more than 1,000 companies in 71 countries who serve the food industry.

The Postharvest Education Foundation is a non-profit 501(c)3 organization dedicated to improving postharvest handling practices, providing low cost training and education programs and reducing global food losses. Our innovative “Global Postharvest E-learning Program” takes about one year to complete, during which our PEF e-learners gain knowledge, practical skills and experience and then graduate as “Postharvest Specialists”.

PEF is pleased to support the All Africa Postharvest Congress and Exhibition in March 2017. Each trainee receives long term mentoring, with the goal that the knowledge and skills they gain will help them to promote postharvest technologies to help solve food loss problems in their own countries.

Our PEF e-learning program graduates are working as consultants or are involved in on-going development projects and local jobs that include regular training events, so they reach an average of 30,000 farmers/marketers per year, teaching them about improved handling, food safety, storage, processing and marketing.

www.postharvest.org
Supporting Sponsors

The Alliance for Green Revolution in Africa – AGRA, is an African-led alliance focused on putting smallholder farmers at the center of the continent’s growing economy by transforming agriculture from a solitary struggle to survive into farming as a business that thrives. Founded in 2006, at a time when agricultural development was emerging from a 20-year decline characterized by minimal growth and investment in the sector, AGRA’s mission is to catalyze and sustain an agricultural transformation in Africa through innovation-driven productivity increases and access to markets and finance that improve the livelihoods of smallholder farmers. From the beginning, AGRA was positioned to tailor the research, technologies, and lessons of the world to the needs and opportunities of smallholder farmers in particular agro-ecologies and farming systems. AGRA’s approach was private sector driven and represented a more robust and sustainable way of addressing chronic, systemic failures in African agricultural development.

Together with its partners— including African governments, researchers, donors, the private sector and civil society—AGRA works to catalyze an agricultural transformation in Africa through innovation-driven and sustainable productivity increases and access to innovative finance and markets that improve the livelihoods of smallholder farmers. As the sector that employs the majority of Africa’s people, nearly all of them smallholder farmers, AGRA recognizes that transforming agriculture into a productive, efficient, and sustainable system is essential to ensuring food security, lifting millions out of poverty, and driving equitable growth across the continent.

The Global Alliance for Improved Nutrition (GAIN) is an international organization driven by the vision of a world without malnutrition. Globally, at least one in three people are consuming nutritionally poor diets. Billions are priced out of affordable diets even if they know they need them. GAIN strives to make healthier food choices more affordable, more accessible, and more desirable. This means engaging with businesses, governments and civil society to form alliances that innovate and deliver food system solutions to the complex problem of malnutrition. Gain has created the Postharvest Loss Alliance for Nutrition (PLAN) that supports reducing food loss and waste from both an agronomic and nutrition standpoint, which must be addressed in concert as part of the strategy to end hunger and all forms of malnutrition.

PLAN acts as both a global nucleus for coordination, programming, research, knowledge exchange and investment on postharvest food loss as well as a national hub in emerging markets for business to business (B2B) engagement. GAIN serves as a backbone organization driving for collective impact. At the center of the Alliance is a B2B Engine where local businesses are matched with international industry leaders and technical experts to increase local enterprises’ access to knowledge, technologies and the financial services.

Eastern Africa Grain Council (EAGC) is a regional private sector membership, Not-for-Profit organization founded in 2006. Our mandate operation span over 10 countries in Eastern Africa region including Kenya, Uganda, Tanzania, Rwanda, Burundi; DR Congo, Zambia, Malawi, Ethiopia and South Sudan. The membership comprises of: Active members - those directly dealing in handling grains including Grain producers, Grain Traders and Grain Processors/Millers; Affiliate members – Regional and national business associations for the farmers, traders or processors who affiliate as an organization and Associate members-service providers to the grain sector including inputs, financial institutions and international organizations with an interest in the grain sector.

Our mandate is to develop, promote, and influence structured grain trading system in the Eastern Africa region with defined rules and regulations. Improve the policy and trading environment in the regional grain trade, strengthen market linkages and reduce constraints along the grain value chain.

To achieve this, EAGC has developed a number of interventions and programs targeted at addressing post-harvest losses regional and national markets for grain commodities hence recognized as the “Voice of the Grain Sector” regionally and internationally; Structured Trading Systems (STS) for the grain value chain including post-harvest management, grading and standards, grain storage and warehousing, market and trade linkages, as well as reduction transaction costs through creating efficiency in the grain value chain; Promoting market information through the EAGC Regional Agricultural Trade Intelligence Network (RATIN) in www.ratin.net; Training and Capacity building of grain value chain stakeholders to be practitioners of Structured Trading Systems through the Eastern Africa Grain Institute (EAGI) - the specialized training division of EAGC and; Policy and Advocacy to create an enabling environment for investments in the grain value chain in order to achieve a predictable rule based regulatory framework with minimum interference by governments.

AgResults is a US$118 million multilateral initiative financed jointly by the governments of Australia, Canada, the United Kingdom, the United States, and the Bill & Melinda Gates Foundation. AgResults seeks to increase private sector investment in food security and agriculture, using “market-pull” mechanisms—economic incentives, or grants, that are provided to organizations who achieve specific development outcomes, where private sector investment is typically absent or hindered due to market uncertainties. In doing so, AgResults goes beyond traditional aid/technology-push mechanisms that provide funding, technical assistance, or other inputs to create development impacts. Instead, AgResults-financed pull mechanisms define a development problem and pay only for development outcomes that are achieved.

See www.agresults.org for more details. The Kenya AgResults project addresses grain post harvest losses by stimulating widespread smallholder farmer adoption of improved on-farm grain storage systems, whilst catalyzing a market driven mechanism for such solutions. The project employs a pull strategy, providing financial incentives to participating private sector companies based on predetermirned sales of hermetic devices to smallholder farmers. AgResults is proud to support the 1st Africa Post Harvest Congress under the aegis of the University of Nairobi, an institution that is contributing significantly to improving global food security.

Reducing food losses and waste; Sustainable Solutions for Africa
Supporting Sponsors

**KIE-Land O Lakes**

Feed the Future Kenya Innovation Engine is a five-year $177 million program funded by USAID to identify, foster, and bring to scale innovative market-driven solutions to persistent food insecurity, under-nutrition and poverty. By providing targeted financial support and technical assistance to entrepreneurs who design new concepts, products and services, KIE is fulfilling its mandate to improve agricultural productivity and markets and increase private sector investment in agriculture and nutrition-related activities.

To date, KIE has reached almost 140,000 farmers, more than 100,000 of whom have adopted new technologies for better livelihoods in 22 implementation counties. The new technologies span a range of sub-sectors including: market access; ICT for farm records management; efficient dissemination of agricultural information and last-mile distribution of farm inputs; dairy management systems; farm records management information systems; smallholder post-harvest management.

Post-harvest management forms a critical point in the agricultural value chain; best practices in post-harvest management result in significant positive impact in farmers’ earnings and therefore livelihoods, as well as overall community nutrition, while poor practices have far-reaching detrimental effects. KIE supports enterprises such as the University of Nairobi’s Horticulture Department in this niche segment to develop and test innovative approaches to post-harvest management relevant to the Kenyan context and thus reduce postharvest losses.

**CTI**

CTI is a global NGO that equips smallholder farmers in Africa with innovative tools and training to harvest and process food to improve their livelihood. CTI technology reduces women’s drudgery, improves food quality, and creates new opportunities for business leaders in the rural sector through surplus sales and value addition.

Among our technologies are: groundnut tools for harvesting, striping, and shelling high-quality peanuts, efficient and gender sensitive equipment for making fine flour or creamy nut paste, etc. In partnerships we create solid post-harvest designs, supply affordable tools and offer training in Africa.

**AgriProFocus**

AgriProFocus is an international multi-stakeholder network in the agri-food sector consisting of farmer entrepreneurs, private sector enterprises, governments, knowledge institutions and civil society organisations. Active in 13 countries in Africa and South-East Asia, and linking 24,300 agribusiness professionals worldwide, we are the go-to network for entrepreneurs in agricultural value chains.

The first all-Africa post harvest congress and exhibition is timely for the network as it’s a follow up to previous joint action with network members. A key ingredient in this is being able to support the business drivers that facilitate post harvest loss reduction and innovations. This platform provides an opportunity to create awareness on innovations and strategies our members have developed to respond to postharvest losses.

We look forward to deepening our partnerships with like-minded stakeholders in the sector.

Maureen Munjua,
Country Coordinator, AgriProFocus Kenya
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Website: agriprofocus.com/Kenya
Day 1 (28th MARCH 2017) Summary

7.00 am  Meet at Safari Park Hotel Reception

7.15 am  Departure

EXCURSIONS – 3 ROUTES

Route 1  (Horticulture – Real IPM, Practical Training Center, Burton and Bamber Fruit Processors, Makongeni Open Market)

Route 2  (AAA fresh produce processors, Kings Commodities, Classic Food)

Route 3  (Dairy – Githunguri/Fresh Dairies, Smallholder Dairy Farmers, University of Nairobi Field Station)

Registration

Setting up of Exhibition Booths and Posters

Self-Organized Dinners
# Day 2 (29th March, 2017) Summary

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<th>Time</th>
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| 7:00 am – 8:30 am | Breakfast sponsored by AgResults  
Viewing of Posters/Exhibitions |
| 8:30 am – 10:30 am | Plenary session: Role of Postharvest Management in Africa’s Economic Transformation Agenda |
| 10:30 am – 11:00 am | **TEA BREAK**  
Parallel Work streams  
1. Agro-processing, value addition and valorization solutions for postharvest loss and waste.  
2. Postharvest handling and technologies for perishable commodities.  
3. Postharvest handling and technologies and storage solution for grains  
4. Aflatoxin management, food safety and nutrition  
5. Policy, practice, youth and gender angles in postharvest management |
| 11:00 am – 1:30 pm | **LUNCH BREAK** |
| 2:15 pm – 3:45 pm | **Official Opening Ceremony**  
Chief Guest, Kenya’s Deputy President, H.E William Ruto |
| 3:45 pm – 5:15 pm | **Panel discussion: Zero Tolerance to Food Loss: Policy Dialogue towards Halving Postharvest Losses in Africa** |
| 5:15 pm – 6:30 pm | **POSTER PITCHING SESSION** |
| 6:30 pm – 8:30 pm | **ROCKEFELLER FOUNDATION CONGRESS COCKTAIL** |
| 8:30 pm | **SELF-ORGANIZED DINNERS** |
ORGANIZING CHAIRPERSONS

Dr. Charles Wilson

Dr. Wilson’s career spans over 15 years in academe at the University of Arkansas and Ohio State University and 37 years with the USDA. In the last 5 years he has been involved in the establishment of the World Food Preservation Center® LLC. Dr. Wilson has authored over 250 scientific publications, 20 patents, and 6 books. He has been invited to organize and chair ten international symposia, to present papers at ten additional symposia, to deliver over 40 lectures in 22 states and eleven countries, and to lead seminars and discussions with students at ten major universities. He has organized three international BARD-sponsored workshops on food preservation by biological means. He was instrumental in the development of the first EPA-registered “biofungicide” for the control of postharvest diseases. Dr. Wilson was the first to conceptualize the field of postharvest biocatalysis (Stevens and Khan in their book “Recent Advances in Agriculture” (2008) state, “The pioneering work of Dr. Charles L. Wilson has highlighted the potential of utilizing biological control of postharvest diseases of fruits and vegetables, and he is considered by us to be the father of biological control of postharvest diseases of fruits and vegetables.

HONORS: Highest honor of the Arkansas Alumni Association for Distinguished Research and Teaching
Distinguished Service Award by the Washington Academy of Sciences for “pioneering research in
understanding and manipulating plant diseases.”
- Elected Fellow of the Washington Academy of Sciences
- Selected ARS-NAA “Scientist of the Year” for “pioneering research in the biological control of postharvest
diseases of fruit.” Elected Fellow of the American Phytopathological Society
- Received the Award of Excellence in Technology Transfer, Federal Laboratory Consortium
- USDA ARS Technology Transfer Award.

Dr. Jane Ambuko

Dr. Jane Ambuko is a senior lecturer and head of Horticulture at Department of Plant Science and Crop Protection of University of Nairobi. She holds a Bsc Agriculture and Msc Horticulture from University of Nairobi (Kenya) and a PhD in Agricultural Sciences (Pomology and Postharvest Major) from Tsukuba University (Japan). She has also received additional training in Postharvest Management from the Postharvest Education Foundation and Postharvest Training Center, UC Davis, USA. Dr Ambuko’s area of specialization is Postharvest Science and Technology. Her main research focus is adapting, validation and promotion of postharvest technologies. She is involved is several multi-disciplinary research projects geared towards finding sustainable solutions to challenges facing smallholder farmers in developing countries. Besides teaching and research, she is involved in outreach and capacity development initiatives aimed at empowering smallholder farmers especially on postharvest management and market access.

Dr. Ambuko has authored (co-authored) several papers in peer reviewed journals and conference proceedings. She is a member of several professional associations including the International Society of Horticultural Science (ISHS), American Society of Horticultural Science (ASHS), Horticultural Association of Kenya (HAK), Kenya National Young Academy of Sciences (KNYAS). She is a recipient of a number of prestigious fellowships including the Norman Borlaug Fellowship, African Women in Agricultural Research and Development (AWARD), and Africa Biosciences Challenge Fund – ABCF. In 2013-2014, Dr. Ambuko was appointed by the FAO-United Nation’s Committee on Food Security to the High Level Panel of Experts (HLPE), the project team on ‘Food Losses and Waste in the Context of Sustainable Food Systems’ (HLPE report #8).
DAY 2 SESSION LEADS & SPEAKERS

Betty Kibaara

Betty Kibaara is an Associate Director at the Rockefeller Foundation, Africa Region Office. At the Foundation, Betty leads the implementation of the YieldWise Initiative whose goal is to reduce food loss in Maize (Tanzania), Mangoes (Kenya) and Cassava and Tomato value chains to improve livelihoods of the small holder farmers. She serves as the regional champion for the Foundation’s initiatives in strengthening food security, agribusiness and the building of resilience to the devastating effects of climate change to enable real, sustainable and equitable economic growth.

Prior to joining the Rockefeller Foundation in 2009, Betty worked as a Research Fellow at the Tegemeo Institute of Agricultural Policy and Development, Egerton University. For over a decade she conducted numerous large-panel household data surveys and has published widely on food security, efficient use of agricultural inputs and agricultural markets. On the policy front, she has published work on the Comprehensive African Agricultural Development Program and the agricultural policy-making process in Kenya. Ms. Kibaara holds a Master of Science Degree in Agricultural and Resource Economics, Colorado State University, USA and Bachelor of Science in Agribusiness Management, Egerton University, Kenya.

Dr. Damian Ihedioha

Dr. Damian Ihedioha is a Nigerian, had Bachelor’s degree in Food Science and Technology, and his Master’s degree in Food Technology from the University of Ibadan, Nigeria. He had his Doctor of Philosophy (PhD) degree in Public Health Nutrition also from University of Ibadan. Dr. Ihedioha is a renowned agricultural value chain specialist specializing in post-harvest losses reduction and agro-processing of agricultural commodities to diversify foods, enhance their shelf-life and ensure food security. Dr. Ihedioha has traversed across the food industry, first as a Brewer with Golden Guinea Breweries Ltd, Umuahia; Shift Production Manager, Cadbury Nigeria Limited and Research Supervisor at the International Institute of Tropical Agriculture (IITA) Ibadan. Dr. Ihedioha came back to IITA after his PhD degree to IITA as a Scientist (Agro Processing Specialist). After a stint with IITA, he was seconded to the United States Agency for International Development (USAID) project on Maximizing Agricultural Revenue and Key Enterprises in Targeted Sites (MARKETS) as Agro Processing and Business Development Specialist. It was from there that Dr. Ihedioha joined the African Development Bank as Agro Industry Specialist, and currently the Coordinator of the Bank’s Flagship on Post-harvest Losses Reduction and Agro-Processing. Dr. Ihedioha had previously developed the Framework for Reducing Post-harvest Losses (2010 – 2015) which was at the time the Bank’s document for engaging with institutions of post-harvest losses reduction issues. Along the line, Dr. Ihedioha was a Senior Lecturer at Federal University of Technology, Minna in the Department of Food Science and Technology.
DAY 2 SESSION LEADS & SPEAKERS

Linus Opara

Prof. Opara graduated with degrees in agricultural engineering from the University of Nigeria, Nsukka, specialising in agricultural mechanization (BEng First Class Honours 1987; MEng cum laude 1989) and Massey University in New Zealand (PhD 1993) specialising in postharvest engineering. In 2012 he completed the Certificate on Innovation for Economic Development at the Kennedy School, Harvard University. He currently holds the position of Distinguished Professor at Stellenbosch University, where he is also the DST-NRF South African Research Chair in Postharvest Technology. His research activities focus on high-level capacity building through research on innovative postharvest technologies to reduce losses, maintain quality and enhance market access. Prof. Opara is a chartered agricultural engineer (UK) and certified food scientist. He has held academic and management positions in New Zealand and Oman, and consulted extensively in various continents for international developments agencies and organisation on issues related to agricultural transformation, postharvest management and economic development. He is the founding editor-in-chief of the International Journal of Postharvest Technology and Innovation, President of the Pan African Society for Agricultural Engineering, and In-coming President of the International Commission of Agricultural and Biosystems Engineering. He is a member of the Academy of Science of South Africa, Fellow of the South African Institution of Agricultural Engineers, Life member of the American Society of Agricultural and Biological Engineers, Life member of the member of the Asian Association for Agricultural Engineering, and Life member of the Indian Society of Agricultural Engineers. He is the founding editor-in-chief of the International Journal of Postharvest Technology and Innovation, President of the Pan African Society for Agricultural Engineering, and In-coming President of the International Commission of Agricultural and Biosystems Engineering. He is a member of the Academy of Science of South Africa, Fellow of the South African Institution of Agricultural Engineers, Life member of the American Society of Agricultural and Biological Engineers, Life member of the Indian Society of Agricultural Engineers. He serves on the Presidium of the International Commission of Agricultural and Biosystems Engineering and is a member of the Executive Committee of the International Society for Horticultural Science. He has served on the editorial boards of over 100 academic journals and is a member of the editorial boards of over 50 international journals. His research interests include postharvest technology, agricultural engineering, agricultural and biological engineering, and sustainable development. He has published over 200 articles in peer-reviewed journals, and made over 50 invited keynotes and plenary lectures at international conferences. In 2015, he received the 2015/2106 Impact Research and Science in Africa (IMPRESSA) Award for excellence in research & building Africa’s human resources capacity” by RUFORUM – the Regional Universities’ Forum for Capacity Building in Agriculture in Africa. During the African Heads of State Summit in Ethiopia January 2016, Prof. was honoured as the 2015 Laureate of the African Union Kwame Nkrumah Continental Prize for Earth and Life Science – the continent’s highest prize for senior researchers.

Sanginga Nteranya

Nteranya Nteranya assumed the leadership of the International Institute for Tropical Agriculture (IITA) on November 1, 2011.

Before joining IITA, he was the Director of the Nairobi-based CIAT-TBSF. Sanginga has more than 21 years of experience with the University of Zimbabwe, International Atomic Energy Agency (IAEA) in Austria, and CIAT-TBSF; in agricultural research and development, particularly in the fields of applied microbial ecology, plant nutrition, and integrated natural resources management in Africa, Latin America and Southeast Asia.

Prior to transferring to CIAT-TBSF in late 2002, Sanginga spent 14 years at IITA in various capacities, including principal scientist and head of the soil microbiology unit; coordinator of a project to improve high intensity food and forage crop systems and short fallow systems to arrest land degradation due to land use intensification; and leader of the multidisciplinary program to improve and intensify cereal-legume systems in the moist and dry savannas of West and Central Africa, collaborating with many scientists in national and international institutions. His career has also focused on building the capacity of young scientists in Africa.
Ranajit Bandyopadhyay

Ranajit is a Principal Plant Pathologist at the International Institute of Tropical Agriculture (IITA), Ibadan, Nigeria where he has been guiding research and development activities related to crop diseases and mycotoxins since 2002. He completed his PhD from Haryana Agricultural University, Hisar and joined the International Crops Research Institute for the Semi-Arid Tropics (ICRISAT) in 1980. He has 36 years of research and development experience in Asia, Africa and the Americas. His research on mycotoxins focuses on surveillance, bi-ecology of toxigenic fungi, integrated management of mycotoxins and policy and institutional issues.

Ranajit leads initiatives on research, technology transfer, commercialization and scaling-up of the aflatoxin biocontrol technology Aflasafe in 11 African nations. He has authored nearly 175 publications and serves on the editorial board of two international journals. Ranajit is a Steering Committee member of the African Union based Partnership for Aflatoxin Control in Africa (PACA) and Chairs its Technical Sub-Committee. He was jointly named as ‘Change Agent for Research and Technology’ by PACA in 2016. IITA recognized Ranajit with the Outstanding Scientist Award in 2010, Outstanding Team Award in 2012, and Outstanding Paper Award in 2015.

Dr Thomas Dubois

Dubois is the Regional Director for Eastern and Southern Africa at the World Vegetable Center, and is based in Arusha, Tanzania. Thomas obtained his PhD from Cornell University in 2003, and has worked for over a decade with the International Institute of Tropical Agriculture (IITA) in several countries in Africa, where he worked on enhancing banana seed systems as well as marketing of tissue culture in banana using smallholder business approaches. Dr Dubois also co-lead IITA’s efforts in managing aflatoxins in maize using Aflasafe, a biological control option, throughout the continent.

He also has experience working on rice value chains and helped harmonize action plans in AfricaRice’s 22 member countries. Thomas has published extensively with over 40 research articles in impact factor journals, and numerous other articles, book chapters, farmer manuals and books. In 2006, he received the CGIAR Young Scientist of the Year award.

Anne Mbaabu

Mrs. Mbaabu, holds a Master of Science degree in Food Science & Technology (Processing and Control) and a Bachelor degree in Food Science and Technology, both from the University of Nairobi, Kenya. Currently, she is the Head of Markets at the Alliance for a Green Revolution in Africa (AGRA), charged with market transformations to link smallholder African farmers of food staples to markets, promoting structured trading systems, value addition of food staples and directing investments into alternative uses of staples and addressing issues to create an enabling environment for markets to perform efficiently.

Previously, Mrs. Mbaabu held different positions including Executive Director, The Eastern Africa Grain Council, Managing Director, Proctor & Allan East Africa Ltd. and conducted various consultancies with senior management positions at Unga Group Ltd, Unga Feeds Ltd, and CPC Kenya Ltd.

Mrs. Mbaabu has more than 35 years of involvement and experience in a wide range of food industry management and development areas in Small Medium Enterprises (SME) in Africa. She has also worked in international development in the agricultural sector and commercialization of SME projects in Africa that include implementation of innovative structured agricultural trade systems and strategic planning, value chain analyses, training and counseling/mentorship of SME’s.
7.00 am – 8.30 am  Breakfast sponsored by AgResults Viewing of Posters/Exhibitions

8.30 am – 10.30 am  **Plenary Session:**

**Role of Postharvest Management in Africa’s Economic Transformation Agenda**

**Session Summary**

Food security in Africa has remained elusive. The huge postharvest food loss of around 40% is untenable as this significantly reduces the amount of food available to consumers, reduces amount of marketable produce and results in income losses of 15% or more for the 470 million smallholder farmers, as well as for food traders, processors, transporters, and retailers. This session brings together private sector and industry players to evaluate and discuss whether postharvest management makes economic sense to Africa’s economic transformation and food security agenda. The objective of the session is to share experiences in research and technology application to postharvest management of some value chains, highlight examples of game-changing best practices on assisting farmers access markets and propose actionable recommendations for action towards the continental goals of reducing postharvest losses.

**Moderator** Betty Kibaara

**Rapporteurs:**

Maina Mwangi
Lusike Wasilwa
Judith Mbau

**Lead Speakers:**

Dr. Damian Ihedioha, African Development Bank.

Linus Opara,
University of Stellenbosch

Sanginga Nteranya
(International Institute of Tropical Agriculture)

**Panel Discussants**

Prof Ruth Oniango, Rural Outreach Africa
Anne Mbaabu, Head of Markets, AGRA
Rick Van Keulen, SNV
John Logan, Technoserve

10.30 – 11.00 am  **TEA BREAK**
Parallel Work Streams

Work Stream 1
Agro-processing, value addition and valorization solutions for postharvest loss and waste.

Session Lead: Alliance for a Green Revolution in Africa (AGRA)
Lead paper: Anne Mbaabu

Rapporteurs:
George Ooko
Peter Kahenya
Willis Owino

Session Summary
Food both from plant or animal origin are highly perishable. Despite taking all the precautions in postharvest handling of the food product, it is still impossible to keep them in their farm-fresh state for considerable periods of time. As a result, to preserve the food for later utilization or for transportation to distant markets, food processing and value addition is necessary for extended shelf life. The aim of food processing and value addition is to prevent undesirable changes in the wholesomeness, nutritive value, and sensory qualities of the food product. This is accomplished by controlling chemical, biochemical, physiological, and microbiological activities within the food product. However, processing and value addition generates huge volumes of by products and wastes that can cause serious environmental problems, such as water pollution, unpleasant odors, asphyxiation, vegetation damage and greenhouse gas emissions. In addition, food waste disposal is costly and adds to the total cost of food production. There is need for integrated technologies that address specific postharvest loss or waste in the food value chains. This session will explore some of the processing strategies, technologies, innovations, and products. The challenges and opportunities in agro-processing will also be discussed.

Oral Presentations
- Fresh-Cut Markets and Opportunities for Income and Nutrition Security: Francisca Aba Ansah
- Improving Post-Harvest Handling Technologies for Farmers in Northern Uganda: A Case Study of North East Chilli Producers Association: Florence Agwang
- Effect of Harvesting and Postharvest Processing Methods on the Quality of a Hararghe Coffee (Coffea Arabica L.) in Eastern Ethiopia: Mohammdsani Amin
- Assessment of pre- and post- harvest challenges facing mango farmers in Eastern, Coast and Nyanza regions of Kenya: Everlyn Okoth
- Processing and Value addition as a Mitigator of Postharvest Food Losses: The Kenya Status: Willis O. Owino
- Development of a protein fortified mango fruit bar: Everlyn Okoth
- Development of Africa Pearl Millet Sourdough Bread: Nutrition and Economic Implications: Adepehin, J.O.
- Accessing Global Market Place through Post-Harvest Handling Technologies and Food Innovation: A case of sweet potato: Perez Ochieng
- Process characterization and optimization of traditional Atifufui; a maize flour-based crunchy sticks from Ghana: Dzesi Kwame Torku
- Gambia Horticultural Enterprise Mango Out-Grower Scheme and Multipurpose Agro-Processing Centre – A Success Story: Momodou Alasan Ceesay
- Effect of processing on quality characteristics of pearl millet (pennisetum glaucum) based value added products: Eyoel Legesse

Panel Discussion
- Kimani Rugendo
- Tel Mukunya
- Farmer Rep

45 Minutes
Work stream 2

Postharvest handling and technologies for perishable commodities.

Session Lead: TechnoServe/World Vegetable Centre (AVRDC)
Lead paper: Thomas Dubois & Goudian Gwademba

Rapporteurs:
Arnold Opiyo
Charity Gathambari
Joyce Chepungeno

Session Summary
The perishable commodities (including fruits, vegetables, roots & tubers) sector in Africa is dominated by small holder farmers who account for more than 70% of the production for domestic and export markets. Due to various challenges from the production to the market/consumption stage, huge postharvest losses (40 – 50%) are reported in the perishable commodities. There exist simple and applicable technologies and innovations that can be adopted to reduce the high losses. This session will focus on applicable, accessible and cost-effective innovations that have worked to reduce losses. The challenges and opportunities in postharvest management of perishable commodities will be discusses.

Oral Presentation
- Effects of using insulated punnets and conventional packaging films on the storage of fresh Robusta Banana fruits: Abdul-Rahaman Adams
- Pre-harvest curing: effects on skin adhesion, chemical composition and shelf life of sweet potato roots in tropical conditions: Aditya Parmar
- Postharvest Losses and Management Strategies in Fruit and Vegetable Sector of Pakistan: Aman Ullah Malik
- Low cost evaporative coolers as an alternative storage to mechanical refrigerators: the case of tomatoes: Esa Abiso
- Effect of Essential Oils Treatment on Anthracnose Disease Development, Quality and Shelf Life of Mango Fruits: Gerefa Sefu
- Characterization of ripening and associated gene expression in two kiwifruit cultivars at different storage temperatures: O.W. Mitalo
- Ethylene removal from horticultural produce held without refrigeration by a potassium permanganate ethylene absorbent: M. Sabater
- Some determinants of postharvest loss in strawberry fruit in Kenya: Maina Mwangi
- Combinatorial Effects of Hydrocooling, Sanitizer Application and Cold Storage in Maintaining Quality of Vegetables: Chepungeno Joyce
- Evaporative Pre-cooling Technologies and Practices for promoting food loss and economic opportunity in Dire Dawa, Ethiopia: Melese Temesgen
- Efficacy of Hexanal Application on the Postharvest shelf life and Quality of Banana Fruits (Musa spp): Yumbya Peninah

Panel Discussion
Zakayo Magara (Acting MD, Horticultural Crops Directorate)
Elizabeth Mitcham (Horticulture Innovation Lab)
Stephen Muchiri (East African Farmers Federation)
Work stream 3a
Postharvest handling, technologies and storage solution for grains

Session Lead: East Africa Grain Council (EAGC)
Lead Paper: Gerald Masila

Rapporteurs:
Sammy Ruto
Willis Owino
Davine Minayo

Session Summary
Grains (including cereals and pulses) are staples or major dietary components for most people in Africa and therefore the production is done by almost all households. Postharvest losses (quantitative and qualitative) are reported at every stage of grain supply chain – from the farm (production) to the consumer stage. The losses (estimated to be 10 -20%) are attributed to various preharvest and postharvest factors. In this session, preharvest, harvest and postharvest factors contributing to the losses will be discussed. Possible interventions to minimize the quantitative and qualitative losses at the various stages of the supply chain will also be discussed. It is expected that at the end of this session there will be strong and actionable recommendations to address postharvest losses in grains and other dried food products.

Oral Presentation
- Field Testing of a Multipurpose Solar Dryer for Smallholders Farm: Klein E. Ileleji
- On-Farm Comparison of Maize Postharvest Storage Technologies in Central Tanzania: Adebayo Abass
- Effect of Three Seed Conditioning Methods in the Control of Cowpea Weevil (Callosobruchus maculatus): Dari Linda
- Evaluation of Maize Drying Systems to Aid Smallholder Farmers with Post-Harvest Loss Reduction in Sub-Sahara Africa: Dirk Maier
- Ghana Maize Marketers’ Utilization of Advanced Drying Methods in Post-harvest Loss Reduction: Nkoyo Etim Bassey
- Insect infestation in stored grain: the resident versus the visitor; who inflicts greater food loss Honest Machekano
- Stored Grain Protection and Management Capacity Building in Nigeria – Review of 7 Years Of Experience: Klein E. Ileleji
- Efficacy of Silica Gel and Hot Bulbs in Convective Maize Drying with Encased air Isaiah E. Muchilwa
- Effect of sealing methods of metal silos for control of Prostephanus truncatus in stored maize grain: Kimani Anne

Panel Discussion
Mr. Badi Omar –GRAINPRO
Cyprian Kabbis, CRS and Food Business Manager, SGS
Marcos Brendalise -Brazagro Ltd
Work stream 4

Aflatoxin management, food safety and nutrition.

Session Lead: Partnership for Aflatoxin Control in Africa (PACA)
Moderator: Elizabeth Ogutu
Lead Paper: Ranajit Bandyopadhyay

Rapporteurs:
Charity Mutegi
William Maina
Stanley Kimereh

Session Summary
Aflatoxin is the most important mycotoxin due to its global distribution, significance in key staples and adverse impact. Research efforts on aflatoxin have gained momentum in the current quarter of the decade and areas in nutrition, health and parameters that aggravate or mitigate loss are being looked at critically through research. The objective of this work stream therefore is to bring stakeholders up to speed with ongoing research initiatives on aflatoxin management and identify research gaps to be considered moving forward. In addition explore research -to-use approaches and how we can strengthen knowledge sharing and increased awareness.

Oral Presentation
- Influence of Moisture Content On, Insect Pests and Mycotoxin Levels of Maize in Farms in Northern Region of Ghana: N. Manu
- Isolation and Identification of compounds from Piper guineense seed extract for the management of Sitophilus zeamais on stored maize: Mobolade Dele Akinbuluma
- Use of hermetic storage to control aflatoxin in maize: Sophie Walker
- Packaging Atmosphere Influences Quality, Occurrence of Mycobiota and Aflatoxin B1 in Peanut (Arachis hypogaea L.) Kernels cv. Khon Kaen 84-8: Peter Opio
- Good crop management practices help reduce aflatoxin contamination in groundnut before storage in Mali: Konaté D.
- Effect of temperature, relative humidity and moisture on aflatoxin contamination of stored maize: F.C. Muga
- Incidence of Fusarium Mycotoxins in Major Traditional Weaning Foods (Ogi and Soybean Powder) From Nigeria: CA. Chilaka
- Development of International Mycotoxin Alliance: Y. Martin Lo
- Nutritional and economic postharvest losses of African leafy vegetables along the supply chain: Gogo E.O
- Biodegradability of Mycotoxins in Anaerobic Digestion: A New Solution to Valorize Highly-Contaminated Mycotoxin Batches: M. De Boevre

Panel Discussion

Panelists
Roberta Lauretti-Bernhard (GAIN)
Palisade Fernandes (Cereal Millers)
Stanley Kimereh (FAO)
James Muthomi (University of Nairobi)
Work stream 5

11.00am – 1.30pm

Policy, practice, youth and gender angles in postharvest management

Session Lead: Food Agriculture Natural Resources Policy Analysis Network (FANRPAN)
Session Moderator: Ms Elizabeth Mnyandu

Rapporteurs:
Margaret Hutchinson
George Cheminingwa
Joyce Maina

Lead paper: Gender Roles, Relationships, and Social Equity in Post-harvest Management: Talentus Mthunzi

Invited Speakers
Wanjiru Rutenberg (AWARD)
Heyl Julia (FAO)

Session Summary
Every year African smallholder farmers experience huge postharvest losses of cereal crops and grain legumes. These losses represent significant costs at household and at national level and have been at the center of research, policy, and development practice in the last 50 years. In the area of research, progress has been made in perfecting the art of quantifying the scale of losses and documenting their economic and welfare consequences. Research and development efforts have focused on two approaches for reducing postharvest losses. In one approach, scientists attempted to reduce postharvest grain losses by breeding for better insect pest tolerance during storage. However, this has met with limited success partly because of the grain quality the grain becomes harder which brings new problems with processing and utilization. In the second approach, development organisations introduced different types of ‘improved’ postharvest storage technologies across many countries in Africa. Examples of the alternative storage technologies include brick bins, cement and mud plastered baskets. More recently, there has been a promotion of hermetic storage technologies such as metal silos and super grain bags. Rigorous evaluations demonstrated the potential of the hermetic storage technologies to reduce postharvest losses in grains. They potentially assist households to buy cheaper grains at peak harvest time, and to use the grains throughout the year. However, new insights show that the potential gains associated with use of the improved storage technologies have not been enjoyed by small, poor farmers especially women. This session will provide a platform to showcase ongoing PHM development and research programme initiatives which promote a robust and consistent PHM approach that is responsive to gender and social equity

Oral Presentation
- Policy frameworks for food standards related to post-harvest management of grains and pulses: Talentus Mthunzi
- Extension and Learning Platform for Postharvest and Agro-processing: Leonides Halos-Kim
- Scoping Study on Gender Mainstreaming in the Agriculture Sector in Kenya: Margaret Hutchinson
- Postharvest Training and Services Centers can reduce postharvest losses in developing countries: Mohmad Arief Zargar
- Post-harvest losses in Jhapa: Technology prospects and its constraints: Sudarshan Ananta Nepal

45 Minutes

Panel Discussion

Panelists:
Mary Njuguna (EDA) Clepin Josephpat (MALF-GLP) Dr. Pedro Tomo (FANRPAN)

1.30 pm – 2.15 pm

LUNCH BREAK
OFFICIAL OPENING CEREMONY
High level Panel Discussants

Rafael Flor
Rockefeller Foundation

Hon. Willy Bett
Cabinet Secretary Agriculture, Kenya

Charles Wilson
World Food Preservation Center

Gerardine Mukeshimana
Agriculture Minister Rwanda

Simon Carter
IDRC

Cephas C. Taruvinga
(African Union Commission/FAO)
Reducing food losses and waste; Sustainable Solutions for Africa

**Introductory Video**

Welcome remarks by the Chair LOC, Dr. Jane Ambuko

**Speeches**

- Prof Peter Mbithi, University of Nairobi, Vice Chancellor
- Betty Kibaara, Rockefeller Foundation
- Cephas Taruvinga, African Union Commission
- Hon. Willy Bett, Cabinet Secretary Agriculture, Kenya

**Official Opening Ceremony**

Chief Guest, Kenya’s Deputy President, H.E William Ruto

Theme: Zero Tolerance to Food Loss: Policy Dialogue towards Halving Postharvest Losses in Africa

Moderator: MC: Wallace Kantai

**Rapporteurs:**

- Margaret Hutchinson
- George Cheminingwa
- Jane Ambuko

**Session Summary**

The Malabo Declaration (2013) is a continental commitment to halving postharvest food losses by the year 2025 as per Goal 12 of the Sustainable Development Goals. This session on Zero Tolerance to Food Loss will provide a platform for stakeholders to discuss existing requisite policy interventions or constraints exacerbating food loss and waste in the continent. The session will also accord opportunity for the high level speakers to share strategies adopted by different stakeholders towards meeting the set targets. During the session, there will be discussions focusing on actionable strategies to realize the same.

The objectives of the session are:

- Share experiences in policy reform and advocacy,
- Highlight examples of game-changing best practices and
- Propose actionable recommendations

**High level Panel Discussants**

- Rafael Flor, Rockefeller Foundation
- Hon. Willy Bett, Cabinet Secretary Agriculture, Kenya
- Charles Wilson, World Food Preservation Center
- Gerardine Mukeshimana, Agriculture Minister from Rwanda
- Simon Carter, IDRC
- George Odingo, USAID
- Cephas C. Taruvinga (African Union Commission/FAO)

**POSTER PITCHING SESSION**

5:15 pm – 6.30 pm

6:30 pm – 8.30 pm

**ROCKEFELLER FOUNDATION COCKTAIL**

**SELF-ORGANIZED DINNERS**

8.30 pm
# Day 3 (30th March, 2017) Summary

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<th>Time</th>
<th>Event</th>
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<td>7:00 am – 8:30 am</td>
<td>Breakfast meetings organized by Global Alliance for Improved Nutrition</td>
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<td>Viewing of posters/ exhibitions</td>
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<td>8:30 am – 10:30 am</td>
<td>Plenary session: Best Practices in Postharvest Management</td>
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<td>10:30 am – 11:00 am</td>
<td><strong>TEA BREAK</strong></td>
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<td>11:00 am – 1:30 pm</td>
<td>Symposia: Hosted by four partner organizations</td>
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<td></td>
<td>1. Horticulture Innovation Lab (USAID)</td>
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<td>2. International Institute of Tropical Agriculture (IITA)</td>
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<td>4. Rockefeller Foundation</td>
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<td>1:30 pm – 2:30 pm</td>
<td><strong>LUNCH BREAK</strong></td>
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<td>2:30 pm – 5:00 pm</td>
<td>Parallel Work Streams</td>
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<td>6. Food loss and waste assessment in agricultural value chains – the</td>
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<td>8. Postharvest handling and technologies for livestock products</td>
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<td>5:00 pm – 6:00 pm</td>
<td><strong>COFFEE BREAK &amp; BUSINESS TO BUSINESS NETWORKING SESSION</strong></td>
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<td>6:00 pm – 9:00 pm</td>
<td><strong>CONGRESS GALA DINNER</strong></td>
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DAY 3 LEAD SPEAKERS

Francesca Gianfelici, FAO

Ms Gianfelici holds a degree in ‘Rural and Urban sociology’ at the University of Rome La Sapienza and a post-graduated Master in Economics, “Human development and food security” (University of Roma Tre, in Rome). Since October 2014, she is acting as moderator of the global Community of Practice on Food Loss Reduction, developed in the framework of a UN Rome-based agencies project on ‘Mainstreaming Food Loss Reduction Solutions In Food Deficit Areas’.

Before joining FAO, she worked for NGOs assisting migrants and refugees towards their socio-economic inclusion in Rome and Europe. In this framework she worked with local authorities in Italy and in Turkey establishing an Italian decentralized cooperation committee as a result of networking activities between NGOs and municipalities, and launching projects to support local authorities in Turkey. In 2005, she joined FAO as a consultant, collaborating in activities carried on by a multi-disciplinary group titled ‘Food For The Cities’, assisting its secretariat in the coordination activities, and carrying out urban food security assessments in Nairobi, Kenya and Phnom Penh, Cambodia. Afterwards, worked with the Decent Rural Employment team of the FAO Economic and Social department supporting a project implemented in Malawi and Tanzania.

Gerald Masila, Eastern Africa Grain Council

Gerald Makau Masila is the Chief Executive Officer, the Eastern Africa Grain Council (EAGC), since March 2011 to date.

Gerald is an experienced and accomplished professional in the field of Agribusiness management having worked with a range of agribusiness related organizations for over 20 years. He has served in agribusiness fast moving consumer goods firms including British American Tobacco (BAT 1996-2004, New Kenya Cooperative Creameries (NKCC) between (2004-2006), he played a key role in the revival of NKCC, including relaunch of a number of new products and brands and regaining market share, Kenya Wine Agencies Limited (KWAL) as the Managing Director (2006-2009), and is credited for turning round KWAL from loss making to profitability and winning the second best state corporation in the performance contracting in 2008.

Gerald has led the growth of the Council establishing specialized divisions of EAGC including the Eastern Africa Grain Institute (EAGI), the Agricultural Trade Policy Advisory Forum for Eastern and Southern Africa ATPAF-ESA, and the relaunch of the EAGC Market Information System Regional Agricultural Trade Intelligence Network (RATIN) and the recently developed EAGC G-Soko Online Grain Trading Platform launched in June 2015.

EAGC facilitates efficient, structured, inclusive and profitable grain trade in the Eastern Africa Region and has the vision to be the leading voice of the Grain Industry in Africa. Gerald will share some thoughts and highlights on the post- harvest losses especially in the grain subsector in regard to current food and nutrition security situation in Africa and discuss some recommendations on post –harvest mitigation.

Gerald holds an MSc Agricultural Economics degree from Egerton University and he is currently pursuing his PhD Studies in Project Planning & Management, Project Finance option at the University of Nairobi.

Toine Timmermans (REFRESH/FUSIONS)

Toine Timmermans is Program Manager Sustainable Food Chains at Wageningen University & Research, and Coordinator of the EU projects FUSIONS and REFRESH. The overall aim of the project REFRESH is to contribute to SDG 12.3, halving food loss and food waste across the post-harvest supply chain. We aim to build a responsible and sustainable food consumption and production system within the EU, based on circular economy principles and to prevent and reduce food waste and maximize the value from unavoidable food waste. A central ambition of the REFRESH project is to develop and implement National ‘Framework for Action’ models, based on strategic agreements across all stages of the supply chain (backed by Governments), delivered through collaborative working and supported by evidence-based tools to allow targeted, cost effective interventions. www.eu-refresh.org

Toine is coordinator of the FLW reduction project within the CGIAR program CCAFS (Climate Change, Agriculture and Food Security) with a focus on in developing and emerging countries in Sub Sahara Africa. To provide evidence for the amount of mitigation that could be achieved by reducing FLW, understanding the systemic drivers for food loss and waste, and to identify strategies for reducing FLW in ways that achieve a food- and nutrition- secure food system while also reducing emissions.
DAY 3 SESSION LEADS

Ms. Totobesola-Barbier

Totobesola is the Project Manager of the UN Rome-based Agencies’ Joint project ‘Mainstreaming food loss reduction initiatives for smallholders in food deficit areas’ (RBA/GLO/001/SWI) funded by the Government of Switzerland. Ms. Totobesola holds a Ph.D in Agro-food Engineering (University of Montpellier II, 2008), graduate degrees in Food Science (University of Montpellier II, 2002) and in Rural Economy and Agribusiness Management (Montpellier University of Law and Economics, 1994), as well as an Engineering degree in agro-food industries. From 2010 to 2014, she served as the Regional Technical Advisor for Agriculture in the West Africa Regional Office of Catholic Relief Services (CRS), based in Ouagadougou, Burkina Faso. From 2006 to 2010 she was the Coordinator of the ‘Fonds de soutien à la programmation’ for the Canadian International Development Agency (CIDA) based in Ouagadougou. In addition to her extensive work experience in West Africa, she worked for the Centro Internacional de Agricultura Tropical (CIAT) from 1998 to 2001, as a Research Associate of the Rural Agro-enterprise Development Project for Central America based in Honduras. From 1995 to 1997 she worked as a Research Associate with Conservation International in Washington, D.C.

Dr. Steve Sonka

Steve Sonka is Emeritus Chaired Professor of Agricultural Strategy at the University of Illinois. Currently he also serves as Fellow at the Ed Snider Center for Enterprise and Markets at the University of Maryland and Senior Economist at the National Great Rivers Research and Education Center. Dr. Sonka is co-founder and partner of Centrec Consulting Group, LLC, Illinois. Steve joined the University of Illinois faculty in 1975 and became the First faculty member to hold the Soybean Industry Chair in Agricultural Strategy. He also served as the Vice Chancellor for Public Engagement, First Director of the National Soybean Research Laboratory, and First Director of ADM Institute for the Prevention of Postharvest Loss. Dr. Sonka received a Bachelor’s degree (with distinction) and a Ph.D. degree in economics from Iowa State University. He has also held assignments with the Monsanto Corporation; New Zealand’s AGMARDT Foundation; Arthur Andersen & Co. and the Institute of Agribusiness, Santa Clara University. Dr. Sonka has authored or coauthored over 220 books, articles and publications including ‘Computers in Farming’ and has consulted and lectured in every continent except Antarctica. Dr Sonka has been recognized with national professional awards for the quality of both his teaching and research.
Day 3 Morning Session

7:00 am – 8.30 am  Breakfast meetings organized by different organizations: GLOBAL ALLIANCE FOR IMPROVED NUTRITION

Viewing of posters/ exhibitions

8.30 am – 10.30 am  **Session Theme:** Best Practices in Postharvest Management

**Session Summary:**

To address the high postharvest losses in food value chains, there is need of multi-pronged approach that goes beyond technologies and innovations. The technologies and innovations to reduce the losses may already exist but they remain largely unused or underutilized. In this session, best practices, innovative strategies and approaches to postharvest management will be discussed. There will be sharing of lessons learnt by the invited lead speakers and panelists. At the end of the session there will be recommendations on scalable best practices to reduce postharvest losses in the Africa context.

**Moderator:** Brett Rierson

**Rapporteurs:**
John Macharia
Judith Mbau
Penina Yumbya

**Theme:** Best Practices in Postharvest Management

**Lead speakers:**
Francesca Gianfelici, FAO
Gerald Masila, Eastern Africa Grain Council
Toine Timmermans (REFRESH/FUSIONS)

**Panel Discussants**
Leah Kasera, Grow Africa
Andrew Gatheca, AgResults
Bernd Haille (European Retail Academy)
Samir Droby (Volcani Institute)

10.30 – 11.00 am  **TEA BREAK**
Session Summary
Aflatoxin is a poison that contaminates a wide range of food crops as they grow, and after harvest, finding it into human beings and livestock. The toxin is unforgiving and cumulative with dire consequences, affecting the health, of man and livestock, trade and the general food security situation across the continent. Presently, countries such as Kenya have staggering reports of increased cancer cases, while several countries have lost lucrative markets due to unacceptable levels of aflatoxin in produce, especially maize and peanuts. The complexity of contamination avenues means that there is no single solution to the aflatoxin problem. Cognizant of this, the collegial multi-institutional and interactive symposium is designed to illustrate the efforts of various actors on different fronts and how we can further enhance coordination and concert in our shared vision to fight aflatoxin.

Objectives
To appreciate the extent of the aflatoxin problem and its impact on food security, health and trade.
To highlight technologies, and cross cutting initiatives and highlight examples of game-changing best practices.
Share experiences in upscaling and out scaling ready-to-go mitigation approaches
Propose actionable recommendations based on lessons learnt from past and ongoing efforts

Structure
The session will have short and precise presentations covering the impacts, prevalence and technologies for aflatoxin mitigation, and scaling up private/public sector experiences in moving technologies to markets. A panel discussion guided by various sector players across the continent will guide the discussion and focus on lessons learnt and what need to happen to strengthen the ongoing efforts on aflatoxin mitigation.

10.20 am Registration (and streaming of video on aflatoxin management in groundnuts- McKnight Foundation) Susan Karonga/Linda Wangila
11.00 am Introduction: Purpose of the symposium, speaker introduction and summary of symposium’s process Dr. David Githanga
11.15am Opening remarks Dr. Leena Tripathi, Deputy Director, East Africa hub, IITA
Presentations
11.25 am Impacts and Mitigation of Aflatoxins on Agriculture, Trade and Health Elizabeth Ogutu,
Strategy and Operations Senior officer, African Union-Partnership for Aflatoxin Control in Africa (AU-PACA).
Technologies, policies and institutions for aflatoxin mitigation
11.40am Interventions for combating aflatoxin health risks Dr. George Mahuku, Plant Pathologist, IITA
11.55am Markets and potential challenges in uptake of interventions for aflatoxin mitigation in the African context Dr. Vivian Hoffman, Senior Researcher, IFPRI
12.10pm Capacity building and awareness raising campaigns for aflatoxin mitigation. Stanley Kimere, Program Associate, FAO-Kenya
Scaling up and public/private sector experiences
12.25pm Scaling-up of grain drying and storage technologies Sophie walker, Chief of Party, ACDI-VOCA
12.40pm Business Perspectives for Managing Aflatoxins in Food Systems JB Cordaro, MARS Inc
12.55pm Experiences of an implementer: a learning tool for upscaling aflatoxin interventions Tolu Owolabi, Analyst, Doreo Partners/Babban Gona, Nigeria
13.05 Lunch: Brown Bag
Panel Discussion
Theme: Lessons learnt from the past and building consensus on next steps in further reducing aflatoxin contamination and its effects
Moderator: Mary Onsongo Program Management Specialist, Agricultural markets and Value Chain, USAID EA

Panelists
Chebii Kileo Head of Food Crops Directorate, AFFA
Martha Byanyima Lead Expert, sanitary and Phytosanitary matters, COMESA
David Githanga Pediatrician and Cardiologist
Mouhamadou Habib Thiam President, COPEGA and representative, groundnut farmers and exporters Representative, Senegal
Kevin Manyara Operations Manager, Cargill
Delia Grace Flagship Leader for Food safety, A4NH CGIAR and ILRI

Rapporteur: Charity Mutegi & William Maina Muiru
Horticulture Innovation Lab Symposium

Session Lead: Elizabeth Mitcham
Rapporteur: Arnold Opiyo & Joyce Chepngeno

USAID Postharvest Projects - Special Session March 30

11:00 Importance of Postharvest Loss Reduction at USAID
Angela Records, Bureau of Food Security, USAID Washington

11:05 Importance and feasibility of cold chain technology in the developing world
Beth Mitcham, Horticulture Innovation Lab

11:25 Evaluation of interventions to improve packaging methods for tomatoes produced by smallholder farmers
Ngoni Nenguwo, World Vegetable Center

11:40 Assessment of postharvest constraints and testing of interventions in horticulture value chains in Rwanda
Gurbinder Gill, Agribusiness Associates

11:55 Securing the Harvest: adapting local and global technologies to reduce post-harvest loss in strategic African crops
Jagger Harvey, Reduction of Postharvest Loss Innovation Lab

12:15 Scaling Post-harvest loss reduction across Africa
Brett Rierson, Head World Food Programme Global Post-Harvest Knowledge & Operations Centre

12:30 Designing affordable grain dryers for on-farm use in Africa
Jess Lowenberg-DeBoer, Purdue University

12:45 Drying bead technology to maintain quality of vegetable seeds and horticulture products
Johan Van Asbroeck, Rhino Research

13:00 Use of hermetic storage to control aflatoxin in maize
Sophie Walker, AflaSTOP

13:15 Strategies for developing affordable nutritious foods
Dr. Violet Mugalavai, University of Eldoret
Rockefeller Foundation Symposium

Zero Loss Café
In 2016, The Rockefeller Foundation launched YieldWise, a $130 million initiative, with the goal of demonstrating how the world can halve food loss by 2030, one of the UN’s sustainable development goals (12.3). The current focus is on Mangoes in Kenya, Maize in Tanzania and Tomatoes in Nigeria where up to half of all food grown is lost due to poor post-harvest management. During this session, the Rockefeller Foundation will bring together current partners working within and outside of the initiative that are pushing boundaries and making unique contributions in reduction of post-harvest losses. Participants will engage with thought leaders, innovators, practitioners and most importantly farmers to exchange ideas and promote collaboration between different actors towards reducing post-harvest losses.

Session Lead: Olivia Karanja
Rapporteur: Maina Mwangi & John Macharia

The main objectives of the session are to:
- Provide an overview of the YW model and learnings to date
- Showcase the Foundation’s partners that are making unique contributions in reduction of post-harvest losses
- Provide an opportunity to exchange experiences and develop new ways of thinking about some of the challenges in addressing reducing PHL losses

The session will focus on addressing drivers towards improving the system and recommending practical solutions that would speed up this process, while taking into consideration the intricacies of the local context and value chain.

Structure
The panel session will begin with framing presentation on the YieldWise Model by Olivia Karanja. Olivia will use an interactive format to present the model using a mix of visual aids and participant engagement to guide the presentation.

This will be followed by a presentation of the mango customer journey map by Dr. Asa Torkelson and the team from UN Women. The presentation will be used as the test case of challenges faced within value chains in reducing PHL losses and frame the session for the talking heads.

The Zero Loss Café will host thought-leaders to share their success stories / ideas in these thematic areas; farmer aggregation, digital platforms for smallholder farmers, alternative channels for extension services and access to innovative financial mechanisms. The sessions are structured to be conversational and enable engagement with the audience. Every 15 minutes the bell will ring to signal rotation to another table and another thematic area.

Reflections and closing remarks by Kagwiria Koome.

Total Length: 90 minutes
SNV Symposium

**Theme:** Solutions to Food Losses in Vegetables and Tubers, Perspectives from Private Sector

**Session Lead:** Stefan Engels/Bernard Ndolo  
**Rapporteur:** Peter Kahenya & Penina Yumbya

**Objectives**  
Entrepreneurship around solutions to food losses is often hindered by limited information for investment. Solutions exist with the private sector but with limited commercial uptake in Africa. This symposium will discuss these challenges and mechanisms for addressing them through the private sector and advocacy. Presentation of a study by SNV and Wageningen Food and Biobased Research on food losses and loss reduction opportunities in potato, courgette and avocado supply chains will open the symposium to discussions with the private sector on how they overcame information barriers and ideas to increase uptake. We will wrap up with advocacy avenues to trigger changes in businesses and government for investment in food loss reduction solutions.

**Event Programme**

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<td>11:00</td>
<td>Welcome and Introductions (SNV and EKN programmes)</td>
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<td>11:25</td>
<td>Food losses study, methodologies and data</td>
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<td>12:05</td>
<td>Interactive Q &amp; A Session - Perspectives from private sector</td>
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<td>12:55</td>
<td>Opportunities in policy and practice</td>
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**Speakers**

- **Rik van Keulen** SNV Global sector coordinator horticulture
- **Eelco Baan** SNV Global sector coordinator and sustainable markets
- **Toine Timmermans** Programme manager sustainable food chains, Wageningen

**Food & Biobased Research**

- **Roseanne Wanjiku** Director, Gaëa Foods Ltd – Potato processors
- **Peter Francombe** MD Kenya Highland Seeds – Distributors of Omnivent storage technologies
- **Sally Wakiugu** Corporate account manager, Fresh n Easy Ltd – Door delivery of pesticide free fruits and vegetables
Work Stream 6

Food loss and waste assessment in agricultural value chains – the Metrics

Lead Paper: Totobesola, Mireille (FAO)

Session Summary:
Lack of reliable data has hampered evidence based approach in Postharvest management interventions. While some progress has been made and tools for data collection and collection developed, this data and tools are not widely and easily available to many stakeholders. The main objective of this session is to share and interrogate progress made towards ensuring that reliable data is widely available and in a space and format that can be easily used by the wider stakeholder community in Africa.

Rapporteurs:
Stanley Kimereh
Joseph Onyango
Joyce Chepenger

Oral Presentation
- Postharvest losses along the cooking banana, potato and cassava fresh value chains in Uganda: Diego Naziri
- Systematic review of the measurement of postharvest losses in perishables in Brazil: Gilmar P. Henz
- Post-Harvest Losses in Ethiopian Food Production System: The Case of Perishable food crops: Melese Temesgen pppp
- Farmer post-production practices, grain losses and perceptions in maize-based smallholder farming systems of Zimbabwe: Brighton M. Mvumi
- Food loss assessment study on maize and rice value chains in the Democratic Republic of Congo (DRC): Sumbu Zola Eric
- Rice Postharvest Loss Assessment in Bunkure LGA, Nigeria: AOGA, Antoine (Mr.)
- Post-Harvest Loss Assessment in Cowpea, Maize and Sorghum Selected Supply Chains in Burkina Faso and Recommended Solutions and Strategies: Doulaye Diancoumba
- An assessment of the magnitude of postharvest losses in off-farm grain storage systems in Kenya: Joseph Kibaki Mwangi
- Expanding the African Postharvest Losses Information System - APHLIS+: Tanya Stathers
- The Rapid Loss Appraisal Tool (RLAT) for agribusiness value chains: Heike Ostermann
- Gender Perspective Taken into Consideration in Food Loss Assessment Studies Undertaken in Burkina Faso: Hado Sawadogo-Ouedraogo

Panel Discussion
Panelists:
Bernd Hailler
Nehemiah Chepkwony (Ministry of Agriculture Livestock and Fisheries)
Toine Timmermans (REFRESH/FUSIONS)
Work Stream 2b

2.30 pm - 5.00pm

Postharvest handling and technologies for perishable commodities.

**Session Lead:**
Thomas Dubois & Goudian Gwademba

**Rapporteurs:**
Arnold Opiyo
Charity Gathambari
Joyce Chepngen

- Post-Harvest loss Examining the challenges and Solutions in sub Saharan Africa: Adebola Adedugbe
- Comparison of Drying Rates of Chilli Peppers Using Solar House and Sun Drying Methods: Flora C. Amagloh
- Effect of storage temperature on vitamin c, total phenolics, uplc phenolic acids profile and antioxidant capacity of eleven potato (Solanum tuberosum l.) Varieties: Galani Y. Joseph Hubert
- Postharvest loss and waste prevention strategies in Ghana: A meta-anal: John Nelson Ekumah
- Postharvest quality requirements for producers and traders of vegetables in Ethiopia: Ngoni Nenguwo
- Characterization of ripening and associated gene expression in two kiwifruit cultivars at different storage temperatures: O.W. Mitalo
- Postharvest handling practices and losses of some major fruits sold in Abeokuta, South-western Nigeria: Odeyemi, O.M
- Threats to Agro-Industrial Development in Nigeria: A Case for Post Harvest Losses in Cashew Nuts Production: Ogusina B. S
- Postharvest warm water treatment to ensure quarantine security of French beans against thrips: Speckhahn C

45 Minutes

Panel Discussion

5.00 pm – 6.00 pm
COFFEE BREAK & BUSINESS TO BUSINESS NETWORKING SESSION

6.00 pm – 9.00 pm
CONGRESS GALA DINNER
Work Stream 3b

2.30 pm - 5.00pm

Postharvest handling and technologies and storage solution for grains

Session Lead:
Gerald Masila

Rapporteurs:
Sammy Ruto
Willis Owino
Davine Minayo

- Postharvest Losses and Management Strategies in Cereal Sector of Pakistan: Irfan Afzal
- Controlling weevils in maize by means of physical disturbance: C. J. Bern
- Applying the Most Appropriate PH Solution by Making the Correct Distinction Between Symptoms and The Actual Causes of Losses: Cephas Taruvinga
- Effective Strategies for Stored Maize Post-Harvest Loss Prevention at Rural Primary Schools in Uganda: Thomas Brumm
- Hermetic technology for control of insect pests in stored maize: Paddy Likhayo
- Effectiveness of Integrated Pest Management for Preservation of Stored Maize in Nigerian Markets: Otitodun, G. O
- Rodents’ Postharvest Losses in On-farm Maize Storage in the Lowland Tropical Zone of Kenya: Kukom Edoh-Ognakossan
- Qualitative Discussion about Reducing Grain Postharvest loss with Logistical Platforms in Ghana, Lanier, W., Salifu
- Food Loss Assessment Study on Maize and Sunflower Value Chains in Uganda – Causes and Recommended Solutions and Strategies: Harriet Muyinza

45 Minutes

Panel Discussion

5.00 pm – 6.00 pm

COFFEE BREAK & BUSINESS TO BUSINESS NETWORKING SESSION

6.00 pm – 9.00 pm

CONGRESS GALA DINNER
Work Stream 7
Innovative strategies, practices, approaches towards postharvest loss management

Lead paper: Dr. Steve Sonka: Ed Snider Center for Enterprise & Market

Rapporteurs:
Catherine Kunyanga
Maureen Munjua
Oliver Chanzu

Session Summary:
In a bid to counter the challenges faced in postharvest management, a number of institutions from around the world have developed innovative and novel technologies and approaches. However, these innovative ideas are uncoordinated, unknown and not scaled up for various reasons. This session seeks to put the spotlight on the innovative ideas by partners in the post-harvest field, while recommending scalable solutions and strategies to unlock the potentials for smallholder farmers and other value chain actors. The session seeks to harness experiences and collate recommendations of practical solutions that would ensure scaling up in Africa.

Oral Presentation:
- **Polymer Membrane Technology for Shelf Life Extension of Fruits and Vegetables:** Shubham Chandra
- **Energy efficient adsorption cooling system for perishables as alternative to mechanical refrigeration in rural areas:** Aaron Dzigbor
- **Development of a Low-Cost Moisture Meter for the Grain Trade:** S. McNeill
- **Better Use of Cassava Waste to Improve the Life of Poor Farmers and Processors in Africa:** C.M. Fauquet
- **Willingness to Adopt Plastic Crate by Actors in the Tomato Value Chain in Nigeria:** Babarinsa Olumuyiwa
- **Agricultural Service Delivery: Strengthening private crop protection service in Southern Ethiopia:** Abebe Shiferaw
- **Gender Dynamics in Postharvest Management - A Case Study from Ethiopia:** Aberash Tsehay (Ms.)
- **Participatory Community Solar Drying of African Indigenous Vegetables for Improved:** Andika, D.O.
- **Yield and Quality Characteristics of Waste Potato Peel Starch as Influenced by Extraction Method** Kipkoech R
- **Evaluating influence of storage environment on storage life of Green Peppers, Green Beans and African Eggplant:** Arne Pauwels
- **Enhancing Global Harmonization of Regulations for Reducing Food Losses and Waste in Sub-Saharan Africa:** Benard Odhiambo Oloo
- **Research & development of chinese tradition cereal food under room temperature storage:** Xinzhong Hu
- **Promoting business models and dissemination techniques for sustainable postharvest management among smallholder farmers:** Jerry Tingle Egessa
- **A New Model of International Short Course Training: An African Postharvest Case Study** Walters, E

Panel Discussion
Panelists:
Alexandra Spieldoch (CTI))
Richard Tracy (Global Cold Chain Alliance)
Ikegwuonu Naemeka (Cold Hubs)

5.00 pm – 6.00 pm COFFEE BREAK & BUSINESS TO BUSINESS NETWORKING SESSION

6.00 pm – 9.00 pm CONGRESS GALA DINNER
Work Stream 8

Postharvest handling and technologies for livestock products

Session Moderator: Prof. Gitahi Kiama (University of Nairobi)

Lead paper: Dr. Grace Delia (International Livestock Research Institute – ILRI)

Rapporteurs:
Joshua Amimo
Joyce Maina

Session Summary

Most livestock and fish products are highly perishable and lose value quickly in the absence of cold storage facilities. In most African countries, postharvest losses and appropriate interventions in the various livestock and fish value chains are inadequate. Most postharvest losses of livestock and fish products in Africa occur due to poor road networks that limit access to markets, poor handling of products and limited connection to electricity in most rural areas among many other causes. The session will focus on postharvest handling of products in various livestock and fish value chains and interventions that can potentially reduce these losses. The interventions include technologies, innovations, practices, policies and other interventions that can be scaled up while taking into consideration the intricacies of the local context and specific value chains.

Oral Presentation:

- An Assessment of Milk Production Efficiency of Smallholder Dairy Households and Post-Harvest Losses in Meru County, Kenya: D.K. Mugambi
- Extraction of Casein from High Acid Milk for Utilization in Yoghurt Development: Faith Ngundi Ndungi
- Inclusiveness and efficiency in post-harvest loss reduction; a glance at the FAO-Thiaroye fish processing technology: Dr. Yvette Diei Ouadi
- Harnessing Lessons in sustainable dairy farming to Kenyan dairy sector from the Dutch dairy sector for reduction of post-harvest milk losses: Oloo Benard Odhiambo
- Reduction of Post-Slaughter Losses in the Meat Value Chain through Value Addition and Innovative Processing Technologies: Catherine Kunyanga
- Ten-Years FAO Support to Assessment Methodology and Informed Fish Loss Reduction Policies and Strategies: Dr. Yvette Diei Ouadi
- Tackling milk wastage in Uganda by increasing its shelf life: Tibimanywa Geoffrey
- Effects of smoking techniques and ambient storage on the concentration of polycyclic aromatic hydrocarbons (PAHs) of smoked catfish (Clarias gariepinus): Salaudeen Mutiat Motolani
- Solar tent dryers for reducing fish post-harvest losses Joseph Nagoli
- Post-harvest milk loss reduction in Kenya: The case of smallholder dairy commercialization programme: Kembe Moses Ageya
- Network governance, value addition, gender and traceability in the aquaculture sector: Josphat N. Gichure

Panel Discussion

Panelists:
Justin Mabeya Land O Lakes
Githunguri Dairy
Day 4 (31st March, 2017) Summary

7.00 am – 8.30 pm  
- Breakfast meetings
- Viewing of posters/ exhibitions

8.30am – 10.30 pm  Plenary Session: Capacity Development including training, Research and Extension/outreach programmes – addressing skills gap in the postharvest sector

10.30 – 11.00 am  TEA BREAK

11.00pm – 1.00pm  All Africa Postharvest Technologies and Innovation Challenge
- Pitching and Award Ceremony

1.00pm – 2.00pm  LUNCH BREAK

2.00pm – 3.30pm  Official Closing Ceremony
- Congress communiqué
- Key take away messages and way forward
- Vote of thanks

3.30pm – 4.00pm  COFFEE BREAK & DEPARTURE
DAY 4 LEAD SPEAKERS AND MODERATOR

Dr. Paul Nampala

Dr. Nampala is the Grants Manager at the Secretariat. He joined Secretariat in 2012. He is an Entomologist/Nutritionist with Post-Graduate Level Training in Agricultural Sciences (PhD, Makerere University) & Public Health (MPh, University of Liverpool, UK). Paul worked (2004 – 2011) as Executive Secretary of the Uganda National Academy of Sciences (UNAS). Prior to this Paul worked with the Uganda National Council for Science and Technology as Assistant National Project Coordinator for the National Biotechnology and Biosafety Frameworks under the UNEP/GEF Global Projects on Biotechnology Legislation.

As an academic and independent consultant (with Scholarly Works Associates), he has worked with several stakeholders on various aspects in the research for development continuum including issues of evidence-into-policy linkages and evidence-based advice for policymaking. He has participated in the implementation of various projects and served as Team Leader to several consultancy undertakings. Paul is a member of professional and honorific organisations including among others the Uganda National Academy of Sciences, African Crop Science Society, International Biometrics Society, African Association of Insect Scientists, International Federation for Science Editors and Fellow of the Global Young Academy and Fellow of the African Science Institute (ASI).

Dr. Ephraim A. Mukisira (Ph.D, MBS, OGW)

Dr. Ephraim A. Mukisira is the chairman of FARA Board of Directors. He holds a PhD in Animal Science from McGill University, Canada (1994), M.Sc Degree from the Louisiana State University, USA (1984), and a B.Sc degree in Agriculture (Hons) (1980) from the University of Nairobi. He worked for the Kenya Agriculture Research Institute (KARI) from 1980 to 2014. Within this period, he was actively involved in crop-livestock research and held several managerial positions thus an Assistant Director (2000-2002); Deputy Director, Research and Technology (2002-2005) and the Director General/CEO of KARI (2005-2014). Upon his retirement from the public service, he became a consultant in crop-livestock systems with the International Livestock Research Institute.

During his career as a researcher, Dr. Mukisira acquired skills in research management and implementation, setting of research priorities, monitoring and evaluation of major research projects, in effective team building and in sound management. Initial activities in KARI involved planning and undertaking livestock research activities in a regional setting. In subsequent years, he was instrumental in building and sustaining the current research infrastructure at KARI, embracing strategies for technology generation and up-scaling of appropriate technologies; this impacted positively on the livelihood of many farmers and pastoralists. He also played a leading role in establishing operational frameworks for engaging the public sector, private sector, the development partners and key stakeholders along the commodity value chains.

Dr. Lisa Kitinoja

Dr. Lisa Kitinoja has been involved as a private consultant in international horticultural development since the 1980s, and has been specializing in postharvest technology, food loss reduction and the extension of information on small-scale postharvest handling practices since 1992. She founded the non-profit organization ‘The Postharvest Education Foundation (PEF)’ in 2011 that provides innovative training programs in postharvest food loss reduction for extension workers, farmers and young horticultural professionals. She has undertaken horticultural and food loss assessments, and conducted postharvest/cold chain literature reviews for UN FAO (extension, cold chain development, agro-industry development), the SAVE FOOD Initiative, TAAHA (Tanzania), PACCD (Pakistan), Winnrock International, ICPE, WRI (food losses and waste), IMechE (UK), the Liquid Air Energy Network and BMFG. In 2015-17 she developed a set of 50 training manuals for the SAVE FOOD Initiative on food loss assessment and food loss reduction.

Prof. John Kimenju

Prof. John Kimenju holds a Ph.D in Crop Protection (1998), M.Sc. Plant Pathology (1991) and B.Sc. Agriculture (1987) from the University of Nairobi. He is a Professor of Plant Nematology in the Department of Plant Science and Crop Protection having risen through the ranks since joining the University as a Graduate Assistant in 1991.

Prof. Kimenju is an active trainer and has supervised over 40 postgraduate students and conducted extensive research in Plant Pathology. He has published over 75 papers in refereed journals, authored 4 book chapters and presented over 45 papers in scientific conferences. Prof. Kimenju has sourced and managed several research grants from local and international funding agencies.

Prof. Kimenju is currently serving as Dean of the Faculty of Agriculture. As the academic and administrative head of the Faculty, Prof. Kimenju has guided processes leading to development of curricula and taken them through the steps up to approval by Senate. Previously, he served as Manager of Student Welfare (2008-2014) in the College of Agriculture and Veterinary Sciences, Section Head, Crop Protection (2005 – 2009); Coordinator of Training Programmes (1999 - 2003); Coordinator of Industrial Attachments in the Faculty of Agriculture (2003–2007). This profile depicts a pillar to advancement of knowledge and academic processes.
7:00 am – 8:30 am  Breakfast meetings  
Viewing of posters/ exhibitions

8:30 am – 10:30 am  **Plenary Session**: Capacity Development including training, Research and Extension/outreach programs – addressing skills gap in the postharvest sector

**Moderator**: Prof. John Kimenju (Dean Faculty of Agriculture – UON)

**Rapporteurs**  
Joshua Ogendo  
Maina Mwangi  
Lusike Wasilwa

**Session Summary**  
It acknowledged that there is a general postharvest knowledge and skills gap among the practitioners in agricultural value chains. This is attributed to the fact over the years, training, research and resource allocation in Agriculture has focused mainly on increasing production. For example some reports indicate that 95% of the research investments during the past 30 years have focused on increasing productivity and only 5% directed towards postharvest loss reduction.

The session will provide a platform for four Lead Speakers drawn from Research, Training and Extension to share lessons learned from various building capacity building programmes and initiatives. The speakers and invited panelists will have a chance to highlight scalable best practices and possible interventions to address the existent skills gap in regard to postharvest management. It is envisaged that at the end of the session, there will be actionable recommendations to address the challenges to postharvest management with respect to capacity development.

**Lead Speakers**  
Dr. Paul Nampala (RUFORUM)  
Dr. Charles Wilson (WFPC)  
Dr. Lisa Kitinoja (PEF)  
Dr. Ephraim Mukisira, FARA

**Panelists:**  
Dr. Rufaro Madakadze, Alliance for a Green Revolution in Africa  
Deans of Agriculture (Makerere, Egerton, Malawi, Ghana)  
Dr. Eliud Kireger, Kenya Agriculture and Livestock Research Organization  
Dr. Wellington Ekaya, Biosciences eastern and central Africa

10:30 am – 11:00 am  **TEA BREAK**
All Africa Post Harvest Technologies & Innovations Challenge 2017
All Africa Post Harvest Technologies & Innovations Challenge 2017

Session Summary:
Many technologies and innovations aimed at reduction of food loss and waste have been developed by individuals’ researchers and organizations both in the private and public sector. Some of these technologies have showed potential for up-scaling and commercialization in the market. However, some remain at the testing and market ready stage, and therefore this ‘Challenge’ offers an opportunity for innovators to showcase their technologies and innovation to private sector and other interested parties for support in the up-scaling and out-scaling. The Postharvest Technologies and Innovation Challenge attracted over 200 entries from across Africa. These entries were subjected to screening and finally judged by an expert panel of Jury. This session will therefore provide a platform to showcase the top 10 best technologies and innovations in postharvest loss/waste reduction from scientists and innovators across the continent. The main objectives of the session are to showcase the best technologies and innovations in postharvest management in Africa to private investors and provide a platform for networking and pitching opportunities for the top 10 postharvest innovations and technologies from Africa to private investors and other relevant organizations.

Rapporteurs:
Joshua Amimo
Judith Mbau

11.15 am – 1.15 pm
All Africa Post Harvest Technologies & Innovations Challenge 2017

• Remarks by the Postharvest Technologies and Innovations Challenge Chair (Dr. Catherine Kunyanga)
• Process presentation, Chair of the Postharvest Technologies & Innovations Jury
• Pitching by the top 10 innovations (5 minutes each)
• Presentation of Awards to Innovators

1.15 pm – 2.15 pm
LUNCH BREAK

2.15 pm – 3.45 pm
Official Closing Ceremony

Moderator: Wallace Kantai

• Congress Communiqué – The Nairobi declaration on post-harvest loss reduction in the African context
• Way Forward – A Call to Action towards food loss and waste reduction by all stakeholders

• Closing Remarks
  o Willy Bett, CS Agriculture
  o Peter Mbithi, University of Nairobi Vice Chancellor
  o Komla Prosper Bissi, African Union Commission
  o Strategic Partner – Rockefeller Foundation

• Vote of thanks: Margaret Hutchinson

3.45pm
COFFEE BREAK & DEPARTURE
List of Posters


2. Development and Quality Assessment of Nutrient-Rich Cereal-Based Porridge Flour in The Northern Region of Ghana: Agyiri M

3. Microorganisms of smoked fish from Iseyin local government, Oyo state Nigeria: Akinyemi, A. A.

4. Acoustic detection of postharvest insect pests of maize Zea mays L. and common beans Phaseolus vulgaris L. (Fabaceae) in Kenyan grain stores: Anastasia Wanju Njoroge


6. Assessment of potential microbiological hazards associated with farmed fish in Kenya: Anne Chepkoech

7. Value Chain Assessment and Nutritional composition of two Indigenous Leafy Vegetables (Amaranthus and Corchorus Spp.) In Kumasi Metropolis: Baidoo, J. K

8. Postharvest Drying and Storage of Amaranth Seed Using Zeolite Beads and Effect on Seed Quality: Catherine Ndinya

9. Ramping up the Training, Equipping and Support of Postharvest Extension Specialists in Africa: Cathy Kitinoja

10. Postharvest microbial quality of edible insects during handling and processing: D. Nyangena

11. Evaluation and Consumer Acceptance of Five Tomato (Lycopersicon esculentum Mill) Cultivars in Northern Region of Ghana: Dari Linda

12. Moisture adsorption of semi-processed adult cricket (Acheta domestica) and black soldier fly larvae (Hermetia illucens) flours: E. Kamau


14. Physico-chemical properties of extruded fish pellets containing black soldier fly (Hermetia illucens) larvae and adult cricket (Acheta domesticus) meals: F. Gichuho

15. Influence of milk handling containers on raw milk shelf life: Faith Ngundi Ndungi

16. Extraction of casein from high acid milk to be utilized in yoghurt development: Faith Ngundi Ndungi

17. Experiences and Challenges in Transfer of Milk Postharvest Technologies in Pastoral Communities of Kenya: Francis O. Wayua

18. Low-Cost Technologies for Postharvest Handling of Maize by Smallholder Farmers in Kenya: Francis O. Wayua

19. How much has been published on postharvest losses of perishables and food waste in Brazil: Gilmar P. Henz

20. Moisture Content, Insect Pests, Mycotoxin Levels In Maize In Three Districts In The Middle Belt Of Ghana: J. K. Danso

21. Hermetic storage for controlling postharvest losses and aflatoxin poisoning on maize in Kenya: J. Ng’ang’a

22. Postharvest loss Assessment along the tomato value chain in Lilongwe District, Malawi: Jacinta Andrew Nyaika

23. Efficacy of Lime and Vinegar powder as a disinfectant for tomato during storage: Jacinta Andrew Nyaika

24. Maturity Indices for Van Dyke, Kent and Tommy Atkins Mango Varieties produced in Embu County of Kenya: Jacinta Muiruri


26. Evaporative cooling technologies: simple but effective short-term cold storage alternatives for smallholder horticultural farmers: Jane Ambuko

27. Postharvest knowledge and skills gap in crop value chains: Can Universities bridge the gap?: Jane Ambuko

28. Efficacy of Filter Cake against Sitophilus granarius and Rhyzopertha dominica in Stored Wheat: Karta Kaske Kalsa

29. Effectiveness of Hermetic Bags in Protecting Maize Grains from Sitophilus zearraei Motschulsky (Coleoptera: Curculionidae): Karta Kaske Kalsa


31. An initial characterization of aflatoxin B1 maize sold in the principal retail markets of Kigali, Rwanda: Kizito Nishimwe

32. Assessment and Mitigation of Aflatoxin and Fumonisin Contamination in Animal Feeds in Rwanda: Kizito Nishimwe
33. Innovative technologies for cassava processing: viable option for SMEs growth in Nigeria: Lateef Ayodele Sanni
34. Effect of specific gum coatings on the shelf life and quality of cassava roots: Loreto Atieno
35. Effectiveness of hermetic facilities as alternatives to synthetic pesticides for sorghum storage under hot smallholder conditions: Macdonald Mubayiwa
36. Farmers’ Awareness and Adoption of Improved Grain Storage Technology in Western Kenya: Martins Odendo
37. Are Improved Postharvest Management Technologies beyond the reach of smallholder farmers in Linthipe Extension Planning Area in Malawi: Mirriam Matta
38. Improvement of women’s livelihoods through provision bio-fertilizer for vegetable gardens in two villages at west Kordofan, Sudan: Mohammed A. A. Hamad
39. Stored maize pests, their damage and economic losses in south-eastern Kenya: Muo Kasina
40. Ergonomic evaluation of grain extraction from smallholder farmer grain storage structures in Zimbabwe: Musundire R
41. Reducing post-harvest loss in cowpea (vigna unguiculatus l.walp) by use of botanicals to control the cowpea weevil: Mwandikwa J.M
42. Population Dynamics of Stored Maize Insect Pests In Warehouses In Two Agro-Ecological Zones In Ghana: N. Manu
43. Effect of drying on degradation of nutritional and bioactive compounds in african eggplant: Naomi N. Mbond
44. Small-holder oriented approach to post-harvest loss reduction in groundnuts in Kenya: Nelson Wafula
46. Influence of different edible coatings on quality and shelf life of cucumber (Cucumis sativus L) fruits: Odeyemi, O.M
47. Effect of different peeling methods on the quality characteristic of livingstone potato flours: Ofoeze M.A
49. Assessment of postharvest losses in pepper (Legon 18) in the Kwahu North District of Ghana: Osei-Kwarteng
50. Effects of Hexanal formulations on prolonging the postharvest life and quality of papaya fruit: Ouko J.R
51. Curbing Postharvest Losses in Okro Production In Nigeria: Thin Layer Drying Studie: Owolarafe, O.K
52. Maize grain stored in hermetic bags: Effect on grain quality of pest infestation and moisture: Paddy Likhayo
53. Improving Postharvest Quality of Greenhouse Tomatoes using Plant Biomass Soil Amendments: Peter Caleb Otieno
54. Information Sharing Strategies on Milk Postharvest Loss Reduction Among Smallholder Dairy Farmers of Olenguruone Division, Kenya: Rop K. Willy
55. Drying effects on the nutritional and antioxidant properties of selected tomato varieties grown in Kenya: Rosemary Mwende
56. Postharvest losses in fruits: Dissecting possible role and implications of pre-harvest NPK nutritional status of the fruits: Rosepiah Munene
57. Field efficacy of hermetic storage facilities for smallholder maize grain storage: Shaw Mlambo
58. Development of food based dietary guidelines for rural Kenyan women using Linear Programing: Sophie Ngala
59. Application of off-season flower induction chemicals to address seasonality in mango fruiting and the associated postharvest losses: Stephen Maloba
60. Effect of pre harvest calcium supplements on strawberry (Fragaria ananassa) yield, quality and shelf life: Tatenda Nyamwena


AGRIDEA
The Swiss Agency for Development and Cooperation (SDC) supports several initiatives for postharvest loss reduction in Sub-Saharan Africa, implemented by HELVETAS Swiss Inter-cooperation and partners. We focus on the specific areas of Water and Infrastructure (water and sanitation, water for food, bridges and roads), Rural Economy (food, organic farming and Fairtrade), Environment and Climate Change (soils, forests, water and energy), Skills Development and Education (basic literacy and vocational training) and Governance and Peace (human rights and culture). We showcase technologies for managing postharvest loss, in different languages.

Bioconservacion
Bioconservacion specializes in post-harvest solutions for cold storage and transportation of fresh produce. Our product line is designed to enhance the overall quality of the fruit and vegetables by absorbing ethylene (the “ripening hormone”) and other contaminants (odors, aldehydes and sulfur compounds) and particles (bacteria, fungi spores) inside cold stores, reefer containers and ship holds, thus ensuring high standards of hygiene, freshness and fungi-free commodities. Our solutions will improve quality and extend the shelf life of your produce by reducing spoilage and wastage due to over ripening and decaying.

One Mobile Projector Per Trainer (OMPT)
We enable the most under-served communities in the world to lift themselves out of poverty by gaining access to knowledge that can transform their lives. We achieve this by empowering organizations to create videos, to better reach the most underserved and remote communities with less staff and fewer resources. OMPT will demonstrate a revolution of how information is delivered to remote populations through tech based solutions. Come and learn how locally created video and battery-powered projectors can transform message delivery to beneficiary populations, including locations without electricity.

Africa Grain Care Limited
We focus on Post-Harvest Agricultural machinery through design of plants, importation and sale of machinery, setting up of turn-key plants, maintenance and service of equipment. We will showcase our products and services which include; consultation and designing postharvest grain solutions, storage-Flat and Hopper bottom silos, drying equipment both fixed and mobile dryers, cleaning and grading equipment which includes cleaners, graders, Coffee processing equipment such as coffee dryers, optical colour sorters, pendulum bucket elevators and intake system, grain piping and valves, bulk loading chutes, bagging units. Controlled plant aspiration systems that ensure a dust free working environment, electrical and control systems.

D.K Engineering
We specialize in the manufacture and supply of food processing equipment. These include: Fruit juice processing, Cereal popping machine for breakfast and snacks, and fruit and vegetable drying equipment. VIP’s compact power plant combined with a fruit and vegetable drier enables farmers to increase the value of their crops by up to 10 times. The technology helps mango farmers reduce post-harvest losses which can be up to 50% of Kenya’s mangoes. VIP’s unit transforms waste into heat and power, thus enabling farmers to process and preserve their crops.

Bell Industries
We deal with Agro-Inputs among them being; Foliar fertilizers, Pesticides, Herbicides, Water saving fertilizer and PICS bags. PICS are a triple layered hermetic bag that is chemical free, cost-effective, safe and efficient for short and long-term storage of grains. The benefits of PICS include: Absence of weevils and chemicals, stopping growth of Aflatoxin and long term storage. In addition to lower storage cost per bag, availability of food throughout the year and high quality grain.

OMPT will demonstrate a revolution of how information is delivered to remote populations through tech based solutions. Come and learn how locally created video and battery-powered projectors can transform message delivery to beneficiary populations, including locations without electricity.

Compatible Technology International (CTI)
CTI is a global NGO that equips smallholder farmers in Africa with innovative tools and training to harvest and process food to improve their livelihood. CTI technology reduces women’s drudgery, improves food quality, and creates new opportunities for business leaders in the rural sector through surplus sales and value addition. Among our technologies are: groundnut tools for harvesting, striping, and shelling high-quality peanuts, efficient and gender sensitive equipment for making fine flour or creamy nut paste, etc. In partnerships we create solid post-harvest designs, supply affordable tools and offer training in Africa.

Detia Degesch
We offer practicable and effective products for the sustainable protection of stored harvest and supply storage holder worldwide, while developing strategies against pest infestation. Our phosphine based insecticides are successfully used for durable food products such as grain, nuts, pulses and tobacco, and protect valuable commodities during storage, shipment, and further processing. We pay special care to the correct and responsible use of the high quality products in more than 120 countries. We are based in Germany with global markets for our insecticides and rodenticides.

Bioconservacion specializes in post-harvest solutions for cold storage and transportation of fresh produce. Our product line is designed to enhance the overall quality of the fruit and vegetables by absorbing ethylene (the “ripening hormone”) and other contaminants (odors, aldehydes and sulfur compounds) and particles (bacteria, fungi spores) inside cold stores, reefer containers and ship holds, thus ensuring high standards of hygiene, freshness and fungi-free commodities. Our solutions will improve quality and extend the shelf life of your produce by reducing spoilage and wastage due to over ripening and decaying.

Reducing food losses and waste; Sustainable Solutions for Africa

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ECOH Holdings Limited

ECOH provides solutions that mitigate industrial challenges in an environmental friendly and sustainable way. In Agriculture, our flagship product, YAD BIO-VITALIZER, is made from recycling of organic (kitchen, farm and animal) wastes, through a catalytic enzymatic processing to an organic fertilizer. It replenishes the depleted soil nutrients, increases soil water holding capacity and revitalizes soil health to enhance availability of plant nutrients thus resulting to production of healthy chemical free foods and increased household incomes while reducing and eliminating pollution loads and greenhouse gases. ECOH collaborates with government institutions, CBOs, farmer groups and individuals to enhance healthy crop production.

Elite Heavy duty bag

Is a triple layer bag Comprising of two inner liners and a strong outer bag. The two inner liners are made of strong polythene to prevent easy breakage and ensure that there is no exchange of oxygen between the inside and the outside of the bag. Lack of oxygen ensures that grain is stored for longer periods without pests breeding on the grain. The bags prevent aflatoxin growth. This ensures that farmers access healthy food free from pesticide dust for up to 5 years.

Farmtrack Consulting Limited

We are an agricultural consultancy firm dealing with sustainable agricultural pest control technologies, for horticultural crops. These technologies involve monitoring and male annihilation technique for Tuta absoluta on tomatoes, Fruit flies in mangoes, oranges, pawpaw, melons, etc and False codling moths on avocado, pepper and citrus. The technologies use female-based pheromone attractant meant to attract, trap and kill the males thus denying them fertilization. This suppresses the pest population and improves the quality of fruits and vegetables. These technologies are safe for use and are environmentally friendly as they leave no chemical residues on food products.

Postharvest Loss Alliance for Nutrition (PLAN)

Postharvest Loss Alliance for Nutrition (PLAN) brings together the multitude of public and private actors to collectively reduce the loss and waste of nutritious food. PLAN acts as a global nucleus for coordination, programming, research, knowledge exchange and investment on postharvest food loss as well as a national hub and “Business to Business Engine” in emerging markets for business to business engagement. PLAN coordinates measurable actions to address losses in perishable and nutritious food supply chains, and increase access to these foods for populations, including low-income households. These actions include “The Marketplace for Nutritious Foods.”

The Global Cold Chain Alliance (GCCA)

GCCA works to drive new innovations and development addressing postharvest losses through cold chain projects globally. GCCA represents all major sectors of the cold chain and unites partners to be innovative leaders in the temperature-controlled products industry. The cold chain plays a critical role in delivering safe, high quality food and other products to consumers around the world. GCCA serves as a primary resource for operational best practices, productivity data, and metrics as well as assisting in mitigating the cost of regulatory compliance to its members. We showcase innovations in refrigeration, warehousing, transportation, and postharvest activities.

GrainPro Inc Ltd

GrainPro Inc. has through its innovation, created a revolution in safe storage and drying of grains and seeds. Improving the Environment GrainPro’s pesticide-free hermetic storage units provide long and medium-term, safe storage, eliminating losses without insecticides, fumigants, or refrigeration. GrainPro’s storage solutions include Super Grainbags™ of 25kg to 1-tonne that act as portable airtight liners that protect small scale farmers, Collapsible Dryer Case II for safe, effective and convenient drying, Solar Bubble Dryers that save energy, Cocoons for larger quantities hermetic storage and TranSafeliners which protect commodities during transport.

Horticulture Innovation Lab, UC Davis

An improved solar dryer, the UC Davis Chimney Dryer can be built for approximately $100 and dries more quickly than standard solar dryers. The Drying Bead technology can dry and store vegetable seeds, and any agricultural commodity to safe moisture contents. In addition, we will show case the DryCard technology and provide it to participants. This card can be used to indicate if the moisture content of harvested and dried products is adequate for safe storage.

ILRI

The Biosciences eastern and central Africa-International Livestock Research Institute (BecA-ILRI) Hub is a shared agricultural research and biosciences platform whose mission is to mobilize bioscience for Africa’s development. Through the capacity building program “The Africa Biosciences Challenge Fund (ABCF)” BecA-ILRI Hub is able to support and mentor African scientists in the application of biosciences in food security and agricultural development to address constraints. The main program objective is to support and strengthen the capacity of National Agricultural Research Stations (NARS) to deliver on their research for development agenda. The ABCF Program operates in the intersection between
agricultural research for development (ARD), food security, and individual and institutional capacity strengthening.

**PICS**
PICS are a triple layered hermetic bag that is chemical free, cost-effective, safe and efficient for short and long-term storage of grains. The benefits of PICS include: absence of weevils and chemicals, stopping growth of Aflatoxin and long term storage. In addition to lower storage cost per bag, availability of food throughout the year and high quality grain. This simple post-harvest technique enables farmers to increase their income by keeping crops longer instead of selling their entire harvest immediately for fear of weevils. PICS bags eliminate the practise of chemical misuse on crops, thereby providing a reliable source of nutritious grain for thousands of villages. We showcase maize/cowpeas for 2014 and pigeon peas for 2015, stored in PICS bags.

**Rural Outreach Programme Africa**
We strive to create a healthy rural community able to live and enjoy an active dignified life, and to access and utilize both internal and external resources to the full, and willing to contribute fully to the development of families, communities, and the nation while upholding respect for others. We showcase approaches to Integrated Soil Fertility Management (ISFM), Packaging legumes (soybeans), soy products and value addition among others.

**SORELA**
We will be showcasing the Aflatoxin testing ELISA kits. ELISA well readers and all other laboratory equipments required for quantitative aflatoxin testing in Maize, cereals and their products and in milk and its products. We will also conduct a live demonstration of Aflatoxin testing process.

**USAID-KAVES Project**
USAID-KAVES invests in the commercialization of staples, milk, and horticultural crops. The project also increases access to water and improves nutrition and hygiene standards for rural communities in target counties. KAVES works with smallholder farmers, businesses, national and county government, private sector companies, and NGOs in Western and Eastern Kenya. We showcase best practices in “Reduction in physical losses and wastage through the commercialization of the hermetic storage technology (HST), Development of secondary markets particularly in processing of mangoes and yellow passion fruits and Technical assistance and training to smallholder dairy farmers, to improve the quality and shelf-life of milk.

**VESTERGAARD**
The ZeroFly® Storage Bag is a new technology developed to reduce post-harvest losses. It contains an insecticide, Deltamethrin that is incorporated within the polypropylene yarns woven into a storage bag. ZeroFly Hermetic Storage bag is the new ground-breaking innovation that has multi-layered polypropylene liner with advanced technology having a gas and moisture barrier for the safe storage of grain, seed and pulses.

**GRANSILO**
Kentainers is part of AquaSanTec group and operates in seven East African countries. AquaSanTec, has developed a unique domestic grain silo, under brand name GranSilo. It is made from high quality rigid food grade polymer using a combination of high end technologies, with a storage capacity of 375 Kg. It is designed in two parts with removable lid that locks on to the nestable base, using a sturdy metal clamp providing an air-tight fit with an EPDM seal. Its maximum width is 84cm. GranSilo is made from food contact grade polymers guaranteeing 30 year expected lifespan when used indoors.

**USAID Trade and Investment Hub (The Hub)**
The USAID East Africa Trade and Investment Hub (the Hub) boosts trade and investment with and within East Africa, by deepening regional integration, increasing the competitiveness of select regional agricultural value chains, promoting two-way trade with the United States under the African Growth and Opportunity Act (AGOA), and facilitating investment and technology to drive trade growth intra-regionally and to global markets. The Hub supports the U.S. government’s presidential Trade Africa and Feed the Future initiatives.

**Azuri Health Limited**
Azuri Health Limited commercially distributes and markets nutritious, naturally dried products from its own processing facility and those sourced from farmers. We work with a network of about 600 smallholder farmers to provide market linkages for their produce either locally or through export. The main ranges of products are dried mangoes, dried pineapples, passion, Nutri-porridge flour, sweet potato flour and dried fruit mix. Fresh mangoes are, dried using a solar-biogas green process to achieve perfect depth of flavor with no additives and preservatives.

**FAO**
The SDC funded an FAO, IFAD, and WFP joint project “Mainstreaming food loss reduction initiatives for smallholders in food deficit areas” aimed at improving food security and income generation opportunities through reduction of food losses in supported food value chains. The three Rome-based UN agencies have joined forces to raise awareness, stimulate changes and actions in member countries. At the Congress, the Community of Practice (CoP) on food loss reduction platform, a global convener and integrator of knowledge and information sharing, will be exhibited, as well as relevant publications, including from the SAVE FOOD global initiative.
Enterprise Projects Ventures Ltd.
InspiriaFarms™ mission is to transform the global food industry by enabling small and medium agro-food businesses to be highly competitive. We bring together talent, transformational ideas, and supporting infrastructure to create commercially viable social impact. We significantly reduce operating costs and perishable losses through provision of food safe certification-ready, modular cold storage technology. This technology is provided with free, high-quality food industry business strategy and technical assistance for long term growth and 0% interest asset financing.

International Institute for Tropical Agriculture (IITA)
The International Institute of Tropical Agriculture (IITA) is a not-for-profit institution that generates agricultural innovations to meet Africa’s most pressing challenges of hunger, malnutrition, poverty, and natural resource degradation. We will exhibit material on IITA activities to address hunger, malnutrition, and poverty as well as natural land degradation in sub-Saharan Africa. In addition, we will showcase new, science-based technologies to reduce postharvest losses in key crops such as cassava and grains such as maize and legumes. These technologies include promoting market-oriented and profitable postharvest processing, storage, and value-adding technologies including machineries for smallholder farmers and processors.

Post Harvest Africa
We are a Kenyan private enterprise targeting the small scale farmers in Kenya and in Africa as a whole. Our objective is to enable small scale farmers use Grainz bag (the hermetic technology) in storing their grains. Grainz storage bag are economical, easy, effective and safe to use, affordable, and require no pesticides for grain storage. This ensures that food is chemical and insect free.

AFRICA FARMS AND MARKETS
We showcase the Super Grain bag, a highly regarded storage solution that serves as inner liner for bags. Its proprietary Ultra Hermetic design preserves the freshness of stored commodities. Cable ties used to seal in freshness and to create a gas tight atmosphere makes it effective against oxygen and moisture permeation and easily arrests insects and fungus. It preserves the quality, taste and aroma as well as the color of stored commodities such as coffee, corn, paddy, sorghum, soybeans, wheat, etc. The strong plastic material made of SGB IV-R makes it resistant to cowpea weevils and larger grain borers.

The International Institute of Tropical Agriculture (IITA)
IITA is a not-for-profit institution that generates agricultural innovations to meet Africa’s most pressing challenges of hunger, malnutrition, poverty, and natural resource degradation. In partnerships, we develop new science-based technologies to reduce postharvest losses in key crops such as cassava, maize and legumes. We promoting market-oriented and profitable postharvest processing, storage, and value-adding technologies including machineries for smallholder farmers and processors. We showcase Aflasafe, Cassava processing technologies and products and Hermetic bags for grain storage. The Hermetic bags (Purdue Improved Crop Storage (PICS) and Super Grain Bags (SGB)) are oxygen and moisture impermeable, cost-effective, chemical-free storage and reusable. (For more information: www.iita.org)

AFRICAN GRAIN CARE LTD (AGC)
AGC is a company incorporated in Kenya that deals with Post-Harvest Agriculture Machinery through design of plants, importation and sale of machinery, setting up of turn-key plants, maintenance and service of equipment. Our grain post-harvest equipment includes:
- Storage: hopper and flat bottom steel silos etc.
- Drying: Flow dryers, batch dryers etc.
- Grain processing: cleaners, graders, gravity separators etc
- Conveying: Belt conveyors, chain conveyors, etc.
- Milling: flour and animal feed mills and mixers
- Aspiration: Controlled plant aspiration systems ensuring a dust free working environment
- Installation of electrical and control systems e.g. PLC, DCS, SCADA

University of Nairobi, Department of Plant Science and Crop Protection (Postharvest Technologies)
Researchers from the Department of Plant Science and Crop Protection are involved in various applied research projects to find and/or validate sustainable solutions to challenges facing smallholder farmers in Africa. In this congress the research team will show-case some of the postharvest technologies that have been tested and validated. The technologies to be show-cased were not developed by the researchers but they have been adapted and/or validated by the researchers. The technologies to be exhibited include 1) zero energy brick cooler (a low-cost evaporative cooling technology) 2) Coolbot™ (a low-cost cold storage technology) 3) Wakati® (improved storage option for fruits and vegetables) 4) Xtend® (a modified atmosphere packaging option) and hexanal (a pre and postharvest treatment that can be used to extend the shelf life of fruits).
AFRICAN GRAIN CARE LTD (AGC)
AGC is a company incorporated in Kenya that deals with Post-Harvest Agriculture Machinery through design of plants, importation and sale of machinery, setting up of turn-key plants, maintenance and service of equipment. Our grain post-harvest equipment includes:
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- Installation of electrical and control systems e.g. PLC, DCS, SCADA

Ekima Engineering
Is a metal fabricating company situated in Machakos County, it mainly focuses on making Metal Silos among other metal related products. The EK Grain Metal Silo is made of galvanized iron sheets with molten zinc surface that is non-peeling and flexible. To ensure that the silo is airtight, the joints are soldered when it is manufactured, the hermetic technology helps prevent insect breeding and grain damage during storage. The company is flexible in fabrication of metal silos as the capacities/dimensions depend on the number of 90kg bags of grain to be stored; it can range from 1 to 30 bags. The specifications for the capacities take into consideration the height of the inlet and outlet lids and throats in millimetres. Ekima targets mainly small holder farmers to help alleviate post-harvest losses.

World Food Programme
30-40 percent of total crop production never makes it to the market because of poor post-harvest handling practices. WFP is training smallholder farmers on improving grain post-harvest handling combined with simple but effective airtight household storage equipment to ensure quality grain and reduce grain loss. Hermetic (airtight) storage provides excellent insect control and prevents grain from reabsorbing moisture from humid outside air once properly sealed. This equipment includes:
- 1) Hermetic storage bags (a set of 4 which stores up to 400Kgs)
- 2) Plastic silo with storage capacity of 450–500Kgs
- 3) Metal silo available in 2 sizes 750Kgs and 1200Kgs

CIMBRIA
At Cimbria we have built up market leading specialist knowhow within the development of solutions - all the way from processing lines to turnkey projects. Thousands of complex grain and seed turnkey installations around the world, operating under widely different conditions with a broad variety of products, are based on our own research and development over a period of more than sixty years. This, together with our strong focus on a healthy working environment, wide ranging flexibility and return on investment, has provided Cimbria with the leading position on the global market that the company enjoys today. Cimbria is a company of GSI group, a worldwide brand of AGCO (NYSE)

LandOLakes
Following an open and competitive process in 2014, iProcure, Ltd., was among seven proof-of-concept innovations which won a seed funding and technical assistance award from USAID through Feed the Future Kenya Innovation Engine to test its "Last Mile-Distribution of Farm Inputs" innovation. After successfully proving the concept with over 2,000 farmers in Makueni and Meru Counties, in 2016, iProcure won an advanced award from USAID to scale up the technology in Meru, Uasin Gishu, Nandi, Bomet and Homi Bay Counties. iProcure's "Last Mile-Distribution of Farm Inputs" innovation has developed a platform that leverages web and mobile technology to aggregate demand for inputs from smallholder farmers. iProcure then sources for these inputs directly from local wholesalers and manufacturers and delivers them in locations as close as possible to the farmers. This streamlines the supply chain, lowers costs and ensures affordability and timely delivery for smallholder farmers, even in remote areas. As a result, smallholders are enjoying savings of at least 30% on genuine input purchases. The iProcure innovation has currently reached over 15,000 smallholder farmers in the dairy and horticultural crops value chains and manages the supply of approximately 3,000 tonnes of agriculture inputs per month. With USAID’s support, iProcure aims to reach at least 34,000 smallholder farmers and expand its operations to serve farmers in East Africa and the wider region.

EAST AFRICAN GRAIN COUNCIL
G-Soko is a service of EAGC. It’s a regional grain trading system that comprises of a network of automated grain bulking/aggregation centres and certified warehouses, linked to an online trading platform, as well as participating banks for settlement and clearing. The GSOko trading partners include grain sellers, buyers, warehouse operators, banks and agro-dealers who are all regulated and

Reducing food losses and waste: Sustainable Solutions for Africa
administered by EAGC under the law of contract and operate under defined set of protocols, procedures, rules and regulations. The trading system gives confidence that, irrespective of where the warehouse is located, the uniform quality of the stored grains can be guaranteed.

**BURTON & BAMBER**

Sweetunda! We offer new and interesting product range of 3 dried fruit, 4 fruit rolls and mixes. Seven product varieties with a diversity of taste and colour. At Sweetunda everything starts and ends with natural goodness. From the way we work with small scale, local farmers, to selecting the sweetest fruits, gently baking them to seal in all the goodness, to excluding refined sugar. All the ingredients for delicious, healthy snacking on the go or with friends. After all fruit is nature’s way of saying “It’s OK to have a sweet tooth.”

**Israel’s Volcani Institute**

Established in 1921, the Volcani Institute conducts cutting-edge research and leverages Israel’s renowned capacity for innovation to develop solutions for agriculture and the protection of the environment. Serving as the research arm of the Israeli Ministry of Agriculture and Rural Development, the Volcani Institute is the driving force behind Israel’s internationally acclaimed agricultural achievements. One of Volcani’s strengths lie in its multi-disciplinary nature, allowing scientists to collaborate on research and solutions. Comprising 6 research institutes and 2 off-campus experimental centers, Volcani’s dedicated post-harvest institute is one of the largest in the world. Visit our exhibition booth to learn more about Volcani’s key innovations addressing post-harvest loss.

**SMILEPLAST (PLASTIC SILOS)**

**STEEL AND TUBE INDUSTRIES**

Braz Agro LTD