

## 2016 GAIA AgTECH INNOVATION CHALLENGE

**Name of representative:** Bezawit Worku Yenealem

**Name of company:** Agrilink

**Country:** Ethiopia

Agrilink aims to connect small holder farmers to industry in order raise the farmers' incomes and meet the demands of various agriculture-dependent industries. Agrilink provides a full package of local sourced services for agro-industries/buyers through contract farming. It will create market linkage for farmers to directly sell to agro-industries through their cooperatives.

Agrilink has a total team of 52 people with different experiences ranging from working in the private sector, government and non-governmental institutions.

**Name of Representative:** Eden Getachew Tolossa

**Name of Company:** [Green Way Farms PLC](#) (under the brand GreenPath Food)

**Country:** Ethiopia

Green Way Farms (GWF) is a for-profit social enterprise that exists to improve the incomes and nutrition of smallholder farmers through the eco-friendly production of high-value organic produce, and offers access to fair, and sustainable markets.

The GFW team consists of 20 professionals with extensive collective expertise in rural technology development, smallholder training and capacity building, agronomy and permaculture, supply chain logistics, Ethiopian operations, and market-based agricultural development in East Africa.

**Name of representative:** (TBC)

**Name of company:** AniFeeds

**Country:** Kenya

AniFeeds produces a highly nutritious feed for fish and poultry using insect larvae as the protein source. The larvae are grown from organic waste. This innovation is a cost-effective alternative to other feeds and fertilizers.

The three-person team has the potential to serve 150,000 small holder farmers in Kenya alone.

**Name of Representative:** Peter Chege Gichuku

**Name of Company:** Animal Mineral and Allied Ltd t/a [Hydroponics Africa Ltd](#)

**Country:** Kenya

Our innovation is based on simplified hydroponics which leverages the use of local materials to grow healthy plants without user expertise. Hydroponics technology is whereby the farmer can produce maximum yields on small areas (up to 1/5) without use of soil and 80% less water. We have developed five hydroponics methods based on crop type, water availability, user (elderly or disabled or women), land size, climate and culture.

The team is comprised of sixteen members with varying experiences across the agricultural research and development and business sectors.



**Name of Representative:** Ogingo James Ogola

**Name of Company:** Chemolex

**Country:** Kenya

Chemolex makes use of rechargeable electric motorcycles for the transportation to markets of perishable farm produce and fish from rural communities. This innovation prevents post-harvest losses, saves time and transport costs for farmers.

The team is comprised of seven members who are diversely experienced in different fields.

**Name of Representative:** Adan Mohammed

**Name of Company:** Ecodudu

**Country:** Kenya

Ecodudu uses nature's simple mechanism of organic matter decomposition but on an industrial scale. We use insect larvae to digest organic matter. The insects after decomposition of the organic matter are harvested and dried and can be used as animal feed. The waste is turned to a soil conditioner that is supplied to farmers.

Currently in its pilot stage, Ecodudu was founded by engineer Adan Mohammed.

**Name of representative:** Caroline Wanjiku Waithera

**Name of company:** [Enterprises Projects Ventures](#)

**Country:** Kenya

Enterprise Projects Ventures' InspiraFarms, supplies small-scale cold storage, chilling, and food processing units that enable farmer groups and small and growing agribusinesses to reduce their post-harvest losses by 60%, improve their incomes by 50%, and create jobs for rural women. InspiraFarms has also developed an innovative asset finance model to finance the acquisition of its technologies.

Enterprises Project Ventures and InspiraFarms has a ten-person team with members hailing from all over the world and have expertise in finance, research, and policy.

**Name of Representative:** Hillary Miller-Wise

**Name of Company:** [Esoko](#)

**Country:** Kenya

Esoko is a for-profit company with a mission to make agriculture a profitable business for smallholder farmers. Esoko invented a mobile wallet through which smallholder farmers save and borrow toward the purchase of discounted inputs.

Esoko is led by Hillary Miller-Wise who has launched several mobile solutions targeting smallholder farmers in Africa. She also holds an MBA from INSEAD, where she was awarded the Social Entrepreneurship Scholarship, and a Master's in International Economics from Johns Hopkins University.



**Name of Representative:** Mary Joseph

**Name of Company:** [FarmDrive](#)

**Country:** Kenya

FarmDrive connects the small holder farmer financial institutions, loan facilities, and insurance services, all through the mobile phone. When farmers apply for a loan, FarmDrive customize the loan terms to the crop, land size, and season. We ensure that the grace period allows farmers enough time to plant, grow, harvest, and sell before installment payments are due, and we also bundle the loan with weather-index insurance to further reduce risk.

FarmDrive was founded by Rita Kimani and Peris Bosire, young Kenyan innovators who grew up in smallholder farmers communities. The rest of the FarmDrive team is made up of individuals who are highly experienced in computer science, agriculture, and microfinance.

**Name of Representative:** (TBC)

**Name of Company:** [Inagape](#)

**Country:** Kenya

Inagape is a for-profit company that buys subsistence farmers' produce at fair market rates, create employment for the local people through value-addition, and sell the finished products in markets previously inaccessible to farming communities.

Patricia Griffin sees an opportunity to improve livelihoods of women farmers by adding value to existing agricultural assets that would otherwise struggle to reach markets. John Lankeu, the Operations Manager, is a serial entrepreneur with four companies and one community-based self-help group to his credit.

**Name of representative:** Margaret Syomiti

**Name of company:** [Kenya Agricultural Livestock Research Organization \(KALRO\)](#)

**Country:** Kenya

Kenya Agricultural Livestock Research Organization (KALRO) developed a new feeding regime of "Zero-milk" for calves' formula. The benefits will be twofold: 1) an increase in available milk for home consumption and/or for sale, and 2) positive performance of calves without adverse health effects.

The KALRO technical team is comprised of three mentees, one intern, and two technical officers who comprise the technical team. They work with three community-based organizations each with about five farmer groups comprising of about 50 farmers each, giving a total of 750 small holder dairy farmers.

**Name of Representative:** Stephen Wanjala Wamalwa

**Name of Company:** [Kenyatta University](#)

**Country:** Kenya

Based on the of principle Diffuse (light) Reflectance Spectrometry, the methodology provides a protocol for determining the state of soil quality by quantifying such parameters as soil carbon, organic nitrogen, extractable phosphorus, and other exchangeable nutrients, when combined will give timely, precise and cost effective farm specific agronomic advisory services.



Dr. Benjamin Danga, a distinguished scholar with hands-on experience in soil and plant nutrition, and Kizito Kwena, a soil scientist at Kenya Agricultural Research and Livestock Organization (KALRO), conducted the research on this soil testing methodology.

**Name of representative:** Paul Thiongo Kibogo

**Name of company:** Kibogo Innovate Consultant

**Country:** Kenya

From locally sourced organic materials, Kibogo Innovate Consultant has created an organic N.P.K fertilizer with higher levels of nitrogen, phosphorus and potassium, with additional secondary nutrients that include iron, calcium, zinc, magnesium, manganese. The innovation is aimed at providing nutrition to soil and the plants and food harvested from it.

The four-person team collects and processes the raw organic material for the fertilizer.

**Name of representative:** Margaret Jebiwot Komen

**Name of company:** [Mace Foods Ltd](#)

**Country:** Kenya

In 2009 Mace Foods Ltd embarked on an ambitious project to produce process and market five varieties of African leafy vegetables in order to offer these highly nutritious vegetables in a dried pre-cooked form to consumers who may not be able to access it readily.

Managing Director Margaret Komen and her team come from various backgrounds including food technology, business, and accounting. They are currently working with a network of 3, 893 households to provide nutritious greens year-round.

**Name of representative:** Yvonne Otieno

**Name of company:** [Miyonga Fresh Greens](#)

**Country:** Kenya

Miyonga Fresh Greens reduces post-harvest losses and reduces food waste through turning rejected produce into dried powder. This innovation provides extra income for small holder farms who are now able to sell their rejected fruits and vegetables.

In partnership with FoPo, a food powder company, Miyonga Fresh Gardens and their network of farmers gives both farmers and consumers produce alternatives.

**Name of representative:** Yvette Ondachi

**Name of company:** [Ojay Green Ltd](#)

**Country:** Kenya

Our innovation uses a technology that offers smallholder farmers end-to-end support (from production to market linkage) aiming to increase incomes sustainably following a 4-step process: engagement, equipping, educate, and empower. This model ensures farmers produce products that are required by markets. Once farmers complete the first planting cycle then climate smart agriculture measures are introduced.

Our team is a fine blend between dynamic zealous talent and mature talent. The team has 3 main departments: Production, Logistics and Commercial. The management team has cumulative 20 years of agribusiness experience.



**Name of Representative:** Dorothy Akinyi

**Name of Company:** Rhizobia Groundnut Oil

**Country:** Kenya

Our key interest is to enhance food security and better the livelihood of the farmer through sustainable groundnut production using the BNF technology. Two of the acid-Al tolerant rhizobia strains found to effectively nodulate groundnut have been converted in to a powdered bio-fertilizer. Thus the adoption of this biofertilizer for use in groundnut cultivation would optimize BNF and thus increase groundnut yield at low cost.

Rhizobia Groundnut Oil is comprised of six team members.

**Name of Representative:** Stella Gakuo

**Name of Company:** [Savanna Circuit Technologies](#)

**Country:** Kenya

The Autofarm Agrics Kit is an automated, multipurpose SMART sprayer that can be used for spraying in both small and big farms and also on animals. The sprayer is autonomous and is powered by an inexhaustible green energy from power generator known as XBILLS Power Generator, an alternative energy project.

Our team has a diverse background, with members holding degrees and diplomas in software engineering, communication and journalism, computer science.

**Name of Representative:** Lydiah Wangechi Muya

**Name of Company:** [Tech for Trade](#)

**Country:** Kenya

Open Book Trading seeks to influence access to reliable markets and fair prices for smallholder farmers' produce. With access to fair and reliable markets, farmers will invest time and resources to grow extra crops that can be sold to build their income and improve their living standards.

Open Book Trading operates with a lean management and staff team in Nairobi, Kenya, led by director Lydiah Muya.

**Name of Representative:** Brenda Anne Awour

**Name of Company:** [Ukulima Tech](#)

**Country:** Kenya

Ukulima Tech uses vertical farms to combat limited space and encourage more urban farms and year-round farm production. Vertical farms can be replicated in balconies, rooftops, parking areas, basements and backyards to satisfy household and market demand.

Ukulima Tech was founded by dedicated team of professionals committed to the ongoing development and installation of world-class vertical garden systems for the production of food in any geographic location or climate including urban set up.



**Name of representative:** Sarah L. Mubiru

**Name of company:** [Aroma Honey Toffee Ltd](#)

**Country:** Uganda

Aroma Honey Toffee provides consumers of sweets and candy with a healthy option! Honey has health and medicinal benefits, thanks to the high content of nutrients and minerals as well as in providing remedies for numerous medical conditions. Aroma Honey Toffee uses innovative approaches to empower women along the honey production value-chain.

Aroma Honey Toffee was founded by former AWARD Fellow Dr. Sarah Mubiru, a livestock production and value chain specialist.

**Name of representative:** Emmy Moorhouse

**Name of company:** [Mercy Corps](#)

**Country:** Uganda

In partnership with the Gulu Agricultural Development Company (GADCO), Mercy Corps Uganda, has piloted innovative and sustainable ways to engage women in the agricultural value chain in Northern Uganda. GADCO and Mercy Corps have worked together to improve outreach with female smallholder farmers in contract farming schemes.

Mercy Corps Uganda has a team of over 200 staff, spread across its field and capital offices. Staff have several years of experience with market systems development projects in the agri-business sector in Northern Uganda.

**Name of representative:** Annaviola Walter Lema

**Name of company:** A'Viola

**Country:** Tanzania

A'Viola creates hermetic bags (PICS bags) that protect crops from infestation by denying them air and water. Once PICS bags are closed, eggs and pests stop reproducing and they die. Crops remain in the same state and quality until ready for use.

A'Viola has a team of ten people stationed around Tanzania who work with vendors to supply the PICS bags to local farmers.

**Name of representative:** Japhet Sekenya

**Name of company:** [Biofood Tech Enterprises Company Limited](#)

**Country:** Tanzania

Biofood Tech Enterprises Company Ltd processes peanuts to produce non-dairy, non-lactose probiotic drinks, karangayogo, for over 4.25 million lactose intolerant Tanzanians.

The company also produces high protein chicken feed from Azolla, BSF Larvae and duckweeds for over 11.5 million Tanzanians in the poultry industry.

The Biofood Tech Enterprises eight-member team has backgrounds in biology, biotechnology, and business administration.



**Name of Representative:** Mariam Kom Mtunguja

**Name of Company:** Chambezi Community Processing Group

**Country:** Tanzania

Chambezi Community Processing Group will help solve post-harvest losses and also will improve agri-market efficiency through processing and marketing of high quality Virgin Coconut Oil (VCO). Farmers are trained and provided with one oil expelling machine and since then we have been acting as technical back stoppers.

The team is comprised of technical researchers, extension (district level), and farmers.

**Name of Representative:** Clara Anchilla Ibihya

**Name of Company:** [Claphijo Enterprise](#)

**Country:** Tanzania

Claphijo Enterprise uses solar dryer technology, a simple low cost technology that is easily made by rural technicians using the free energy of the sun, to dehydrate fruits, vegetables and spices at the farm level. Solar dryer dehydrates products while letting the produce retain most of the nutrients, color, and flavor.

Our team has over seventy years of combined experience in the fields of conservation and environmentalism, business and entrepreneurship, and food technology.

**Name of Representative:** Jasmijn Bleijerveld

**Name of Company:** [Jasmine Bee Tanzanian Ltd](#)

**Country:** Tanzania

Jasmine Bee's Honey Buzz transports a processing and preservation facility to rural areas in order to assist beekeepers process their raw honey and produce quality honey and connect them to markets.

Jasmine Bee works with community beekeepers to capitalize on Tanzania's excellent beekeeping climate. Tanzania has over 35 million hectares of forests and woodlands that are nearly all pesticide and pollution free, making the potential for honey making huge. Furthermore, there is the rising demand for high-quality bee products. However, the lack of standards and limited access to markets limit honey producers.