

# Biovision Africa Trust Annual Report 2017

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Empowering smallholder farmers to reclaim their land, improve nutrition, livelihood and put hunger at bay in Africa

# Acronyms and Abbreviations

BvAT	Biovision Africa Trust
BV	Biovision Foundation
BI	Biodiversity International
CEC	County Executive Committee
CLO	Country Lead Organization
CIWS	Community Information Workers
CAI	Computer Aid International
DAD	Department of Agriculture Development
DADeADC	Department of Agriculture Development Council
ECHO	Education Concern for Hunger Organization
EOA-I	Ecological Organic Agriculture Initiative
ESA	Ecologically Sustainable Agriculture
FAO	Food and Agriculture Organization of the United Nations
FCP	Farmer Communication Programme
GIZ	The Deutsche Gelleschaft fur Internationale Zusammenarbeit
ICIPE	International Center of Insect Physiology and Ecology
IFOAM	International Federation of Organic Agriculture Movements
KALRO	Kenya Agriculture, Livestock, Research Organization
KOAN	Kenya Organic Agriculture Network
MAAW	Meru Association of Animal Welfare
МКМ	Mkulima Mbunifu
NEPAD	New Partnerships for African Development
PCN	Potato Cyst Nematodes
PICS	Pu-dul Improved Crop Storage
SDC	Swiss Agency for Development and Cooperation
SSNC	Swedish Society for Nature Conservation
SUA	Sokoine University of Agriculture
SINGI	Sustainable Income Generating Investment Group
TOF	The Organic Farmer
TOF Radio	The Organic Farmer Radio
UN-FAO	United Nations Food and Agriculture Organization

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Dr. David Amudavi Executive Director

#### Dear Friends,

We are honoured to present the BvAT's Annual Report for 2017, a year in which our staff members, interns and partners rose to meet unprecedented farming needs facing the smallholder farmers in Kenya and beyond.

Faced by myriad seasons of scanty rains, the agriculture arm of development bore the biggest brunt of the effects of long dry seasons. A sharp escalation in drought leading to loss of millions of livestock, the spread of disease and a creation of scores of people without adequate food, water, healthcare and education. BvAT positioned itself to provide the support it could through the programmes it runs. The Farmer Communication Programme (FCP) and Ecological Organic Agriculture Initiative (EOA-I) are the two broad BvAT programmes growing with farmers' needs. FCP is implemented in Kenya and in Tanzania with five (5) pathways with the core function of empowering the smallholder farmer with information, knowledge and training in the area of ecologically sustainable agriculture (ESA).

The communication pathways are the Print (The Organic Farmer and

Mkulima Mbunifu Magazines), The Organic Farmer Radio (TOF Radio), Infonet (web-based) and the Outreach programme. EOA-I is implemented in eight (8) countries namely Kenya, Uganda, Tanzania, Ethiopia, Nigeria, Benin, Mali and Senegal. The initiative offers solutions to problems facing agricultural systems in Africa through various pillars of knowledge generation and technology transfer, information dissemination, market development, networking and partnerships, policy development and institutional capacity building.

Message from the

**Executive Director** 

In 2017, the two broad programmes of BvAT helped with information addressing farming challenges to at least 10 million smallholder farmers in Africa. This was in the midst of a drought, exacerbated by climate change, sweeping across East Africa and endangering the lives of more than 30 million people.

Many of the African ministers of Agriculture meeting at a Special NEPADfocused session on the UN Food and Agriculture (FAO) in 2002 committed to increasing public investment in agriculture by a minimum of 10 per cent of their national budgets to raise agriculture growth by at least 6 per cent in their respective countries.

Through the EOA-I, Kenya and Uganda have already prepared drafts of an organic agriculture policy which are on the desks of the Principal Secretaries for State Departments of Agriculture waiting for their review, endorsement and pushing through the legislation processes for enactment into law. BvAT will continue to lobby for the signing of the draft policy into a law not only in the two countries but also in most of the African countries that were represented at UN-FAO Special meeting. We are determined to be a part of the change we want to see in changing the lives of the smallholder farmers in the Africa continent and leave a rich inheritance to our children's children and their future.



Andreas Schriber Board Chair and Founding Trustee

The Board of Trustees of the Biovision Africa Trust (BvAT) is pleased to see our young organization continue to grow. Not only in Kenya, but across the African continent, we are catalysing improvements in food security, sustainable agriculture and food systems. The desire of various stakeholders including governments to significantly increase grain yields and animal production is encouraging. However, a focus on environmental sustainability - soil quality, water resources, and ecological practices to manage pests, for example, must be underscored.

The fight against hunger and poverty is bound closely with the global challenges of climate change, loss of biodiversity, inequality, and planetary boundaries. That's why we all have to contribute to the Agenda 2030, to achieve the Sustainable Development Goals (SDGs) of the United Nations by 2030. Biovision Africa Trust, as an agent of change, is pioneering and making a significant contribution to this agenda. BvAT works hard to ensure the realisation of the SDGs by providing and fostering solutions for food security, improved nutrition and sustainable agriculture. Households' human, animal, plant and environmen-

# Message from the Chair of the Board

tal health can only be achieved if food security, improved nutrition and sustainable agriculture become the norm in Africa.

Testimonials from beneficiaries of our Farmer Communication Programme (FCP) in Kenya and Tanzania attest to the critical role the Trust plays in responding to the information and knowledge needs of farmers. This unique and integrated communication programme reaches farmers through two monthly magazines http://theorganicfarmer.org/; http://mkulimambunifu.org/, radio shows which spark dialogue amongst farmers, and an on and offline user-friendly knowledge bank http://www.infonet-biovision. org/. In addition, our farmer resource centers provide face-to-face advice and training which builds practical skills and complements the efforts of extension service providers. It is a onestop shop serving thousands of farmers at community and village levels.

Farmers in Kenya have received timely and valuable information on how to control the Fall Armyworm, which lately has become the biggest threat to cereals, undermining the foundation of the food basket and improved nutrition. The impact of the farmer communication programme will continue to be felt as the team behind it continues to respond to the farmers' needs and foster change in farming behaviours over time. Close cooperation with other organisations, such as the International Centre of Insect Physiology and Ecology (icipe), make BvAT a fantastic organisation for knowledge dissemination. The close relationship with Biovision Foundation, based in Switzerland, is another key aspect for BvAT's success.

The Board of Trustees recognises the important role BvAT is playing in leading and developing the continental initiative – the Ecological Organic Agriculture (EOA-I) – by undertaking three major functions. As an Executing Agency for a major contribution from the Swiss Government through the Swiss Agency for Cooperation and Development (SDC) and additional support from the Swedish Society for Nature Conservation (SSNC); hosting the Continental Steering Committee Secretariat (on an assignment from African Union) and being part of the implementing organisations, handling knowledge management and sharing information on environmentally sustainable agriculture. BvAT has an enormous edge in engaging in partnerships at various levels.

Moreover, the Board of Trustees wishes to most sincerely applaud the BvAT team in Kenya and Tanzania, who continue to work tirelessly to make BvAT a truly caring and supportive organisation for farmers in Africa. We encourage them to continue to pursue partnerships with like-minded organisations to achieve the vision of a food secure African continent with healthy people living in a healthy environment.

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### About BvAT

### **About BvAT**

Biovision Africa Trust (BvAT) is a not-for-profit organization established in Kenya in 2009 by the Biovision Foundation for ecological development in Switzerland and supported by the International Centre of Insect Physiology and Ecology (ICIPE) in Nairobi. Agricultural output and food supply are hindered by various environmental factors and lack of information and relevant training for the African smallholder farmers. Plant pests, for instance, are responsible for up to 80% of crop losses. Ecologically sustainable solutions are a practical alternative for African farmers to achieve good crop yields without relying on expensive chemical fertilizers and pesticides. What is lacking, however, are effective dissemination pathways to deliver relevant information to the farmers.

The **overall goal** of the Trust is to sustainably improve the lives of the people in Africa while conserving the environment as the basis for all life.

This will be achieved through bridging the gap between research and application, with a strategic focus to translate, package and disseminate information related to human, animal, plant and environmental health to smallholder farm-



Our Mission

 Alleviate poverty and
 improve the livelihoods of
 rural communities in Africa
 through disseminating
 relevant agricultural
 information to small holder
 farmers and supporting
 likeminded organizations
 and institutions.



• Inclusivity.

ers and rural communities in Africa. The Trust cooperates and supports other organizations, institutions and stakeholders working with small holder farmers to promote ecological sustainable agriculture in Africa.

### **BvAT Priority Areas**

**Key Priority Area 1**: To support programmes, projects and initiatives in the agro sector that focus on generation and dissemination of knowledge and information on ecologically sound and useful innovations in human, animal, plant and environmental health.

**Key Priority Are 2**: To undertake research into special issues and challenges facing smallholder farmers in order to provide useful and practical solutions.

**Key Priority Area 3**: To support educational and empowerment programs amongst small-holder communities in partnership with other players (public, private, civil society).

**Key Priority Area 4**: To support resource mobilization strategies to provide grants/ technical assistance to public charitable trusts or institutions working with rural communities in organic agriculture.

### **BVAT Board of Trustees**



Andreas Schriber Board Chair and Founding Trustee



Prof. Judi Wakhungu Trustee



Prof. Onesmo ole-MoiYoi Trustee



Prof. Christian Borgemeister Trustee



**Dr. David Amudavi** Executive Director (Ex-Officio)

### Where we work

BvAT runs programmes in four (4) East African countries namely Kenya, Tanzania, Uganda and Ethiopia and four (4) in Western Africa – Nigeria, Mali, Senegal and Benin. The Ecological Organic Agriculture (EOA) Initiative is implemented in eight (8) Afrcian countries Kenya, Uganda, Tanzania, Ethiopia, Nigeria, Benin, Mali and Senegal while Farmer Communication Programme (FCP) is implemented in Kenya and to some extent in Tanzania. The FCP model has been piloted in Ethiopia with support from BvAT's mother organization, Biovision Foundation. BvAT is also working with ICIPE and Biovision Foundation in a new initiative to expand Push-Pull into Sub-Saharan Africa with activities starting in Zambia and Malawi. BvAT is in charge of Community Outreach.

### **BvAT Board of Trustees**

The Board of Trustees who served during the period and to the date of this report were:

- Andreas Schriber Board Chair and Founding Trustee
- Prof. Judi Wakhungu Trustee
- Prof. Onesmo ole-MoiYoi Trustee
- Prof. Christian Borgemeister
   Trustee
- Dr. David Amudavi Executive Director (Ex-Officio)

### **Programme Highlights**

The following are some of the activities and achievements in the year 2017 as BvAT worked and engaged with the beneficiaries of its programmes and other actors in the area of the agriculture development.



# First and fast responder to farmers' needs

Natural disasters of either extreme weather changes, an outbreak of aggressive diseases or emergence of invasive pests can thwart dreams of smallholder farmers of yielding bumper harvests.

Such devastating occurrences can sweep away the fortunes of millions of smallholder farmers and cause unrest in the communities within a twinkle of an eye. TOF Magazine is committed to providing first and fast information whenever and wherever a hint is received from the research bodies through its well-established communication and partnership network.

The magazine has a unique communication classified system, enabling a swift establishment of an occurrence and know how, the project should gather the information to keep the farmers a breast on best preventive and control measures in sustainable agricultural farming practices. It is through the telephone, cell phone, WhatsApp, email addresses, face-to-face and an elaborate distribution network from where we receive the feedback and alerts.



Niche farmers group in Sirisia, Busia County reading TOF magazine during their groups' meeting.

### The Magazine has responded to some of the instances as r

### Fall armyworm

This devastating worm threatened maize production in the country. The government promoted the use of expensive chemicals for its control. TOF Magazine, however, maintained its mandate by promoting cheap and environmentally friendly methods in combating the pest with most farmers reporting success in its control.

### Brachiaria

Erratic rains led to an acute shortage of fodder for the livestock. TOF Magazine gave farmers diversified ways of planning for such an eventually by featuring a series on the benefits of brachiaria as a climate-smart alternative to Napier grass.

"I was devastated when we received scanty rains. I knew my animals would starve and





### mentioned below:

die due to lack of food. When I read about the importance of brachiaria in TOF Magazine and its resilience to drought, I planted it. I'm now a happy livestock farmer." Says Jackson Kusenga, 82, a mixed farming farmer from Iveti village, Kathiani Sub-County in Machakos County.

Brachiaria has since received a national adoption by farmers as an alternative to fodder. It is also used in push-pull plots doubling up as a control of stemborer and fall armyworm on maize.

### Fruit-fly programme

Julius Kipsoi, a mango farmer from Elgeyo Marakwet called TOF Magazine to inquire about the various ways of controlling fruit fly, a pest which had become a menace to the farmers in the region. TOF Magazine visited the region and documented the menace and the great losses farmers had suffered from the invasion of a fruit fly pest.

"We approached ICIPE's Fruit Fly Programme Coordinator, Dr Sunday Ekesi. on this menace. He intervened and ICIPE donated 200 fruit fly starter kits which TOF Magazine delivered to some of the farmers." Mr Peter Kamau, TOF Magazine Editor stated adding, "More farmers expressed interest in the fruit fly trap baits. We approached Dr Ekesi again on the magnitude of the problem. Our intervention led to a survey organized by ICIPE in 2017 on the census of mango trees in Kerio Valley Elgeyo Marakwet, and the problems of a fruit fly. More than 400 farmers and extension officers in the entire County were trained on fruit fly and were issued with starter kits."

The trained farmers are expected to train their counterparts in the county, an initiative that targets a total of 3,000 mango farmers. "This shows how TOF Magazine utilizes the feedback system to help farmers across the Country," Mr Kamau observed.

The Elgeyo Marakwet County Minister of Agriculture has expressed his gratitude to TOF Magazine for the timely intervention. He has already appealed for assistance to train farmers on seed potato production following the spread of Potato Cyst Nematodes (PCN) and bac-

# Facts about the project in 2017

Reached over 3.4m beneficiaries; Read in atleast 10 countries (Kenya, Uganda, Tanzania, South Africa, Nigeria, Zimbabwe, Phillipines, India, UK and USA); Presence in 42 Counties in Kenya; Atleast 4,100 distributors; 12 editions printed; 34,000 copies printed each month.

terial wilt across the Country, which, has affected potato production.

### As a training manual

TOF distributors promote the magazine as a practical training manual for institutions of higher learning and by the extension officers at the county governments.

"I first learned about TOF Magazine during a practical lesson on preparation of A-Frame for soil conservation. My lecturer used to refer to TOF Magazine more often." Stated Sharon Chebet, an Agriculture student at The University of Nairobi.

Mr Henry Kinyua, CEC for Nyeri County says, "I've read TOF Magazine for more than eight-years now. It is a rare resource with rich information on organic farming. My staff and myself use it as one of our primary tools for all the farmer trainings."

## Partnerships for swift rejoinder

TOF Magazine has published information and knowledge on ESA since 2005, establishing community information dissemination centres in partnerships with over 3,000 TOF Magazine distribution agents across 42 counties. Knowledge is power and transfer of



Mr William Mutheke, a member of Ndanyua Maize growers and a Board member of Mitooni Farmers' Cooperative Society in Kieni South Sub-County, Kirinyaga County showing off his vegetable land where he applied vegetable farming technology published in TOF Magazine.

innovations on ESA to the smallholder farmers is a critical humanitarian resource.

Thirteen (13) out of the 3,000 TOF distribution agents are BvAT's Outreach Resource Centres spread in 13 Counties with a standby team who are the agents of face-to-face ESA knowledge transfer and responder to the smallholder farmers' needs with technical support and contacts to other linkages.

"Swift response to an urgent farmer's need, especially where language is a barrier, can be challenging even to the most experienced group." Says Ms Venter Mwongera, TOF Magazine Manager. "By embracing synergy amongst projects and the like-minded organisations, we are able to provide faster and more effective assistance to smallholder farmers," she adds.

Ms Veronica Kimotho is an ardent TOF Magazine reader. She has carved a niche for herself as the opinion leader in ESA farming methods in Nyandarua County and beyond. She was among the first adoptees of ESA technology amongst 5,000 farmers' in the County who receive TOF Magazine and a first to adopt ESA. "More than seven (7) years ago, I received a copy of TOF Magazine from a staff of BvAT. I read an article about kitchen gardening. Thereafter, I decided to grow vegetables in my garden using manure for fertilizer. Since then, the taste of naturally grown vegetables has never left my mouth." Ms Kimotho reveals. "I enjoyed the benefits and I decided to teach my friends about the newly acquired knowledge and the benefits derived from growing food through organic methods," she stated.

Veronica embraced ESA farming methods which have today rewarded her. She trains farmers groups on ESA technologies within and outside Nyandarua County. "I've embraced value addition technologies to prepare yoghurt for commercial purpose. Early this year, I opened a Favour Dairy Enterprise shop to sell yoghurt and fresh milk. In a day, I sell at least 70 litres of yoghurt and milk. My customers like it very much," Veronicah says with a radiant face. "I've received a courtesy visit from the area MP applauding my initiative of a model organic farmer and calling other farmers to follow in my footsteps," she revealed.

Veronica has received training invitations by Global Alliance for Improved Nutrition and GIZ on community nutrition in 2018. "Thank you TOF Magazine for opening my eyes to the world of opportunities," says Veronica wearing a broad smile.

The single greatest barrier to easing food shortage is a lack of commitment by the governments to honouring promises made to eradicate hunger and reduce poverty through agriculture. African ministers of Agriculture at a special NEPAD-focused session on the UN Food and Agriculture (UN-FAO) in 2002 committed to increasing public investment in Agriculture by a minimum of 10 per cent of their national budgets to raise agriculture growth by at least 6 per cent. "If African governments would keep their word, the continent would be a major producer for its food security, nutrition needs and exporter of all the agricultural produce to the global markets," Ms Mwongera reiterated.

TOF Magazine is calling for the Kenyan government and all African countries to live up to the commitments made in improving agriculture and the international friends to smallholder farmers to increase their agricultural funding to put hunger at bay.





## Helping smallholder farmers to diversify income sources from the same land

Traditionally, farmers' primary source of farming information has been extension officers whose presence was a relief to the farmers' farming needs. From human, animal, plant and the environmental health, all these needs were and are met by the extension officers on a daily basis. But, most countries in Africa seldom meet the demands of the smallholder farmers' farming needs especially in the face of many yield-threatening emerging trends like the invasive pests.

Kenya in particular, the agricultural component is a devolved function where extension officers service is managed by the County Governments. The needs of the farmers' surpass the number of extension officers responding to these needs. Hence, a sharp shortage of the extension officers would require complementarity if the farmers' needs are to be addressed. In spite of a lack of adequate number of extension officers, farmers' needs are responded to through access to relevant information through the radio which reaches to a large mass audience. "Farmers are always on the lookout for information on genuine farm inputs at an affordable price, improved agricultural technologies for better productivity, weather and market information, climate change and invasive species like fall armyworm," says Mr John Cheburet, TOF Radio Manager.



Anastacia Muleka, a farmer in Busia County listens to TOFRadio farming programs.

"I listened to the programs on compost making and the importance of organic farming aired at Mbaitu FM. I was very happy because they helped me to improve my farm's soil fertility. Beans harvest from my farm have now increased by about 180 kilograms," said Mercy Mbithe.

Mbithe is an ardent listener to TOF Radio programmes aired at Mbaitu FM in the local language (Kikamba). Together with her farmers group, they



Farmers using the raised bed technologies, one of the technologies disseminated by TOF Radio programmes.

previously suffered poor harvests and low returns from their farming activities. Now their farm yields have improved.

The Lower Eastern Region in Kenya suffers insufficient rains with prolonged dry spells. As a result, most of the smallholder farmers have embraced various adaptation methods for food sustainability for their domestic use and commercial purposes.

"We listened to the teachings on soil fertility management, doudle digging, Zai pits, how to establish kitchen gardens and how to make money from honey as aired by Mbaitu FM. As a group, we invited Victoria Mutinda to show us how to apply the knowledge," stated Ms Margaret Itumbi.

"Today, my family enjoys nutritious meals throughout the year. The meals are grown organically through double digging and Zai pit technologies. I now have more than 20 chickens and four (4) goats bought from the sale of organic farm produce," says Ms Agnes Muithya with jubilation.

According to Kenya's Communication Authority, about 38 million Kenyans own mobile phones. Due to the advancement of communication technologies like the installation of small and large cell masts for enhanced mobile telecommunication and availability of affordable mobile phones, many smallholder farmers can now listen to the various FM stations from their mobile phones.

"I listen to TOF Radio programmes aired at Mbaitu FM through my mobile phone. As I listen, I take notes which I use to train farmers groups in Makueni County on various farming needs. Revealed Mr Joseph Mbithi, a Community Information Worker of BvAT based in Makueni County. "For example, the management of fruit flies for improved yields from the mangoes, pest and disease management in vegetables and common pests during the rainy season are some of the farmers needs I continue to address using TOF Radio programmes and TOF Magazines," he further reveals.

Radio continues to be among the most effective mass media to educate and debunk myths surrounding ecologically sustainable farming methods. "A five minutes' educative radio

# Facts about the project in 2017

45 vernacular radio programs produced and aired on Mbaitu FM;

- 45 Programs produced for KBC to be aired from June 2018;
- 8 programs produced and aired with partner radio station, Radio Sahara FM;
- Reached over 1 million beneficiaries;
- Received in 42 counties in Kenya with Focus on 13 counties.

programme can correct unfounded beliefs that a farmer ought to always use chemical fertilizer to enjoy a bumper harvest," states Mr Cheburet.

For continuous response to farmers' farming needs, TOF Radio reached out to regional radio stations to share content as a value addition to the existing programmes. TOF Radio partnered with Sahara FM to develop an agricultural programme which was aired at the station. "Joint programme production with TOF Radio not only enriched the programme for the smallholder farmers but also built the capacity of Sahara FM staff," stated Mr Musa Naviye, Kilimo Jira Producer, Sahara FM.

"TOF Radio has grown. It has continuously produced weekly radio programmes on ecologically sustainable agriculture since August 2007. The programmes have impacted positively the lives of the smallholder farmers." TOF Radio Manager states with pride adding, "Many agricultural programmes were started and exited prematurely. Our flame is still on and we hope to incorporate video among other relevant communication tools to continue to respond to the farmers' farming needs."





# Fighting poverty with knowledge empowerment

Mr Nahashon Ndung'u from Gichagi village, Nyandarua South Sub-County in Nyandarua County came face-toface with death due to an overdose of drugs he abused for more than seven (7) years aggrevated by desperation. His poverty-stricken family could not afford to pay for his secondary school education. Hence, he dropped out of school in form two (2). Sorrowful and disappointed, Mr Ndung'u, now 35, found comfort in drugs which helped him run away from the harsh realities of poverty. "I felt high when I smoked bhang. It was gratifying. I could not worry about the unmet needs. Food, clothes and shelter were among the unmet needs," recalls Ndung'u.

More than 500,000 youths indulge in unproductive activities due to lack of knowledge, employment opportunities and poverty, they have basic needs that ought to be met at all the time, which, lead to either criminal activities, abuse of drugs, early or unplanned marriages and broken marriages, family strife, among other abhorrent occurrences in Kenya and in many countries in Africa.

Whilst many development conscious organisations are playing a pivotal role in helping to dignify each human being; BvAT has not lagged behind. Throughout 2017, more than 1,627 farmers groups were imparted with the knowledge of ecologically sustainable agriculture (ESA) methods. Out of the groups trained, 83 were youth groups. The Outreach program runs many activities designed to improve



Ms Veronicah Kimotho, a achampion of Organic Farming show-casing her Favour Dairy Entreprise shop born from the knowledge published in TOF Magazine and continuous training by the Outreach staff.

ESA knowledge, offering practical lessons, mentorship and coaching not only to apply the knowledge but also to master the art and the skill, pass it on to the other farmers and improve their economic status. "After training farmers on ESA technologies, we take them through the practise sessions on a demonstration farm where they directly apply the knowledge gained," affirmed Ms Pauline Mundia, Outreach Project Manager. Adding, "We also arrange for individual farm visits and

exchange visits where the trainees are exposed to practical sessions and inspirations from the testimonies by the other project beneficiaries."

As a function of the government to empower the farmers on farming matters through the Ministry of Agriculture and Irrigation, the role was devolved to the Counties after devolution dispensation took effect in 2013. Habitually, aid is provided by the government or other non-governmental organisations



Mr Anthony Musili, a Community Information worker from Muumbuni Resource Centre explains about the achievements made by most of the farmers he trains on ESA technologies.

in-kind. For instance, subsidized farm inputs like seeds and storage bags like Purdue Improved Crop Storage (PICS) bags. But, these intervention measures are responsive to the immediate need which only create a habit of dependence on the aid. It seldom offers long-term solutions likened to knowledge and information empowerment to solve food security and improved nutrition.

The Outreach Project has 15 Farmer Resource Centres each located in a different County and are manned by trained Extension Officers as a Manager and at least two (2) Community Information Workers (CIWS). These staff are the change agents who transfer ESA technologies directly to the farmers' groups affiliated to the Outreach Project. Some of the training materials the staff use for their farmers' training are The Organic Farmer Magazines, modules and other relevant materials developed by the project and collections from partners.

"After training farmers on theory, we visit them in their farms for on-farm transfer of the knowledge. We develop a schedule that we use to support the various farmers in farmers' groups on weekly basis," stated Mr John Mutisya, Katoloni Resource Centre Manager. Adding, "Some of the farmers that we trained on ESA technologies supply their organically grown vegetables to Mulleys Supermarket in Machakos County. Their sources of income have now increased."

For schools, ESA technologies are disseminated through the 4-K Club. Teachers and pupils are trained on the importance of regulating the temperatures within the school through tree nurseries. Also, preparation of schools' kitchen gardens to improve the pupils' nutrition needs is a step towards regaining pupils' good health; an added advantage towards improved academic performances, inculcating habits for better farming and caring for the environment at an early age.

"With cash at hand from the sale of cabbages, spinach, milk, eggs from my farm, I can go to the market and buy other kitchen items that can't be grown," says Ms Veronicah Kimotho, a beneficiary of ESA technologies affiliated to Murungaru Resource Centre.

The extension officers have built strong relationships with the farmers' groups they work with. Hence, many farmers have been equipped to practice ESA technologies and their economic status has improved. "Through knowledge, I have managed to change from drug

# Facts about the project in 2017

Farmers trained - 16,562 (f) and 8,300 (m);

Youths trained - 642 (f) and 697 (m);

Individual farm visits - 649 (f) and 495 (m);

Demonstrations - 2,127 (f) and 1,628 (m);

Exchange visits - 228 (f) and 220 (m);

Field days attendees - 2,301 (f) and 2,740 (m);

Agricultural shows attendees - 1,740 (f) and 2,212 (m);

Seven (7) joint activities with partners.

abuse to being a responsible farmer. I only needed the right knowledge. Today, I'm happy because through an income from farming, I now have a happy family of my own," confesses Mr Ndung'u with a jubilant face.

For Mr Ndung'u, the Outreach Project saved a good life he had wasted away through drugs. "Knowledge is power. That is what this project has done to me," he says.





### Welcoming diversity

### Infonet-Biovision

"I had searched far and wide for a long time. But, I could not get information on indigenous vegetable datasheets. When on the verge of giving up, I remembered Infonet," says Monique Wekesa, who now practices indigenous vegetable farming for both domestic use and commercial purposes. "I'm glad I contacted Infonet staff. I got richer information than I anticipated. I needed information on Amaranth. I have diverse information on many types of vegetables," she states.

Infonet is an online repository of knowledge and information on human, animal, plant and the environmental health. "We continuously update Infonet with new knowledge after scientists come up with new knowledge under the category of 4-H," educates Ms Belinda Weya, Infonet Regional Manager.

The Internet has reduced the world to a global village and availability of affordable cell phones has made life easier for a majority of people to own one and surf the net to get the information they need without walking to a library or a research institution. Infonet continuously updates the content and introduces new topics responsive to the farmers' information and knowledge needs. New content on genuine ecological sustainable agriculture include Push-pull technology and crop management system using brachiaria, pest modules on the satin tail in maize, pod rot in cocoa and scales in yams datasheets uploaded to the website.



Members of farmers from Kamukuywa Resource Centre applying the knowledge learnt from the Infonet on the use of plant extracts to control pests.

"The internet connectivity sometimes can be hampered by various disturbances. Hence, a deterrent to surfing the internet," says Ms Weya. Adding, "With this knowledge, we have developed an offline version with a bigger capacity of 1.5 GB from 512 MB as previously availed. The new version holds much more information," she confirms. Besides the smallholder farmers, Infonet website benefitted from diversified audiences in 2017. "I spend much of my time on Infonet website because it responds to all the tea research needs I have. It is an online library, regularly refreshed and offers answers to all my research queries," confessed Dr. Everlyne Cheramgoi, an Entomolo-



# Facts about the project in 2017

- Accessed worldwide by atleast 190 countries;
- 49% of visits are from African countries;
- Desktop visits were 46.7%;
- Mobile phone visits were 49.5%;
- Visits by tablet were 3.8%

gist at Kenya Tea Research Institute in Kericho County, Kenya.

Together with other partners, Field Coordinator Mr David Gachuka of Organic Agriculture Centre of Kenya (OACK) credits much of their success in preparation of a training manual for sustainable ecological agriculture to Infonet. "We could not find much content from other sites. But, much content of the chapter on pest and disease management was borrowed from Infonet," Mr Gachuka reveals.

Infonet has gradually created a rich reputation for her unique and rich content. It collaborated with Computer Aid International (CAI) to provide information to students in 25 schools in Amhara region in Ethiopia. "CAI has integrated Infonet content into their mini-computer used as a digital library in a computer classroom," states Ms Weya.

In their email feedback to Infonet, Children Green World Vision organization in Norway said, "Infonet-Biovision is a useful site to gain knowhow," While Tree Plantation wrote, "We found a good website that has a planting guide to follow. It helps with much information to also choose which tree varieties to plant," Chorina said, "Animal health and welfare knowledge on Infonet home page is good. Just look at it!" Beneficiaries to Infonet poured out their praises to a rare information resource they have in Infonet. "Well organized and illustrated information on a wide range of agricultural, environmental and health topics," revealed Mr Joe Bunefa, a Business Consultant who provides Wi-Fi E-Libraries for Public Libraries, Remote Resource Centres in Papua, New Guinea.

Caring for the environment as well as watering a tree as one of the strategies adopted by farmers' for economical use of water.





**Mkulima Mbunifu** 

# Empowering farmers



A pig farmer from Meru, Tanzania who adopted pig farming knowledge published by MkM project.

Farmers have constantly struggled with poor yields due to over use of unsustainable farming methods which create more problems than solutions. Despite the heavy investment in farm inputs, most of the farmers hardly get adequate yields. Farmers desperately want information on better farming technologies for food security. *Mkulima Mbunifu* Project implemented in Tanzania is addressing this problem through its monthly magazine. The magazine disseminates information on ecologically sustainable agricultural practices on a monthly basis.

The Magazine treats the farmers to a cocktail of diversified information on natural ways of farming, sustainable ways of responding to agricultural enemies to crops, testimonies from the farmers who are the direct beneficiaries of the project on the impacts of many embracing natural ways of the address-

ing farming needs for improved health and livelihoods. Among those benefiting from such an initiative are youths, women and men. A majority of the recipients to the project's knowledge empowerment are women who are about 41,984, followed by men with a total of 28,491 in number. Pupils in 4-K Clubs also benefit from *MkM* project; "1,000 pupils from 6 new primary schools enrolled as *MkM* beneficiaries'," states Mr Ayubu Nnko, MkM Project Manager

### Mkulima Mbunifu

# Facts about the project in 2017

12 editions printed

15,000 copies printed each month;
Reached atleast 70,475 farmers;
Has a waiting list of 70,368 farmers.
based in Arusha, Tanzania.

A lot of smallholder farmers in Tanzania have a thirst for new knowledge for sustainable agriculture. "Naturally grown food has natural sweetness. Though it is expensive to grow, it is the best option compared to conventionally grown food," states Mr Zadock Kitomary, an organic farmer and a direct

beneficiary of *MkM* magazines.

Mr Kitomary, about 52, is a vanilla farmer from Arusha, Tanzania. He learnt about vanilla farming from *Mkulima Mbunifu* Magazine and decided to apply the knowledge on his farm. "I was thirsty farmer for better farming technologies who wanted to increase his sources of income for his family. When I read about farming of the vanilla crop, I decided to practise it. It is now earning me more income through the sale of the vanilla products," he confesses happily.

As a successful farmer in vanilla, *MkM* Magazine decided to publish Mr Kitomary's story in the magazine to allow the farmer to share his experiences with other farmers. "From the time my story was published, I receive many calls from the farmers with varied inquiries," he reveals adding, "I receive orders for vanilla cuttings, other farmers would like to know how to grow the crop and the markets for the produce."

Mr Kitomary is a happy farmer who reaps many benefits from his vanilla



MkM Manager (in the front) with one of the farmer's group receiving MkM magazine in Morogoro, Tanzania

farming venture. "Each season, I sell at least 14 kilograms of vanilla which fetches about USD 2,156. This income helps me to comfortably pay school fees for my children who are in vocational training institutions beside improving nutrition for my family," he states.

As a passionate vanilla farmer, Mr kitomary spends much of his time on his farm either tending to his crop or training other smallholder farmers groups on how to grow and manage the vanilla crop to optimize on the outputs when the crop matures. "I believe in transferring knowledge to other needy farmers. Hence, I joyfully share the knowledge with other farmers on how to grow vanilla," he says happily.

Besides farmers, extension officers too receive and use *MkM* Magazine as their primary training tool. "*MkM* Magazine has made our work easier. The rare information published on it is easy to understand and it's practical. We don't strain too much to teach farmers groups on sustainable farming methods. Those who have the magazine only ask us questions of what they don't understand from it," stated Mr Said Mbonea Kihaliro, an extension officer from Tanga.

According to him, much time was spent on preparing training modules on sustainable agriculture. "We now spend more time with the smallholder farmers groups unlike in the past when we invested more time to prepare the training materials," confessed Mr Kihaliro.

"In 2017, I trained at least 135 farmers using *MkM* Magazine as the primary training tool. It is very resourceful," he affirmed.

"I not only use it to train farmers groups but I also apply the knowledge in it on my farm," says Ms Lucy Mvungi, an extension officer in Arusha, Tanzania.



Many farmers and farming institutions attest to have found solutions to their farming needs in *MkM* Magazine. "It was hard for me to remember everything we were trained on during the farmers' groups training. But, from the time the Department of Agriculture Development Council (DADeADC) started giving us *MkM* Magazines, I'm able to read many times what we are taught because I carry my own copy of the magazine," Ms Martha Moilllel a beneficiary of *MkM* Magazine in Arusha stated.

"A combination of training from the Extension Officers and reading *MkM* Magazine has changed my practices



Nurturing best agricultural practises at a tender age is one of the best intervention strategies.

in crop production and animal husbandry. *MkM* Magazine is a dew in the desert," stated Ms Said Laban Lebulu from Kivesi village in Arusha.

The relevance of *MkM* Magazine has attracted many partners to us. "Meru Association of Animal Welfare, Department of Agriculture Development (DAD), Arusha Council, Sokoine University of Agriculutre (SUA) and Education Concern for Hunger Organisation (ECHO) are among the partners who provide content and distribution of *MkM* Magazine," stated Mr Nnko adding, "We receive many requests for the magazine. But, we are not able to meet all the demands. We have around 70,368 in the waiting list for *MkM* editions."

Enduiment Secondary School also enjoys meals grown organically. "When I learnt of *MkM* Magazine from the Facebook social site, I ordered for a copy of the magazine for my school. *Page 3* of September edition of 2017 educated us on how to use plants from the environment to prevent and control pests from invading vegetables. I'm happy that we applied the knowledge in our school garden. Today, we eat naturally grown vegetables in school," stated Mr Goodluck Syara, a teacher at Enduiment Secondary School.

*MkM* Project publishes 15,000 copies of *MkM* Magazine on monthly basis. The copies are distributed to about 70,475 farmers. "Most of the times, I hide from the farmers because each farmer would like to have a copy of *MkM*. The demand is more than the supply. If you could increase the number of the magazines, more farmers would benefit. They know the value of the magazine," advised Mr Said Rehema Lema, *MkM* Magazine distributor from Kilimanjaro, Tanzania.

### Helping smallholder farmers and mitigate imp

On a chilly April morning in 2017, at the Sustainable Income Generating Investment Group (SINGI) Resource Center in Matayos Sub-County, Busia County, a knock at the door is heard and Mr William Buluma ushers in a group of familiar and unfamiliar friends walk in quietly but happy.

Buluma, the Manager for SINGI Resource Center, had just concluded plans for the day with meetings scheduled with various farmers groups in the Sub-County. "To what do I owe this visit today?" He asked his familiar friends from Biodiversity International. A short silence ensues, and an answer pops up. "Our friends and partners from Solution Search are amazed at the work you do with farmers in Busia County and they would like to learn more. Do you have a moment, or they can come later? Inquired Mr Andrew Khaemba from Biodiversity International.

With over 13 years of community work in Busia County, Mr Buluma's passion to help smallholder farmers to improve their household nutrition. increase their incomes, restore soil fertility, diversify fodder for their livestock and conserve the environment using the parcel of land but embracing different farming methods always lingered at the back of his mind. "I get gratification when I make a positive change to families' life," says Buluma adding, "When pupils and students enjoy organically grown food, perform well in school, and education performance improves; I end a day with a broad smile."



EOA-I Manager, Ms Venancia Wambua discussing the importance of tree nursery with pupils from Mundika Girls

Buluma, 57, attends to the farming needs of more than 1,000 farmers in Busia County. Together with other partners like Biodiversity International, Kenya Agricultural Livestock and Research Organisation (KALRO) among others, Buluma has not only empowered the smallholder farmers in the county with ecologically sustainable agricultural farming methods but has also linked the farmers to various market outlets for their farm produce. "I teach and practically show farmers on feed formulation for livestock, rearing and management of local poultry, use of push-pull

technology for improved soil fertility, diversified fodder for livestock, farming for diversity, kitchen gardening at homes and in schools, tree planting, post-harvest management among other technologies," he educates.

The impact of the projects implemented by SINGI Resource Center brought positive change not only to the smallholder farmers, livestock, soil but also to the environment. Hence, an international recognition.

"My friends' visit that April morning brought exciting news to me. My work to the community was told to them



### acts of climate change



Primary School in Busia County.

by friends and partners at Biodiversity International in Busia County. They advised me to enter my work to an international competition for an award in the category of Farming for Biodiversity," reveals SINGI Resource Center Manager.

In November 2017, Buluma was invited to Bonn, Germany to receive an award for the positive impact he made on the lives of the smallholder farmers in Busia County. "I received an award from Solution Search in the category of Farming for Biodiversity," says Buluma joyfully. Farming for Diversity was among other 330 initiatives recognised during the awarding ceremony. Mr Buluma's effort to impact the lives of the smallholder farmers in Busia County on leadership and biodiversity, friendly agriculture and livestock management for improved yields among other topics was recognized.

SINGI Resource Centre empowers at least 1,000 farmers in Busia County with ESA knowledge. "Through our intervention, most of the farmers have increased milk yields from four (4) to eight (8) litres per cow each day, an increase in compost manure for farming due to gained production of cow dung owing to enriched feeding of the livestock and improved farm productivity attributed to improved soil fertility," stated Buluma.

SINGI Resource Centre believes in partnership for a holistic way of solving farmers' challenges for better living. "Because of knowledge empowerment, farmers now produce surplus farm produce," says Buluma. Adding, "Through partnerships with BI, farmers are linked to various local markets."

The Ecological Organic Agriculture initiative (EOA-I) has greatly supported SINGI Resource Centre to touch the lives of the smallholder farmers. "On behalf of the smallholder farmers in Busia Country, thank you to EOA-I for your support that changed the lives of the farmers for the better," Buluma thankfully stated.

# Facts about the project in 2017

- 100 000+ farmers trained in ecological/organic agriculture practices;
- 21 000+ farmers linked to markets;
- 1700+ farmers facilitated to trade fairs, exchange visits, workshops, conferences e.t.c.;
- 500 000+ farmers reached with informational materials;
- 500+ policy makers reached & facilitated to policy events.

# Some of the other milestones by EOA-I

Through the support of EOA-I, "KOAN as the Country Lead Organization (CLO) has developed an Organic Agriculture draft Policy which is already at the table of the Principal Secretaries for State Department of Livestock; State Department of Agriculture, State Department of Fisheries and Blue Economy awaiting their validation," reveals Mr Eustacia Gacanja, Executive Director, KOAN.

The EOA-I has also supported linking of over 15,000 smallholder farmers to markets both for domestic and export markets. This has been achieved through training, facilitating farmers to get certification, organizing farmer-trader forums, organizing farmers markets among other strategies.

"Empowering farmers with the knowledge, connecting them to the certification bodies and linking them to the markets is a step towards building a food secure community. EOA-I is committed to pursuing this cause," quips Ms Venancia Wambua, EOA-I Manager.

### Income and Expenditure statement

Year ended 31 December				
	2017	2016		
Income	USD	USD		
Restricted income				
Grant income	2,714,757	2,986,522		
Interest income	1,065	1,537		
Unrestricted income				
Donations and overhead recoveries	112,669	115,974		
Other income	27,060	-		
Total income	2,855,551	3,104,033		
Expenditure				
Research and project activities	1,427,813	1,737,989		
Personnel expenses	901,206	733,491		
Travel cost	120,241	107,173		
Project administration costs	88,469	75,500		
General expenses	228,460	300,809		
Audit & consultancy	27,843	66,075		
Finance cost	2,230	10		
Total expenditure	2,796,262	3,021,047		
Surplus/(deficit) for the year	59,289	82,986		

## Statement of Financial Position

	2017	2016
Assets	USD	USD
Non-current assets		
Property and equipment	10,116	11,667
Total non-current assets	10,116	11,667
Current assets		
Receivables from implementing partners	409,300	557,631
Other receivables and prepayments	24,547	31,103
Cash and cash equivalents	988,255	988,598
Total current assets	1,422,102	1,577,332
Total assets	1,432,218	1,588,999
Changes in fund balance		
Fund reserves	257,769	163,807
Current liabilities		
Payables	144,201	175,721
Deferred income	1,023,060	1,249,471
Fundraising	7,188	-
Total liabilities	1,432,218	1,588,999

## How you can support BvAT

### Advocate

Join BvAT online global community at <u>http://www.biovisionafricatrust.org\_to</u> receive important advocacy alerts and news about ecologically sustainable agriculture that are important to you.

### Donate

Give online by visiting on the website at <u>http://www.Paypal.me/BiovisionAf-</u> <u>ricaTrust</u> Make a tax-deductible contribution by email to: Donate BvAT, P.O. Box 30772-00100, Nairobi or

### **Bank details:**

1. BvAT:

Bank Name: Commercial Bank of Africa (CBA)

Bank Account: 6681320055

Branch: Thika Road Mall (TRM)

2. TOF Magazine-

Bank Name: Commercial Bank of Africa (CBA)

Bank Account: 6681320068

Branch: Thika Mall Road (TRM).

Mpesa Account: Pay bill number:833589

Bank Account number: 6681320068

# Development and projects implementation management

In the year under review, BvAT's Executive Director Dr. David Amudavi was supported by the following departmental heads:

Pauline Mundia (FCP Coordination & Outreach Manager), Robert Nyikuli (Finance Manager), Agnes Mwikali (HR & Administration), Venter Mwongera (TOF Manager, Chief Editor for TOF & MkM Magazines), John Cheburet (TOF Radio Manager), Belinda Weya (Infonet), Monique Hunziker (Infonet Manager - Biovision Foundation), Ayubu Nnko (MkM Manager), Venancia Wambua (EOA-I Manager), Alex Mutungi (EOA-I Secretariat Coordinator), Wevine Bichanga (Grants & Resource Mobilisation Officer).

During the year, BvAT staff consisted of 43 full time staff. It is during the year that BvAT recruited one more staff as the Secretariat Coordinator for EOA-I hosted at BvAT offices. The management team at the headquarters in Nairobi provides professional support and monitoring functions. While the field staff directly hold face-to-face meetings with the smallholder farmers on a weekly basis.

#### Honorary work

BvAT is supported in its governance and oversight by a committed Board of Trustees and in its FCP initiative by relentless Advisory Board. In 2017, FCP Advisory board volunteered their time three (3) times in a year to at-



BvAT's staff during a recent team-building activity.

tend meetings. BvAT has continued to enjoy smooth operations, through the advisory services by the two boards (Farmer Communication Programme Advisory Board and Board of Trustees) after transitioning from ICIPE two (2) years ago. This significant honorary commitment by the two boards is greatly appreciated. A big thank you! In particular, BvAT thanks Prof. Onesmo ole MoiYoi for availing his time amid his busy schedule to advise on any pertinent matter as pertains to BvAT's operations during the year under review.

### Internship opportunities

BvAT values the smallholder farmers' needs. For effective and efficient attention to the farmers' needs and offer an

opportunity for practical application of academic work; students from various institutions locally and overseas were offered internship opportunities where they gave a hand into BvAT's programmes. To all the universities and students who participated in this programme, it is a big thank you from us!

### Partnership based on a shared vision

During 2017 BvAT partnered with project's beneficiaries and the like-minded organisations in projects implementation. Memoranda of understanding were developed firmly anchored on BvAT's approved operations guidelines.

### **Our supporters**

Biovision Africa Trust extends heartfelt appreciation to our supporters, who help us restore smiles on the faces of the smallholder farmers whose lives are profoundly affected by continuous use of unsound farming practices, non-committal government policies to agricultural activities and natural disaster.

The unwavering commitment of our donors, whether they may be individuals, foundations, corporations, governments or nongovernmental organizations is what enables BvAT to attend to farmers inquires swiftly and help smallholder farmers' communities to recover from a long-standing and unsound farming practise.

We acknowledge the generous donors who supported BvAT during the past fiscal year, which began 1st January and ended 31st December 2017.

#### **BvAT's Generous Donors**

BvAT is grateful to all the individual donors, corporations and foundations that have provided essential support for BvAT's lifesaving programs in Kenya and parts of Africa. In particular BvAT salutes the following partners:

- BV Biovision Foundation
- SDC Swiss Agency for Development and Cooperation
- SSNC Swedish Society for Nature Conservation

#### Lifetime giving

Biovision Africa Trust is grateful to its many supporters whose compassion and generosity over a decade has helped vulnerable smallholder farmers to rekindle the lost smile and reclaim control of their choices in farming activities.

#### Partners for sovereignty

Partners for sovereignty are individuals who have generously included or plan to include BvAT in their wills and estate plans. We are honoured by this commitment, which will provide lifesaving assistance to the smallholder farmers to achieve a hunger free continent.

#### Access Agriculture

ADSE- Anglican Development Services Eastern AFSA - Alliance for Food Sovereignty in Africa AFRONET - African Organic Network AOPP - Association des Organisations Professionnelles Paysannes AUC - African Union Commission CABI - Centre for Agriculture and Bioscience International **County Government of Elgeyo Marakwet County Government of Makueni County Government of Meru County Government of Nyeri County Government of Trans-Nzoia Egerton University EM-Technologies** FAO – Food and Agriculture Organization of the United Nations FENAB – Federation Nationale Pour l'Agriculture Biologique icipe - Africa Insect Science for Food and Health ISD - Institute for Sustainable Development IFOAM - International Federation for Organic Agriculture Movements JUANCO SPS KALRO – Kenya Agricultural & Livestock Research Organization KBC – Kenya Broadcasting Corporation KOAN - Kenya Organic Agriculture Network KEFRI – Kenya Forestry Research Institute Mbaitu 92.5 FM MOA – Ministry of Agriculture, Livestock and Fisheries **NETFUND** - National Environment Trust Fund NOGAMU - National Organic Agricultural Movement of Uganda NOAN - Association of Organic Agriculture Practitioners of Nigeria OPEBAB – Organisation Béninoise pour la Promotion de l'Agriculture Biologique **PELUM** – Participatory Ecological Land Use Management Slow Food

SARI – Selian Agricultural Research Institute, Tanzania

SAT – Sustainable Agriculture Tanzania

SUA – Sokoine University of Agriculture, Tanzania

TOAM – Tanzania Organic Agriculture Movement

UON – University of Nairobi

**ZOPPA** – Zimbabwe Organic Producers and Promoters Association

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📚 Swedish Society for Nature Conservation

