



Acronyms and Abbreviations

AFERIA - Adaptation for Ecosystem Resilience in Africa

BvAT - Biovision Africa Trust

CAADP - Comprehensive African Agriculture Development Programme

CABI - Centre for Agriculture and Bioscience International

CBO – Community Based Organization

CIW - Community Information Worker

CLO – Country Lead Organization

CSC – Continental Steering Committee

EOA - Ecological Organic Agriculture

ESA - Ecologically Sustainable Agriculture

FAO - Food and Agriculture Organization of the United Nations

FCP – Farmer Communication Programme

FADECO – Family Alliance for Development and Cooperation

FM – Frequency Modulation

FRC - Farmer Resource Centre

GDP - Gross Domestic Product

GRM – Grants and Resource Mobilization

HR - Human Resource

icipe - International Centre for Insect Physiology and Ecology

ICT - Information and Communication Technologies

KALRO - Kenya Agricultural and Livestock Research Organization

KOAN – Kenya Organic Agriculture Network

KBC – Kenya Broadcasting Corporation

MOALF - Ministry of Agriculture, Livestock and Fisheries

MkM – Mkulima Mbunifu

NEPAD – New Partnership for Africa's Development

NGO – Non-Governmental Organization

PCN – Potato Cyst Nematode

SYsCOM – Long-term Farming Systems Comparison in the Tropics

SUA – Sokoine University of Agriculture

SDC – Swiss Agency for Development and Cooperation

SMS – Short Message Service

SSNC – Swedish Society for Nature and Conservation

TOF – The Organic Farmer Magazine

UN - United Nations

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Dr. David Amudavi **Executive Director**

Message from the **Executive Director**

Biovision Africa Trust started 2016 with expectation, having been prepared well for autonomy by the founding organization, Biovision Foundation, the incubating organization, International Centre of Insect Physiology and Ecology (ICIPE) and informed by institutional strengthening audits. BvAT continued to run effectively its programmes in Kenya and those for which it has mandate around East Africa and rest of Africa.

BvAT recognizes that agricultural output and food supply incomes for smallholder farming communities continue to be hindered by various challenges including environmental factors, lack of information and relevant training and limited functioning markets for the African smallholder farmers. In some cases, plant pests and diseases are responsible for up to 80% of crop losses, deepening food insecurity and frustrating efforts of poverty alleviation. Though it is common knowledge that researchers have developed possible ecologically sound agricultural technologies, their uptake tends to be limited partly due to weak or non-existent technology dissemination processes and institutional disincentives including lack of and/or high costs of inputs, lack of credit and poor marketing linkages.

Therefore, BvAT disseminates information and technologies to farmers, agricultural advisory service providers, and other stakeholders at the local and regional levels and supporting research into issues and challenges facing smallholder farmers to provide useful and practical solutions. Enabling this is the integrated Farmer Communication Programme (FCP) comprising of The Organic Farmer (TOF) magazine, TOF Radio program, the FCP Outreach, Infonet, and Mkulima Mbunifu programme in Tanzania, all of which are tailored to suit local farming contexts.

The multiple channels provide scientifically proven, illustrated and easy-to-understand information about ecological and sustainable methods and applications for prevention and control of pests and parasite infestations of plants, humans and animals adapted to East African conditions. The populate these channels, the BvAT team works with experts to derive information and knowledge from research institutions, project activities, publications, websites, exchanges with partner organizations, feedback from farmers' groups and extension workers.

During the year, BvAT continued to provide leadership to the African-Union led Ecological Organic Agriculture Initiative (working with partners Mali, Nigeria, Senegal, Benin (West Africa) and Kenya, Tanzania, Ethiopia and Uganda (Eastern Africa- Kenya). This responsibility was bolstered by additional mandate of hosting the Continental Secretariat with additional staff to be recruited in 2017. The greater impact of the programme is to ensure increased food production, safer livelihood, farmers appreciate better farming practices, and how their produce can access various markets, as well as promote, health and sustainable organic agricultural farming.

BvAT has recognized the power and value of leveraging partnerships. aim to continue working in collaboration with key partners including the Ministry of Agriculture, Livestock and Fisheries (MOALF), the Kenya Agricultural and Livestock Research Organization (KALRO), farmer groups and organizations, private sector and other institutions to support genuinely sustainable agriculture.

David Amudavi (Phd) **Executive Director**



Andreas Schriber Board Chair and Founding Trustee

Africa continues to face the perennial challenge of combating food insecurity against a backrgound of increasing population and imminent threat to agro-ecosystems. It is acknowledged that the continued use of synthetic inputs is detrimental to the health of humans. Africa cannot conclusively address these and other challenges alone. It needs other players to pull efforts and investments to a more sustainable and desirable direction.

Our increasingly popular programme, the Biovision Farmer Communication Programme, one of its kind in Africa provides a one-stop shop for thousands of farmers and farmer groups while generating lessons for organizations supporting the farmers. The team in Nairobi has started looking into the sustainability of this programme. The efforts being made in Kenya to work with not only the National Government but also the County Governments to which agriculture functions have been devolved are commendable.

Equally encouraging is the continued feedback received on BvAT's strong presence in promoting and ensuring efficient coordination of the African

Message from the Chair of the Board

Union supported Ecological Organic Agriculture (EOA) Initiative in Africa. The BvAT Board of Trustees welcomed the elevation of BvAT to host the Secretariat of the Continental Steering Committee. Through this additional responsbility, BvAT will contribute to awareness raising of EOA agenda and wide stakeholder participation; support growth of EOA through resource mobilization; support overall program development guided by the EOA Strategic Plan and provide oversight, advice and guidance on the implementation of the Strategy. In this regard, I wish to particularly thank the CSC and the BvAT's development partners, the Swiss Agency for Cooperation and Development (SDC) and the Swedish Society for Nature Conservation (SSNC) for supporting the Trust and developing confidence in its leadership and programmes. The Board recognizes this unique position of BvAT and will consider options for strategic development of the major fields by BvAT: Information Dissemination and EOA-Implementation in Africa.

BvAT had a seamless transition to operate autonomously after several years of sound partnership with the International Centre of Insect Physiology and Ecology (ICIPE). It has been gratifying to see BvAT end the year in high esteem, and with increased staff level. The BvAT Board still recognizes ICIPE as great partner; hosting and supporting the Trust to continue developing and learning from its wellorganized, experienced and reputable organizational systems.

Last, but not least, I wish to most sincerely thank all the BvAT staff in Kenya and Tanzania who have worked tirelessly and contributed enormously to the reputation of the Trust not only in Eastern Africa but in the whole of the African Continent. My appeal to them is that they should take pride in their work and continue to bolster their achievements and demonstrate to all that the African continent can be free from hunger and with healthy people living in healthy environments.

Andreas Schriber

Andreas Schriber
Chair, Board of Trustees

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 Our Vision
A food secure African
continent with healthy
people living in a healthy
environment.

Africa. The Trust will also cooperate and support other organizations, institutions and stakeholders working with small holder farmers to promote ecological sustainable agriculture in Africa.

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.

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.

Core Values

- Environmental consciousness.
- Accountability.
- Efficiency and Effectiveness.
- Collaboration, networking and partnerships.
- Integrity.
- · Innovation and creativity.
- · Inclusivity.



BVAT Board of Trustees



Andreas Schriber
Board Chair and Founding
Trustee



Prof. Judi Wakhungu Trustee



Prof. Onesmo ole-MoiYoiTrustee



Prof. Christian BorgemeisterTrustee



Dr. David AmudaviExecutive Director (Ex-Officio)

Where we work

BvAT runs programmes in four East African countries namely Kenya, Tanzania, Uganda and Ethiopia and four in Western Africa - Nigeria, Mali, Senegal and Benin. The EOA Initiative is implemented in 8 Afrcian countries while FCP is implemented in Kenya and to some extent in Tanzania. The FCP model is being 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 2016 as BvAT worked and engaged with the beneficiaries of its programmes and other actors in the area of the agriculture development.



Agnes Mwikali Human Resource and Administration Officer



Lucv Macharia Administration Assistant



Wevine Bichanga Grants and Resource **Mobilization Officer**

Human Resource, Administration and Grants and Resource Mobilization

BvAT growing

The Human Resource and Administration Department was established in 2016 upon BvAT becoming autonomous. This came with the recruitment of the HR & Administration Officer. Ms. Agnes Mwikali. The officer reports to the Executive Director and is responsible for maintaining staff records, staff contracts management, staff recruitment and development, maintaining staff leave records and ensuring relevant policies are up to date.

The department oversaw the revision of BvAT policies, and implementation is ongoing. These include the HR & Administration Manual which regulates terms and conditions of work for staff. All BvAT staff were trained on the use of the HR Policy.

Five new staff joined BvAT in 2016;

Agnes Mwikali Kiiti, HR & Administration Officer.

Geoffrey Kipngetich Langat, Accountant.

Venter Nkatha Mwongera, TOF/ MkM Manager.

Joyce Mahui, Radio Production Assistant.

Wevine Hadio Bichanga, Grants and Resource Mobilization Officer.

Two staff left BvAT in 2016:

Caroline Kwamboka Kinyulusi, TOF / MkM Manager

Benson Chege Kuria, Community Information Worker, Gilgil Resource Centre.

James Katsinye, Community Information Worker, Perani Resource Centre.

BvAT has 42 staff; 16 based at the Head Office at ICIPE Duduville campus in Nairobi, 8 Resource Centre Managers and 18 Community Information Workers based in various resource centres across Kenya.

New Grants and Resource **Mobilization functions**

BvAT has established a Grants and Resource Mobilization Department headed by a Grants and Resource Mobilization Officer.

The officer reports to the Executive Director and supports project managers in the areas of grants management to ensure that all donor reports are prepared to quality standards in compliance with contractual obligations, maintaining a tracking system so that all reporting deadlines are met.

The officer is also responsible for donor engagement, identifying funding opportunities, develop winning proposals, concept notes and grant applications that meet the costs of the current and future programmes, and building capacity of BvAT staff on fundraising and resource mobilization.

The GRM Officer looks forward to devising strategies of strengthening this section to support the sustainability of BvAT's programmes.

Increased knowledge on organic farming methods enhances livelihoods

Kenya's smallholder farmers are continuously receiving timely information on emerging farming challenges with practical solutions in the health of plant, animal, human and the environment. Through partnerships with the various experts, monthly responsive articles with information and knowledge are published in The Organic Farmer (TOF) magazine and uploaded on the website (www. theorganicfarmer.org). TOF magazine is a hub of value-adding information channel for farmers in Kenya and the wider East African region, with a focus on providing practical advice on ecologically sustainable agricultural farming techniques.

This information is practical, timely and very relevant. TOF's coverage of Potato Cyst Nematode (PCN), Maize Seed quality and Varieties suitable for various agro-ecological zones in Kenya, Special issue on result of Long

Term System Comparison Trials (SY-sCOM), among other relevant thematic areas has not only informed farmers but also influenced the research institutions to prioritise on research topic. After publishing an article on PCN, research institutions like ICI-PE, KALRO and Kenyatta University picked up the matter and started investigating the disease. TOF articles have kept researchers, policy makers and donors abreast on emerging issues and trends in agriculture in Kenya, the region and beyond.

TOF articles catalyse dialogues on farming issues, and readers of both the hard copy and online versions of the magazine give their comments through varying feedback channels. Below are samples of the feedback:

"We hope the government will now support organic agriculture as the best system that restores soil fertil-



Venter Mwongera TOF & MkM Magazine Manager



Peter Kamau TOF Editor



Farmer Magazine



Mr Onesmus Kyalo, a beneficiary of TOF magazine from Kitui County

ity and increases crop yields", says Ms. Ann Muriuki, a scientist at Kenya Agricultural and Livestock Research Organization (KALRO).

Mr Onesmus Kyalo, a successful farmer from Kitui County says, "TOF magazine publishes information that is easy to read, understand and apply."

Mr Kyalo, (pictured above) attributes his success to the information he has continuously received through TOF over the last three years. "I was retrenched from employment and I didn't have any other means to earn a living and care for my family. I was frustrated. One day, I came across The Organic Farmer Magazine, flipped through the pages, and was encouraged to start farming. Today, I'm a happy farmer.



TOF Magazine Highlights for 2016

- Through the generosity of Biovision Foundation, 420,000 copies of TOF magazine were successfully printed and distributed to over 2,472 farmer groups, agricultural Institutions, schools and institutions, companies, CBOs, NGOs, churches, and individuals.
- An estimated 3.4million direct and indirect TOF magazine readers were reached by the publication in 2016.
- 20 topical modules covering various thematic areas of interest to TOF smallholder farmers were printed and distributed.
- Working partnerships in content

- generation were firmed up with various research institutions and like-minded organizations that include Egerton University, ICIPE's Adaptation for Ecosystem Resilience in Africa (AFERIA) project, Kenya Forestry Research Institute (KEFRI), Kenya Organic Agriculture Network (KOAN).
- Soil sampling article led to UN-Food and Agriculture Organisation (UN-FAO) to allocate USD 79million for soil sampling across the country in 2016.
- Farmers groups receive few copies of the magazine but creatively share and read on rotational

- basis. For example, in parts of Western Kenya VI-Agroforestry project works with 2,900 farmers' groups comprising 60,000 farmers. They receive 800 copies of the TOF Magazine. This implies that one copy of the magazine is shared amongst 75 farmers.
- Thirst for knowledge in ecologically sustainable agriculture continues to flourish. Hence, a possible monthly increase of TOF magazine copies from 34,000 to 40,000 would ease the pressure of sharing one copy amongst many farmers and accelerate learning.

Role of Vernacular Radio in Facilitating Access to Agricultural Messages

Radio is the most accessible and most popular information communication technology medium in Africa, and an important extension tool that is used in sharing agricultural information with farmers in rural areas inexpensively. The use of vernacular in radio broadcasts makes programmes more acceptable to farmers. It is a means to complement public extension.

The information needs of smallholder farmers revolve around production technologies and practices like seed selection, cultivating, composting, harvesting, and the resolution of problems such as pest and weed control and other crops and livestock management practices.

Apart from on-farm information, farmers also require timely information on markets, credit facilities, input suppliers, collective action with other farmers, post harvesting processing and value addition, and coping with climate change.

With cheap mobile telephones that have radio facilities, mobile phone radio handsets are becoming ever more popular not only among rural people but also among young people who are increasingly attracted to it for its entertainment and new programming trends.

Since the mid 1990s, Kenya's radio mass media has experienced tremendous growth and by mid-2011, 319 radio stations had been licensed ma-

jority of which are private vernacular radio stations.

Local language stations have gained popularity because people believe that community media directly address the concerns of the audiences, as opposed to national media that often carries little content touching on the issues that directly affect them.

The Media Council of Kenya 2014 Report estimates that vernacular stations now command 42 per cent of the total radio market share. Moreover, the vernacular radio stations keep increasing not only their number of listeners, but also their reach in the country, which has expanded from being concentrated in the areas dominated by speakers of their languages of broadcast to national and international spaces using the internet.

This is a force that can no longer be ignored. According to Ms. Mary Kimanthi, a green-grams farmer from Kibwezi East constituency, Makueni County in Kenya, people in rural areas often find it easier to understand information passed through word-of-mouth compared to the written word. She sees vernacular radio as an extension of the former.

She says that after listening to a radio program on Financial Literacy broadcast by Mbaitu FM in collaboration with Biovision FCP's TOF Radio with focus on savings and investments, she was motivated to join a local Savings



John Cheburet
TOF Radio Manager



Musdalafa Lyaga Radio Assistant



Joyce Mahui Radio Production Assistant



TOFRadio



Busia CIW Bonventure Buluma explains signs of banana diseases to TOF Radio Assistant Musdalafa

and Credit Cooperative Organization (SACCO) where she accessed a loan facility. She used the funds to diversify into meat goat farming. Before, she focused on growing crops which were susceptible to droughts and many a times she ended up losing her crop.

Uthui Muundani (There is wealth in the farm) is a 30-minute program that airs every week on Friday at 7:30pm. Mr. Macdonald Mathew who presents the program says that the program has wide appeal among listeners because it incorporates marketing and weather forecasts, information that is directly relevant to farmers.

Listeners are always encouraged to participate through SMS and social media as the audience places comments, requests and even engage in debates on farming issues affecting them. All this feedback is used to inform the content for the next programs. The queries are also shared with Community Information Workers (CIWs) who answer the farmers directly through phone calls.

Macdonald says that radio programs are most effective when produced with audience participation and

with consideration for cultural traditions and indigenous knowledge. He guides farmers from the known to the unknown carefully introducing new information and knowledge. The program incorporates farmer voices thereby increasing its appeal; farmers get to hear from other successful farmers within their community.

Vernacular radio catalyzes adoption of technologies with information from successful farmers, extension officers, subject matter experts and marketing agencies. This is a strength that TOF Radio banks on as it seeks creative ways to expand the reach of radio and ecologically sound agricultural practices.

Improving the capacity of radio journalists to cover agricultural issues will help drive the scaling up of positive impacts; therein lies the opportunity to support local and vernacular radio stations to complement agricultural extension and farmer education.

TOF Radio Highlights

- ers across Kenya. The radio reaches Valley and Western Kenya. They benefit by accessing information on ecofriendly farming practices that support priority value chains in their regions/
- A total of 80 radio programs were radio programs via Mbaitu FM and 35 Kiswahili programs via Kenya Broadcasting Corporation (KBC).
- TOF Radio content continued to focus counties of Lower Eastern Region for the Vernacular program and Western parts of Kenya for the Kiswahili program, practices and technologies that and farmers.
- Indigenous poultry is a priority value chain in all the three counties, this farmers across the region and presents an opportunity for engaging
- TOF Radio is growing the video channel as a complementary tool for outreach to farmers through its collaboration with Access Agriculture, CABI, SNV and other partners in the produc-

Farmer Resource Centres, a Community Approach to Agriculture Extension

One key challenge in agricultural development, especially in developing countries is the gap between research outputs by institutions and actual practice by farmers. Many useful technologies have been developed by researchers but do not trickle down to the intended beneficiary, the farmer. Thus, food security and improved livelihoods remain a challenge to most smallholder farmers.

In a rapidly changing world, farmers need a one-stop hub for up to date and relevant information on new technologies and practices that will help them improve productivity and increase their income. This is the idea behind Biovision Africa Trust's (BvAT) Farmer resource centres.

BvAT, through the Farmer Communication Programme (FCP) is implementing the Farmer Communication Outreach project which has established Farmer Resource Centres (FRCs) to provide demand driven information and knowledge on ecological sustainable agriculture to local communities to enhance food security and improve their livelihoods. This helps to supplement the services offered by government extension which has not been able to cope with the increasing demand for information by farmers.

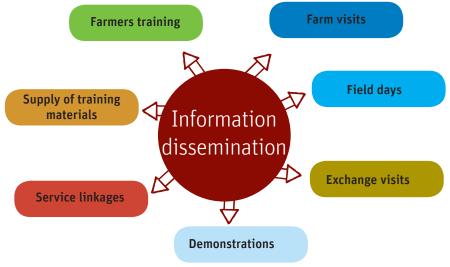
- The major functions of FRCs are:
- Offering focused and demanddriven trainings.
- · Establishing demonstration plots.
- Agro-clinic support.
- Providing information on new technologies and innovations through distribution of information materials relevant to addressing farmers' needs. These include BvAT products namely, The Organic Farmer magazine (TOF), The Organic Farmer radio programmes, offline infonet database as well as other relevant print, audio and audio-visual materials.



Pauline Mundia
Outreach Manager and
FCP Coordinator



Njeri Kinuthia Outreach Project Officer



FCP Outreach - Methods of information dissemination.



Farmer Outreach

Providing a forum for information exchange among farmers and between farmers and other stakeholders in the agriculture sector.

Providing linkages to value chain actors such as input suppliers, marketers, credit facilities. Farmer Communication Outreach has 16 resource

centres spread across 13 Counties in Kenya. For the resource centres to be successful, they have developed and maintained strong and diversified partnerships with likeminded organizations. These include Kenya Agriculture and livestock Research Organisation (KALRO) which hosts 2

of our resource centres in Kakamega and Katumani, Public Administration which hosts 2 resource centres in Maragua and Murungaru, ICIPE, Slow Food, CARITAS, among many others.

Farmer Resource Centres fill an important gap in the provision of advisory and extension services to smallholder farmers. They serve well to complement public extension by providing a more diversified portfolio of products and services to farmers aimed at improving livelihoods and contributing to food and nutrition security.

Highlights of Outreach Activities

- Field officers conducted a total of 1,460 farmer trainings that involved 24,700 farmers, 92 youth trainings involving 1,475 youth, and 260 school trainings involving 7,100 children. Technologies and practices trained on are chosen depending on the seasonal calendar, relevance to the target audience and emerging issues identified by either the farmers or the field staff.
- 213 demonstrations set up to expose farmers to technologies and practices they have been trained on. Adult learners are kinaesthetic learners who respond better to visual and practical training.
- 49 field days held in the 10 resource centres reaching 4,520 farmers to increase awareness on sustainable agriculture technologies.



Harvesting rainwater runoff for the dry season



A polythene lined dam for harvesting rainwater run off constructed by Zipporah Wambua

Zipporah Wambua, a farmer residing along the slopes of Kiima Kimwe hill in Machakos County in Kenya, is passionate about farming. She keeps two dairy animals and grows vegetables and maize. Water is a big constraint to her farming activities and many times she has suffered crop losses due to lack of water. The region she comes from is classified as a semi-arid area and receives an average of 520mm of rainfall per year distributed over two seasons. Agriculture in the region is mainly rain-fed and this amount is inadequate for optimum agricultural production.

As a member of Old Men and Women Self Help Group, Zipporah has been attending trainings on farming technologies from BvAT Community Information Worker (CIW), Margret Kioko, who is based at KALRO Katumani Resource Centre. Just before the short rainy season of 2015, the group was trained on water harvesting for use in

farming and for domestic purposes. The CIW explained the importance of harvesting water during the rainy season and storing it for use during the dry season. The group learnt how to harvest water through roof catchments, earth pans and retention ditches.

She says, "I pictured the large amount of water that flows near my homestead, which drains into the rivers. I recalled the crop failure I suffered and felt I needed to do something about it."

With the idea burning in her mind, she went ahead to survey a good place on her farm to dig an earth dam. She then bought a liner as advised by the field officer to prevent water loss through seepage.

When it rained, her polythene lined dam filled with water. She uses the water to grow vegetables for her kitchen and sells extra in the nearby local market. Besides, her cows can now drink as much water as they need. Zipporah's pond has been a great help to her family members and the community that buys vegetables from her farm. She makes some extra income from the sales which she uses for meeting her immediate financial needs. The water pan also saves Zipporah and her family precious time and energy previously used to fetch water from long distances.

Zipporah plans to fence her water pan and plant trees around it. She is now regarded in her village as a water harvesting champion because of her commitment to rainwater harvesting and her encouragement to her neighbours to do the same. 16 members of her group are already digging their own dams that are expected to directly benefit about 128 people from the households.



Zipporah Wambua at her maize farm in Machakos.



Belinda Weva Regional Coordinator



Monique Hunziker Concept and Project Management



Infonet-Biovision

The role of ICT in Knowledge Management for Agricultural Production

In the last decade, Africa has seen some of the highest expansion in the information and communication technologies sector in the world. Experiences from across the continent shown that ICTs play a significant role in a country's development, and intentional application of ICTs to the agricultural sector, which is the largest economic sector in most African countries, offers the best opportunity for economic growth and poverty alleviation on the continent. In Kenya, (ICT) in agriculture is an emerging field focusing on the enhancement of agricultural and rural development. It involves application of innovative ways to use ICT in the rural domain.

At BvAT, these advancements in ICT are being utilized for providing accurate, timely, relevant information to the farmers, thereby facilitating an environment for more ecologically sound agriculture. Infonet-biovision (www.infonet-biovision.org) is a database that provides scientific and practical validated information and knowledge related to plant (crop), animal, human and environmental health. The resource gives farmers, trainers, students, and extension workers quick access to up-to-date and locally relevant agricultural information and related topics. It aims to improve human and animal welfare and health, improve regional and local food security and at the same time conserve the environment and biodiversity.

Infonet-biovision is the result of collection and packaging of a lot of knowledge generated by research institutions. This effort is informed by the fact that there has been a slow uptake of innovations and technologies by smallholder farmers, and with the rapidly changing farming environment brought about by climate change, farmers need up to date information on weather, input prices and availability, market prices, value addition technologies, pests and diseases control. This information can be delivered with the aid of ICT tools, especially to extension officers, farmer resource centres and younger farmers who are more conversant with internet and mobile technology.

BvAT realizes that ICT helps in information dissemination in less time with effective ways of communication. Therefore, proactive utilization of ICT through infonet-biovision and online platforms, integrated with social media is a strategic direction that BvAT will continue to pursue in order to complement print, broadcast and field extension personnel.

Infonet Highlights for 2016

- Infonet has directly reached out to 9,249 farmers, 40 extension officers, 45 scientists and 350 secondary school students through trainings, workshops and partnerships.
- Infonet has a global audience in in 219 countries. In Africa, Infonet had visitors from 54 countries, led by Kenya, Sudan, Tanzania, Nigeria, and South Africa. Visits via Desktop computers were highest at 54%, followed by mobile at 48%, and by tablet at 4%.
- Two new pest modules for emerg-

- · New Infonet offline version will be available on USB sticks from 2017.
- Infonet had productive partnerships with CABI, MOALF, ICIPE and KOAN. These were in content review and update and promoting of Infonet in the respective organizations.
- Infonet Evaluation Report of 2015 showed that Infonet positively influences farmers to adopt Ecologically Sound Agricultural technologies such as compost making, making of natural pesticides and kitchen gardening technologies.



A farmer, Mr. Charles Githinji transplanting onion seedlings in his farm in Kinangop



Ayubu Nnko Editor and Country Leader - MkM



Flora Laanyuni Assistant Editor - MkM



Gabriela John Administrator - MkM



Farmer Magazine

Mkulima Mbunifu, spreading Ecologically Sound Farming in Tanzania

Agriculture is the backbone of the Tanzanian economy, accounting for between 25 to 26% of GDP and employing close to 80% of the working population. Low and declining agricultural productivity has continued to characterize the sector thereby affecting household incomes and worsening the food and nutrition security of most rural farm families. Like most of East Africa, Tanzania farmers face various challenges including poverty, decreasing soil fertility, volatile markets, prices and the impacts of climate change. The farmers still lack adequate access to reliable agricultural information among other needs. Consequently, farmers are increasingly expressing demand for quality and relevant agricultural infor-mation to deal with increased challenges. Such demands are expressed through agricultural trade fairs, SMS requests to agriculture information providers. Mkulima Mbunifu (MkM) is working to meet this demand.

MkM is a magazine for small scale farmers in Tanzania and neighbour countries in East Africa. Since July 2011, Tanzanian small scale farmers have continuously received well packed information and knowledge on ecologically sustainable agricultural farming practises, livestock keeping and management, environmental care, and human health.

MkM production is supported by Biovision Foundation and is managed by Biovision Africa Trust (BvAT), with administrative support of Sustainable Agriculture Tanzania (SAT). Through this support, 15,000 copies of **MkM** magazine are printed and distributed each month to

smallholder farmers across Tanzania. *MkM* is distributed through Farmers groups, NGO's, CBO's, Agriculture Institutions, Churches, Colleges and Schools, Extension officers, and individual readers.

The interesting and high value articles published in *MkM* magazine drew the interest of other media outlets and researchers like Mwananchi Communication, Habari leo, FADECO Media and Sekta ya Mifugo Tanzania (http://ufugaji.co.tz) which is operated by scientists from Sokoine University of Agriculture (SUA). These complimentary communication channels enhanced the spread of *MkM* information and messages among the farmers community in Tanzania.

MkM Magazine is also available electronically (www.mkulimambunifu.org), and on social media platforms like Facebook (https://www.facebook.com/mkulimambunifu).

MkM has content development partnerships with Sokoine University of Agriculture (SUA), Sekta ya Mifugo Tanzania (SUA), Department of Agriculture Development Arusha Council, Acquaculture Service Company, HORTI Tengeru, Regional Livestock Centre Arusha (RLCA), Department of Agriculture Development Lushoto District (DADLD), among others

The 15,000 copies of *MkM* produced per month are not enough to meet the growing demand for the magazine. One copy of *MkM* serves 12 farmers, and there is a waiting list of more than 6,000 farmers.

Highlights

- 12 editions of *MkM* were printed, with 15,000 copies printed on monthly basis and reached at least 69,600 farmers.
- MkM reached 152 Extension officers from various region in Tanzania. The Extension officers used MkM Magazine as a source of information to train farmers in different approaches especially in the area of soil improvement, animal husbandry, value addition and human health.
- MkM content remained consistent with the message of environmentally sustainable farming practices. These practices encouraged farmers to be conscious of environmental conservation as they tilled their land to produce more

- healthy foods, reduce on-farm costs, add value to their produce and access better markets.
- Six (6) on various themes were revised and printed. Namely;
 Pig Rearing, Fish Farming, Dairy Farming I (Housing and Breeding), Dairy Farming II (Feeding),
 Poultry Keeping, Value Addition and Marketing.
- MkM took part in the Nane-Nane Agricultural Trade Fair in Arusha, where it maintained its strong presence and scooped an award in the category of information and small technology development.
- MkM enhanced the capacity 23 stakeholders in writing the articles and composing professional

- photographs to improve the quality of the publication. The workshop was conceived as part of building the network of journalists covering agriculture and environmental issues in Tanzania, and as a way of building the capacity of content contributors for *MkM* magazine.
- The internet is an important distribution channel for *MkM*. The *MkM* website (www.mkulimambunifu.org) was redesigned to give it more interactive functionalities to address the needs of the online stakeholders and a new look. This is important in reaching out to young farmers via social media, websites and other webbased platforms.



Journalists interview a young farmer Urio Majoo in Arusha



Venancia Wambua EOA Manager



Hudson Were Programme Assistant

Ecological Organic Agriculture (EOA) Initiative in Africa

Introduction

Ecological Organic Agriculture is an Initiative that came into force to support and implement the African Union Council Decision (AUDC) on Organic Farming. This guideline was passed during the Eighteenth Ordinary Session, 24-28 January 2011, EX.CL/Dec.621 (XVIII). The initiative commenced its implementation in 2011 on a pilot basis through the support of development partners, sucha as Swedish Society for Nature and Conservation (SSNC) and Swiss Agency for Development and Cooperation (SDC).

The initiative has a mission to promote ecologically sound strategies and practices among diverse stakeholders in production, processing, marketing and policy making. It has an overall aim to mainstream Ecological Organic Agriculture into national agricultural production systems by 2025 to improve agricultural productivity, food security, access to markets and sustainable development in Africa.

The initiative is currently being implemented in eight (8) countries. Namely; Kenya, Ethiopia, Tanzania, Uganda, Nigeria, Mali, Senegal and Benin.

EOA Pillars

- (i) Research, Training and Extension
- (ii) Information and Communication
- (iii) Value Chains and Market Development.

(iv) Supporting and Cementing -Steering, coordination and management.

Key Highlights

Lead Coordination by Biovision Africa Trust

- Implementation of programme activities by Country Lead Organizations (CLOs) and Pillar Implementing Partners (CLOs) considerably went on well in the year 2016 in seven (7) countries with partners aligning their activities with the set objectives and budgets. Mali partners came on board to resume activity implementation in July, 2016.
- BvAT coordinated compilation, synthesis and submission of partner mid-term and annual reports for 2016. The reports were reviewed in close coordination with partners and submitted to SDC.
- Capacity strengthening of partners in project and financial management was undertaken. During the year 2016, BvAT organized and hosted two EOA Partners' Training Workshops on project and financial management in West Africa and Eastern Africa.



Dr Janet Edeme (Chair of CSC and Head of Division, Rural Ecenomy and Agriculture Department/Africa Union commission) (Centre and in maroon) with members of the Continental Steering Committee in Harare, Zimbabwe.

Country Highlights

- More than 209,000 farmers benefitted from the project activities through the Outreach pathway.
 At least 64,000 farmers were trained and 114,213 farmers received the information and knowledge materials.
- Kenya and Uganda proactively developed a draft organic policy documents which are at final stages before validation phase.
- Tanzania has already introduced Organic Agriculture strategic statements in the National Agricultural policy while in Benin, an MOU has been developed between private practitioners and government to agree on the price of organic cotton. Nigeria has so far introduced an organic agriculture bill among other efforts.
- All countries have held strategic meetings with key policy makers in the Ministry of Agriculture.

The President of Senegal, His Excellency Macky Sall attended organic events.

Continental Highlights

- members successfully facilitated the EOA Mid-Term Review (MTR) exercise. The main aim of the MTR was to assess how the initiative is being established in terms of effectiveness, efficiency and sustainability in relation to the AU Declaration on Organic Farming and to generate concise and actionable recommendations.
- BvAT was approved by the CSC members to host the Continental secretariat for 5 years. This approval paved the way for strengthening partner networking and brought on board various actors like NEPAD and CAADP who are key stakeholders to EOA mainstreaming.
- The secretariat supported 2 phys-

ical meetings of the Continental Steering Committee in May and December, 2016. During the meetings, support was offered to the Mid Term Review exercise from its inception of development of the TOR, to taking part in selection of the experts and during the process of executing the task and final submission of the report.

- The EOA Continental Strategic Plan was also approved by AUC through support from the chair of the committee who heads the Rural Economy and Agriculture Department at the African Union Commission.
- EOA Continental Strategic Plan 2015-2025 and Action Plan 2015-2020 was published and shared with EOA stakeholders.



Robertson Nyikuli Senior Accountant



Geoffrey Langat
Accountant

"Our Auditors Pricewaterhouse Coopers (PWC) have expressed an unqualified opinion on our 2016 financial statement. These financial statements include associated notes that are essential to understanding the information presented here in. The full set of financial statement and notes is available, and a printed copy may be obtained from Biovision Africa Trust offices in Nairobi."

Income and expenditure statement

	Year ended 31 December		
	2016	2015	
	USD	USD	
Income			
Restricted income			
Grant income	2,986,522	1,617,943	
Interest income	1,537	16,404	
Unrestricted income			
Donations and overhead	445.07/	(2.7(0	
recoveries	115,974	63,760	
Interest income	-	589	
Total income	3,104,033	1,698,696	
Expenditure			
Research and project activities	1,737,989	1,283,265	
Personnel expenses	733,491	206,411	
Travel cost	107,173	55,267	
Project administration costs	75,500	33,760	
General expenses	300,809	79,284	
Audit & consultancy	66,075	40,825	
Finance cost	10	7,154	
Total expenditure	3,021,047	1,705,966	
Surplus/(deficit) for the year	82,986	(7,270)	

Statement of Financial Position

	2016	2015
Assets	USD	USD
Non-current assets		
Property and Equipment	11,667	5,453
Total non-current assets	11,667	5,453
Current assets		
Receivables from implementing partners	557,631	679,029
Other receivables	13,342	-
Prepayments	17,761	-
Cash and cash equivalents	988,598	992,457
Total current assets	1,577,332	1,671,486
Total assets	1,588,999	1,676,939
Changes in fund balance		
Fund reserves	163,807	80,821
Current liabilities		
Payables	175,721	87,682
Deferred income	1,249,471	1,508,436
Total liabilities	1,588,999	1,676,939

Biovision Africa Trust 2016 Donor Funding Report

Project Title	USD	USD	USD	USD
	Opening Balance	Funding Received	Expenditure	Closing Balance
FCP Projects (Biovision Foundation)	01.01.2016	1 Jan-31 Dec 2016	1 Jan-31 Dec 2016	31.12.2016
TOF Radio	-	141,000	(142,307)	(1,307)
FCP Outreach	-	270,000	(275,149)	(5,149)
TOF Magazine	-	280,000	(235,279)	44,721
Infonet	-	115,000	(84,578)	30,422
MKM Magazine	22,474	212,526	(202,349)	32,651
Pushpull	-	130,000	(6,687)	123,313
Total FCP	22,474	1,148,526	(946,349)	224,651
EOA Projects				
Ecological Organic Agriculture -SDC	1,446,553	1,350,554	(1,800,654)	996,454
Ecological Organic Agriculture -SSNC	18,870	76,854	(89,463)	6,261
Total EOA	1,465,424	1,427,409	(1,890,117)	1,002,715
Other BvAT Projects				
CCGA-Biovision Foundation	-	24,200	(24,200)	-
BvAT Core Support-Biovision Foundation	-	140,916	(120,530)	20,386
Agroecology Approaches for Sustainable Agriculture-FAO	-	27,000	(26,968)	32
Training Videos (Collaboration)-Access Agriculture	-	4,245	(2,558)	1,687
Farmer Support-SDC	(1,751)	1,751		-
MKM Radio-SDC TZ	22,289		(22,289)	-
Total Other BvAT Projects	20,538	198,111	(196,545)	22,105
Total Funding	1,508,436	2,774,046	(3,033,011)	1,249,471

Partners and Networks

Biovision Foundation

icipe – Africa Insect Science for Food and Health

SDC – Swiss Agency for Development and Cooperation

SSNC – Swedish Society for Nature Conservation

FAO – Food and Agriculture Organization of the United Nations

MOA – Ministry of Agriculture, Livestock and Fisheries

KALRO – Kenya Agricultural & Livestock Research Organization

KBC – Kenya Broadcasting Corporation

Mbaitu 92.5 FM

CABI - Centre for Agriculture and Bioscience International

Access Agriculture

NETFUND

SAT – Sustainable Agriculture Tanzania

JUANCO SPS

Slow Food

AUC – African Union Commission

PELUM – Participatory Ecological Land Use Management

IFOAM – International Federation for Organic Agriculture Movements

AFSA – Alliance for Food Sovereignty in Africa

AFRONET – African Organic Network

Egerton University

UON – University of Nairobi

KOAN – Kenya Organic Agriculture Network

KEFRI – Kenya Forestry Research Institute

County Govenment of Makueni

County Govenment of Nyeri

County Government of Meru

County Government of Elgeyo Marakwet

County Government of Trans-Nzoia

SUA - Sokoine University of Agriculture, Tanzania

SARI – Selian Agricultural Research Institute, Tanzania

ISD – Institute for Sustainable Development

TOAM – Tanzania Organic Agriculture Movement

NOGAMU – National Organic Agricultural Movement of Uganda

OPEBAB – Organisation Béninoise pour la Promotion de l'Agriculture Biologique

FENAB - Federation Nationale Pour l'Agriculture Biologique

AOPP – Association des Organisations Professionnelles Paysannes

NOAN – Association of Organic Agriculture Practitioners of Nigeria

ZOPPA – Zimbabwe Organic Producers and Promoters Association



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