

CHARITY NUMBER: 1107507  
COMPANY REGISTRATION NUMBER  
4645806

AFRICAN AGRICULTURAL TECHNOLOGY  
FOUNDATION  
(A COMPANY LIMITED BY GUARANTEE)

REPORT AND FINANCIAL STATEMENTS

31 DECEMBER 2016

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## GLOSSARY OF TERMS

AATF	African Agricultural Technology Foundation
AGRA	Alliance for a Green Revolution in Africa
AMELIA	AATF Monitoring Evaluation, Learning and Improvement and Align
BASF	Baden Aniline and Soda Factory
BMGF	Bill and Melinda Gates Foundation
BXW	Banana Xanthomonas Wilt
CABI	Centre for Agriculture and Biosciences International
CAMAP	Cassava Mechanisation and Agro-processing Project
CFT	Confined Field Trial
CIAT	International Center for Tropical Agriculture
CIMMYT	International Maize and Wheat Improvement Center
COMPRO-II	Commercial Products-II
DFID	UK Department for International Development
FARA	Forum for Agricultural Research in Africa
FIPS-Africa	Farm Input Promotions Africa
FOCAC	Forum for Chinese Africa Collaboration
GM/ GMO	Genetically Modified / Genetically Modified Organisms
HGBF	Howard G. Buffett Foundation
HEAL	Hybrids East Africa Ltd
IITA	Institute of Tropical Agriculture
ILRI	International Livestock Research Institute
IP	Intellectual Property
IR	Imazapyr-resistant maize
ISMA	Integrated Striga Management in Africa
LLP	Limited Liability Partnership
MLN	Maize Leaf Lethal Necrosis
NARO	National Agricultural Research Organization
NARS	National Agricultural Research Systems
NCRI	National Cereal Research Institute
NEPAD	New Partnership for Africa's Development
NERICA	New Rice for Africa
NEWEST	Nitrogen Use Efficiency, Water Use Efficiency and Salt Tolerant
NGO's	Non-Governmental Organizations
NUE	Nitrogen Use Efficient
OFAB	Open Forum on Agricultural Biotechnology in Africa
OPV	Open Pollinated Varieties
PPPs	Public Private Partnerships
SFSA	Syngenta Foundation for Sustainable Agriculture
SMOG	Standard Milestone Obligation Grant
SSA	Sub-Saharan Africa
SOPs	Standard Operating Procedures
SORP	Statement of Recommended Practice
spp	Species Plural
USAID	United States Agency for International Development
VAT	Value Added Tax
WEMA	Water Efficient Maize Africa

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## LEGAL AND ADMINISTRATIVE INFORMATION

CHARITY NUMBER  
1107507

COMPANY REGISTRATION NUMBER  
4645806

## REGISTERED OFFICE AND OPERATIONAL ADDRESS

African Agricultural Technology Foundation  
C/O Arnold and Porter (UK) LLP, Level 30,  
Tower 42, 25 Old Broad Street, London, United Kingdom

## REGISTERED KENYA OFFICE ADDRESS:

ILRI Offices  
Old Naivasha Road  
P.O.Box 30709 - 00100  
Nairobi

## BOARD OF TRUSTEES

Idah Sithole-Niang (Retired Chair - term ended 9 April 2016)  
McLean Sibanda  
Kwame Akuffo-Akotto  
Rory Radding  
Denis Kyetere  
Johnson Irungu Waithaka  
Ousmane Badiane, Senegal (Chair)  
Anne Glover  
Ingrid Wüning Tschol - (appointed 3 November 2016)

Jennifer Thompson (Board Chair Emeritus)  
Larry Beach  
Stanford Blade  
Justin Rakotoarisaona  
Jeremy Ouedraogo

From 9 April 2016 Ousmane Badiane was appointed as Board Chair in replacement of Idah Sithole-Niang whose term as trustee has ended

## SENIOR MANAGEMENT TEAM

Ousmane Badiane	Chair
Denis T. Kyetere	Executive Director and Trustee
Emmanuel Okogbenin	Director Technical Operations (Incoming)
Moussa Elhadj Adam	Director Finance & Administration
Alhaji Tejan-Cole	Director of Legal Affairs & Board Secretary
Donald Mavindidze	Director of Commercialisation
Sofia Tesfazion	Director of Resource Mobilisation

## LEGAL AND ADMINISTRATIVE INFORMATION (CONTINUED)

### AUDITOR

Ernst & Young LLP  
Citygate  
St James' Boulevard  
Newcastle upon Tyne NE1 4JD

### SOLICITORS

BDO Seidman, LLP  
Accountants and Consultants  
7101 Wisconsin Avenue Suite 800  
Bethesda MD 20814, USA

Ivory & Wellington  
Barristers and Solicitors  
Lagos: 19, Town Planning Way, Ilupeju  
Abuja : Suite 209  
Chams City, First Avenue  
Central Business District - Abuja  
Nigeria

Arnold & Porter LLP  
Tower 42  
25 Old Broad Street  
London, EC2N 1HQ  
United Kingdom.

### BANKERS

Commercial Bank of Africa Limited,  
Commercial Bank Building, Standard/Wabera Streets,  
PO Box 30437-00100  
Nairobi, Kenya

AFRICAN AGRICULTURAL TECHNOLOGY FOUNDATION  
REPORT AND FINANCIAL STATEMENTS  
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STRATEGIC REPORT

The Trustees present their report and audited financial statements for the year ended 31 December 2016, which disclose the company's state of affairs.

Financial review

Incoming resources during the year under review increased by US\$10 million to US\$30.3 million (2015: US\$20.30m). During the year, the Foundation received from Bill and Melinda Gates Foundation a supplementary funding for its OFAB Project and new funding for a basic seed enterprise project (Qualibasic Seed) and a Maize Foundation Seed Deployment for Africa Project. In addition, The Foundation was the recipient of a sub-grant from CIMMYT for its Maize Lethal Necrosis (MLN) Project. The total income received in 2016 for the OFAB supplement and these three new projects amounted to US\$4,922,020. The funding received during the year was mainly from Bill & Melinda Gates Foundation at US\$19.22 million (2015: US\$12.61m). There was continued support from all past investors. Contributions from Bill & Melinda Gates Foundation, Howard Buffet Foundation, USAID and DFID accounted for 98.5% of the total funding received in 2016.

Total expenditure increased to US\$22.4 million as compared to US\$21.8 million in the previous year. The expenditure largely related to outsourced research activities costs which represented 52% of expenditure for the year. There was an overall decrease in the Charity's other costs during the year under review; (2016: US\$323,672), (2015: US\$410,258).

Restricted funds carried forward at the end of the year are US\$4,162,055 (2015: -US\$3,266,511). Total Funds now stands at US\$9,762,603 up from US\$1,932,081 at the end of 2016.

Key Performance Indicators for the Board of Trustees

The Key Performance Indicators of the Board of Trustees as stipulated in the Board Manual are as follows:-

- Timeliness in providing the policy decisions needed by management;
- Adequacy of documentation for decision making and adequate time to consider major issues in Board and Committee meetings;
- Quality and openness of discussions;
- Quality of decision making;
- Adequacy of planning to assure continuous high quality leadership for the Board and its Committees;
- Appropriate Board composition for Board functions associated with the oversight of both program and management;
- Appropriate committee structure; and
- Adequate orientation for new Trustees.

Financial risk management

The Foundation's activities expose it to a variety of financial risks, including credit risk and the effects of changes in foreign currency exchange rates. The Foundation's overall risk management programme focuses on the unpredictability of changes in the business environment and seeks to minimise the potential adverse effect of such risks on its performance by setting acceptable levels of risk.

Risk management is carried out by a committee made of staff from the organization's finance department, technical department, legal department and the Executive Director's office.

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STRATEGIC REPORT (CONTINUED)

Market Risk

(i) Foreign exchange risk

The Foundation receives its income (donations) mainly in US Dollars (US \$) and Great Britain Pounds (GBP) but incurs and pays for expenses in either Kenya Shillings or US Dollars. However, the Foundation's exposure to foreign exchange risk is minimal, and is mainly related to Kenya Shilling transactions. Invoices are settled in the currency in which they are received, hence minimal foreign currency gains/losses. Balances held in currencies other than US Dollars are as follows:

	2016 US\$	2015 US\$
Cash and bank balances in KShs	24,324	62,898
Cash and bank balances in GBP	5,137	1,836
Cash and bank balances in NGN	30,685	4,415
	<u>60,146</u>	<u>69,149</u>

(ii) Interest Rate Risk Management

The Foundation uses fixed negotiated rate for both fixed and call deposits to avoid such risks related to floating rate.

(iii) Price Risk

The Foundation does not hold investments that would be subject to price risk; hence this risk is not relevant.

Credit Risk

The Foundation's credit risk is primarily attributable to its unexpended grants receivable. The credit risk on liquid funds with financial institutions is also low, because the counter parties are banks with high credit-ratings.

The amount that best represents the Foundation's maximum exposure to credit as at 31 December 2016 was made up as follows:

	Current US \$	Past due US \$	Impaired US \$
Grants Receivable	3,314,165	-	-
Other Receivables	974,027	-	-
Cash and short term deposits	<u>5,993,533</u>	<u>-</u>	<u>-</u>
	<u>10,281,725</u>	<u>-</u>	<u>-</u>

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The amount that best represents the Foundation's maximum exposure to credit as at 31 December 2015 was made up as follows:

	Current US \$	Past due US \$	Impaired US \$
Grants Receivable	-		
Other Receivables	2,066,536	-	-
Cash and short term deposits	<u>310,152</u>	<u>-</u>	<u>-</u>
	<u>2,376,688</u>	<u>-</u>	<u>-</u>

Liquidity Risk Management

Ultimate responsibility for liquidity risk management rests with the board of directors through the senior management of the Foundation. Management has built an appropriate liquidity risk management framework for the management of the Foundation's short, medium and long-term funding and liquidity management requirements. The Foundation manages liquidity risk by maintaining banking facilities through continuous monitoring of forecast and actual cash flows.

The table below analyses the Foundation's financial liabilities that will be settled on a net basis into relevant maturity groupings based on the remaining period at the balance sheet date to the contractual maturity date. The amounts disclosed in the table below are the contractual undiscounted cash flows. Balances due within 12 months equal their carrying balances, as the impact of discounting is not significant.

	2016 US\$	2015 US\$
Payables	<u>380,160</u>	<u>359,333</u>

Approved by the Board of Trustees  
and signed on behalf of the Board

  
Denis T. Kyetere  
Executive Director

Date August 14, 2017



AFRICAN AGRICULTURAL TECHNOLOGY FOUNDATION  
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TRUSTEES' REPORT

The Trustees present their report and audited financial statements for the year ended 31 December 2016, which disclose the Charity's state of affairs.

Our vision, objectives, aims and activities

The Charity's vision is a prosperous and a food secure Africa. The Charity's key objective is to improve the livelihoods of Sub-Saharan Africa ('SSA') farmers by accessing and delivering appropriate agricultural technologies. The Charity's specific objectives are:-

- Accessing appropriate agricultural technologies for the benefit of smallholder farmers in SSA.
- Facilitating development and adaptation of accessed technologies.
- Facilitating delivery and commercialisation of products.
- Supporting the development of enabling policies in accessing, developing and delivery of technologies.

The Charity achieves its specific objectives above by affecting the following implementation objectives:-

- Restructuring the organisation and re-aligning skills to respond to the dynamic environment.
- Increasing and diversifying the funding base.
- Implementing a monitoring and evaluation system based on an effective knowledge management system.

African Agricultural Technology Foundation (AATF) aims to ensure food security and reduce poverty in Africa. AATF is designed to facilitate public-private partnerships to access, develop, adapt and deliver appropriate agricultural technologies for sustainable use by smallholder farmers in Sub-Saharan Africa through innovative partnerships and effective stewardship along the entire value chain. It provides expertise in the identification, access, development, delivery and use of appropriate agricultural technologies. In its quest to ensure food security and reduce poverty in Africa, AATF draws upon the best practices and resources of both the public and private sectors. It also contributes to capacity building in Africa by engaging institutions on the continent in the diverse partnerships through which it executes its mandate.

AATF uses a medium to long-term strategy to achieve its objectives. This strategy focuses on the access of appropriate technologies, developing and adapting these technologies and deploying and commercialising these technologies for impact. These strategic focus areas are the key aspects (key performance parameters) to attaining the Foundation's objectives. We anchor our activities on a strong and effective institutional programming and a conducive environment through:-

- Institutional capacity building for technology access, development, adaptation and deployment; and
- Creation of an enabling environment for technology access, development, adaptation and deployment.

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TRUSTEES' REPORT (CONTINUED)

The significant activities that contribute to the achievement of the above objectives are as follows:-

- Developing Striga control technology for smallholder maize fields.
- Developing *Maruca*-resistant cowpea varieties for use by smallholder farmers.
- Improvement of bananas resistant to banana bacterial wilt disease.
- Implementing the Water Efficient Maize for Africa (WEMA) Project.
- Developing Nitrogen-Use Efficient, Water-Use Efficient and Salt Tolerant (NEWEST) rice varieties.
- Maize Lethal Necrosis (MLN) Diagnostics and Management.
- Open Forum for Agricultural Biotechnology (OFAB).
- Implementation of the Cassava Mechanisation and Agro-processing Project (CAMAP).
- Developing Hybrid Rice for use by smallholder farmers
- Seeds2B Project.

THE STRIGA CONTROL IN MAIZE PROJECT

Objective

The objective of this project is to sustainably improve maize productivity among smallholder maize producers in Kenya, Tanzania, and Uganda who rely on maize for household food security and income through control Striga weed infestation. To accomplish this, the project is scaling the commercialization of IR-maize seed in Kenya, Tanzania, and Uganda. The implementation of this project will result in widespread access to and adoption of StrigAway technology by smallholder maize producers who rely on maize for household food security and income. StrigAway, the combination of herbicide resistant maize treated with herbicide, is a high-potential, market-proven technology that transforms productivity and income.

The problem

The damage caused annually by Striga in SSA is estimated at US\$ 1 billion, affecting the livelihoods of more than 100 million people. Fifteen countries of eastern, southern and western Africa account for 95% of the continent's Striga infested fields. The challenge is to expand commercial access of StrigAway technology.

AATF interventions

AATF has technical expertise in commercializing IR-maize seed, having completed pilot activities since 2005 in Kenya. AATF has worked in Uganda and Tanzania with other technologies and has already developed partnerships in those countries for the commercialization of IR-maize seed. AATF is providing support in market development, farmer training, and technology stewardship to private seed company partners who are producing, distributing, and marketing IR maize seeds to smallholder producers. Overall AATF is in charge of oversight and coordination of project partnership.

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TRUSTEES' REPORT (CONTINUED)

Specifically this is done through:

Formulation of IR maize dissemination plans in target countries

Mobilize and build capacity of stakeholders in IR maize technology handling and use, thus assisting in product stewardship

Addressing any bottlenecks in technology transfers to ensure effective access, delivery and uptake of the IR maize technology by seed companies, agro-dealers and farmers

Facilitating demand creation for the IR maize technology among farmers through sustained on-farm product demonstrations, outreach and awareness campaigns, thereby encouraging investment in certified seed production by seed companies

Support for variety evaluation, release and nomination by seed companies, so as to bring new and higher yielding hybrids to the market

Facilitating compliance to seed and herbicide registration regulations in target countries

Sustaining technology uptake and use through effective training, monitoring and evaluation, and feedback workshops, thereby enabling compliance to technology user guidelines and its long term benefits to farmers.

Achievements

Interest from seed companies has increased in the last two years with three more seed companies, Elgon Kenya Ltd, Meru Agro in Tanzania and Victoria Seeds in Uganda joined in the production and selling of StrigAway bringing the total number of companies involved to seven.

Through efforts by the partner private seed companies, the Striga Control Project reported a 60% improvement in the supply of certified IR maize seed. Data from farmer fields shows that the maize grain yield advantage of the IR maize varieties over the farmers' variety averaged 2 tonnes per hectare, with the extra grain being worth about US\$ 660 per ha. The volume of seeds recently produced under this project is estimated as sufficient to reach over 150,000 households at 4kg per household. The project continued with promotion activities involving seven partner seed companies to enhance commercialisation of the IR maize in addition to seeking additional seed company participation to build high demand for the IR maize varieties.

A critical bottleneck in commercialization being the capital cost required by the need to have separate herbicide coating dedicated treatment equipment, AATF provided cost share for the purchase and installation of a seed treatment processing lines by one private seed company partner in Kenya in 2016.

Some key assumptions with respect to our Maize-based projects are as follows;

- i. 1 household = 1 acre of farmland on average
- ii. 1 household = 6 family members on average
- iii. On average 10kg of maize seed needed to cultivate 1 acre of farmland
- iv. Average yield of OPV = 0.6 tons of grain per acre
- v. Average yield of hybrids = 1.2 tons of grain per acre

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TRUSTEES' REPORT (CONTINUED)

Project/Indicator	No of CFTs	No of NPTs	No of Varieties released	Seed produced (MT)	Seed Sold (MT)	No of households reached
STRIGA	0	1 <sup>[1]</sup>	11	604	364 <sup>[2]</sup>	91,000 <sup>[3]</sup>

1 in Uganda

2 364MT can cultivate 14,560Ha

3 household reached is a wrong parameter given that there will be repeat farmers in a season.

Crucial statistics:

Striga, commonly known as witchweed, is a parasitic plant that requires a living host for germination and initial development. Maize, the staple food for the majority of East Africans, has significant susceptibility to Striga and continuous cereal mono-cropping has intensified the Striga problem. Severe Striga infestations can cause between 20%-80% crop loss in maize and farmers have abandoned farmland and areas of fields with heavy Striga infestation. Striga affects approximately 1.4 million hectares in Kenya, Tanzania, and Uganda.

AATF's experience in Kenya and Tanzania has shown that the IR maize technology has great impact in the reduction of Striga effects. The technology can increase yields from 0.5 tonnes to 3 tonnes per hectare and in effect increase income and reduce poverty. Thus IR technology is viable in addressing food security and poverty reduction across SSA especially given the importance of maize in the region. Based on the overwhelming results from Kenya, AATF is putting in place mechanisms to scale-up the technology in other countries for smallholder farmers to be food secure.

Challenges & Lessons learnt

- Open Pollinated Varieties (OPV) which were the first varieties available and commercialized could control Striga weeds, but were not of exceptional high grain yield. However seed companies are now embracing new high yielding hybrids like IR H3 of Kenya seed and Longe7H-IR Naseco in Uganda.
- Capital cost required by the need to have separate herbicide coating dedicated treatment equipment.

AATF is proactively engaging seed companies with binding milestone-based contracts to assist monitoring and foster compliance to agreed targets.

THE MARUCA-RESISTANT COWPEA PROJECT

Objective

The project aims at contributing to food security and improving livelihoods of small holder farmers in sub-Saharan Africa by developing and deploying improved, high yielding farmers-preferred cowpea varieties that are resistant to the insect pest Maruca vitrata, commonly known as Podborer.

The Problem

The pod borer (*M. vitrata*) is a Lepidopteran pest that inflicts severe damage to cowpea. In severe infestations yield losses of between 70-80% have been reported.

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AATF Intervention

AATF is addressing these problems through a combination of conventional breeding and genetic engineering of the crop to improve its productivity and utilisation.

Achievements

The PBR Cowpea project has collated most of the data required for a regulatory dossier including molecular characterisation of Cry1Ab gene and its efficacy in different agro-ecological zones with results showing the gene as having a near complete control of the Maruca pest in transgenic farmers' preferred varieties. Results from non-target organisms and the seed density trials indicate that relative abundance and the types of insects that visited the transgenic and the non-transgenic plots were similar. Trials indicate that increasing seed densities of the wild cowpea did not result in geometric increase in seed production (weediness and gene flow). Thus the environmental risks are quasi non-existent. The yields obtained from two insecticide sprays with PBR- cowpea comparable to results from five insecticide sprays indicating that the high number of sprays by farmers as generally practised can be significantly reduced when Bt cowpea is adopted. An IPM/IRM strategy is being developed to control pod-sucking bugs.

Expected impact

- Increased production in Africa by at least 50 percent from 6.675 millions tons to 10.150 millions tons which translates to US\$ 4,567 500,000 US\$2,308,500,000 at an average price of (\$450/tons)
- Increased yields of local varieties from 0.3 – 0.6 t/ha to 0.6 – 2.0 t/ha resulting in increased income of at least US\$270-US\$ 900
- Improved nutrition - cowpea contains 22 percent protein.
- Reduce regional grain prices by 9.5 percent, resulting in increased regional trade volume and demand by between 8.5 percent and 19.2 percent.
- Improved health linked to the reduction in insecticide herbicide sprays from about 6 to 2 times

THE BANANA IMPROVEMENT PROJECT

Objective

- To negotiate access to genes for banana bacterial wilt resistance
- To develop transgenic resistant banana varieties to bacterial wilt disease
- To conduct efficacy tests of the accessed genes for resistance to bacterial wilt disease
- To evaluate consumer acceptance, agronomic characteristics and environmental and food safety of the transgenic banana in target countries
- To deregulate transgenic banana for commercial release in Africa
- To facilitate deployment and stewardship of transgenic banana in target countries

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The problem

Banana is a major staple crop in East and Central Africa produced mostly by smallholder subsistence farmers. This crop is severely attacked by Banana Xanthomonas wilt (BXW) disease which threatens the stability of food security in the region. About 20 million people depend on bananas or plantains as their major source of dietary carbohydrates. The disease affects all banana varieties, including both East African Highland Bananas (EAHBs) and exotic dessert and beer bananas. The economic impact of the disease is potentially disastrous because it destroys whole plants leading to complete yield loss. The disease has caused estimated economic losses of about \$2-8 billion over the past decade. There are currently no commercial pesticides, biocontrol agents or resistant cultivars available to control BXW. Given the rapid spread of the disease in Africa and the lack of known genetic resistance to BXW, IITA is partnering with AATF in exploring transgenic research to improve banana resistance to the disease. Genetic transformation using three transgenes has been successfully demonstrated as effective in controlling the disease. These transgenes are now being used to develop resistant cultivars.

AATF Interventions

License and service agreement with IITA and partners

On accessing genes, AATF then undertakes the issuance of sublicense to partners (IITA and NARO). AATF also ensures a Service Level Agreement is made with partners. Along terms of the agreement, AATF undertakes IP Management for all forms of IP and General License Compliance including license compliance visits for the genes covered under the agreements.

Stewardship of Banana

- Visit partner laboratories where banana will be transformed by the licensed genes to audit the general stewardship of these genes.
- Visit partner glasshouses, growth chambers and/or confined field trials (CFTs), where transformed seedlings/plantlets or regenerated plants will be evaluated for specific traits, to audit compliance with stewardship requirements of the License in these conditions.

Regulatory Affairs

AATF regulatory roles:

- Develop a Biosafety and IP compliance guideline in liaison with IITA, to facilitate the NARS to report and implement the expectations of the technology owner.
- Undertake Regulatory Audits in the project areas to ensure compliance with Biosafety requirements in approvals and the country laws and the Compliance guideline.
- Carry out Compliance Training in the participating NARS in collaboration with IITA.
- AATF's will participate during project implementation processes including and not limited to the following activities:
  - Participate in review of improvements made on the technology
  - Participate in review of Application dossier - This should be copied to AATF during IBC review stage and a copy retained at AATF.
  - Participate in review of activity of third parties including any published information on the 3 genes.
  - Participate in review of press releases and media reports regarding the technology
  - Participate in Annual Review of the sub-licenses with IITA, NARO and EIAR.
- Participate in progress reporting forum as organized by IITA.

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TRUSTEES' REPORT (CONTINUED)

Reports and Communications

TOD will peruse and vet the technical reports and the journal articles developed by the partner, IITA, arising from the use of licensed genes in a timely manner so as to meet the desired publication deadline. Communications will vet all the press releases and Legal will check for online articles and reports, online referencing of any of the subject covered under the agreement.

Project achievements

Renewal of Sublicense and terms to IITA

A significant development in the banana project was the renewal of the sublicense for the transgenes (P1fp, Hrap, Espfp) being used for the development bacterial wilt resistant banana by AATF to IITA. The sublicense was renewed in March 2016 under modified terms that empower AATF to oversee general license compliance. The sublicense granted to IITA was extended to cover IITA Enset and cassava transgenic research. AATF further prepared corresponding sublicenses with NARO (Uganda) for Banana and EIAR (Ethiopia) for Ensete.

IITA summary results from BXW product development activities

Kenya

- The promising transgenic banana lines of cultivar 'Cavendish Williams' and 'Gros Michel' with stacked P1fp and Hrap genes and individual gene showing 100% resistance to BXW were multiplied for confined field trial in Kenya.
- Molecular analysis of promising transgenic lines was performed to check the presence, integration and expression of genes.
- Application for confined field trial submitted to Institute Biosafety Committee (IBC) of KALRO for approval. PI of the project has defended the application during IBC meeting on 8th March, 2016. Once approved by IBC, application will be submitted to NBA-Kenya. The planting of CFT is planned for August 2016 at KALRO-Alupe.
- First CFT application for banana was approved by both the Institute Biosafety Committee (IBC) of KALRO and finally by the NBA-Kenya in December 2016

Uganda

- NARO has generated transgenic lines of banana matooke cultivar 'Nakitembe' and hybrid variety 'M9' using single gene and stacked gene constructs provided by IITA. These lines are currently under screen house evaluation for resistance to BXW.
- The National Biosafety Counsel (NBC) of the Uganda National Council of Science and Technology (UNCST) approved evaluation of selected transgenic lines of Hybrid M9 and Nakitembe (Under Permit Number A529) for multilocal CFTs in three agroecological zones of Uganda: Central low altitude, Western highland, and Lake Albert region. Bulking of transgenic lines was started, and sites were selected and verified for infrastructure development.

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TRUSTEES' REPORT (CONTINUED)

IP Compliance

- AATF developed a Biosafety and IP compliance guideline in liaison with IITA, to facilitate compliance and efficient implementation of the project by NARS in accordance with the expectations and requirements of Academia Sinica (the technology provider). The guideline is being used for on-going compliance audit visits.
- It was noted that one of the varieties being evaluated, the Nakitembe Variety, is a landrace which had not been officially released. It was recommended that NARO undertakes steps to ensure official release of the variety with the genes to ensure quality control.
- IP Management: IITA paid US\$30,000 to AATF
- Compliance visits: were made to operational areas of IITA (30 September 2016) and NARO-Kawanda (6 and 7 October 2016) where cassava, Ensete and banana are being transformed and no sub-license infringements were noted.

Review of project manuscripts for publication

- AATF reviewed a book chapter prepared by the project PI. The book chapter is titled: Transgenic Technologies for Bacterial Wilt Resistance.
- AATF also worked closely with IITA to prepare the project report for the 2015 AATF Annual Report recently published.

Expected impact

- Reduce the impact of BXW in banana production through increased production and income (annual loss as a result of BXW in Uganda is US\$200 million and be up to 8 billion in the next 10 years).
- Increase banana regional exports by over 65 percent and reduced poverty

Challenges and lessons learnt

- Overcoming the regulatory barriers in Kenya and Uganda for commercial release.
- Combining resistance to BXW with Fusarium wilt in farmer preferred cultivars to enhance successful banana productivity in Africa.
- Funding initiatives should be intensified to enhance project activities towards the commercial release of transgenic varieties in target countries.



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TRUSTEES' REPORT (CONTINUED)

THE WATER EFFICIENT MAIZE FOR AFRICA (WEMA) PROJECT

The problem

Drought is the most important constraint of African agriculture severely affecting maize, the most important African staple food crop. Three-quarters of the world's severe droughts over the past 10 years have occurred in Africa. The WEMA partnership was formed in response to a growing call by African farmers, leaders and scientists to address the effects of drought in a way that is cost effective to African smallholder farmers.

Objective

To develop and deploy royalty-free African drought-tolerant and insect-pest protected white maize hybrids using conventional, marker assisted, and genetic modification approaches, giving at least 20-35% yield advantage under moderate drought conditions compared to commercial hybrids developed in 2008.

AATF interventions

AATF works with the internationally funded non-profit International Maize and Wheat Improvement Center (CIMMYT), the private agricultural company Monsanto, and five National Agricultural Research Systems (NARS) in five countries in eastern and southern Africa in this partnership. AATF contributes its leadership, unique experience in public-private partnership management, technology stewardship, regulatory affairs and intellectual property management, and project management expertise. CIMMYT provided high-yielding maize varieties that are adapted to African conditions and expertise in conventional breeding and testing for drought tolerance.

Monsanto provided several proprietary germplasm, advanced breeding tools and expertise, and drought-tolerance transgene developed in collaboration with Baden Aniline and Soda Factory (BASF) and insect-pest resistant transgenes. The varieties developed through the project will be distributed to African seed companies through AATF without royalty and made available to smallholder farmers as part of their seed business. The national agricultural research systems, farmers' groups, and seed companies participating in the project will contribute their germplasm, expertise in field testing, seed multiplication and distribution. The project also involves local institutions, both public and private, and in the process expands their capacity and experience in crop breeding, biotechnology and biosafety.

Summary of Achievements and Impact / Achievements

A summary of achievements of selected key performance indicators (outputs and outcomes) in 2016 is presented in Table 1.

The WEMA project has received approvals for the release of 35 new DroughtTEGO® hybrids during the reporting period. Five transgenic Bt insect-pest protected (MON98034) hybrids (TELA™) were commercialised to smallholder farmers royalty-free in seven provinces in South Africa in the 2016/2017 cropping season.

The project received approval for environmental release of Bt insect-pest protection (MON810) trait for Kenya in January 2016; and approvals of applications for confined field trials for stacked drought tolerant (DT) and Bt in Kenya, Mozambique and Uganda. Tanzania planted their first ever confined field trials (CFTs) for drought tolerance transgene in 2016.

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Table 1: Summary of achievements of some key performance indicators, 2016

Project/Indicator	No. of CFTs	No. of NPT/DUS/AYT hybrids	No. of new approved for variety release	Certified seed production (tons)	No. of farm households reached (FHHs)
WEMA	10a	96b	35c	1,995d	498,750e

No. of CFTs: Kenya - 1; Mozambique - 1; Tanzania - 1; Uganda - 3; and Republic of South Africa - 4.

A total of 21 new hybrids were advanced into the National Performance Trials (NPT) in 2016 from the various WEMA breeding pipelines into the first year NPT testing (NPT1) in Kenya, Uganda and Tanzania. In WEMA countries, the number of NPTs varies from 1 - 3 in East Africa and none in Southern Africa. The total number of materials under certification in NPT/Distinctness, Uniformity and Stability observation - DUS/Advanced Yield Trials - AYT was 96 new and unique hybrids (81 in Eastern Africa and 15 in Southern Africa).

A total of 35 new DroughtTEGO® hybrids were approved for commercialization in 2016 (Kenya - 22; Tanzania - 5; Uganda - 4; Mozambique - 2; & South Africa - 2) bringing the total number of conventional hybrids approved for commercialisation to 94 since 2013 (WEMA Phase II), with additional five transgenic hybrids approved for commercialisation only in South Africa. Finally, in 2016, 19 new parental lines (inbred lines) bringing the total number to 38 parental lines from WEMA Monsanto breeding and testing program that are available for licensing to seed companies through AATF, to make their own proprietary hybrids, but not for breeding.

A total of 1,995 tons of certified seed were produced in 2016 bring the total certified seed production to 4,278 tons since 2013.

Based on 1,995 tons of TEGO hybrid seed available to farmers for cultivation, the quantity of seed when sold, will be enough to plant @ seed rate of 10 kg seed/acre (0.405 ha), 80,798 ha  $((1,995 * 1000 \text{ kg})/10 \text{ kg}) * 0.405$  of farmlands to benefit at least 498,750 FHHs (based on the assumption of planting 4 kg seed or 2 packs of 2 kg each per farm household of six persons each on average) to benefit approximately 2.99 million people.

Expected impact

- Increased maize yields by 20-35 percent over 2008 commercial varieties under moderate drought stress.
- Additional 2 million metric tons of maize during drought years to feed about 14 to 21 million people in the long-term.
- Improved yield stability under moderate drought to encourage investments in best management practices.
- The conventionally bred seed has been available royalty-free to small-scale farmers in SSA since 2013; while limited quantities of transgenic hybrids were available in South Africa in 2016.
- Reduced risks of crop failure during moderate drought

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Key Challenge

- Outbreak of Maize Lethal Necrosis (MLN) disease in East Africa has limited the project's progress in terms of hindering or delaying trans-boundary seed movements and cultivation bans in certain areas. This has slowed down seed production activities and affected cultivation targets and timelines beyond the project's control.

DEVELOPING NITROGEN-USE EFFICIENT, WATER-USE EFFICIENT AND SALT TOLERANT (NEWEST) RICE VARIETIES FOR USE BY SMALLHOLDER FARMERS IN SSA

Objective

This project is designed to develop transgenic farmer preferred rice varieties that are water-use efficient, nitrogen-use efficient and salt tolerant. By 2018, the project will show proof of concept, identify lead events for both NUE and NEWEST rice, chose farmer preferred varieties for introgression and carryout introgression and backcrosses.

The Problem

Rice consumption in SSA has been growing by 6 percent per annum over the years, more than double the rate of population growth resulting in demands that far exceed local supply in SSA. The rising demand for the commodity has been largely attributed to changing food preferences in both urban and rural areas coupled with high population growth rates and rapid urbanization in Africa. This demand and consumption rate indicates that rice is an important staple food and a commodity of strategic significance across most African countries, requiring specific interventions that target production constraints.

AATF Intervention

The NEWEST Rice project was launched by AATF in 2008 as a strategic pathway to addressing food insecurity in the face of many abiotic constraints to rice production and impending challenge of climate variability in Africa. The initiative strives to genetically transform some varieties of the New Rice for Africa (NERICA) using plant transformation technologies to improve their productivity in nitrogen-deficient soils, drought prone regions and in soils with high salinity. To ensure adoption the project will introgress the gene into the farmer prefer varieties in the respective country of deployment and commercialization.

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Achievements

The NEWEST rice project has concluded transformation activities. A total of 33 events comprising 15 Nitrogen Use Efficient (NUE) and 18 Nitrogen-use Efficient, Water-use Efficient and Salt Tolerant (NEWEST) events were developed by Arcadia Biosciences and distributed to all partners for CFTs. The 15 nitrogen-use efficient transgenic lines comprises of six and nine lines from pARC321/pPIPRA543 and pARC321/pARC163 co-transformation pipeline respectively. While the 18 triple stacked genes events for nitrogen-use efficient, water-use efficient and salt tolerance are from pARC609/pARC163 product pipeline. Both the 15 NUE and 18 NEWEST events were shipped to the partners in Crops Research Institute (CRI) Ghana, National Crops Resources Research Institute (NaCRRI) Uganda, National Cereals Research Institute (NCRI) Nigeria and International Center for Tropical Agriculture (CIAT) Colombia. The NUE events have been tested in 12 Confined Field trials in four locations (Ghana, Uganda, Nigeria and Colombia). The events were tested at four nitrogen levels (0kg, 30kg, 60kg and 90kg). As a result of all the trials, a major milestone was achieved in the NEWEST Rice Project, by completing a combined analysis of the data collected since 2012 when the confined field trials started to date. Events NUE 12, NUE 9 and NUE 2 had consistently outperformed the Bulk Sibling Nulls (BSN) and NERICA 4 (not transformed) with an average of 15% yield increase from a GGE biplot analysis. This has positioned these three as potential lead events, subject to molecular characterization of the plants and the final results to come from Nigeria, the best will be selected as the lead event. Also, the regulatory process have commenced with the completion of the early food safety evaluation (EFSE) for NUE protein with results now in the public domain on the website of the Food and Drug Agency of America.

Expected impact

- A total welfare gain of more than \$0.5bn could potentially be achieved if farmers adopting rice technologies are able to increase their yields by at least 30 percent.
- A reduction in rice imports leading to foreign currency savings of more than US\$300 million per year.
- Increase of household income of at least \$400 per annum.
- At least 500,000 households will be accessing or adopting the new rice varieties within the first three years after commercialization.

Challenges and Lessons Learnt

The major obstacle in the project was the level of noise experienced in the data collected in 2013, which was identified to be caused by the small plot size used in the trials. The protocol has been reviewed and the plot size increased. Also delay was experienced in the signing of the agreement by partners. Constant reminders were sent with a number of phone calls.

Key benefactors of project

This project will have direct benefit to the resource poor farmers (mostly women) in Africa, especially those with lands of poor soils, that could produce little or nothing from their lands due to low nitrogen level, drought or salinity. It will also empower African scientific and agricultural communities to better deliver other improved technologies and services to farmers in the future."

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CASSAVA PRODUCTIVITY THROUGH MECHANISATION AND AGRO-PROCESSING (CAMAP)

Project goal

The goal of the Cassava Mechanisation and Agro-processing Project (CAMAP) is to enhance cassava production and processing technologies for sustainable improvements in food security, incomes and livelihoods for farmers, processors, and marketers in the cassava sector. This will be achieved through the upgrading and expanding of traditional planting, harvesting and processing. These changes will contribute to the development of competitive cassava commodity value chains resulting in reliable supply of processed products for food and non-food industrial use. The competitiveness of Africa's cassava manufactured products at the world market has been low because cassava is produced and processed for subsistence, not as a commercial crop.

Project objectives:

- Negotiate access and transfer of cassava mechanisation and agro processing technologies for use by smallholder farmers
- Increase cassava production through mechanisation across the entire value chain and thus reduce post-harvest losses and demand for intensive labour
- Add value to the cassava industry through value addition and the creation of market linkages between smallholder farmers and agro processing centres
- Build the capacity of local entrepreneurs to design prototypes machines, manufacture, maintain and repair equipment for planting, harvesting and processing cassava
- Expand the utilisation of safe, quality, diversified, value added cassava products and derivatives.

The Problem

Cassava is a staple crop for 500 million people in Sub-Saharan Africa (SSA) with Nigeria accounting for 55% of the world's cassava production. Although Nigeria is the highest cassava producing country in the world with over 40 million metric tonnes, the output per unit area is still very low (9–12 tons/ha) as compared to over 25 tons/ha recorded in Asia and Latin America. The yield level on farmers' field (for landraces and improved varieties) has remained very low in SSA due to inefficient production systems. Cassava production in Africa predominantly remains manual and labour intensive; and employs traditional tools in all operations. One of the key constraints to cassava production in Africa is lack of mechanisation or appropriate production and processing tools. This remains laborious to women, and less attractive to the youths who want to go into cassava production. Yet market opportunities for cassava in Africa are limited compared to other cassava-producing regions. This situation has hindered value addition because it is farmers who have access to markets that are likely to adopt technologies which enhance productivity.

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Project Overview

Mechanisation of cassava production and processing has been identified as the most important constraint to the development of the cassava sector in Africa. High labour requirement for cassava production operations include land clearing, land preparation, planting, weeding and harvesting. These high labour requirements of cassava production come with high cost over a long growing season that makes cassava production less attractive to farmers, especially youths compared with other staple crops that are less labour-intensive and require less operational costs. Other high operation costs are those related to transportation, storage and post-harvest processing. To address the problem, the New Partnership for Africa's Development (NEPAD) has launched the Pan-African Cassava Initiative, while several countries, such as Nigeria and Ghana, have started national initiatives to promote the use of cassava in industries. Cassava for large-scale use such as the mandated incorporation of 10 percent cassava flour in wheat flour for bread making in Nigeria requires a large number of small-scale cassava processing units. However, the existing capacity for manufacturing of cassava processing equipment is limited and unless it is upgraded, Africa's farmers and entrepreneurs are unlikely to benefit from the new market opportunities. The project, therefore, aims to stimulate cassava mechanisation along the product value chain to ensure increased production and value addition and on the other hand reduce post-harvest losses. Improvement of cassava production systems will be critical to maximizing its full potential as a cash crop especially for smallholder farmers.

AATF Intervention

AATF is negotiating access, building capacity for local fabricators, backstopping enterprise development, providing stewardship of the technologies, deploying and creating market linkages through CAMAP. AATF has been providing resources for the project development, testing of the technology, overall partnership management, business enterprise development and market linkage expertise. Manufacturers in regions with appropriate technologies, but who are reluctant to supply equipment to African businesses for fear of piracy and subsequent loss of market, have been approached and they have shown interest in partnering with African entrepreneurs to produce high quality equipment.

CAMAP is a value chain approach to addressing constraints faced by smallholder cassava farmers in which not only mechanisation and agro-processing is involved, but it is a systems approach where there is the use of improved high-yielding and disease resistant cassava varieties and best agronomic practices (including optimum plant density, fertiliser and herbicides application, weeding, scheduled dates for planting and harvesting) is incorporated into the mainstream project activities. Through market linkages, CAMAP is assisting in reducing post-harvest losses by over 80%, reduce labour drudgery by 90% and significantly increase farmer income from \$700 - 900 per ha to \$2,000 - \$3,000 perha.

Achievements

a. Revolving Fund

The revolving fund began full swing operation in 2016 where smallholder farmers would pay for mechanization services for their pieces of land on full cost recovery. This noble idea contributes to the sustainability of the project as the money paid by the farmers is used to reach out to more farmers and for servicing the project equipment. The revolving fund provided that farmers pay up 50% of the total sum of all mechanization operations (ploughing, harrowing, herbicide application, cultivation, and harvesting) before commencement of works and the balance is paid upon completion of activities or harvest of their cassava. The 50% payment approach was meant to have financial inclusion aimed at motivating small holder farmers who are not financially able to mechanize their farms. Through this method, farmers have the opportunity to raise the needed funds over a period.

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For 2016, there was great progress in Nigeria, Zambia and Uganda in terms of the farmer payments into the revolving fund, considering that it was the first year the fund was launched. By the December 2016, a total of 117,600 ZMK (USD 15,981) had been received while 276,830 ZMK (USD 37,409) was to be paid in 2017 in Zambia. In Uganda, there were delays in the signing of the contract with National Crop Resources Research Institute (NaCRRI). This led to only 116 ha being done and a total of USD3,056 being paid by the farmers into the Revolving Fund. For Nigeria, a total of 29,370,400 Naira (USD 117,481 using the exchange rate of 1US\$ = 250 Naira) representing 70% of the cost of mechanisation operations was raised through the cost recovery and the 30% balance will be paid this year. The summary of these amounts is highlighted in the table below.

**Table 1: Cash flow within CAMAP countries**

Zambia	Uganda	Nigeria
Cash Received (USD)	Cash Received (USD)	Cash Received (USD)
15,981	3,056	117,481

**b. Country Progress**

Zambia continues to grow in terms of number of beneficiaries and hectareage. Last season CAMAP targeted to do 350 hectares of cassava in the Luapula and Western Province. However due to limited number of tractors and breakdowns only 196 hectares were planted as at December 2016. Two capacity building trainings were organized and conducted; the first one was held at AGCO Farms in Lusaka for tractor operators who were selected from project operational districts. The training was provided by AGCO the franchise holder for Massey Ferguson (MF) tractors in Zambia. The second training was for cluster lead farmers/Zone leaders, field staff, and tractor operators drawn from project sites in Luapula on herbicide application and weed management. It was facilitated by BASF Zambia which supplied the herbicides to the project. The main objective of the training was to equip Zone leaders from the project clusters, tractor operators and field officers with knowledge and skill on the application of herbicides for maximum benefits during the 2016/2017 growing season and beyond.

Nigeria As demand for cassava and its by-products now continue to soar unprecedentedly in Nigeria, demand for mechanisation services to increase productivity and reduce associated drudgeries has led to expansion in the activities of CAMAP. The various mechanisation operations in the 3 states (namely Ogun, Osun and Delta states) in Nigeria covered a total of 2,061Ha. A lot of organisations are now partnering with AATF under the CAMAP project. These includes IFAD Value Chain Development Project which part financed 300 ha for farmers in 8 different clusters in Ogun, FADAMA 11, which paid for 50% of mechanisation work for farmers in Osun, Moko Investment which is working with 500 ha owned by smallholder farmers in Ogun, A - reegwa Farms which leased two four-row planters to plant its 500 ha farm. As part of the sustainability plan for CAMAP, AATF is now working with FOIRTIS Investment Bank in Nigeria to finance farmers under the cassava mechanisation.

AATF invited a group of relevant experts and stakeholders to a strategic workshop on economically sustainable approaches to provision of field mechanization services for cassava farmers in Nigeria to review progress, explore opportunities, and discuss options for interventions to increase Nigerian cassava farmers' access to mechanization services in a sustainable manner from the 25<sup>th</sup> to the 27<sup>th</sup> of October 2016.

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Uganda

A total of 300 hectares had been targeted for the whole year however only 77 hectares was planted representing 25% target reach. Cumulatively 250ha of mechanized operations was done in Uganda. Two field officers were recruited for the Apac and Kigumba clusters to spearhead the management of operations within the clusters. Their work includes farmer mobilisation, supervision of machine use, collection of mechanisation funds and data reporting. The figures below are the CAMAP project achievements for 2016 period, for the 3 project countries. (All area related figures are in Ha)

Table 2: Hectare coverage In CAMAP countries

	Uganda	Nigeria	Zambia
Ploughed	74	570	196
Disked	64	411	193
Planted	77	775	102
Sprayed & Cultivation	35	305.5	87
Harvested <sup>[1]</sup>	-	550	79
Sub Totals	250	2061	657
Total hectares	2968		
Number of beneficiaries reached	17,808		

**Yield Levels**The yields of cassava harvested in Nigeria ranged from 18 to 32 ton/ha, for Uganda, the yield ranged from 20-27tons/ha, and for Zambia yields ranged from 23 to 56t/ha. The variation of yields is highly dependent on agronomic practices from the farmers' end including the duration from planting to harvesting.

**Number of beneficiaries reached**We assume that 1 farm household is mechanising 1 ha and each household represents 6 beneficiaries, and 1 hectare of land planted under CAMAP is owned by 1 household. Therefore total beneficiaries would be 2,968 multiply by 6 = 17,808. This figure excludes over 2,500 ha which were done by our partners namely National Centre of Agriculture Mechanisation (NCAM) in Nigeria, and Crest Agro.

Challenges and Lessons Learnt

The challenges faced during the year included the following.

- There are limited resources hence we are unable to engage more farmers. An active resource mobilization campaign is underway to identify possible investors.
- Misuse of machines – field officers attached to the CAMAP project in Uganda were assigned to manage correct use of the machines
- Limited number of tractors to manage growing interest from farmers



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THE OPEN FORUM ON AGRICULTURAL BIOTECHNOLOGY IN AFRICA (OFAB)

Objective and AATF Role

The objectives of OFAB are to:

1. Establish and manage a range of platforms to enhance understanding of biotechnology in agriculture for productivity;
2. Contribute to informing policy decision making processes on matters of agricultural biotechnology through provision of factual, well researched and scientific information;
3. Forge strategic alliances for optimization of resources through convening and encouraging inter-institutional networking and knowledge sharing in the agricultural biotechnology space;
4. Enhance targeted capacity strengthening that will improve communication across all sectors interested in biotechnology for African agricultural development.

The Problem

AATF established OFAB in recognition of the potential that biotechnology offers towards agricultural development in SSA and the need for its active participation in creating an enabling environment for adoption of new technologies by smallholder farmers in order to support it effectively implement its strategies and catalyse change in African agriculture.

Achievements

OFAB is globally recognized as a credible biotech advocacy platform in SSA and has built a global network to bolster its advocacy and communication efforts in Africa. For example, OFAB is a founding member of the Cornell Alliance for Science Growth and has expanded its mission from one chapter in 2006 to seven chapters - Kenya, Nigeria, Ghana, Uganda, Burkina Faso, Tanzania, and Ethiopia - currently. AATF advocacy platform significantly contributed towards creating an enabling environment for biotech uptake in SSA. OFAB successfully engaged grassroots communities on benefits and safety of GMOs through sustained community mobilization program in collaboration with relevant local bodies in target countries. It has enhanced media outreach campaigns leading to significant positive changes in media coverage (from 49 stories in 2011 to about 250 stories in 2016) of biotechnology in all the countries where it operates. This has increased biotech awareness and knowledge in the OFAB countries. OFAB raised additional funds to drive up its advocacy efforts at the grassroots and 'grasstops' (policy advocacy). It has leveraged resources from partner institutions to expand its reach. For example, it raised about \$ 10 million grant from B&MGF to intensify biotech advocacy and communication campaigns for maximum impact.

Challenges and Lessons Learnt

*Political will (political support) for biotech has been found critical for biotech adoption. AATF has therefore intensified high-level policy advocacy and communications campaigns to mobilize political goodwill and support for biotech through OFAB. Efforts are being made to enhance high level outreach to build visibility and inclusion in decision making.*

*Grassroots support for biotech is vital for two reasons: boost confidence of policy makers to support the technology and back up their support with science-based policies. AATF made a strategic decision to engage grassroots communities on benefits and safety of GMOs through sustained community mobilization programs through OFAB in Kenya, Uganda, Tanzania, Ethiopia, Burkina Faso, Ghana and Nigeria. Information sharing and awareness creation without a sustained, well-designed advocacy campaigns is not enough to bring about strong public acceptance that would lead to adoption of the technologies. All country partners are now strongly encouraged to build awareness as part of policy change advocacy.*

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*The media (mass and social) support for biotech is a strong booster of public acceptance of biotech products. Proactive engagement and capacity strengthening of journalists on science reporting is helping in building informed and empowered reporters. Involvement of project communications staff at AATF and country levels in advocacy has further helped to expose them to a bigger perspective on biotech; and have also given them a chance to communicate issues raised in outreach efforts to a wider public (masses) for awareness creation and transparency i.e. CFTs in Kenya, Uganda, Tanzania and Mozambique.*

*Advocacy is an expensive exercise which requires adequate resources to undertake and achieve desired results. As mentioned above, OFAB raised additional funds to drive up its advocacy efforts at the grassroots and 'grasstops' (policy advocacy) levels. Efforts for more funding ongoing and to leverage resources from partner institutions to expand its reach.*

*The anti-biotech movement has been globalized and efforts to counter it ought to be globally networked as well, but with strong local presence and action. OFAB has built a global network to bolster its advocacy and communication efforts in Africa. These partnerships are encouraged and will continue to ensure global presence with local attention. To reduce public distrust of government institutions due to the history of compromise on the part of its officials, AATF has encouraged officials to engage with media more often to showcase their capacity to regulate GM technology especially. Encourage government agencies to engage the public more frequently. Endorsement of biotech by National and regional trade associations, farmer organisations has also significantly helped to boost chances of acceptance of GM technology.*

DEVELOPING HYBRID RICE FOR USE BY SMALLHOLDER FARMERS IN SUB-SAHARAN

Objective

The hybrid rice project aims to improve food security and rural livelihood among African small-scale rice producers, by developing hybrid rice, with its significant yield advantage and create sustainable hybrid rice agro-businesses to support rice farming in East, West and Southern Africa. Over a 15 year period the project expects to enable African researchers and seeds producers to reach 500,000 rice farmers with hybrid rice that delivers a yield advantage of at least 1 ton per hectare over the most competitive inbred varieties.

The Problem

Rice (*Oryza spp*) is an important staple food and a commodity of strategic significance across much of Africa. Driven by changing food preferences in the urban and rural areas and compounded by high population growth rates and rapid urbanisation, rice consumption in SSA has increased by 5.6 percent per annum over the years, more than double the rate of population growth. However, the area under rice production in SSA has stagnated at about 8 million hectares producing about 15.5 million tonnes per year against an annual consumption of 27 million tonnes. These production and consumption trends imply a production deficit of about 11.5 million tonnes per year valued at US\$ 4 billion that is imported annually. Thus the rice production deficit presents a great development challenge to governments and development agencies in SSA. The slow growth in domestic rice production has been attributed to mostly to the very low yield being achieved by rice farmers in SSA.

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AATF Intervention

AATF is working with to develop hybrid rice, with significant yield advantage. The partnership is developing hybrid rice germplasm that is adapted to African conditions using the 2-line hybrid rice technology, which uses only 2 breeding lines to produce rice hybrids. Also being developed in the project is, an information technology tool with interpolated weather surfaces to predict temperature regimes and manage 2-line hybrid rice production risk. The project is being managed by AATF in a way which ensures that technology partners focus on their technical work and that the outputs of the project contribute to global public goods. AATF is also providing a connection to the African seed sector researchers and seed firms. AATF provides an in-depth understanding of African seed companies and the NARS; and provide links between the partners - Hybrids East Africa Ltd (HEAL), and the researchers and seed firms that the project trained. The widespread testing of hybrids in association with regional collaborators will result in global public goods by selecting successful germplasm for global distribution along with the data, to create a strong, viable and sustainable 2-line rice hybrid breeding platform which will add value to hybrid rice breeders and seed producers all over Africa and the globe.

Achievements

The hybrid rice project has recorded good progress in the management of public private partnerships, breeding activities and the development of IT tools to successfully predict where and when to breed and produce seed.

The Hybrid Rice "Breeding by Design" project has made enormous progress, with 14 female lines (S-lines) developed, which are now ready for release as Global Public Goods (GPG). In addition 127 F5 S lines are also available for further development by the commercial partners with a number of private seed companies in Kenya and Tanzania showing interest in taking up the seeds, out of which two seed companies has taken delivery of their preferred lines. The project is gradually transiting into the deployment stage with 15 rice hybrids selected for National Performance Trials (NPT) in Kenya which is the first step towards release and commercialization. The high yield potential of the developed hybrids is attracting huge attention for the project in Kenya, where it has received a lot of mentions in the media.

The project

The project has led to a change in practice on hybrid rice system in Africa. Hybrid rice is now being developed in Africa by an African company for use in Africa. This is in comparison to the former practice of importing hybrid rice developed outside Africa for evaluation in Africa. Four seed companies (local and regional) that had never being involved rice production before are now involved in the testing of the rice hybrids as potential crop for the diversification of their crop portfolio. In this regard, the companies have already acquired the parental lines from the project and are currently conducting performance test in Tanzania, Nigeria, Ghana, Kenya and Zimbabwe. The project has trained 49 rice value chain personnel in key areas of 2-line hybrid rice production system – evaluation and selection of rice hybrids, production of quality seeds, breeding and development of 2-line rice hybrids and establishment of hybrid rice demos, to ensure sustainability.

Expected impact

- Development of 2-line hybrid rice germplasm that is adapted to African conditions.
- Increased yields of at least one ton over the best commercial varieties available for use by smallholder farmers.
- Development of skills of seed companies in 2-line hybrid rice technology
- Development of web based IT tool for predicting hybrid rice production environment

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TRUSTEES' REPORT (CONTINUED)

Challenges and Lessons Learnt

A major constraint is that it is difficult convincing small (or even a large) African seed companies to invest in hybrid rice seed business. Also, although the product of the project is meant to be public goods, most seed companies want exclusive right to those products. The companies are going to have exclusive right to any hybrids they develop using only one parental line from the project.

Key benefactors of project

The key benefactors are seed companies, scientist, rice farmers (Male and Female), millers and research Institutes in Africa."

SEEDS2B PROJECT

Objective

The Seeds2B Project aims to engender agricultural transformation in Sub-Saharan Africa (SSA) by leveraging public-private partnerships to bridge the gap between breeders, local seed companies and smallholder farmers in SSA. The project purpose is to develop and implement scalable business models that will enable technology donors across the globe, from the private and public sector, to license appropriate improved crop cultivars to seed companies in SSA. By adding new commercially viable products to the portfolios of local seed enterprises, the Seeds2B Project helps smallholders in the region access improved seed and therefore serve existing and new markets with the best of locally grown produce.

Problem

Limited smallholder farmer access to quality seed of a range of new improved varieties of key cash and subsistence crops presents a major bottleneck to food security in sub-Saharan Africa (SSA). Adoption rates of modern crop varieties remains low across the region. This situation persists despite increased global public and private investment in the development of innovative improved crop cultivars with potential to address challenges faced by smallholders in SSA. Scalable business models that sustainably expedite smallholder access to quality assured planting materials of such improved crop cultivars is critical for the enhancement of agricultural productivity in SSA.

AATF interventions

Facilitated by the Syngenta Foundation for Sustainable Agriculture, AATF is developing scalable business models founded on equitable public-private partnerships to expedite deployment of quality seed of new better-performing, locally adapted and market-appropriate crop cultivars to smallholder farmers in SSA via local seed enterprises. The Foundation is focused on enhancing yields of non-core crops with significant local demand and high value vegetables. Through the Seeds2B Project, AATF aims to contribute towards improving smallholder productivity, facilitating returns on investments in crop breeding for technology owners and enhancing business performance of Africa's seed enterprises.

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TRUSTEES' REPORT (CONTINUED)

AATF will negotiate on behalf of seed enterprises in Africa for access to appropriate improved crop cultivars. The Foundation will also oversee the management of ensuing business relationships between participating local seed enterprises and technology owners to ensure benefit for all project partners and more so smallholders in SSA. Supported by AATF, participating seed enterprises will impart sustainability to the project by availing improved seed varieties to farmers. The local seed enterprises will benefit from reaching new markets through an expanded variety catalogue. The Foundation will also facilitate recovery of investment to technology owners leading to enhanced returns on investments in technology development. The returns will either be monetary or non-monetary in nature depending on the mandate of the technology owner. While monetary returns will primarily be realized as seed royalties, non-monetary returns will be in the form of data on farmer livelihood enhancement on technology adoption. AATF and local commercial partners will promote commercially viable products accessed by the project to farmers. This will be carried out during on-farm trials demonstrations and open-days in research fields. The Foundation will also carry out capacity enhancement on best agronomic practice towards ensuring that farmers benefit from adopting products commercialised by the project.

AATF will sustainably scale the seeds2B concept across SSA by implementing a scalable business based approach to technology transfer and promotion of farming as a business.

Achievements

AATF successfully facilitated the evaluation of high potential tomato (25), sorghum (16), pearl millet (10) and soybean (6) cultivars in Malawi and Zimbabwe. The evaluated cultivars were accessed from 11 breeders and developed through public and private funded conventional plant breeding initiatives. The participating breeders are based in the global south and SSA, specifically Nigeria, Mozambique, Brazil, India, China and Australia.

The performance, adaptability and market acceptance of accessed cultivars was benchmarked against local checks in small-scale on-station field trials. The trials aimed to identify commercially viable products on the basis of positive interactions between genotype, environment and markets. The outcomes of these trials determine suitability to farmer and market preferences as well as commercial potential, which is key for commercialisation by seed companies. The trials inform nomination of products for on-farm and on-station regulatory and marketing trials.

Evaluation trials identified 11 sorghum, 5 pearl millet and 8 tomato cultivars with potential to offer benefits to smallholders in Malawi and Zimbabwe. Compared to local checks applied, the promising sorghum and millet cultivars offer yield enhancements ranging from 5% to 40%, drought escaping properties; suitability for mixed farming systems; and potential for applications in beer processing. The promising tomato cultivars offer yield enhancements ranging from 10% to over 100%; early fruiting; high fruit counts; and competitive shelf-life. Second season evaluation trials of 6 soybean varieties and first season evaluation trials of 3 groundnut varieties were also initiated in 2016.

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TRUSTEES' REPORT (CONTINUED)

Expected impact

- Access to quality seeds leading to improved yields, increased household income, better livelihoods and food security for African farmers.
- Strengthened African seed systems through increased competition, better quality seed, higher seed volumes, stronger market linkages and increased income/ profits fostering a virtuous circle of investment in African seed companies.
- Effective link with untapped markets in Africa for international technology owners leading to more returns on their investment in technology development.
- Reduced barriers to trade and investment in the African seed industry.
- Enhanced capacity for partner institutions, particularly national agricultural research systems and technical trial partners, on technology transfer and seed business management.

Challenges

The full potential of the trial entries may have not been achieved during the evaluations due to unprecedented drought and floods as well as elevated disease and pest pressure which negatively affected trial outcomes. These stresses were brought about by global climate change. Engagement of trial partners with irrigation capacity and limited trial establishment during affected seasons were strategies applied to manage associated risks.

Grant making Policies

The Foundation's grant making policy for achieving its objectives is to facilitate collaboration and partnerships among competent institutions in Africa and elsewhere, responding on a project-by-project basis to the expressed needs of African farmers.

The nature of AATF's collaborations and partnerships will vary depending on the specific requirements of each project. Some AATF partnerships are primarily strategic in nature while others are operational. They may involve organisations from both the public and private sectors (public/private) or public sector entities only (public/public) or private sector organizations (private/private). In all of its activities, AATF acts as a facilitator, with delivery and implementation carried out by public, private and NGO partners.

Management of partnerships is guided by the different partnership models that will be defined by each relationship. For each partnership entered into, AATF seeks to have clearly defined agreements that will guide expectations of the partners. It invests in understanding what it takes to make such partnerships effective and seeks to identify areas of common interest shared by different entities in order to benefit all involved.

Principal funding sources

During 2016, AATF continued to receive considerable support from members for programs across Africa. In addition, strong internal policies and controls have contributed to maintaining administration costs at reasonable levels. While AATF's focus is on SSA, it nevertheless offers the prospect and potential for its activities to benefit a wide range of stakeholders worldwide. AATF will facilitate partnerships and networks that link food security, poverty reduction, market development and economic growth in ways that will change the conventional approaches employed by African producers engaged in agri-business, to make these activities sustainable over time.

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TRUSTEES' REPORT (CONTINUED)

Investment policy

AATF's investment objective is to maximise the return of its investment funds while generating a high degree of liquidity to allow a response to operational needs. To meet this objective AATF invests in fixed term or call deposits with a high security rating and either fixed interest rates or with a fixed relationship to base rates. Our interest rate is of course lower than what the market can offer due to our cautiousness on ensuring capital protection. During the year, there was no equity investment held by AATF. The Board of Trustees review AATF's investment policy annually.

Reserves policy

The Trustees have examined the requirement for free reserves which are those unrestricted funds not invested in fixed assets, designated for specific purposes or otherwise committed. The policy objective is "to maximise the programme impact to beneficiaries and maximise the value of net income". The Trustees consider that given the nature of AATF's work; ideally the general reserve should preferably be in surplus, which gives flexibility to cover temporary timing differences for grant claims, adequate working capital for our core costs and will allow AATF to respond quickly in unexpected situations. As at 31st December 2016, the unrestricted reserves stood at \$5.6 million. The Trustees review the reserves policy on an annual basis in light of the new strategic policies and future commitments. The restricted funds are in a deficit position due to the timing of recognition of grant income under the new SORP. In the short term the projects funded by restricted grants are funded from general funds for cash flow purposes, the project expenditure is then matched with further restricted grants received since the year end when such expenditure meets the criteria of the related grant funding.

Plans for future periods

About 70% of people in Africa and 90% of the continent's poor depend on agriculture for their livelihoods. Access to developments in agricultural science and technology would improve food security and reduce poverty in SSA. Neither the private nor the public sectors can exploit this potential alone. The former has the technological resources but no commercial incentive, while the latter has vast experience but needs improved access to proprietary technologies that are held by the private sector.

African public sector research institutions could also benefit from assistance in adapting technologies so that they are appropriate for African farmers and improved means of achieving dissemination and use of these new technologies by resource-poor farmers. The AATF facilitates partnerships to remove the constraints on transfer and use of appropriate agricultural technologies.

Structure, governance and management

The African Agricultural Technology Foundation (AATF) is a company limited by guarantee, not having a share capital and a registered Charity governed by a Memorandum and Articles of Association.

Article 8 of the Articles of Association deals with the Appointment of Trustees. The Trustees may appoint a person to be a Trustee, either to fill a vacancy or as an additional Trustee, for terms of a maximum of two terms of 3 years each (Article 8.1 read with Article 8.2). Article 8.2 shall not apply to the Executive Director or to the representative for the time being of the host country of the Charity. The term of service of the ex-officio Trustee being the representative of the host country of the Charity shall be determined by the government of the host country of the Charity. The name of host country's (Kenya) ex-officio Trustee is Johnson Irungu Waitthaka

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TRUSTEES' REPORT (CONTINUED)

In accordance with the AATF Articles of Association and Board Decisions, the Board shall consist of not less than seven nor more than twelve trustees. Up to ten trustees-at-large shall be drawn from academia, public sector organizations, international and local private sector companies, donor agencies, major non-governmental organizations and the Consultative Group on International Agricultural Research community; the representative of the host country; and the Executive Director (ex officio).

The Nominating Committee, which is a standing committee advisory to the Board, advises the Board on the nomination of new trustees. The Nominating Committee maintains a data bank of potential candidates for future trusteeship and considers candidates for trusteeship several years in advance in order to maintain a balanced Board in terms of the list of qualifications. The list of qualifications are geographical distribution, field of expertise, gender, availability, language and suitability for Board leadership and Committee assignments.

The decision of the full Board on the Nominating Committee advice is normally reached by consensus. In the absence of a consensus at a meeting of the Board, the Board Chairperson may, and at the request of any two trustees not including the Executive Director or the representative of the host country, shall, put the proposal to a vote.

Trustees are elected for terms of no more than three years as determined by the Board in advance of the election, with appointments staggered to ensure continuity. Trustees are eligible for re-election to a second term, also of three years, but shall not serve more than two successive terms. The term of office and the selection of the trustee appointed by the government of the host country shall be determined by the government.

At the time an individual is invited to be a candidate for trusteeship, he or she is provided with information on Board responsibilities and a sample schedule of meetings. In most cases the trustee nominee will be invited to attend a Board meeting as an observer prior to election. Following election to the Board, the new trustee receives a letter from the Board Chairperson welcoming him or her to the Board as well as background information from the Board Secretary, including the Board Manual with all annexes, minutes of the last two Board meetings and the most recent AATF Annual Report. At the first Board meeting the new trustee attends, either as a trustee elect or observer, he or she also has an opportunity for briefings from the Board Chairperson, senior management and program staff. The senior management are responsible for arranging the orientation briefings.

The members of the Board of Trustees are required to be experts in relevant fields such as agricultural research, agribusiness, agricultural extension, marketing, biotechnology, intellectual property law, and bio-safety. New Trustees are inducted in the governing documents and policies of the AATF. The Board of Trustees is occasionally trained on emerging governance and policy management issues. Whenever need arises, the Trustees are also trained on resource mobilization, business negotiation skills among others. The Foundation is in the process of incorporating a Trustees Training Policy into the existing Board of Trustees Manual to streamline the procedures and processes of training Trustees.

The general business of the Charity is managed by the Trustees who are charged with exercising all the powers of the Charity. The Trustees are specifically charged with expending the funds of the Charity in such manner as they consider most beneficial for the achievement of the objects, to invest in the name of the Charity such part of the funds as they may deem fit, to direct the sale of any such investments, to expend the proceeds of any such sale in furtherance of the objects of the Charity, and to enter into contracts on behalf of the Charity. The Trustees delegate the day to day management of the Charity to the Executive Director.



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TRUSTEES' REPORT (CONTINUED)

The relationship between the Charity and collaborative institutions is that of independent entities. Nothing in the Charity's collaborative agreements shall be construed as constituting any collaborative institution to be the agent of another, or shall be construed so as to constitute a legal partnership or joint venture of any kind between the collaborative institutions.

The major risks to which the Charity is exposed (managing existing potential liabilities) have been identified and reviewed by the Trustees. The production and use of genetically modified organisms (GMOs) can create many potential liabilities. The producer or user of GM crops may be liable for damage caused by GM crops to the person or property of another person or to the environment. Pollen flows from transgenic crops to non-transgenic crops cause crop damage. For instance, transgenic pollen flow may ruin the "organic" status of crops or the purity of the genetic material of other seeds. Questions may arise as to whether transgenic crops or their food products are toxic, allergenic or pose a long-term health threat. Claims for compensation in actions for personal or property damage could be based on a theory of negligence, trespass, nuisance or strict liability.

The producer or user of GMOs may also be liable for infringement of intellectual property (IP) rights. This liability might even extend to farmers whose crops are accidentally affected by the presence of GMOs as a result of pollen flow or seed comingling.

The Charity has instituted the following systems or procedures to manage those risks:

- The Charity ensures compliance with IP, license and regulatory requirements for its Projects. The Charity adopts appropriate scientific and technical safeguards for all GMOs and advises stakeholders, including smallholder farmers, as to the appropriate use of GMOs.
- The Charity uses indemnification clauses in its contracts with collaborative institutions. Indemnification is a promise, usually contractual, to protect a party from financial loss.
- The Charity also uses warranty disclaimers in its contracts with collaborative institutions. A warranty, either express or implied, is a guarantee that a particular product or technology will serve a specified purpose.
- Another risk mitigation measure available to the Charity is a letter of non-assertion. A letter of non-assertion assures the user that the technology owner will not enforce its IP rights.
- The use of technology and product stewardship procedures including comprehensive risk analyses for Projects and/or phases of Projects, appropriate risk-mitigation strategies (including appropriate insurance coverage, outlining specific uses for technology, management and oversight protocols, procedures to protect confidential information, etc.), and compliance with all applicable laws.

In shaping the objectives and planning the activities of the Charity, The Trustees have considered the Charity Commission's guidance on public benefit.

The financial statements have been prepared on the going concern basis, which the Trustees consider to be appropriate in the context of the Charity's ability to meet its obligations as they fall due in the period of 12 months following the date of approval of these financial statements.

AFRICAN AGRICULTURAL TECHNOLOGY FOUNDATION  
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TRUSTEES' REPORT (CONTINUED)

Risk management

In addition to the risks mentioned above in the "Structure, governance and management" section, the Board of Trustees reviews AATF's key risks regularly as part of the monitoring process. This regular review, combined with the review of controls over key financial and other operational systems carried out through a structured audit program of each country of operation have, in the past, provided AATF with adequate risk assurance. However a more comprehensive mechanism to manage the operations of AATF has been incorporated in the new monitoring and evaluation system known as "AATF Monitoring Evaluation, Learning and Improvement and Align (AMELIA)". AATF has a dedicated Regulatory Affairs Unit in charge with technological risks. Through this mechanism, risk mapping, analysis, and mitigation processes are carried out by the Trustees and management in a more structured way. It is generally accepted that the Board of Trustees has overall responsibility for risk oversight. One of the roles of the Board as stated in the AATF Board Manual is that it shall be to ensure that "the future well-being of AATF is not jeopardised by exposing its financial resources, its staff or its credibility to imprudent risks".

As such, a risk management committee has been established with the purpose of assisting the Board in executing its oversight responsibilities with regard to the risk appetite of the Foundation; the risk management and compliance framework; and the governance structure that supports it.

Financial risk management

The Foundation's activities expose it to a variety of financial risks, including credit risk and the effects of changes in foreign currency exchange rates. The Foundation's overall financial risk management program focuses on the unpredictability of changes in the business environment and seeks to minimise the potential adverse effect of such risks on its performance by setting acceptable levels of risk. Risk management is carried out by the organization's finance department under policies approved by the Board of Trustees. A detailed analysis of the financial risk management for the year is described in the Strategic Report.

We do recognize however, that the nature of some of AATF's work in marginalized areas of Africa often affected by extreme poverty and conflict requires active acceptance and management of some risks in undertaking activities in order to achieve the objectives of the Charity.

To achieve AATF's vision "Prosperous Farmers and a Food Secure Africa" we endeavor to:

- Have AATF's footprint on as much of SSA as possible. To achieve this, AATF must spread its projects and activities throughout SSA beyond the current concentration in east Africa and parts of southern and west Africa;
- Broaden the range of technologies accessed beyond novel breeding techniques including Genetically Modified technologies to encompass agro-processing (value addition), biological control, etc;
- Expand the donor portfolio - to all our current and planned activities; and
- Work at ensuring exemplary relationship management of key stakeholders.

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TRUSTEES' REPORT (CONTINUED)

Guiding Principles

- AATF responds to a growing sense of urgency demanding that agriculture plays a stronger role in Africa's economic development. The response includes the recognition that new approaches to technology development and delivery are required.
- AATF believes that if African agriculture is to provide secure livelihoods for farm households and contribute to economic growth then the private sector must play a much more important role in technology development for and delivery to smallholder farmers.
- This strong belief in the potential of the private sector is combined with a commitment to re-invigorate public sector roles in African agriculture, ensuring that public institutions support both markets and policies for equitable development.
- AATF focuses its attention on proprietary/innovative technologies because much of it is currently unavailable to African farmers. Because such technologies encourage commercial activity, it can bring new energy to African agriculture; its importance lies in the incentives it provides for the delivery of a product.
- AATF is committed to the adoption of new technologies and to facilitating the adoption process by intervening to mitigate risks and ensure that the new technologies are deployed and used appropriately.
- AATF is committed to fostering partnerships that are based on real incentives, including the desire of emerging African enterprises to grow and prosper; the interest of farmers in acquiring the most productive technologies to improve their food security and incomes; and the commitment of donors and governments to see that those farm households with insufficient resources are helped to build their assets and experience in order to prosper.

Core Values

As pioneers to brokering innovative agricultural technologies to farmers, and in particular to resource-poor smallholder farmers, in SSA, AATF staff uphold the following core values: integrity, dedication and accessibility (IDA).

**Integrity:** We uphold integrity; we keep our word and do what we say we will do by when/how. We adhere to moral principles in dealing with ourselves and partners. We seek to be honest, transparent and accountable. In recognition of our facilitative role, we provide accurate information to our partners while respecting confidences. We also base our actions on facts and present accurate reports of our progress, thus showing credibility and thriving to become the partner of choice for stakeholders in the agricultural sector.

**Dedication:** We are responsible partners, committed to ensuring our intended beneficiaries are well served. We seek to maintain good relations with our partners, investors, staff and other stakeholders to ensure we maximise their potential for delivering public goods. We undertake to seek required resources to ensure the success of accessing and delivering required technologies.

**Accessibility:** We are available and approachable to discuss and/or provide information that will support technology transfer in SSA. AATF has specialised expertise to address niche issues related to technology transfer such as technology stewardship, partnership management, regulatory compliance and intellectual property management. In recognition of the capabilities and contribution of the various entities involved in overall agricultural revival for SSA, AATF will avail its knowledge and provide necessary information in discussions and in requests for information to support best decisions and inform opinion on the issues at hand. We respect our stakeholders' opinion and seek to learn from their experiences.

Donated services

The Trustees are grateful to Federal Ministry of Agriculture who has provided office space in Abuja as part of their support of our work in Nigeria. It is estimated that AATF makes savings amounting to over \$18,000 on rent annually.

AFRICAN AGRICULTURAL TECHNOLOGY FOUNDATION  
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TRUSTEES' REPORT (CONTINUED)

Remuneration policy

All AATF staff pay is dictated by a salary survey among comparators, funds availability and Board approval. The survey is conducted every three years by an independent consultancy firm. Management provides the Board with the results of the survey and suggestions of what is feasible taking into account the budgetary situation of the Foundation. The Audit Committee of the Board examines the survey together with management's proposal and make its recommendation to the Board for approval.

Trustees' indemnity insurance

AATF has granted an indemnity to its Trustees against liability in respect of proceedings brought by third parties, subject to the conditions set out in the Companies Act 2006. Such qualifying third party indemnity provision remains in force as at the date of approving the Trustees' report.

Approved by the Board of Trustees  
and signed on behalf of the Board



Denis T. Kyetere  
Executive Director

Date *August 14, 2017*

AFRICAN AGRICULTURAL TECHNOLOGY FOUNDATION  
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STATEMENT OF TRUSTEES' RESPONSIBILITIES

The Trustees (who are also directors of AATF for the purpose of company law) are responsible for preparing the Strategic Report, the Trustees' Report and the financial statements in accordance with applicable law and United Kingdom Accounting Standards (United Kingdom Generally Accepted Accounting Practice).

Company law requires the Trustees to prepare financial statements for each financial year which give a true and fair view of the state of affairs of the Charity and of the incoming resources and application of resources, including the income and expenditure, of the Charity for that period. In preparing these financial statements, the Trustees are required to:

- Select suitable accounting policies and then apply them consistently;
- Observe the methods and principle in the Charities SORP;
- Make judgements and estimates that are reasonable and prudent;
- State whether applicable UK accounting standards have been followed, subject to any material departures disclosed and explained in the financial statements; and
- Prepare the financial statements on the going concern basis unless it is inappropriate to presume that the Charity will continue in business.

The Trustees are responsible for keeping proper accounting records that disclose with reasonable accuracy at any time the financial position of the Charity and enable them to ensure that the financial statements comply with the Companies Act 2006, the Charity (Accounts and Reports) Regulations 2008 and the provisions of the Trust Deed. They are also responsible for safeguarding the assets of the Charity and hence for taking reasonable steps for the prevention and detection of fraud and other irregularities.

Each of the persons who is a director at the date of approval of this report confirms that:

- so far as the director is aware, there is no relevant audit information of which the Charity's auditors are unaware; and
- the director has taken all the steps that he/she ought to have taken as a director in order to make himself/herself aware of any relevant audit information and to establish that the company's auditors are aware of that information.

This confirmation is given and should be interpreted in accordance with the provisions of s234ZA of the Companies Act 2006.

Approved by the Board of Trustees  
and signed on behalf of the Board



Denis T. Kyetere  
Executive Director

Date *August 14, 2017*

## **INDEPENDENT AUDITOR'S REPORT TO THE MEMBERS OF AFRICAN AGRICULTURAL TECHNOLOGY FOUNDATION**

We have audited the financial statements of the African Agricultural Technology Foundation for the year ended 31 December 2016 which comprise the Statement of Financial Activities, the Balance Sheet, the Statement of Cashflows and the related notes 1 to 21. The financial reporting framework that has been applied in their preparation is applicable law and United Kingdom Accounting Standards (United Kingdom Generally Accepted Accounting Practice), including FRS 102 "The Financial Reporting standard applicable in the UK and Republic of Ireland".

This report is made solely to the charitable company's members, as a body, in accordance with Chapter 3 of Part 16 of the Companies Act 2006. Our audit work has been undertaken so that we might state to the charitable company's members those matters we are required to state to them in an auditor's report and for no other purpose. To the fullest extent permitted by law, we do not accept or assume responsibility to anyone other than the company and the charitable company's members as a body, for our audit work, for this report, or for the opinions we have formed.

### **Respective responsibilities of Trustees and auditor**

As explained more fully in the Trustees' Responsibilities Statement set out on page 34, the Trustees (who are also the directors of the charitable company for the purposes of company law) are responsible for the preparation of the financial statements and for being satisfied that they give a true and fair view.

Our responsibility is to audit and express an opinion on the financial statements in accordance with applicable law and International Standards on Auditing (UK and Ireland). Those standards require us to comply with the Auditing Practices Board's Ethical Standards for Auditors.

### **Scope of the audit of the financial statements**

An audit involves obtaining evidence about the amounts and disclosures in the financial statements sufficient to give reasonable assurance that the financial statements are free from material misstatement, whether caused by fraud or error. This includes an assessment of: whether the accounting policies are appropriate to the charitable company's circumstances and have been consistently applied and adequately disclosed; the reasonableness of significant accounting estimates made by the trustees; and the overall presentation of the financial statements. In addition, we read all the financial and non-financial information in the Report and Financial Statements to identify material inconsistencies with the audited financial statements and to identify any information that is apparently materially incorrect based on, or materially inconsistent with, the knowledge acquired by us in the course of performing the audit. If we become aware of any apparent material misstatements or inconsistencies we consider the implications for our report.

### **Opinion on financial statements**

In our opinion the financial statements:

- give a true and fair view of the state of the charitable company's affairs as at 31 December 2016 and of its net income and application of resources, including its income and expenditure, for the year then ended;
- have been properly prepared in accordance with United Kingdom Generally Accepted Accounting Practice, including FRS 102 "The Financial Reporting standard applicable in the UK and Republic of Ireland"; and
- have been prepared in accordance with the requirements of the Companies Act 2006.

## INDEPENDENT AUDITOR'S REPORT (CONTINUED)

### Opinion on other matter prescribed by the Companies Act 2006

In our opinion, based on the work undertaken in the course of the audit:

- the information given in the Strategic Report and Trustees' Annual Report is consistent with the financial statements.
- The Strategic Report and the Trustees' Annual Report have been prepared in accordance with applicable legal requirements.

### Matters on which we are required to report by exception

In light of the knowledge and understanding of the Charitable Company and its environment obtained in the course of the audit, we have identified no material misstatements in the Strategic Report and Trustees' annual report.

We have nothing to report in respect of the following matters where the Companies Act 2006 requires us to report to you if, in our opinion:

- adequate accounting records have not been kept or returns adequate for our audit have not been received from branches not visited by us; or
- the financial statements are not in agreement with the accounting records and returns; or
- certain disclosures of Trustees' remuneration specified by law are not made; or
- we have not received all the information and explanations we require for our audit.



Caroline Mulley (Senior Statutory Auditor)  
for and on behalf of Ernst & Young LLP, Statutory Auditor  
Newcastle upon Tyne

Date 21 AUGUST 2017

AFRICAN AGRICULTURAL TECHNOLOGY FOUNDATION

STATEMENT OF FINANCIAL ACTIVITIES (INCLUDING INCOME & EXPENDITURE ACCOUNT)  
FOR THE YEAR ENDED 31 DECEMBER 2016

	Notes	Restricted funds 2016 US\$	Unrestricted funds 2016 US\$	Total funds 2016 US\$	Total funds 2015 US\$
Income from:					
<i>Charitable activities</i>					
Voluntary income	2	27,061,638	1,776,121	28,837,759	19,118,817
Overhead Income		-	1,190,534	1,190,534	1,116,066
Trading activities					
Investment income		14,422	229,506	243,928	65,412
<b>Total</b>		<b>27,076,060</b>	<b>3,196,161</b>	<b>30,272,221</b>	<b>20,300,295</b>
Expenditure on:					
Charitable expenditure	3	19,555,092	2,562,935	22,118,027	21,390,867
Other	18	92,402	231,270	323,672	410,258
<b>Total</b>		<b>19,647,494</b>	<b>2,794,205</b>	<b>22,441,699</b>	<b>21,801,125</b>
<b>Net income/(expenditure)</b>		<b>7,428,566</b>	<b>401,956</b>	<b>7,830,522</b>	<b>(1,500,830)</b>
Reconciliation of funds					
Total funds brought forward		(3,266,511)	5,198,592	1,932,081	3,432,911
<b>Total funds carried forward</b>	<b>14&amp;15</b>	<b>4,162,055</b>	<b>5,600,548</b>	<b>9,762,603</b>	<b>1,932,081</b>

All activities are continuing

There were no recognised gains or losses other than the net income for the year of \$7,830,522 (2015: net expenditure \$1,500,830).



## AFRICAN AGRICULTURAL TECHNOLOGY FOUNDATION


BALANCE SHEET  
AS AT 31 DECEMBER 2016

Company Registration Number 4645806

	Notes	2016 US\$	2015 Restated* US\$
Non current assets			
Intangible assets	9a	3,120	2,746
Tangible assets	9b	50,230	104,292
		<hr/>	<hr/>
		53,350	107,038
		<hr/>	<hr/>
Current assets			
Grants debtors	10	3,314,165	-
Other debtors	11	974,027	2,066,536
Short term deposits		-	-
Cash at bank and in hand		5,993,533	310,152
		<hr/>	<hr/>
		10,281,725	2,376,688
		<hr/>	<hr/>
Current liabilities			
Unexpended grant creditors	10	-	-
Other creditors	12	(380,160)	(359,333)
		<hr/>	<hr/>
		(380,160)	(359,333)
		<hr/>	<hr/>
Net current assets		9,901,565	2,017,355
Provision for liabilities and charges		(192,312)	(192,312)
		<hr/>	<hr/>
		<hr/>	<hr/>
Total assets less current liabilities		9,762,603	1,932,081
		<hr/>	<hr/>
Unrestricted funds	15	5,600,548	5,198,592
Restricted funds	15	4,162,055	(3,266,511)
		<hr/>	<hr/>
Total funds	14	9,762,603	1,932,081
		<hr/>	<hr/>

\$2,746 of intangible assets have been shown separately from tangible fixed assets - there are no other changes to the comparative balance sheet.

These financial statements are prepared in accordance with the Companies Act 2006 and are approved by the Board of Trustees and signed on its behalf:

  
 Denis T. Kyetere  
 Executive Director  
 DATE August 14, 2017

AFRICAN AGRICULTURAL TECHNOLOGY FOUNDATION

STATEMENT OF CASHFLOWS  
FOR THE YEAR ENDED 31 DECEMBER 2016

	Note	2016 US\$	2015 US\$
OPERATING ACTIVITIES			
Net cash inflow/(outflow) from operating activities	16	5,678,400	(3,335,873)
INVESTING ACTIVITIES			
Investment income		20,616	47,304
Purchase of assets	9	(17,815)	(74,136)
Proceeds on disposal of equipment		2,180	213
Net cash inflow/(outflow) from investing activities		4,981	(26,619)
INCREASE/(DECREASE) IN CASH AND CASH EQUIVALENTS		5,683,381	(3,362,492)
CASH AND CASH EQUIVALENTS AT 1 JANUARY		310,152	3,672,644
CASH AND CASH EQUIVALENTS AT 31 DECEMBER		5,993,533	310,152

AFRICAN AGRICULTURAL TECHNOLOGY FOUNDATION  
NOTES TO THE FINANCIAL STATEMENTS (CONTINUED)  
FOR THE YEAR ENDED 31 DECEMBER 2016

1 ACCOUNTING POLICIES

Statement of compliance and basis of preparation

African Agricultural Technology Foundation is a public benefit entity, a private company limited by guarantee, registered in England. The Registered Office is c/o Arnold and Porter (UK) LLP, Level 30, Tower 42, 25 old Broad Street, London, UK. The financial statements have been prepared in compliance with the Charities SORP (FRS 102) "Accounting and Reporting by Charities: Statement of Recommended Practice applicable to charities preparing their accounts in accordance with the Financial Reporting Standards applicable in the UK and Republic of Ireland (FRS 102) (effective 1 January 2015)".

The principal accounting policies adopted in the preparation of the financial statements are set out below. The financial statements are prepared on a going concern basis.

Basis of accounting

The financial statements have been prepared under the historical cost convention. The financial statements are prepared in US dollars which is the functional currency of the Company and rounded to the nearest \$, with the exception of the analysis of highest paid staff which is given in GBP sterling for clarity of disclosure compliance.

Judgements and key sources of estimation uncertainty

The preparation of the financial statements requires management to make judgements, estimates and assumptions that affect the amounts reported for assets and liabilities as at the balance sheet date and the amounts reported for revenues and expenses during the year. However the nature of estimation means that actual outcomes could differ from those estimates. Specific areas of judgment include depreciation and useful economic lives of assets and provisions. The nature of the estimation means that actual outcomes could differ from those estimates. None of the judgements have a significant effect on the financial statements.

Income

Income is recognised in the accounts when all of the following criteria are met:

- Entitlement - control over the rights or other access to the economic benefit has passed to the charity.
- Probable - it is more likely than not that the economic benefits associated with the transaction or gift will flow to the charity.
- Measurement - the monetary value or amount of the income can be measured reliably and the costs incurred for the transaction and the costs to complete the transaction can be measured reliably.

Interest income is accrued on a time basis by reference to the principal outstanding and at the effective interest rate applicable.

Overhead income represents revenue derived from projects' grants to support these indirect costs meant to cover administrative or other expenses related to general operations that are shared among projects and/or functions and which cannot be directly allocable to a particular activity. These may include executive oversight, existing facilities costs, accounting, grants management, legal expenses, utilities and audit.

AFRICAN AGRICULTURAL TECHNOLOGY FOUNDATION  
NOTES TO THE FINANCIAL STATEMENTS (CONTINUED)  
FOR THE YEAR ENDED 31 DECEMBER 2016

1 ACCOUNTING POLICIES (CONTINUED)

Income (continued)

Grants are recognised as revenue upon the fulfilment of donor-imposed conditions or restrictions attached to the grants as explained below:

Structure of funds

Where there is a legal restriction on the purpose to which a fund may be put, the fund is classified in the accounts as a restricted fund. Funds where the capital is held to generate income for charitable purposes and cannot be spent are accounted for as endowment funds. Other funds are classified as unrestricted funds. Funds which are not legally restricted but which the Trustees have chosen to earmark for set purposes are treated as classified funds. The major funds held within these categories are disclosed in note 2.

Expenditure

Expenditure is recognised on an accrual basis as a liability is incurred. Expenditure includes any VAT which cannot be fully recovered, and is reported as part of the expenditure to which it relates.

Other costs include those costs associated with meeting the constitutional and statutory requirements of the Charity and includes the audit fees and costs linked to the strategic management of the Charity.

Support costs

All costs are allocated between the expenditure categories of the Statement of Financial Activities on a basis designed to reflect the use of the resource. Costs relating to a particular activity are allocated directly, and support costs are apportioned on an appropriate basis e.g. estimated usage, as set out in Note 3.

Tangible assets

Property, plant and equipment are stated at cost less accumulated depreciation and accumulated impairment losses. Items of lasting value with an initial acquisition cost of less than US\$1,000 are charged to operating expenses in the year of purchase. For some donors like Bill & Melinda Gates Foundation all items valued less than US\$ 5,000 are considered operational expenses and not capital expenses.

Depreciation is provided on all property, plant and equipment, at rates calculated to write off the cost, less estimated residual value, of each asset on a systematic basis over its expected useful life as follows:

Computers and related equipment	3 years
Motor vehicles	4 years
Furniture and equipment	5 years

The carrying values of tangible fixed assets are reviewed for impairment when events or changes in circumstances indicate the carrying value may not be recoverable.

AFRICAN AGRICULTURAL TECHNOLOGY FOUNDATION  
NOTES TO THE FINANCIAL STATEMENTS (CONTINUED)  
FOR THE YEAR ENDED 31 DECEMBER 2016

1 ACCOUNTING POLICIES (CONTINUED)

Intangible assets

Intangible assets acquired separately from a business are capitalised at cost. Subsequent to initial recognition, intangible assets are stated at cost less accumulated amortisation and accumulated impairment. Intangible assets are amortised on a straight line basis over their estimated useful lives. The carrying value of intangible assets is reviewed for impairment if events or changes in circumstances indicate the carrying value may not be recoverable. The useful economic lives of intangible assets are as follows:

Computers software	3 years
--------------------	---------

If there are indicators that the residual value or useful life of an intangible asset has changed since the most recent annual reporting period previous estimates shall be reviewed and, if current expectations differ the residual value, amortisation method or useful life shall be amended. Changes in the expected useful life or the expected pattern of consumption of benefit shall be accounted for as a change in accounting estimate.

Operating leases

Rentals payable under operating leases are charged to the Statement of Financial Activities on a straight line basis over the lease term.

Pension contributions

AATF operates a defined contribution pension scheme. The assets of the scheme are held separately from those of the company in an independently administered fund. The amount charged to the income and expenditure account represents the contributions payable to the scheme in respect of the accounting period.

AATF makes pension contributions to an offshore defined pension contribution scheme (Vanbreda International) for expatriate staff and to a local defined pension scheme (Liberty) for all Kenyan staff. The contribution made is 15% equivalent of each employee's basic salary.

Currency translation

The Foundation's financial statements are presented in United States Dollars (US\$), the functional currency. Transactions and balances expressed in currencies other than the US Dollar are treated as follows:

- Non US Dollar grants and donations received in the year are converted to US dollars at the rates of exchange prevailing on the dates of receipt. Non US Dollar grants and donations pledged for the year but not received by the period-end are recognised in the financial statements at the rates of exchange prevailing at the period-end.
- Non US Dollar denominated expenditures are recorded at the average rates of exchange for the month in which they are incurred and are accumulated in US Dollars.
- Assets and liabilities that are denominated in currencies other than the US Dollar are restated into US Dollars at the rates of exchange prevailing at the period-end.
- Gains and losses arising from changes in exchange rates are charged or credited to the statement of comprehensive income in the period in which they arise.

AFRICAN AGRICULTURAL TECHNOLOGY FOUNDATION  
NOTES TO THE FINANCIAL STATEMENTS (CONTINUED)  
FOR THE YEAR ENDED 31 DECEMBER 2016

1 ACCOUNTING POLICIES (CONTINUED)

Taxation

As a Charity, African Agricultural Technology Foundation is exempt from tax on income and gains falling within Chapter 3 of Part 11 to the Corporation Tax Act 2010 to the extent that these are applied to its charitable objects. No tax charges have arisen in the Charity. The Charity is exempt from corporation tax.

Donated services

The Trustees are grateful to ARCN who has provided office space in Abuja as part of their support of our work in Nigeria. No value has been placed on this in the SOFA as it is not material in the context of the accounts.

Financial instruments

The company recognises financial instruments when it becomes a party to the contractual arrangements of the instrument. Financial instruments are de-recognised when they are discharged or when the contractual terms expire. The company's accounting policies in respect of financial instruments transactions are explained below:

Financial assets

The company classifies all of its financial assets as loans and receivables.

Loans and receivables

Loans and receivables are non-derivative financial assets with fixed or determinable payments that are not quoted in an active market. They arise principally through the provision of goods and services to customers (e.g. trade receivables), but also incorporate other types of contractual monetary asset. They are initially recognised at fair value plus transaction costs that are directly attributable to their acquisition or issue, and are subsequently carried at amortised cost using the effective interest rate method, less provision for impairment. Impairment provisions are recognised when there is objective evidence (such as significant financial difficulties on the part of the counterparty or default or significant delay in payment) that the company will be unable to collect all of the amounts due under the terms receivable, the amount of such a provision being the difference between the net carrying amount and the present value of the future expected cash flows associated with the impaired receivable. For trade receivables, which are reported net, such provisions are recorded in a separate allowance account with the loss being recognised within administrative expenses in the income statement. On confirmation that the trade receivable will not be collected, the gross carrying value of the asset is written off against the associated provision.

Financial liabilities

The company classifies all of its financial liabilities as liabilities at amortised cost.

At amortised cost

Financial liabilities at amortised cost including bank borrowings are initially recognised at fair value net of any transaction costs directly attributable to the issue of the instrument. Such interest bearing liabilities are subsequently measured at amortised cost using the effective interest rate method, which ensures that any interest expense over the period to repayment is at a constant rate on the balance of the liability carried into the statement of financial position.

AFRICAN AGRICULTURAL TECHNOLOGY FOUNDATION  
NOTES TO THE FINANCIAL STATEMENTS (CONTINUED)  
FOR THE YEAR ENDED 31 DECEMBER 2016

2 INCOME FROM CHARITABLE ACTIVITIES

Voluntary Income	Restricted funds 2016 US\$	Unrestricted funds 2016 US\$	Total funds 2016 US\$	Total funds 2015 US\$
USAID	7,423,823	-	7,423,823	4,613,473
DFID	-	1,776,121	1,776,121	1,350,000
Bill & Melinda Gates Foundation & Howard Buffet Foundation (WEMA)	11,500,000	-	11,500,000	9,643,767
Bill & Melinda Gates Foundation – Other Projects	5,465,796	-	5,465,796	2,965,015
Bill & Melinda Gates Foundation – QBS Seed	2,251,894	-	2,251,894	-
IITA	-	-	-	40,376
CIMMYT	70,125	-	70,125	116,186
Sygenta Foundation for Sustainable Agriculture (SFSA-SEEDS2B)	350,000	-	350,000	390,000
AGRA	-	-	-	-
	<u>27,061,638</u>	<u>1,776,121</u>	<u>28,837,759</u>	<u>19,118,817</u>
Income is analysed by geographical source of origin			2016 US\$	2015 US\$
North America			26,711,638	17,338,441
Europe			2,126,121	1,740,000
Africa			-	40,376
			<u>28,837,759</u>	<u>19,118,817</u>

AFRICAN AGRICULTURAL TECHNOLOGY FOUNDATION  
NOTES TO THE FINANCIAL STATEMENTS (CONTINUED)  
FOR THE YEAR ENDED 31 DECEMBER 2016

3. CHARITABLE EXPENDITURE

	Striga Control	WEMA	Banana	Cassava	Cowpea	Hybrid Rice	NEWEST Rice	MLN	OFAB	Seeds2B	2016 Total	2015 Total
Currency USD \$												
Outsourced Research Activities	44,928	7,885,512	-	155,466	343,078	850,587	760,753	-	1,530,941	6,524	11,577,789	11,879,591
Project Supplies	50,697	1,534	-	144,206	13,790	-	160	-	-	14,380	224,767	950,711
Travel	21,443	62,793	854	70,089	73,386	4,376	26,207	1,340	17,084	14,199	291,771	152,961
Conference & Workshops	148,656	471,023	1,041	100,409	56,064	26,165	42,176	43,797	128,933	89,188	1,107,452	1,881,569
Rentals	10,754	88,153	-	-	-	5,074	10,148	-	5,074	5,074	124,277	175,854
Direct Staff Costs	53,219	846,216	-	40,859	352,974	69,842	126,200	-	161,425	3,643	1,654,378	1,526,122
Institutional Support	132,641	463,414	-	-	120,490	15,754	109,716	7,515	281,766	36,580	1,167,876	1,008,855
Cost directly allocated to activities	462,338	9,818,645	1,895	511,029	959,782	971,798	1,075,360	52,652	2,125,223	169,588	16,148,310	17,575,663
General Personnel Costs	134,549	344,891	-	87,584	230,932	26,885	112,945	30,000	112,918	103,926	1,184,630	1,085,381
Consultancy and other professional services	291,994	1,676,545	3,560	17,960	32,041	18,000	-	-	314,198	1,500	2,355,798	945,279
Depreciation	1,797	22,891	-	-	19,879	-	-	-	4,084	1,161	49,812	86,484
General expenses and supplies	32,467	195,464	-	49,267	42,743	2,494	5,239	10	80,657	2,222	410,563	384,523
Forex Losses on revaluations	158	31,132	-	4,126	64,651	-	3,331	-	20,662	3,211	127,271	12,404
Support costs allocated to activities	460,965	2,270,923	3,560	158,937	390,246	47,379	121,515	30,010	532,519	112,020	4,128,074	2,514,071
Other charitable activities											1,841,643	1,301,134
Total	923,303	12,089,568	5,455	669,966	1,350,028	1,019,177	1,196,875	82,662	2,657,742	281,608	22,118,027	21,390,868

Note the 2015 comparative analysis has been aligned with the above categories used in 2016



AFRICAN AGRICULTURAL TECHNOLOGY FOUNDATION  
NOTES TO THE FINANCIAL STATEMENTS (CONTINUED)  
FOR THE YEAR ENDED 31 DECEMBER 2016

4. PERSONNEL COSTS

	2016 US\$	2015 US\$
Salaries and wages	3,626,584	3,093,545
NI social security costs	197,377	168,222
Pension costs	334,267	329,530
	<u>4,158,228</u>	<u>3,591,297</u>

The Charity had an average of 49 employees during the year (2015 restated: 46 - this figure has been restated to reflect the correction of the disclosure to show a consistent approach to calculating average employees).

The directors consider that key management personnel are the senior management (executive directors). Remuneration for key management personnel totalled \$1,019,476 (2015: \$846,315).

The number of employees with total emoluments for the year of over £60,000 was as follows:

	2016 No.	2015 No.
£60,001 - £70,000	-	-
£70,001 - £80,000	1	-
£90,001 - £100,000	2	2
£100,001 - £110,000	1	2
£110,001 - £120,000	-	4
£120,001 - £130,000	1	3
£130,001 - £140,000	4	-
£140,001 - £150,000	3	1
£150,001 - £160,000	2	-
£170,001 - £180,000	-	1
£190,001 - £200,000	1	-
£220,001 - £230,000	1	-

Contributions in the year for the above higher paid employees to defined contribution pension scheme totalled US\$ 222,003 (2015: US\$ 198,004)

Number of the above higher paid employees to whom retirement benefits are accruing under defined contribution pension schemes totalled 16; (2015: 13).

AFRICAN AGRICULTURAL TECHNOLOGY FOUNDATION  
NOTES TO THE FINANCIAL STATEMENTS (CONTINUED)  
FOR THE YEAR ENDED 31 DECEMBER 2016

5. CONSULTANTS' AND PROFESSIONAL EXPENSES

	2016 US\$	2015 US\$
Consultants' fees	2,387,094	1,030,815
Consultants Travel, Accomodation and reimbursements	20,389	21,091
Fees payable to the company auditors for the audit of the annual accounts	23,650	23,650
Internal audit (KPMG)	9,167	-
Legal fees	29,634	49,323
Taxation and secretarial services	51,257	31,856
	<hr/>	<hr/>
	2,521,191	1,156,735
	<hr/>	<hr/>
Allocated:		
Charitable expenditure (note 3)	2,355,798	945,279
Other costs (note18)	165,393	211,456
	<hr/>	<hr/>
	2,521,191	1,156,735
	<hr/>	<hr/>

6 GENERAL EXPENSES AND SUPPLIES

	2016 US\$	2015 US\$
Office and computer supplies	379,269	390,991
Communication	141,484	98,036
Vehicle expenses	30,114	24,278
General repairs and maintenance	-	148
Other office expenses	39,219	25,468
	<hr/>	<hr/>
	590,086	538,921
	<hr/>	<hr/>

AFRICAN AGRICULTURAL TECHNOLOGY FOUNDATION  
NOTES TO THE FINANCIAL STATEMENTS (CONTINUED)  
FOR THE YEAR ENDED 31 DECEMBER 2016

7 NET INCOME/(EXPENDITURE) FOR THE YEAR

This is stated after charging:

	2016 US\$	2015 US\$
Depreciation	68,757	106,236
Amortisation	2,746	1,707
Fees payable to the Company's auditors	23,650	23,650
Operating lease costs	202,952	184,533
Unrealized Exchange Loss	131,862	54,867

AATF has entered into a hosting agreement with International Livestock Research Institute (ILRI). This agreement includes among other things a lease arrangement for office space by AATF payable on a quarterly basis. The hosting agreement is renewable annually. The current agreement expires on 31 December 2017, therefore the total of future minimum lease payments made under non-cancellable operating leases for the next year is \$209,862 (2015: \$201,550)

8 TRUSTEE REMUNERATION AND RELATED PARTY TRANSACTIONS

The Board of Trustees (BOT) were paid honoraria of US\$57,900 (2015: US\$29,975) for their role in meetings and other corporate activities of the Foundation. Travel allowances amounting to US\$67,574 (2015: US\$ 127,480) were reimbursed to 11 members of the Board to cover travel costs incurred in attending the Foundation's Board meetings. Indemnity Insurance for Trustees was paid during the year of US\$ 10,045 (2015: US\$9,439).

No Trustee or other person related to the Charity had any personal interest in any contract or transaction entered into by the Charity during the year (2015: Nil).

The Charity has advanced loans to senior management personnel, the balance outstanding at the year end totalled US\$35,033 for 4 employees (2015: US\$61,479 for 3 employees). Such loans are interest free.

No one party has ultimate control over the Charity.

AFRICAN AGRICULTURAL TECHNOLOGY FOUNDATION  
NOTES TO THE FINANCIAL STATEMENTS (CONTINUED)  
FOR THE YEAR ENDED 31 DECEMBER 2016

9a INTANGIBLE ASSETS

	Computer software	Total
	US\$	US\$
Cost		
At 1 January 2016	39,726	39,726
Additions	3,120	3,120
	<hr/>	<hr/>
At 31 December 2016	42,846	42,846
	<hr/>	<hr/>
Depreciation/Amortisation		
At 1 January 2016	36,980	36,980
Charge for the year	2,746	2,746
	<hr/>	<hr/>
At 31 December 2016	39,726	39,726
	<hr/>	<hr/>
Net book value		
As at 31 December 2016	3,120	3,120
	<hr/>	<hr/>
As at 31 December 2015	2,746	2,746
	<hr/>	<hr/>

AFRICAN AGRICULTURAL TECHNOLOGY FOUNDATION  
NOTES TO THE FINANCIAL STATEMENTS (CONTINUED)  
FOR THE YEAR ENDED 31 DECEMBER 2016

9b TANGIBLE ASSETS

	Motor vehicle	Furniture and office equipment	Computers and related equipment	Total
	US\$	US\$	US\$	US\$
Cost				
At 1 January 2016	383,225	165,728	211,490	760,443
Additions	-	-	14,695	14,695
Disposals	-	(907)	(28,523)	(29,430)
At 31 December 2016	383,225	164,821	197,662	745,708
Depreciation/Amortisation				
At 1 January 2016	336,931	143,883	175,337	656,151
Charge for the year	27,467	11,366	29,924	68,757
Disposals	-	(907)	(28,523)	(29,430)
At 31 December 2016	364,398	154,342	176,738	695,478
Net book value				
As at 31 December 2016	18,827	10,479	20,924	50,230
As at 31 December 2015	46,294	21,845	36,153	104,292

AFRICAN AGRICULTURAL TECHNOLOGY FOUNDATION  
NOTES TO THE FINANCIAL STATEMENTS (CONTINUED)  
FOR THE YEAR ENDED 31 DECEMBER 2016

10 GRANT DEBTORS/ (UNEXPENDED GRANTS)

Donor	Grant Debtors brought forward 01.01.2016 US\$	Unexpended grants brought forward 01.01.2016 US\$	Receipts US\$	Grant Income Recognised US\$	Grant Debtors carried forward 31.12.2016 US\$	Unexpended grants carried forward 31.12.2016 US\$
USAID	-	-	5,032,054	7,432,823	2,391,769	-
DFID	-	-	853,725	1,776,121	922,396	-
BMGF & HGBF (WEMA)	-	-	11,500,000	11,500,000	-	-
BMGF- Hybrid Rice, OFAB & NEWCO	-	-	5,465,796	5,465,796	-	-
BMGF- QBS Seed	-	-	2,251,894	2,251,894	-	-
CIMMYT	-	-	70,125	70,125	-	-
SFSA-SEEDS2B	-	-	350,000	350,000	-	-
Total	-	-	25,523,594	28,837,759	3,314,165	-

11 OTHER DEBTORS

	2016 US\$	2015 US\$
Staff loans	244,314	401,095
Advances for travel and expenses	71,757	47,849
AIARC current account	190,413	32,546
Prepayments	10,116	1,089
Other debtors	355,649	505,257
USDA-FAS	84,009	659,506
Credit Cards	3,998	-
Seed Revolving Fund	13,771	419,194
	<u>974,027</u>	<u>2,066,536</u>

Loans are provided to staff, after approval in accordance with AATF's policies, as part of AATF's staff retention strategy, as such incentives are provided by other similar local organisations.

12 OTHER CREDITORS

	2016 US\$	2015 US\$
Accrued leave	182,733	175,745
Accrued services	197,427	86,030
Other accruals	-	94,308
Credit cards	-	3,250
	<u>380,160</u>	<u>359,333</u>

AFRICAN AGRICULTURAL TECHNOLOGY FOUNDATION  
NOTES TO THE FINANCIAL STATEMENTS (CONTINUED)  
FOR THE YEAR ENDED 31 DECEMBER 2016

13 PROVISIONS FOR LIABILITIES AND CHARGES

	US\$
At 1 January 2016	192,312
Provided	-
Payments out of the account	-
At 31 December 2016	<u>192,312</u>

The provision relates to employee payments and is expected to be resolved next year.

14 MOVEMENT IN FUNDS

Fund name	Fund balances brought forward US\$	Incoming resources US\$	Outgoing resources US\$	Fund balances carried forward US\$
Unrestricted:				
Rockefeller	269,354	-	1,222	268,132
DFID	1,050,994	1,776,121	2,785,033	42,082
Reserves Account	3,878,244	1,420,040	7,950	5,290,334
Restricted:				
USAID	(2,868,208)	7,423,823	5,290,570	(734,955)
Bill and Melinda Gates Foundation and Howard Buffet Foundation	(695,344)	19,232,112	13,989,378	4,547,390
Africa Harvest	89,076	-	-	89,076
NEPAD/FARA	17,083	-	-	17,083
Kirkhouse Trust	12,824	-	-	12,824
FOCAC	27,044	-	-	27,044
IITA	(1,045)	-	-	(1,045)
CIMMYT	465	70,125	82,894	(12,304)
SFSA	148,550	350,000	281,608	216,942
AGRA	3,044	-	3,044	-
	<u>1,932,081</u>	<u>30,272,221</u>	<u>22,441,699</u>	<u>9,762,603</u>

The restricted funds are in a deficit position due to the timing of recognition of grant income under the new SORP. In the short term the projects funded by restricted grants are funded from general funds for cash flow purposes, the project expenditure is then matched with further restricted grants received since the year end when such expenditure meets the criteria of the related grant funding.

AFRICAN AGRICULTURAL TECHNOLOGY FOUNDATION  
NOTES TO THE FINANCIAL STATEMENTS (CONTINUED)  
FOR THE YEAR ENDED 31 DECEMBER 2016

14 MOVEMENT IN FUNDS (CONTINUED)

Unrestricted funds can be used in accordance with the charitable objects at the discretion of the Trustees.

Restricted funds are those given for particular projects, and they can only be used for the projects for which they are designated. Details are as given below:

- USAID grant is for Cowpea, NEWESTRice and WEMA Projects. USAID also extended a sub-grant to AATF for Striga Project through Fintrac (Lead Grantee).
- Bill and Melinda Gates Foundation and Howard G. Buffet Foundations are for the WEMA, OFAB, Hybrid Rice, Qualibasic seed enterprise and NEWCo projects.
- CIMMYT sub-grant was for Integrated StrigaManagement (ISMA) and Maize Lethal Necrosis projects.
- Syngenta Foundation for Sustainable Agriculture (SFSA) was for the Seeds2B project.

15 ANALYSIS OF NET ASSETS BETWEEN FUNDS

	Restricted US\$	Unrestricted US\$	Totals 2016 US\$	Restricted US\$	Unrestricted US\$	Totals 2015 US\$
Tangible fixed assets	18,263	31,967	50,230	61,500	42,792	104,292
Intangible assets	1,040	2,080	3,120	2,080	666	2,746
Grant debtors	2,391,769	922,396	3,314,165	-	-	-
Other debtors	306,900	667,127	974,027	207,157	1,859,379	2,066,536
Cash at bank and in hand	1,444,083	4,549,450	5,993,533	(3,537,248)	3,847,400	310,152
Creditors due within one year	-	(380,160)	(380,160)	-	(359,333)	(359,333)
Provisions for liabilities and charges	-	(192,312)	(192,312)	-	(192,312)	(192,312)
	<u>4,162,055</u>	<u>5,600,548</u>	<u>9,762,603</u>	<u>(3,266,511)</u>	<u>5,198,592</u>	<u>1,932,081</u>



AFRICAN AGRICULTURAL TECHNOLOGY FOUNDATION  
NOTES TO THE FINANCIAL STATEMENTS (CONTINUED)  
FOR THE YEAR ENDED 31 DECEMBER 2016

16 NET CASH GENERATED FROM OPERATING ACTIVITIES

	2016 US\$	2015 US\$
Reconciliation of net income/(expenditure) for the year to net cash generated from operations		
(a) Net income / (expenditure) for the year	7,830,522	(1,500,830)
<u>Adjustments for:</u>		
Depreciation	68,757	106,236
Amortisation	2,746	1,707
Loss /(Gain) on disposal of equipment	(2,180)	694
Interest received	(20,616)	(47,304)
Working capital changes:		
Decrease / (increase) in grants debtors	(3,314,165)	2,678
Decrease/ (increase) in other debtors	1,092,509	(1,177,018)
Increase/ (decrease) in other creditors	20,827	(722,036)
Net cash generated from operations	<u>5,678,400</u>	<u>(3,335,873)</u>

Analysis of funds:

	At 1 January 2016 US\$	Cashflow 2016 US\$	At 31 December 2016 US\$
Cash	310,152	5,683,381	5,993,533

AFRICAN AGRICULTURAL TECHNOLOGY FOUNDATION  
NOTES TO THE FINANCIAL STATEMENTS (CONTINUED)  
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17. INCORPORATION/REGISTRATION

The Foundation is incorporated and registered as a private company limited by guarantee and not having a share capital. It has been registered in the United Kingdom (January 2003) and in Kenya (April 2003), respectively. It was registered as a Charity in England and Wales in January 2005. It was granted host country status by the Government of Kenya in June 2005.

18. OTHER COSTS

	2016 US\$	2015 US\$
Honoraria	57,900	29,975
Meeting expenses	100,379	168,827
Consulting and other services (note 5)	165,393	211,456
	<u>323,672</u>	<u>410,258</u>

19. PENSION COMMITMENTS

The assets of the defined contribution pension scheme are held separately from those of the company in a range of funds provided and administered by an independent plan provider. Contributions of \$334,267 (2015: \$329,530) were charged to the statement of financial activities during the financial year as they became payable in accordance with the rules of the scheme. There are no outstanding contributions at the current year-end (2015: \$nil).

20. FINANCIAL INSTRUMENTS

	2016 US\$	2015 US\$
<b>FINANCIAL ASSETS</b>		
Cash and receivables	10,281,725	2,376,688
	<u>10,281,725</u>	<u>2,376,688</u>

	2016 US\$	2015 US\$
<b>FINANCIAL LIABILITIES</b>		
Financial liabilities measured at amortised cost	380,160	359,333
	<u>380,160</u>	<u>359,333</u>

Financial assets measured at amortised cost comprise cash and cash equivalents, trade debtors and other receivables.

Financial liabilities measured at amortised cost comprise trade creditors.

AFRICAN AGRICULTURAL TECHNOLOGY FOUNDATION  
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21. GRANTS PAID TO INSTITUTIONS

Project	Sub-Grantee	Amount US\$
COWPEA	IAR- Zaria, Nigeria	63,936
	CSIR-SARI, Ghana	52,538
	IFPRI	57,496
	Bunda College	94,358
	INERA-Burkina Faso	<u>74,750</u>
	Total Cowpea	343,078
CAMAP	ZARI, Zambia	113,471
	NaCCRI, Uganda	41,995
	Total Hybrid Rice	155,466
HYBRID RICE	aWhere Inc	180,403
	Hybrid East Africa Ltd (HEAL)	<u>670,184</u>
	Total STRIGA	850,587
NEWEST RICE	Arcadia Biosciences, USA	434,787
	NaCCRI, Uganda	115,816
	CRI-Coraf	122,162
	NCRI	<u>87,988</u>
	Total NEWEST Rice	760,753
SEEDS2B	Chitedze Research Station, Malawi	<u>6,524</u>
	Total STRIGA	6,524
STRIGA	Africa 2000 Network (A2N), Uganda	21,994
	RSS	<u>22,934</u>
	Total STRIGA	44,928
OFAB	OFAB Tanzania, COSTECH	132,500
	OFAB Ghana	40,000
	Science Africa	21,840
	KARLO	19,665
	KUBICO	33,056
	OFAB Uganda, UNCST	254,975
	OFAB Kenya, ISAAA	482,516
	OFAB Ethiopia, EIAR	138,141
	OFAB Nigeria, NABDA	318,249
	OFAB Burkina Faso, INERA	<u>90,000</u>
	Total OFAB	1,530,942
Potato	CIP	<u>142,730</u>
	TOTAL CIP	142,730
WEMA	Monsanto, USA	4,007,820
	CIMMYT, Mexico	2,248,088
	COSTECH - Tanzania	277,771
	ARC- South Africa	296,142
	IIAM - Mozambique	275,728
	KALRO - Kenya	344,237
	ROP	26,901
	NARO - Uganda	<u>408,825</u>
	Total WEMA	<u>7,885,512</u>
Total Sub-grants		<u>11,720,520</u>