

REPUBLIC OF KENYA



Paper laid
By the HPM, Hon. Aden
Dole MP on Wed
27/9/17
27 SEP 2017
[Signature]



OFFICE OF THE AUDITOR-GENERAL

REPORT

OF

THE AUDITOR-GENERAL

ON

THE FINANCIAL STATEMENTS OF
KENYA AGRICULTURAL AND LIVESTOCK
RESEARCH ORGANISATION

FOR THE YEAR
ENDED 30 JUNE 2016

PARLIAMENT
OF KENYA
LIBRARY



A single vertical line is present on the left side of the page, approximately one-tenth of the way from the left edge.



OFFICE OF THE AUDITOR GENERAL
P. O. Box 30084 - 00100, NAIROBI
11 MAY 2017
RECEIVED

KENYA AGRICULTURAL AND LIVESTOCK RESEARCH ORGANIZATION

ANNUAL REPORT AND FINANCIAL STATEMENTS

FOR THE FINANCIAL YEAR ENDED

30TH JUNE, 2016

**Prepared in accordance with the Accrual Basis of Accounting Method under
the International Public Sector Accounting Standards (IPSAS)**

Table of Content

ITEM	PAGE No.
I. KEY ORGANISATION INFORMATION AND MANAGEMENT	2
II. THE BOARD OF DIRECTORS	4
III. MANAGEMENT TEAM	5
IV. CHAIRMAN'S STATEMENT	6
V. REPORT OF THE CHIEF EXECUTIVE OFFICER	7
VI. CORPORATE GOVERNANCE STATEMENT	8
VII. CORPORATE SOCIAL RESPONSIBILITY STATEMENT	10
VIII. REPORT OF THE DIRECTORS	11
IX. STATEMENT OF DIRECTORS' RESPONSIBILITIES	19
X. STATEMENT OF FINANCIAL PERFORMANCE	20
XI. STATEMENT OF FINANCIAL POSITION	21
XII. STATEMENT OF CHANGES IN NET ASSETS	22
XIII. STATEMENT OF CASHFLOWS	23
XIV. STATEMENT OF COMPARISON OF BUDGET AND ACTUAL AMOUNTS	24
XV. NOTES TO THE FINANCIAL STATEMENTS	25

I. KEY ORGANIZATION INFORMATION AND MANAGEMENT

(a) Background information

The Kenya Agricultural and Livestock Research Organization (KALRO) is State Corporation established under the Kenya Agricultural and Livestock Research Act, No 17 of 2013, with perpetual succession, the power to sue and be sued in its own name and the ability to own and alienate movable and immovable property. The organization is also governed by the provisions of the State Corporations Act, Chapter 446 of the Laws of Kenya, an Act of Parliament providing for control and regulation of state corporations. KALRO falls under the Ministry of Agriculture, Livestock and Fisheries, and is the country's principal national organization responsible for research and technology generation on crops, livestock, soil and water management and their socio-economics.

(b) Principal Activities

The Institute's mandate is to conduct appropriate crop, livestock and factor research programmes that are geared towards the sustainable development of national agricultural sector. Its mission is to develop and disseminate appropriate agricultural technologies in collaboration with stakeholders. In pursuit of this mission, KALRO seeks to acquire and contribute knowledge and creative solutions that are participatory and client-oriented; holistic and system-oriented; gender-sensitive and affordable to its stakeholders. The Institute has a computerized Financial Management Information System, which is operational in all research Centres and consolidation of financial data done at Headquarters.

(c) Key Management

The organization's day-to-day management is under the following key organs:

1. Director General, KALRO
2. Deputy Director General (Livestock)
3. Deputy Director General (Crops)
4. Chief Manager, Corporate Services

(c) Fiduciary Management

The key management personnel who held office during the financial year ended 30th June 2016 and who had direct fiduciary responsibility were:

No.	Designation	Name
1	Chairman	
2	Secretary	Dr. Eliud K. Kireger
3	Member	Dr. Moses K. Rugutt
4	Member	Prof. Kassim O. Farrah
5	Member	Prof. Mabel Imbuga
6	Principal Secretary	Ministry of Environment and Mineral Resources
7	Principal Secretary	Ministry of Agriculture Livestock and Fisheries, State Dept. of Livestock
8	Principal Secretary	Ministry of Agriculture Livestock and Fisheries, State Dept. of Agriculture
9	Principal Secretary	Ministry of Industrialization & Enterprise Development
10	Principal Secretary	National Treasury

(d) Fiduciary Oversight Arrangements

- Finance and Administration (F&A) Committee
- Scientific and Technical (S&T) Committee and
- Audit Committee

(e) Organization Headquarters

Kenya Agricultural and Livestock Research Organization
Headquarters,
Kaptagat Road, Off Waiyaki Way
P. O. Box 57811-00200
NAIROBI
Tel No. 4183301/20; Fax No. (254) 4183344

(f) Organization Contacts

P.O. BOX 57811 – 00200
TEL:254-20-4183301-20 FAX: 254-20-4183344
E-mail: director@kalro.org
NAIROBI

(g) Organization Bankers

- | | | |
|---|---|---|
| 1 | Kenya Commercial Bank
KICC, Branch
P.O. Box 46950
Nairobi
Tel no. 020-214878, Fax no. 337650 | 4.CFC Stanbic Bank
Kenyatta Avenue Branch
P.O Box 30550-00100
Nairobi. |
| 2 | NIC Bank Limited
Westlands Branch
P.O. Box 44599- 00100
Nairobi.
Tel no. 4450882, Fax no. (020) 4450847 | 5.National Bank of Kenya
Ruiru Branch
P.O Box 93-00232
Ruiru. |
| 3 | Co-operative Bank of Kenya Ltd
Kisumu,Kericho & Ruiru Branch
P O Box 48231 - 00100
Nairobi | |

(h) Independent Auditors

Auditor General
Kenya National Audit Office
Anniversary Towers, University Way
P.O. Box 30084-00100
Nairobi, Kenya

(i) Principal Legal Adviser

KALRO Legal Office
P.O. BOX 57811 – 00200
TEL:254-20-4183301-20 FAX: 254-20-4183344
E-mail: director@kalro.org
NAIROBI



II. THE BOARD OF DIRECTORS

No.	Name	Details	Designation
1.	Prof. Mabel Imbuga	Vice Chancellor, JKUAT	Appointed Member
2.	Prof. Kassim O. Farrah	Senior Rangeland Management Expert IGAD	Appointed Member
3.	Mrs. Winnie Makotsi	Representative - PS State Dept of Livestock	Appointed Member
4.	Mrs. Anne A. Onyango	Representative - PS State Dept of Agriculture	Appointed Member
5.	Dr. Eliud K. Kireger	DG-KALRO	Secretary
6.	Dr. Moses K. Rugutt	DG NACOSTI	Appointed Member
7.	Mr. James A. Aloyo	Representative, PS.National Treasury	
8.	Dr. Bruno Linyiru	Inspector General - State Corporations, Office of DP	

III. MANAGEMENT TEAM

1 Dr. Eliud K. Kireger-B.Sc.; M.Sc.; PhD.



Director General, KALRO

Dr. Eliud Kiplimo Kireger is the Director General/CEO of KALRO. Prior to this appointment, he served as the Managing Director/CEO of the Tea Research Foundation of Kenya.

Dr Kireger attained his PhD in Plant Eco-physiology from the University of Wales, (UK), MSc in Genetics and Tree breeding from University of Toronto (Canada) and a BSc in Forestry from Moi University (Kenya). He has trained in Conflict Management and Resolution, Strategic Leadership, Company Directorship and Change Management among others. He was an Appointed Member of the board of management of Kenya Agricultural Research Institute (KARI) where he chaired the Audit committee.

2 Dr. Joseph G. Mureithi-B.Sc.; MSc.; PhD.



Deputy Director General, Livestock

He holds a Doctorate degree in Forage Agronomy from Reading University, UK; a Master of Science degree in Grassland Science from the same university and a Bachelor of Science in Agriculture from the University of Nairobi.

Prior of this, he served as the Deputy Director in-charge of the Research and Technology Department. Dr. Mureithi has held professional positions in local and international bodies and has received reputable awards from the Soil Science Society of East Africa (SSSEA) and the American Society of Agronomy (ASA).

3 Dr. Felister W. Makini - B. Sc.; M.Sc.; PhD.



Deputy Director General, Crops

Dr. Felister Makini holds a BSc in Botany and Chemistry from the University of Nairobi, Kenya and a MSc in Plant Pathology from Georgia State University, USA. She also has a PhD in Plant Pathology from the University of Greenwich, UK and has done several short courses in various fields.

Prior to her current position, she worked as the Deputy Director in charge of the Department of Outreach and Partnerships, a new department in the former Kenya Agricultural Research Institute (KARI). She was responsible for promoting the dissemination and adoption of KARI technologies, products and services. She was also responsible for promoting the establishment and strengthening of strategic partnerships along the research development to utilization continuum as well as along the agricultural product value chains (APVC), an approach adopted by then. Recently together with others she published an operational field guide to innovation platforms as the lead author.

IV. CHAIRMAN'S STATEMENT

In the year under review, the KALRO Board of Directors (BoD) ensured that the environment for the development of the 1st KALRO Strategic Plan (2015-2020) was created. In addition, the Board spearheaded the development of policies that guided the annual activity planning and milestones of the Organization. Subsequently, a performance contract with the Ministry of Agriculture was drawn and we committed ourselves to the achievement of the set goals. I am glad to report that we expect to record commendable achievements on all the targets for the year. Going forward, the Organization will continue to adopt the Agricultural Productivity Value Chain (APVC) approach for all research programmes and projects.

In the year under review, the KALRO Board of Directors (BoD) ensured that the environment for the development of the 1st KALRO Strategic Plan (2015-2020) was created. In addition, the Board spearheaded the development of policies that guided the annual activity planning and milestones of the Organization. Subsequently, a performance contract with the Ministry of Agriculture was drawn and we committed ourselves to the achievement of the set goals. I am glad to report that we expect to record commendable achievements on all the targets for the year. Going forward, the Organization will continue to adopt the Agricultural Productivity Value Chain (APVC) approach for all research programmes and projects.

Investment in fundamental research went down during the year under review due to a financial shortfall of KSh. 91.36 million following the scraping of coffee levy by the government, yet the amount was initially factored in our projected Appropriation in Aid (A.I.A). This shortfall, compounded by the winding up of major projects such as KAPAP and EAPP affected research operations. To address this challenge, the BoD will ensure that the Organization's innovation programmes ensure collaboration with sector, industry and funding stakeholders. This is essential for ensuring that sustainable investments in research are availed to build technical and operational capabilities for KALRO to play a meaningful role in developing and disseminating technology and innovations that target both the local and global markets.

Although progress has been made towards the achievement of the Organization's strategic objectives, considerable effort still needs to be made to enhance stakeholder relations to generate buy-in and support for agricultural research initiatives to generate technology and innovation for enhanced productivity in agriculture. This will ensure improved incomes for farmers and attainment of food and nutrition security. The Organization still has room to improve internal efficiencies in order to respond to challenges facing the agricultural innovation system with speed and urgency. Management has been tasked to accelerate plans already underway to address these challenges.

I thank our Government of Kenya, development partners, collaborators, farmers, the KALRO Management and the entire staff for working hard to record these commendable achievements. Let us work even harder for we still owe our beloved nation and the Kenyan people even more for next year.



Chairman, KALRO BoD

V. REPORT OF THE CHIEF EXECUTIVE OFFICER

The KALRO Management remained committed to the ideals of Kenya Vision 2030 in the implementation of the projects planned for the year under review. The activities included research, which is KALRO's core business, staff development and welfare, all of which were meant to provide a good working environment, compensate and motivate staff, develop and maintain facilities in line with the country's research needs. The research projects undertaken during the year were aligned to the former Institutes' Strategic Plans and Government Medium Term Plans (2013-2017). Besides, research projects focused on the assessment, validation and development of agricultural technologies identified along the Agricultural Product Value Chains (APVC). During this period, we continued the process of developing the first KALRO Strategic Plan (2015-2020). This strategic plan will guide the organization in the next five planning years and beyond.

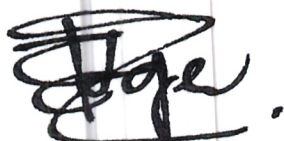
Researchers continued conducting various projects with funding mainly from the Kenya Agricultural Productivity Project (KAPAP), the East African Agricultural Productivity Project (EAAPP) and other agencies and development partners. However, all these major projects were concluded during the financial year. Despite these developments, the Organization managed to achieve A.I.A totaling to over KSh. 1,704.98million. The Management continued to apply the best practices by ensuring that funds allocated to the Institute were utilized for the programmes and activities for which they had been planned for. In this regard, the management launched application of Enterprise Resource Planning (ERP) system in Procurement, Financial and Human Resource Management. The implementation process has been completed and all transactions and activities were undertaken through the ERP. This development is expected to enhance prudent management of resources and support realization of our goals.

A major achievement during the year was the official release of 29 crop varieties by KEPHIS. These included new varieties of cereals, pulses and vegetables. In addition, the Adaptive Research Programme tested and recommended 29 crop varieties to farmers for cultivation. On the livestock research, five vaccines continued to be evaluated before being recommended to farmers. These included Peste des petits ruminants (PPR), Contagious Bovine Pleuro-Pneumonia (CBPP), Rift Valley Fever (RVF) and East Coast Fever (ECF). On the same note, over 226 papers from KALRO researchers were published and/or accepted for publication in renowned peer reviewed journals. Another 292 papers were presented in conferences around the world and some 258 technical papers were published. This offered an opportunity to our researchers to communicate to farmers, the extension workers and other stakeholders on the technologies available. A total of 858 farmer training workshops, field days and demonstrations were held with about 4,705 farmers and stakeholders trained on Kenya Good Agricultural Practices (GAP).

To ensure that farmers used improved varieties around the country, the Organization produced and sold 730 metric tonnes of basic seed and 13.71 million clean root crop planting material. In addition, the Organization conducted 4 Multi-purpose Land Use Assessments and 5 Land Suitability Assessments to ensure optimal use of land. Furthermore, the Organization analyzed 21,159 soil samples and recommendations given to farmers in order ensure increased productivity through use of appropriate fertilizers.

During the reporting period, we successfully completed the Competence Needs Assessment (CNA) and put in place intervention measures. Through the KALRO Training Master Plan, the management continued to coordinate, monitor and evaluate staff on PhD and MSc training both in local and overseas universities as well as identifying potential sponsors for the trainings. During the same period, a total of 300 staff members were sponsored for short courses, study tours and conferences abroad while 100 were sponsored for local courses to improve staff skills capacity. KALRO also provided 605 Youth Internships/industrial attachment/Apprenticeships during the period.

On behalf of the Management, I would like to take this opportunity to thank the Government of Kenya and our development partners for the support they accorded to KALRO during the reporting period. This support ensured that the Organization meets the set targets leading to a commendable achievement of most of our Performance Contract targets. Based on this, we are optimistic that we shall receive a "Very Good" rating by the Division of Performance Contracting, Ministry of Devolution and Planning.



Eliud Kiplimo Kireger-B.Sc.; M.Sc.; PhD
DIRECTOR GENERAL, KALRO

VI. CORPORATE GOVERNANCE STATEMENT

The Kenya Agricultural and Livestock Research Organization complies fully and strictly with all requirements of the regulatory and other non-commercial entities in Kenya including clarity of financial reporting and accountability to the public (citizens and stakeholders) and aims to set best practice standards in agricultural research and fair conduct towards its staff, suppliers and general public.

Core Values

As an organization KALRO is fully committed to generate impact through its research and dissemination efforts as an ultimate measure of its performance. In this regard, KALRO embraces the following core values:

- 1 Innovativeness
- 2 Efficiency
- 3 Equity
- 4 Competitiveness
- 5 Professionalism
- 6 Teamwork
- 7 Integrity
- 8 Partnerships
- 9 Environmental consciousness

Role of the Board of Management

The Act states that the functions of the Board of Directors of KALRO shall be:

- a) carry out the objects and functions of the Organisation;
- b) advise the Cabinet Secretary on Matters of policy relating to agricultural research;
- c) oversee the effective co-ordination of the operations of the Organisation;
- d) ensure that the activities of the Organisation are consistent with the policy and objectives of the government, and the national priorities relating to agriculture and agricultural research;
- e) approve, oversee and evaluate on a continuing basis the programs being implemented by the Organisation;
- f) direct strategic research and policy and prioritise and determine the research agenda;
- g) co-operation with other lead agencies and organizations in carrying out agricultural research;
- h) development of a economic, efficient and cost effective internal management structure, strategic Annual plan of the Organisation;
- i) implementation and fulfilment of the policies and agreed objectives, performance targets and service standards of the Organisation;
- j) provision of advice as required on all matters within the responsibility of the Organisation; and
- k) perform such other functions as may be necessary for the exercise of its powers

Board of the Kenya Agricultural and Livestock Research Organisation

- 1 The management of KALRO is vested in a Board of Directors consisting of:
 - a) Chairperson appointed by the President;
 - b) The Principal Secretary in the Ministry for the time being responsible for agriculture;
 - c) The Principal Secretary in the Ministry for the time being responsible for finance;
 - d) The Principal Secretary in the Ministry for the time being responsible for co-operatives;
 - e) The Principal Secretary in the Ministry for the time being responsible for environment;
 - f) The Principal Secretary for the time being responsible for livestock;
 - g) The Secretary to the Science Council appointed under paragraph 6 of the Second Schedule to the Science and Technology Act;
 - h) One person with experience in agricultural research nominated by the Kenya Private Sector Alliance and appointed by the Cabinet Secretary;
 - i) Four persons appointed by the Cabinet Secretary, of whom
 - i) One represents the interests of farmers;
 - ii) One is a vice-chancellor in a university that conducts agricultural research; and
 - iii) Two persons co-opted by the Board who may be noncitizen scientists in the field of agriculture and possess such knowledge and experience as may be necessary for the better carrying out of the functions of the Board; and
 - iv) The Director General appointed in accordance with section 14.
- 2 Members appointed under sections 6(a), (g) and (h) shall serve on a part-time basis.
- 3 The Secretariat of the Board shall comprise of:
 - i). The Director General;
 - ii) The Deputy Director-General of livestock;
 - iii) The Deputy Director-General of crops; and
 - iv) Any other staff.

Other Board information

The KALRO Board of Directors is answerable to the Government through the parent Ministry. The board signs a Performance contract with the Government through the parent Ministry every financial year outlining performance targets in line with the above stated functions.

Board Meetings

The Board and its Committees shall meet not less than four times in any calendar year and not more than four months shall lapse between the date of one meeting and the date of the next meeting. The actual dates of the meeting is subject to confirmation by notice which also contains the agenda of the meeting among other details.

Board Committees

The KALRO Board has three Committees namely;

- Finance and Administration (F&A) Committee
- Scientific and Technical (S&T) Committee and
- Audit Committee

The above committees permit and facilitate more in-depth deliberations on issues than would otherwise, not be possible in a normal full Board Meetings. The Committees undertake preliminary discussions of the business of the board and prepare their resolutions for deliberations and adoption by the full Board Meetings. A decision of any of the Committees only becomes effective after it has been approved and confirmed by the full board.

Functions of the Scientific and Technical Committee includes:

- a) serving as the advisory arm to the Organisation; and
- b) providing technical, financial and legal expertise to the Board and the research Institutes established under this Act.

In the performance of its functions under subsection (1), the Scientific and Technical Committee shall

- a) Advise the Board on—
 - i) Science policy and broad strategic research directions; and
 - ii) Strategic planning, priority setting and research agenda
- b) Commission and manage periodic external reviews of the programs of research;
- c) Undertake system level impact assessments;
- d) Collaborate with partners to mobilise and harness best science practices;
- e) Provide advice and capacity building to research Institutes and individuals undertaking agricultural research and programs pursuant to this Act;
- f) Analyse policies, research proposals and proposed research programs prior to submission to the Board for approval; and
- g) Perform such other functions relating to agricultural research as may be assigned to it by the Board.

Communication

The Board receives management reports in advance of all scheduled meetings and in turn formally, communicates to staff through the Director General, KALRO. Informal communication to staff may be made during Board meetings while in the Institute. Board members cannot commit the Board in any way when having informal communication with staff.

VII. CORPORATE SOCIAL RESPONSIBILITY STATEMENT

Kenya Agricultural and Livestock Research Organization (KALRO) is committed to contribute to the economic development of the country while improving the quality of life of our employees and uplifting the general wellbeing of the society by integrating Corporate Social Responsibilities (CSR) in its values, culture, operations and decisions at all levels.

Interest is growing in Corporate Social Responsibility activities in Kenya, more especially with regard to the social and environmental management practices. In line with that, Kenya Agricultural and Livestock Research Organization has gone beyond its mandate and emphasis on research and embraced CSR. The Institute has contributed to a number of voluntary long-term Corporate Social Responsibility projects, which include sponsoring noble ideas viz; breast cancer, freedom from hunger walk, ear walk, distributing tree seedlings to schools and contributing towards construction of such schools.

The objectives of this CSR policy are:

- To improve the livelihood of our employees, the neighbouring community and the lesser privileged sections of the society through sustainable and measurable initiatives.
- To participate in National, Community, Education, Environment and healthcare Research initiatives .
- To support farmers through generation and transfer of appropriate Research Technologies and knowledge.
- To offer a platform to employees to give back to the society in a meaningful way.
- To observe a high sense of corporate ethics and promote ethical behavior in all our activities.

KALRO recognizes the need to integrate our business values and operations to meet the expectations of all our stakeholders i.e. government departments, customers, employees, regulators, donors, suppliers, the community and the environment by:

- Recognizing that our social, economic and environmental responsibilities to these stakeholders are integral to our business
- Taking seriously the feedback that we receive from our stakeholders and maintaining open dialogue to ensure fulfilment of their requirements as stipulated in this policy
- Communicating our strategies, targets, performance and governance to our stakeholders in our continual commitment to sustainable development.
- Providing the necessary resources to enhance realization of the corporate responsibilities.

Pursuant to the above mentioned Corporate Social Responsibility objectives, Kenya Agricultural and Livestock Research Organization has endeavoured to give support through:

- KALRO management developed a Customer Service Delivery Charter in line with National Values and Principles of Governance as espoused in Article 10 of the Constitution such as: human dignity; human rights; equality and equity; social justice and inclusiveness; non-discrimination and protection of the marginalized. KALRO has been supporting Social/Community Development oriented activities like promoting education by sponsoring primary schools at Muguga, Kiboko and Ruiru by to enhance their education standards;
- KALRO has developed an Environment Policy to guide the organization in environment oriented activities like initiating and carrying out campaigns to promote environmental care and increase understanding of environmental issues i.e. soil fertility, land use, survey and conservation, vegetation survey, agro forestry, irrigation and drainage as well as planting tree seedlings and carrying out other environmental activities across its locations. In the interest of conservation of environment , the organization donated 2500 tree seedlings to Kibos Primary School, Great lakes University Kisumu, Kisumu Primary school and Kisumu County each. We also provided 1,500 seedlings to Nzioa Sugar Girls High school to benefit Nzioa Sugar Company Community in Environment Conservation.
- The Organisation continued supporting the education sector through the sponsorship of Utafiti Primary school. This is a public primary school located in Timbilil at the KALRO-TRI by partnering with parents to pay ECDE PTA appointed teachers. The organization also donated 25 chairs and six tables to KARI Primary School Kisii to Furnish the Head Teacher's Office and staff room. To empower students on e- learning, five computers were donated to the same School; KARI Primary School, Kisii. Kesure Secondary School too benefited from a donation to equip the Head Teacher's office with six chairs and two tables. Sugar Research Institute provided clean drinking water to school Children to prevent water borne diseases specifically in Kesure Primary school ,community Dispensary. Kabonyo Community also benefited from provision of tents ,chairs and transport services during social functions besides Garbage collection for better disposal of refuse.
- The organization also sponsored the Jacaranda Football Club which comprises of players from all parts of the country thereby enhancing National cohesion.
- The organization also sponsored the Jacaranda Football Club which comprises of players from all parts of the country thereby enhancing National cohesion.
- The organization contributed to sustainable development through generation of Technologies and Knowledge geared towards improvement of food security, income, employment and poverty reduction among Kenyans. These KALRO products have been publicized using market oriented activities such as Publications (website and hand-outs)

The organization too contributed funds and participated in the Freedom from Hunger Walk to stamp out Hunger in Kenya through the Kenya Freedom from Hunger Council

- The management has systematically been ensuring that KALRO is well represented in the counties by establishing centres and sub-centres to provide services throughout the country.

VIII. REPORT OF THE DIRECTORS

RESEARCH PROGRAMME ACHIEVEMENTS: FY/2015/2016

The year recorded significant achievements in various programmes including Food Crops Research, Livestock Research and Operational Units. Presented below is the summary of achievements for each Research Institutes for FY 2015/2016.

A: CROPS RESEARCH

1. Food Crops Research Institute

The following achievement have been realized by the Food Crops Research Institute during the year under review:

- 2.6MT breeders seed of maize varieties sold to seed companies
- 200MT of maize varieties early generation seed produced
- 141.4MT of wheat early generation seed produced
- 1,000,000 stakeholders sensitized on MLN
- 2 counties (Uasin Gishu and Elgeyo Marakwet) surveyed for maize smut disease epidemic sensitized on Smut diseases
- 4 town hall meetings held in Uasin Gishu and Elgeyo Marakwet held to sensitize farmers on maize smut disease and management strategies.
- 4 Agro vets in Trans Nzoia county have their Fertilizer samples analyzed for adulteration at request of Kenya Counterfeit agency and report presented to the CS MOALF, for action
- 2 wheat fungicides recommended to PCPB for release Skyway Xpro 275 EC and Atlas 300 EC
- 4.6 million cuttings of sweet-potato (3M) and cassava (1.6M) were distributed to farmers
- 11513 farm households have had their soils samples analyzed.
- 5 transitional maize varieties submitted for NPT 2014 were MU10-032, MU10-133, MU10-021, MU10-011 and MU10-233.
- 6 transitional maize varieties submitted for DUS 2014 were MU10-032, MU025, MUL692, MU10-010, MU026 and CML 445
- 150 t of legume seed sold to farmers
- 1200 farmers linked to bean contract markets in Western Kenya, 10 locations in Nyandarua, Kiboi, Namelok and Kauti mapped for land cover and irrigation

2. Industrial Crops Research Institute

The following achievements were recorded by Industrial Crops Research Institute during the year under review:

Research Services

- KALRO Seed Unit at Mtwapa multiplied and supplied the following planting materials:
 - o Cashew nut seedlings - 244,642
 - o Cassava cuttings – 1,437,525
 - o Sweet potato vines – 403, 900
 - o Mango seedlings – 17,300
 - o Coconut seedlings – 3,000
 - o Citrus seedlings – 3,500
 - o Tissue culture banana – 4,700
 - o Coast composite maize seed – 2,500 kg
- Significant progress was made in fibre crops research at Industrial Crops Research Centre, Mwea (ICRC, Mwea) as follows:
 - o 50 kenaf varieties, 8 jute varieties, 100 cotton lines and 30 cotton crosses were maintained
 - o 3 cotton varieties namely, UK 68, UKA59/240 and BPA75 were introduced and tested.
 - o One cotton variety, KSA81M was registered
 - o 10 hybrid cotton lines were entered in NPT trials
 - o 70 Kg of cotton breeder's seed was produced.
 - o 8 tons of certified cotton seed was produced
- Rice research at ICRC Mwea also recorded the following achievements
 - o 2 rice varieties were entered in NPT
 - o 2 rice varieties entered in the release list by KEPHIS
 - o 160 rice germplasm maintained
 - o 4 upland cultivars (Dourado Precose, Nam Roo, Wab 181-18 and TGR -94) introduced
 - o 3 lowland rice cultivars (WABIS-675, TGR-78 and Ci Kon Ai) introduced
 - o 4 varieties (NERICA 1, 4, 10 and 11) released
 - o 2.6 tons of rice seed (NERICA 1, 4, 10, and 11) produced
- Efficacy trials for pest control products were undertaken in ICRC Mwea as follows:

- o 8 Crop protection products were tested against cotton and Rice pests including 3 Insecticides on Cotton-(Ogor 40EC, Degree 10EC and Betacyde), 2 Insecticides on Rice-(Fenprox 10 E.C and EM-Actin 3G/L) and 3 Herbicides on rice (Weedmax, Clin 100SC, Amazone, Forester 150 EC)
- o 5 agronomic packages including recommendations on 4 fertilizer formulations and one growth promoter for rice were developed.
- Pyrethrum research and development at ICRC, Mwea achieved the following:
 - o 22 pyrethrum clones were maintained for production of clean planting materials
 - o 4,500 pyrethrum splits were planted at ICRC Molo
 - o 117 pyrethrum accessions were conserved at Food Crops Research Centre, Kisii
 - o 10 Kg of pyrethrum polycross seed produced at ICRC, Molo
 - o Solar drier was fabricated at ICRC Molo for drying pyrethrum flowers.

2. Horticulture Research Institute

KALRO Kandara

Fruits Programme

- Introduced varieties of fruits of superior quality e.g. papaya, apples, mangoes and passion fruits
- New germplasm of Litchi, Pears, Apricot, Nectarine, Peaches were introduced through the partnership between KARI and ICRAF and conserved at KALRO Kandara and Molo.
- 2 seedless grapes varieties (Maroo, Autumn royal) were recommended to farmers
- 5 temperate fruits (peaches, apricot, nectarine, plums and pears) were evaluated at KALRO Kandara and KALRO Molo
- 10 citrus varieties, 1 pomegranate ("Wonderful") and 1 guava("T5G2") varieties introduced
- 3 apple varieties (Gala, Breaburn, and Fuji) were commercialized
- 2 Effective IPM Methods for control (biological control and cultural control) of Mango seed weevil and fruit-fly disseminated to about 3000 farmers in Embu, Meru, Makueni and Kilifi Counties
- 880 superior mango rootstock (Sabre, turpentine and 13-1) were given to 4 groups in Makueni, Meru and Kilifi counties
- 5 new sweet yellow varieties, (Jubilee 1, Jubilee 2, Jubilee 3, Jubilee 4 and Jubilee 5) were Gazetted for registration
- 3 mango papers presented at KAPAP conference and 2 presented at HAK conference

Flowers Programme

- Review of flower agricultural production value chain
- Dissemination of appropriate flower production and utilization technologies
- Multiplication of summer flower germplasm and commercialization
- 15 Pot plants conserved and multiplication e.g. Leopard orchid, Geranium, Syngonium, Leopard bulb, Ruscus, Sansiveira hahnii, Sansiveira trifalciata
- Transgenic gypsophilla evaluations done on effects on Anthropods and environment
- Colour stability trial done of the transgenic gypsophilla flower
- Assessment of effects of transgenic gypsophilla on rhizosphere microorganisms
- Establishment of effect of transgenic gypsophilla on beneficial arthropods
- Post-harvest assessment of transgenic gypsophilla was verified
- Rose flower (*Rosa indica*) germplasm maintenance of rootstocks was done
- Optimum growing environment for alstroemeria was evaluated and disseminated
- Maintenance of Alstroemeria germplasm was done (Sangria, Wilhelmina, Minaz, Rio, Serena, Yellow king and Marina)
- Leather leaf germplasm maintenance and post-harvest research was done
- Eryngium variety (Orion) suitable for warm areas was re-introduced to farmers in limuru
- Adoptive research on pesticides to control of leaf miner as an emerging pest in Eryngium
- 9 lines of Mobydick resistant to nematodes collected and conserved for further multiplication
- Utilization and training on the post-harvest handling protocol of mobydick
- Assessment of keeping quality and drying research on hydrangea ongoing
- Initiation of Fertility trial on use of organic fertilizer to enhance productivity in tuberose
- Maintenance of summer flower germplasm for seed multiplication
- Multiplication of the Mobydick for seed production
- Multiplication of Marigold flower (*Tagetes erecta* var. *superjack*)
- Disseminating on zinnia use as a cut flower as well as dried flower

Vegetable Programme

- Vegetable germplasm maintained: 8 snap bean lines (J12, HY, PALJX4 and JSAMX5 TOJX1, PALJX3, JSAMX1 PAUJX1)
- 6 tomato lines (TKA 81-1-3,TKA 183-31-2, TKA 81-1-1, TKA 193-2-1, TKA 81-1-6, TKA 155-18-1 (Quantity of breeders seed bulked-150kg snap bean and 800gm tomato)
- 5 Tomato varieties (Anna F1, Nuru F1, Tylka F1, Tegemeo F1, Libra F1) evaluated for performance under "greenhouse" cultivation
- Long-term farming systems trial (FiBL) in collaboration with ICIPE conducted for 2 seasons as per the rotation crop cycles schedule (which includes various vegetables).

- 25 vegetable technology dissemination materials (brochures, manuals, handouts) updated, compiled and rebranded to conform to KALRO.
- 3 papers presented in conferences/workshops and 1 paper forwarded for publication in refereed journal
- 50 clients offered advisory services on production of various vegetable crops (e.g. Tomato, onions, capsicum, spinach, brassica, cucurbits)
- 1 proposal approved for funding under revised USAID FTF Project 2016-2019
- "Enhancing Intensive Commercial Vegetable farming Through Greenhouse Production System In FTF target Agro-ecological zones of Kenya" by Ndegwa et al
- Programme head vegetables attended a Science Communication Training organized by ISAAA and VIRCA
- The FiBL project team convened and attended stakeholders meeting on 28th -30th June 2016 at KALRO-Kandara which was attended by 71 participants.
- Recorded interview on French bean production on Citizen TV- Smart Farm segment which was aired on 26th August 2015

Collection, characterization and domestication of indigenous mushroom species conducted

Medicinal Aromatic Plants (MAPs) Programme

- Thirty eight MAPs (seed or Insitu)germplasm accessions were maintained
- One Kola Nut tree germplasm introduced at KALRO Kandara and Studies on vegetative propagation protocol initiated.
- Strategies for dissemination and publication of technologies was done

Bean Research

- Bean variety on-station evaluation
 - 64 bean lines were evaluated for performance at KALRO-Kandara for two seasons. Among them 16 had high micronutrients, 16 had low soil fertility tolerance, 16 had root rot resistance while the other 16 had Aluminum toxicity tolerance.
- Bean variety evaluation on farmers' fields
 - 44 advanced bean lines were evaluated for yield performance at five sites at Kiboko, Machakos, Kitui, Makuyu and Laikipia. Among the 44 lines, 16 are large seeded drought tolerant, 12 are small seeded drought tolerant while the other 16 are micronutrient rich lines. The evaluation was done in collaboration with KALRO Katumani under ASAL bean funded project. Some promising lines have already been identified for submission for NPT.
- Germplasm maintenance
 - 13 bean lines were maintained at KALRO Kandara. These include the 6 released varieties (GLP-2, GLP-24, GLP-1127a, GLP-92, GLP-585, GLP - 1004), varieties and 7 advanced bean lines with potential of being released.
- Variety development
 - Two drought resistant and 2 micronutrient rich bean lines passed the KEPHIS NPT test and are currently undergoing Distinctness, Uniformity and Stability (DUS) testing.
- Variety introduction
 - 67 dolichos bean lines were introduced from ILRI Ethiopia. The lines are currently being multiplied for seed increase at KALRO Kandara.
- Production of bean breeders' seed
 - 280kg of bean breeders' seed were produced and labelled with KEPHIS certificates as follows: 85kg of GLP-2, 25kg of GLP-24, 145kg of GLP-1127a, and 25kg of GLP-x-92. Of these, 100kg (25kg for each variety) had been ordered by Simlaw Seed company.
- Extension materials developed/updated and availed
 - The bean production manual was updated, and two brochures on dry bean production and GLP bean varieties were written.
- Research Proposal:
 - Participatory evaluation of micronutrient rich, drought and heat tolerant beans adapted to low and medium potential zones
 - Investigators: David Karanja (KALRO Katumani), Eliezah Kamau (KALRO Kandara), Ben Musyoki (KALRO Katumani), Ratz Bondo (CIAT) and Clare Mukankushi (CIAT). Budget: KShs 8.3 Million funded by EU.

Crop Health Programme

- Established and evaluated on farm, legume pests and disease management strategies with 30 farmers in western Kenya, through funding by McKnight foundation
- Two effective strategies for pest management identified and recommended in publication which is in draft stage
- Two MSc students supported by the project and one of them graduated with MSc in crop protection from Masinde Muliro University in 2015

Postharvest Programme

- 400 stakeholders were trained on postharvest handling of horticultural produce

Seed Unit

- 147,840 seedlings (avocado, mango, passion fruit, TC banana, pawpaw, grapes, apple, strawberry and macadamia) were sold to 4,705 farmers. Fruit technologies commercialization and generating a revenue of KES 11.8 million
- Established a mother block orchard of 448 plants sweet yellow passion fruit (Jubilee 4) variety
- Established a tree tomato mother block orchard of 70 plants Red oratia variety
- Established a pawpaw mother block orchard of 210 plants of Solo sunrise variety
- 64 macadamia nursery operators from Laikipia County trained

KALRO Kibos

- 1,500 mango seedlings distributed to farmers in Nyando sub-County through CCAFS project
- 1,500 TC banana seedlings distributed to farmers in Nyando sub-County through CCAFS project
- 23 research Proposals developed
- 5 on-farm demonstrations on GAF 4 Striga tolerant maize variety carried out in 6 Counties
- 6 Cotton management demos carried out in Kisumu County
- 1 demo on Integrated Soil Fertility Management carried out in Kisumu County
- 9 scientific manuscripts prepared and published in peer reviewed Journals and 16 papers presented in workshops
- 350 kg of seed of striga tolerant GAF 4 maize variety availed to farmers
- 90,000 sweet potato vines of 6 varieties accessed by farmers
- 74,000 cassava cuttings availed to farmers
- KARI Mtama 1 and KARI Mtama 4 sorghum disseminated to 8 farmer clusters in Nyando basin
- Molasses Urea Blocks factory constructed and equipped
- New bean varieties (KK8 and KK15) introduced into farming systems in Nandi, Busia and Vihiga Counties
- Bean variety KK15 tolerant to root rot identified in Nandi County

KALRO Tigon

- 2 new fungicides against late blight in potatoes were registered by pest control products board (PCPB) and are in use by potato farmers
- a potato processing variety, Unica was released in 2016 and there is a crop of 11 acres (55 tonnes) of breeder seed (pre-basic)
- 262 tons of basic seed produced annually following increased financial support to the potato programme and expansion of land under basic seed production
- 20,000 farmers reached directly and over 500,000 indirectly with new potato technologies via open days, farmer conferences, field days, shows, through mass media
- 10 potato clones entered in the NPT in partnership with CIP on a cost sharing basis
- 1 farmer potato handbook published in 2015 in collaboration with the Kenya Kopia office
- Potato catalogue published in partnership with NPCK
- Organized and participated in 1 ASK Show
- 30 potato production demo's in Kiambu, Nakuru, Nyandarua, Bomet, Murang'a and Meru Counties
- 9 publications in journals and conferences
- 10 outreach brochures developed, 1000 copies printed and 300 sold
- 55,000 arabicum bulbs sold to farmers in Limuru
- 650 flower farmers registered under a producer marketing organization

KALRO Matuga

- Maintenance of citrus and mango germplasm evaluation & maintenance in coastal Kenya
- Participating in over-arching innovation platform stakeholders workshop planning for DDR&T
- KALRO in partnership with MESPT-Kwale, and Nuts Directorate identified superior coconut mother plants in Kwale County to supply quality seed materials.
- Back stopping all agricultural activities supported by Base Titanium Ltd in Kwale County i.e. introduction of Irish potato and cotton to a few selected farmers for observation
- Developed technologies for vanilla pod production
- Introduction of cocoa as an intercrop in a coconut plantation

3. Genetic Resource Research Centre

- The Institute spearheaded the development of a five year Kenya National Strategy on Genetic Resources within the Context of Climate Change (2016 – 2020). The Strategy provides a road map to full integration and mainstreaming of genetic resources into national strategies and action plans on climate change. The Strategy further demonstrates how the rich genetic diversity could be leveraged as a potent adaptation strategy especially for small-scale farmers in the face of climate change. The Strategy was launched by the Cabinet Secretary in January 2016.
- The Institute generated three policy briefs covering three broad areas of genetic resources conservation and use namely:
 - o Plant Genetic resources policy and legal framework in the Context of Climate Change in Kenya
 - o Mainstreaming Plant Genetic Resources Conservation in Climate Change Adaptation and Mitigation in Kenya
 - o Enhancing Access to Plant Genetic Resources in Kenya

- The Institute generated a handbook on the Status of Plant Genetic Resources for Food and Agriculture (PGRFA) in Relation to Climate Change Adaptation in semi-arid Kenya. The handbook is an awareness raising material on integrating conservation of genetic resources into national climate change adaptation planning in Kenya.
- The Institute enhanced the capacity of 120 local community members in Nyamira County to propagate and conserve indigenous plants through training and strengthening community nurseries by providing implements and equipment. Farmers and teachers (ToTs) were trained on seed harvesting and handling, nursery management and plant propagation skills.
- The Institute engaged a total of six communities and ten schools in planting of indigenous useful plant species on farm in the counties of Nyamira and Kisii with a view to enhancing total tree cover in agricultural ecosystems. The communities include: Chokwoyo, Oboseera, Omwobo, Rigosa, Riakiage and Ekerenyo. The schools include Bundo Primary, St. Mathews Gekendo, Gekendo Primary, Mesaria Primary, Magwagwa Primary, Nyansabakwa Secondary, Tonga Primary, Bondeka Secondary, Masosa Secondary and Getari Secondary. A total of 89000 seedlings of six priority species (Croton megalocarpus, Croton macrostachyus, Prunus africana, Markhamia lutea, Olea African and Vitex keniensis) have been propagated to date.

4. Coffee Research Institute

- Developed liquid medium protocol to propagate Ruiru 11 Coffee.
- Evaluated 5 pesticides for coffee pest management
- Undertook land suitability assessments for coffee in 5 Counties
- Undertook county specific soil management guidelines for coffee in 7 counties
- Completed construction of Kenya Coffee College training facilities
- Produced and distributed over 12 million coffee planting materials
- Renovated and modified a coffee seeds dispatch unit (Store) and four green houses
- Conducted 301 stakeholder training, outreach and partnership forums

5. Tea Research Institute

- KALRO-TRI scientists participated of the 1st African Tea Science Symposium and exhibition held at Enashipai Resort and SPA, Naivasha, Kenya from 23rd - 24th May, 2016 during which 18 scientific tea papers and four posters were presented. The proceedings of the symposium will be published as special issue of the Tea Journal for 2016.
- Six scientific articles were published in international refereed journals by the Institute's scientists and collaborators.
- KES 3,613,628.00 was expended in procurement of various services and products from 41 Companies across the Youth, Women and People Living with Disability groups.
- Technologies for developing for product diversification tea based hair shampoos and conditioners were developed and optimized.
- Fifteen staff of the TRI Kangaita Centre were trained on corruption prevention.
- The food scientist initiated studies towards developing technologies for branding Kenyan teas using geographical location for identification and promotion purposes.
- X vegetatively propagated plants and Y cuttings were distributed to tea farmers from various region of the tea growing.
- The Institute participated in review of tea industry issues through Tea Task Force established by the CS, MoALF during the FY. The final report has been submitted to the CS for implementation.
- The Institute received over 750 farmers and 2400 students during the Institute's corporate day. The visitors' main interests were acquiring knowledge on Effects of climate change on tea yields, Agro-forestry in tea industry, Soil and nutrient erosion in sloppy tea fields and Sustainable tea production practices.
- During the period under review, a total of 3168 reports were done for soil analysis; tissue and water analysis for residues, hazardous wastes were taken to Walter Reed in Kericho for incineration.
- TRI also participated in training of Field Service Coordinators whereby from Kenya Tea Development Authority where 68 committee members were trained, 26 from Igara Tea Factory in Uganda and 1052 students (primary, secondary and college) across the country were also trained.
- The Institute partnered with Regional Centre for Mapping of Resources for Development (RCMRD) to enhance frost prediction among tea farmers via mobile communication systems. This is a system that use MODIS satellite data to forecast frost chances in tea growing areas and farmers in frost risk areas will be able to receive a SMS alert 2-3hrs prior to occurrence hence be able to do harvesting before damage. The project is at calibration stage.
- The Institute staff and pupils of UTAFITI primary school participated in the International Environmental day by planting trees and engaging in general clean-up of the Institute's campus.
- Waste management system that make use of segregated waste disposal system which is also being encouraged for use by the entire community to ensure that they segregate the wastes for ease of disposal. Hazardous wastes are also well handled through collaboration with Walter Reed in Kericho town.

6. Sugar Research Institute

The following research achievements were realized by the Sugar Research Institute in collaboration with other agencies in line with Jubilee manifesto:

- 15 imported varieties entered into Preliminary Variety Trial (PVT) stage across the industry for evaluation. These have high sucrose content, high yield and some are early maturing.
- Established 236.62 ha of seed nurseries at strategic locations in various zones across the sugar industry (Transmara, Sony Sugar, Soin, Mumias, Ndhiwa, Chemilil, Muhoroni, Nzoia and Busia). 1,810 tons of seed cane of improved varieties supplied to farmers.
- More than 1,000 soil and plant tissues from farmers have been analyzed and farmers advised accordingly.
- More than 200 samples tested for ratoon stunting disease, a bacterial disease causing over 29% yield loss, and farmers advised.
- The Institute rehabilitated the Kibos irrigation system to ensure seed cane production and supply of adequate high quality seed cane to the industry.
- A remote sensing mapping method developed for sugarcane fields using vegetation indices. This method will be used to map land cover type and also green and burnt harvest methods for enhanced planning of operations in the sugar industry.
- Report on pilot cane testing project in Nzoia Sugar Company submitted. Preliminary results indicated that the NIR system accurately predicts the sucrose content in cane deliveries and that the proposed sucrose based cane payment system is economically viable. Results from these units will inform the industry as it prepares to adopt the new cane payment system.
- 18 stakeholders' field days and 1 open day were held in Soin, SonySugar, West Kenya and Nzoia and SRI Opapo on good crop management practices and use of improved sugarcane varieties. About 5,644 farmers attended the events.
- 9 Farmer trainings on good agricultural practices in 9 sugarcane growing counties undertaken. 422 farmers trained.
- Efficacy evaluation of 2 pre- and 2 post-germination herbicides concluded and reports submitted to Pest Control Products Board.
- Soil fertility mapping undertaken evaluate the suitability of SRI farms for growing sugarcane
- 7 Stakeholders' fora held in 10 counties. 211 stakeholders attended.
- 17 demonstration plots on improved (high yielding, high sucrose content and early maturing) varieties in 8 counties.
- SRI participated in 14 ASK and harambee agricultural shows to display and disseminate KALRO technologies
- 300 farmers sensitized on environmental conservation issues like climate change, establishment of tree nurseries and gully healing undertaken.
- 73,000 tree seedlings established in SRI centres. The seedlings were distributed to farmers. In collaboration with local communities, planted trees in two gullies of Kajulu and Nyakach (KatukOdeyo) in effort to contribute to community gully healing efforts.
- 6 papers published in conference proceedings and refereed journals.

8. Agricultural Mechanization Research Institute

- Participated in Taita Taveta field day with display & demonstration of agricultural machinery technologies
- Carried a baseline survey on status of agricultural mechanization in Kenya on maize, rice, wheat, tea, sugarcane, coffee, tomatoes, mangoes and livestock. A report is being finalized
- Training of 30 engineers & artisans on Nixtamalization technology on maize at KALRO Katumani to diversify maize use in Kenya

Crop varieties developed

- Cowpea: 9 NPT and 6DUS
- Beans: 2 NPT and 1DUS
- Sorghum: 5 NPT
- Amaranth: 2 DUS
- Cassava: 8 NPT
- Maize: 3 varieties released

Information sharing (dissemination)

- Machakos ASK Show, "Enhancing Technology in Agriculture & Industry for Food Security and National Growth" (29th June 20th to July 2nd 2016). 2 First positions: (The Best Statutory Board & Best research Development), 2 Second positions: (The Best in interpreting show theme & Medium Stand) and 1 Third positions: (The Best stand in Technology dissemination)

KSU Business

- Farmer seed payment: July 2015-June 2016: KES 61, 843, 330.
- Seed sales: July 2015-June 2016: KES 56.5m
- Tree seedlings sold 15,202 during the period.
- Seed produced: 785,311 Kgs
- Fruit Seedling produced: 23,562

Referred Journal Articles: 21, Technical (brochures) 21 and 16 conference papers

Empowering Youth, Women and Physically disabled persons

- 8 individual companies approved to supply tender purchases

B: LIVESTOCK RESEARCH

1. Arid and Rangelands Research Institute (ARRI)

- Four grasses adapted to arid and rangelands have been identified for natural pasture improvement through reseeded. These grasses are *Chloris roxborghiana*, *Cenchrus ciliaris*, *Eragrostis superba* and *Enteropogon macrostachyus*.
- Developed a community based range grass seed production system in the southern rangelands. Over 3 tonnes of seeds for the adapted grass species are produced annually and are either given to farmers or sold to able farmers/NGOs/Government.
- Two of the adapted range grasses *Cenchrus ciliaris* and *Enteropogon Macrostachyus* are in national performance trials for certification by KEPHIS for seed production.
- Developed and implemented a goat multiplication business plan for internal revenue generation.
- Plans are underway to set up a research centre in Turkana.

2. Dairy Research Institute (DRI)

- Technologies for efficient utilization of crop residues have been developed. A total mixed ration based on maize stover feed block was developed and the technology is available to farmers from KALRO Kakamega.
- 150 appropriate dairy rations for different counties have been formulated and are available from KALRO Centres.
- Early calf weaning diet as Milk replacer for enhancing smallholder dairy production is available from KALRO Muguga.
- Forage suitability maps have been produced for 6 popular forage crops including Napier grass, Rhodes grass, desmodium, Kikuyu grass and lucerne.
- Commissioned a Centre Pivot irrigation system for 156 acres for fodder and forage seed production, in a 245 acres plot secured with a chain-link fence.
- Established over 245 acres of Rhodes grass hay (156 acres under the irrigation system), to stabilize feed supply during the dry season.
- Made 30,000 bales of hay and 320 MT of silage for dry season feeding and to generate revenue.
- Acquired a second Near Infrared Reflectance Spectroscopy (NIRS), for dry chemistry feed analysis, enabling 24-hour turn-around time.

3. Beef

- *Brachiaria* grass spp entered into Advanced Yield Trials (AYT);
- New sorghum variety (LAN 1) has undergone AYT and currently awaiting NPT before official release as a dual purpose variety.
- Completion of office block at Garissa centre (which is earmarked to house the Institute's headquarters).
- Capacity for the animal nutrition laboratory was enhanced with new equipment and can now process 5000 samples annually. It serves university students and farmers.
- Radio immune-assay laboratory for hormonal profiling is equipped with state-of-the-art equipment. Procedures have been developed for improved heat detection and early pregnancy diagnosis to enhance reproductive efficiency. The procedure also increases chances of getting female calves by 80%. The Lab has capacity of about 2500 samples annually.
- Extended hay fields to about 200 acres with expected hay production of over 20,000 bales.

3. Apiculture Research Institute (ARI)

- Trained over 100 Bee keepers in improved bee keeping
- Refined approx. 1 ton of honey as part of revenue generation.
- Established and launched an Apiculture National Platform for stakeholders.
- Published Bee Keepers Guide in collaboration with, KVDA, Baringo County Government, and ASDSP Baringo – on all aspects of honey production.
- Held 10 field days on improved bee keeping technologies.
- Grass seed produced – 200kg

4. Sheep and Goat Research Institute (S&GRI)

- Mapped and characterised mountain and oases zones of northern Kenya with recommendations on land use potentials and constraints
- Developed a goat rearing technology package (a prototype kid housing, medicated feed block, identified mineral requirements for browsing goats in northern Kenya and a goat production manual).
- Conducted training on camel milk hygiene and marketing; forage production in the oasis areas of arid northern Kenya, management of *Prosopis juliflora* in Oasis areas of northern Kenya, and wet salting of hides and skins.
- An estimated 15,000 farmers and value chain actors in the arid and semi-arid northern Kenya have been reached with KITS from the Sheep and Goat Research Institute in various outreach.

5. Veterinary Research Institute (VRI)

- A Newcastle thermostable vaccine developed and commercialized as AVIVAX® through KEVEVAPI.
- A thermostable PPR (pestes des petit ruminants) developed and laboratory tested. Approval for field trials being sort from NBA.
- A CCPP (Contagious Caprine Pleuro-pneumonia) latex agglutination kit has been developed and commercialized under the trade mark capritest™.
- A thermostable CBPP (Contagious Bovine Pleuro-pneumonia) vaccine sub-unit was developed and preparation underway for commercialization through KEVEVAPI.
- A batch of East Coast fever (ECF) vaccines (ECFim. Marikebuni produced by KALRO). The field testing is to be extended to ASALs in preparation for registration by the KVB.
- Medicated Molasses Urea Mineral Blocks (MUMBs) produced R 2015 001)
- A pH-based pen-side mastitis diagnostic kit is ready for commercialization.
- A Latex Agglutination Test kit for CCPP has been developed
- Accreditation of Virology reference diagnostic laboratory in Muguga to 17025:2005 is still on course.

7. Biotechnology Research Institute (BRI)

- Institutionalized Integrated and Interdisciplinary tsetse and trypanosomiasis control
- Validated use of tsetse Target technology for tsetse and HAT control in Lambwe Valley, and carried out regular monitoring, which has brought down the HAT cases to zero (last cases reported in 2006). Monitoring is continuing towards elimination.
- Contributed to research and publication of the tsetse fly genome
- Established an Embryo Transfer facility and in discussion with Private sector under PPP arrangement to operationalize the facility. This will greatly improve availability of replacement heifers in dairy industry.
- Developed maggot debridement therapy for treatment of chronic wound in both humans and livestock. Gotten the ethics approval from KNH. Seeking approval from pharmacy and poisons board for distribution.
- The Infectra Kit: An Innovative approach to transmission studies. The technology was developed for effective and efficient execution of transmission studies using vectors on live hosts. This kit enables minimal handling of the vectors during transmission studies, thereby protecting the user.

IX. STATEMENT OF DIRECTOR'S RESPONSIBILITIES

Section 81 of the Public Finance Management Act, 2012 and section 15 of the State Corporations Act, require the Directors to prepare financial statements in respect of that organization, which give a true and fair view of the state of affairs of the organization at the end of the financial year/period and the operating results of the organization for that year/period. The Directors are also required to ensure that the organization keeps proper accounting records which disclose with reasonable accuracy the financial position of the organization. The Directors are also responsible for safeguarding the assets of the organization.

The Directors are responsible for the preparation and presentation of the organization's financial statements, which give a true and fair view of the state of affairs of the organization for and as at the end of the financial year (period) ended on June 30, 2016. This responsibility includes: (i) maintaining adequate financial management arrangements and ensuring that these continue to be effective throughout the reporting period; (ii) maintaining proper accounting records, which disclose with reasonable accuracy at any time the financial position of the organization; (iii) designing, implementing and maintaining internal controls relevant to the preparation and fair presentation of the financial statements, and ensuring that they are free from material misstatements, whether due to error or fraud; (iv) safeguarding the assets of the organization; (v) selecting and applying appropriate accounting policies; and (vi) making accounting estimates that are reasonable in the circumstances.

The Directors accept responsibility for the organization's financial statements, which have been prepared in accordance with International Public Sector Accounting Standards (IPSAS), and in the manner required by the PFM Act and the State Corporations Act. The Directors are of the opinion that the organization's financial statements give a true and fair view of the state of organization's transactions during the financial year ended June 30, 2016, and of the organization's financial position as at that date. The Directors further confirm the completeness of the accounting records maintained for the organization, which have been relied upon in the preparation of the organization's financial statements as well as the adequacy of the systems of internal financial control.

With effect from 1st July 2014, Kenya Agricultural Research Institute(KARI), Kenya Sugar Research Foundation(KESREF), Tea Research Foundation(TRF) and Coffee Research Foundation(CRF), were dissolved in pursuant to the Kenya Agricultural and Livestock Research Act 2013. Its newly acquired name is Kenya Agricultural and Livestock Research Organization (KALRO). This will not affect the organization going concern for at least the next twelve months from the date of this statement.



Chairman, KALRO BoD

Date: 10/5/2017



Eliud K. Kireger (PhD)
Director General

Date: 10/05/2017

REPUBLIC OF KENYA

Telephone: +254-20-342330
Fax: +254-20-311482
E-mail: oag@oagkenya.go.ke
Website: www.oagkenya.go.ke



P.O. Box 30084-00100
NAIROBI

OFFICE OF THE AUDITOR-GENERAL

REPORT OF THE AUDITOR-GENERAL ON KENYA AGRICULTURAL AND LIVESTOCK RESEARCH ORGANISATION FOR THE YEAR ENDED 30 JUNE 2016

REPORT ON THE FINANCIAL STATEMENTS

I have audited the accompanying financial statements of Kenya Agricultural and Livestock Research Organisation set out on pages 20 to 38, which comprise the statement of financial position as at 30 June 2016, and the statement of financial performance, statement of changes in net assets, statement of cash flows and statement of comparison of budget and actual amounts for the year then ended, and a summary of significant accounting policies and other explanatory information in accordance with the provisions of Article 229 of the Constitution of Kenya and section 35 of the Public Audit Act, 2015. I have obtained all the information and explanations which, to the best of my knowledge and belief, were necessary for the purpose of the audit.

Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with International Public Sector Accounting Standards (Accrual Basis) and for such internal control as management determines is necessary to enable presentation of financial statements that are free from material misstatement, whether due to fraud or error.

The management is also responsible for the submission of the financial statements to the Auditor-General in accordance with the provisions of Section 47 of the Public Audit Act, 2015.

Auditor-General's Responsibility

My responsibility is to express an opinion on these financial statements based on the audit and report in accordance with the provisions of Section 48 of the Public Audit Act, 2015 and submit the audit report in compliance with Article 229(7) of the Constitution. The audit was conducted in accordance with International Standards of Supreme Audit Institutions. Those standards require compliance with ethical requirements and that the audit be planned and performed to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgement, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation

Report of the Auditor-General on the Financial Statements of Kenya Agriculture and Livestock Research Organization for the year ended 30 June 2016

and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Organization's internal control. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by the management, as well as evaluating the overall presentation of the financial statements.

I believe that the audit evidence obtained is sufficient and appropriate to provide a basis for my qualified audit opinion.

Basis for Qualified Opinion

1.0 Receivable from Non-Exchange Transactions

1.1 Long Outstanding Imprests

Included in receivables from non-exchange transactions balance of Kshs.368,289,000 and as disclosed under Note 22 to the financial statements, are staff imprests totalling Kshs.34,957,000 that are not supported with the dates of issue and the due dates. As reported in 2014/2015 financial year, temporary imprests' balance still includes amounts of Kshs.1,558,396 held by former employees of Kenya Sugar Research Institute and long outstanding imprest amounts of Kshs.5,980,161 of which Kshs.2,964,822 relates to imprests issued in the financial year 2009/2010 to the Sugar Research Institute.

1.2 Debt Recovery

As previously reported, the receivables from non-exchange transactions balance still includes an amount of Kshs.124,495,782 due from Kenya Planters Cooperative Union (in receivership) and Kshs.23,445,376 from Coffee Board of Kenya relating to Coffee Research Institute. Although the organization has made a full provision of Kshs.124,445,376 in respect of KPCU debt and forwarded a claim to receiver manager, no meaningful progress has been reported towards recovery of this debt as at the date of this report.

1.3 Commodity Levy

Receivables from non-exchange transactions figure also includes an amount of Kshs.314,223,000 in respect of commodity levy representing 85% of the total receivables from non-exchange transactions. This figure, however, includes Kshs.6,895,668 due from Nyambene Mills which is under receivership. The management has not provided evidence on the steps being taken to ensure that these debts are recovered.

Consequently, it has not been possible to confirm whether receivables from non-exchange transactions figure of Kshs.368,289,000, in these financial statements is fairly stated.

2.0 Receivables from Exchange Transactions

The receivables from exchange transactions' balance of Kshs.136,184,000 and as disclosed under Note 21 to the financial statements includes like in the previous years amounts of Kshs.12,649,000 and Kshs.33,287,000 owed by various debtors and Kenya Seed Company respectively which have remained outstanding for over four (4) years. The receivables figure also includes long outstanding debts of Kshs.537,700 owed by former Members of Parliament. In addition, included in the balance of Other Receivables of Kshs.31,636,000, disclosed under Note 21 is an amount of Kshs.1,760,000 due from Sugar Research Institute, a department within KALRO.

In view of the above, it is not possible to confirm whether receivables from exchange transactions' balance of Kshs.136,184,000 as at 30 June 2016 is fairly stated.

3.0 Biological Assets

Biological Assets balance of Kshs.388,203,000 includes assets within KALRO headquarters of Kshs.189,674,000 and Tea Research Institute (TRI) of Kshs.198,226,000. This figure, however, excludes undetermined value of assets held at Coffee Research Institute (CRI) and Sugar Research Institute (SRI). The balance of Kshs.388,203,000 as at 30 June 2016 is, however, less than the figure of Kshs.424,541,000 reported as at 30 June 2015 by Kshs.36,640,000. No documentary evidence or explanation has been provided to confirm whether the balance of biological assets reported was determined in compliance with paragraph 16 of International Public Sector Accounting Standard (IPSAS) No.27, which requires biological assets to be measured on initial recognition and at each reporting date at its fair value less costs to sell. In addition, included in the biological assets is the value of Livestock amounting to Kshs.138,569,232, whereas records produced for verification reflect a figure of Kshs.142,562,082 giving a variance of Kshs.3,992,850. In the circumstances, it is not possible to confirm whether biological assets' figure of Kshs.388,203,000 as at 30 June 2016 is fairly stated.

4.0 Property, Plant and Equipment

- (i) Included in the property, plant and equipment balance of Kshs.24,677,231,000 is an amount of Kshs.2,932,785,960 as previously reported, in respect of six (6) parcels of land relating to the former Kenya Agricultural Research Institute for which the Organization has no ownership documents. The parcels include L.R. No.5212 which, although the Institute holds an allotment letter, was allocated to a private developer. Further, part of the Organisation's land at Manera and Olmagogo farms in Naivasha - Mai Mahiu Road, was illegally acquired by private developers in the year 2000 and another property in Katumani Centre measuring approximately 100 hectares has been occupied by private developers since the year 2000. In addition, part of this land is being used as a dumping site by the County Government of Machakos and construction of a power station is taking place on the same land.

Similarly, in January 2011, a group of individuals forcibly invaded the Organization's land L.R.5210 and L.R.5211 in Naivasha, claiming ownership. The Organization filed a case in court to have them evicted, and a ruling in favour of the Organization was made on 29 March 2012. However, a review of the position at the date of this report revealed that the invaders had not vacated the land.

- (ii) As reported in the previous year, a review of available information and documentation of the Organization's land ownership documents as at 30 June 2016, still revealed that the Organization does not have title to 32 parcels of land across the country, some of which have not been surveyed.
- (iii) The property, plant and equipment balance of Kshs.24,677,231,000 as at 30 June 2016 excludes an undetermined value of parcels of land located in Azani and Koru measuring 99 ha and 127 ha respectively, which the Coffee Research Institute uses for farming. The titles to the parcels of land however are in the name of Coffee Board of Kenya (CBK) which has since merged to form Agricultural Food and Fisheries Authority.
- (iv) The Agricultural Mechanization Services (AMS) – a department within the Ministry of Agriculture - occupies a portion of the Organization's land at Rukera and has set up its own buildings. Although management clarified that the value of the constructions/improvements by AMS are not included in the assets balances, and that AMS was devolved from the National Government to the County Government, the County Government had not signed any lease agreement and has not paid any rent to the Coffee Research Institute for use of the land as at the date of this report.
- (v) The property, plant and equipment figure of Kshs.24,677,231,000 also excludes the value of a twenty (20) acre piece of land developed by Tea Research Institute in Kirinyaga County with an estimated value of Kshs.8,430,634. However, available information indicates that the land belongs to Kenya Forest Service.
- (vi) The property, plant and equipment net book value of Kshs.24,677,231,000 includes a figure of Kshs.81,650,080 representing the value of buildings allocated to Kenya Plant Health Inspectorate Service in 1998. The net book value is, therefore, overstated by the Kshs.81,650,000.
- (vii) The property, plant and equipment balance of Kshs.24,677,231,000 also includes the value of an office block completed in the year 2012/13 at a cost of Kshs.663,772,203 in respect to Sugar Research Institute. However, as previously reported, the valuation report on the building placed the value as Kshs.447,992,751 resulting in an unexplained difference of Kshs.215,779,453. It is still not clear how the value of a new building could drop below the actual cost of construction with such a high margin.

- (viii) The value of land reported under Coffee Research Institute is inclusive of undetermined value of coffee bushes thus violating the International Public Sector Accounting Standard (IPSAS) No.1 on presentation which requires various classes of assets to be shown separately on the face of the financial statements.
- (ix) As previously reported, the organization's residential building at Kisii sub-Centre of Coffee Research Institute has been taken over by the Kisii County Government with no benefit accruing to the Organization.

Under the foregoing circumstances, the accuracy and completeness of the property, plant and equipment figure of Kshs.24,677,231,000 could not be confirmed.

5.0 Trade and Other Payables

- (i). As previously reported, a construction company was awarded a contract to put up a new office block and Laboratories at Sugar Research Institute which were completed in the year 2013. However, to date, the Institute has not released the retention money amounting to Kshs.15,856,328 which is included in the trade and other payables balance of Kshs.182,503,000 disclosed under Note.31 to the financial statements.
- (ii). The trade and other payables balance of Kshs.182,503,000 also includes Kshs.3,771,786 as previously reported, owed to various hospitals that have remained unpaid for a very long time. Included also is an amount of Kshs.4,547,866 in regard to penalty from Kenya Revenue Authority on unremitted Pay As You Earn (PAYE). No explanation has been provided for failure to settle the long outstanding liabilities.
- (iii). Trade and other payables also includes Kshs.40,000,000 described as provision for liabilities relating to a provision for amounts owing to a contractor. However, Note 37 (ii) to the financial statements shows that Kshs.108.6 million was awarded to the contractor by an arbitrator resulting in a difference of Kshs.68.8 million.

Under the circumstances, it is not possible to confirm whether trade and other payables balance of Kshs.182,503,000 as at 30 June 2016 is fairly stated.

6.0 Investments

The investments figure of Kshs.2,149,000 as disclosed under Note 29 to the financial statements, includes a Kenya Planters Co-operative Union's (KPCU) unsecured loan stock of Kshs.40,000 and KPCU redeemable ordinary shares of Kshs.2,092,000 with a nil fair value as at 30 June 2016. Further, KPCU is under statutory management. In the circumstances, it is not possible to confirm whether the investments figure of Kshs.2,149,000 is fairly stated.

7.0 Cash and Cash Equivalents

7.1. Unaccounted for Cash

As previously reported, the cash and cash equivalents' balance of Kshs.930,442,000 as at 30 June 2016 still excludes cash withdrawals totalling Kshs.6,914,345 made in 2009/2010 in respect to Sugar Research Institute against which the related supporting documents were not provided for audit verification. Although management had indicated that the missing documents are a subject of investigation by the Sugar Research Foundation and other arms of the Government, the amount of Kshs.6,914,345 nevertheless remains unaccounted for and as at the date of this report, no evidence had been provided on the status of investigations for verification.

7.2 Long Outstanding Unpresented Cheques and Uncredited Items

Bank reconciliation statements for the bank balances of Kshs.930,442,000 disclosed under Note 20 to the financial statements includes unpresented cheques amounting to Kshs.452,634 dating back to 25 April 2015 and uncredited items totalling Kshs.126,255 dating back to 21 November 2008. The management has not explained why these long outstanding items have not been reversed and recorded in the cash book.

Under the circumstances, the accuracy of cash and cash equivalents' balance of Kshs.930,442,000 as 30 June 2016 could not be confirmed.

8.0 Statement of Changes in Net Assets

The statement of changes in net assets reflects a negative figure of Kshs.14,400,000 described as prior year adjustments under the general reserves. However, as disclosed under Note 37(iii) to the financial statements, this negative amount relates to amounts owing from the former KARI to NSSF for failure to remit statutory deductions. The total amount was Kshs.206.49 million and included capital and penalties. As further disclosed in Note 37(iii) to the financial statements, an amount of Kshs.112.690,000 was outstanding as at 30 June 2016 implying that an amount of Kshs.93.800,000 had been paid over time. The outstanding liability of Kshs.112.690,000 as at 30 June 2016 has however not been included in the trade and payables figure of Kshs.182,503,000 as disclosed under Note 31 to the financial statements. No basis was provided for the omission.

Qualified Opinion

In my opinion, except for the effect of the matters described in the Basis for Qualified Opinion paragraph, the financial statements present fairly, in all material respects, the financial position of Kenya Agricultural and Livestock Research Organization as at 30 June 2016, and of its financial performance and its cash flows for the year then ended, in accordance with International Public Sector Accounting Standards (Accrual Basis)

and comply with Kenya Agricultural and Research Organization Act, 2013 of the Laws of Kenya.

Other Matter

KALRO Act, 2013

As previously reported, the Cabinet Secretary Ministry of Agriculture, Livestock and Fisheries had set 1 August, 2014 as the commencement date for the operation of the Organization. This Act repealed the Science and Technology Act 250-KARI, Coffee Act (No 9 of 2001)-CRF, Sugar Act (No f 2001)-KESREF and the Tea Act Cap 343-TRF.

However, other than the Kenya Agricultural Research Institute, which was operating under the Science and Technology Act Cap 250 of the Laws of Kenya, the other parastatals were operating under the Companies Act, Cap 486 of the Laws of Kenya. According to section 221 (1) of the Cap 486, "An application to the court for winding up of a company shall be by petition presented, subject to the provisions of this section, either by the company, by any creditor or creditors (including any contingent or prospective creditor or creditors), contributory or contributories, or by all or any of those parties, together or separately".

Management has not provided evidence that this provision of the Companies Act, Cap 486 was complied with in the establishment of KALRO. Although management has stated that the entities were not wound up but merged, this explanation seems to be in contradiction with Section 56 of the KALRO Act, 2013 which states that, "Any reference to the former institution in any written law or in any contract, document or instrument of whatever nature shall, on the commencement of this Act, be read and construed as a reference to the Organization". In the absence of such evidence therefore, Coffee Research Foundation (CRF), Tea Research Foundation (TRF) and Kenya Sugar Research Foundation (KESREF) are still legally in existence.



FCPA Edward R. O. Ouko, CBS
AUDITOR-GENERAL

Nairobi

04 July 2017

X. STATEMENT OF FINANCIAL PERFORMANCE

For the year ended 30 June 2016

	Notes	2015-2016 Kshs'000	2014-2015 Kshs'000'
Revenue from exchange transactions			
Goods	3	384,718	381,189
Services	4	89,743	87,777
Interest Received	5	8,045	35,751
Other Receipts	6	46,501	76,696
		529,008	581,412
Revenue from non-exchange transactions			
GoK Recurrent	7	2,211,831	2,058,125
GoK Development	8	55,600	41,500
World Bank	9	28,875	259,658
Other Grants	10	1,091,497	928,211
Commodity levy	11	1,026,395	1,023,232
		4,414,198	4,310,726
Total Revenue		4,943,206	4,892,138
Expenses			
Staff Costs	12	2,987,846	2,934,253
Administrative Costs	13	1,686,003	1,881,202
Board Expenses	14	2,409	8,593
Audit Fees	15	7,953	3,713
Depreciation & Amortization expense	16	598,811	537,817
Repairs and Maintenance	17	113,481	148,014
Contracted Services	18	122,267	100,795
Finance cost	19	8,741	4,774
Total Expenses		5,527,511	5,619,161
Surplus/(Deficit)		(584,305)	(727,023)

The Financial Statements set out on pages 20 to 24 form an integral part of the Financial Statements.

XI. STATEMENT OF FINANCIAL POSITION
As at 30th June 2016

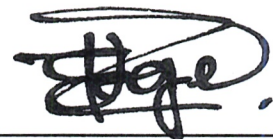
	Notes	2015-2016 Kshs'000	2014-2015 Kshs'000' <i>Restated</i>
Assets			
Current Assets			
Cash and Cash equivalents	20	930,442	1,257,923
Receivables from Exchange Transactions	21	136,184	151,309
Receivables from Non-exchange Transactions	22	368,289	537,509
Prepayments	23	51,937	39,250
Inventories	24	452,496	347,114
Deposits	25	2,331	2,331
		1,941,680	2,335,436
Non-Current Assets			
Property, Plant and Equipment	26	24,677,231	24,904,777
Intangible Assets	27	94,357	106,145
Biological Assets	28	388,203	424,541
Investments	29	2,149	2,149
		25,161,939	25,437,612
Total Assets		27,103,619	27,773,048
Liabilities			
Current liabilities			
Bank overdraft	30	14	10
**Trade & Other Payables	31	182,503	280,503
		182,516	280,513
Non-Current liabilities			
Deferred Income	32	73,315	102,275
Total Liabilities		255,831	382,788
Net assets		26,847,788	27,390,261
**General Reserve	33	1,585,213	2,169,518
Capital Fund	34	5,397,197	5,355,365
Revaluation Reserve	35	19,865,377	19,865,377
Total Net Assets and liabilities		26,847,788	27,390,261

The Financial Statements set out on pages 20 to 24 form an integral part of the Financial Statements.



Chairman, KALRO BoD

Date: 10/5/2017



Director General

Date: 10/05/2017

**The prior year audited figures have been restated. See note 33

XII STATEMENT OF CHANGES IN NET ASSETS

For the year ended 30 June 2016

	Capital Fund	Revaluation Reserve	General Reserve	Totals
	Kshs'000'	Kshs '000'	Kshs'000'	Kshs'000'
Balance as at 1st July 2014	5,192,383	19,865,377	2,910,941	27,968,701
Surplus/(Deficit) for the period	162,981	-	(727,023)	(564,041)
Prior year adjustments	-	-	(14,400)	(14,400)
Balance as at 30 June 2015(Restated)	5,355,365	19,865,377	2,169,518	27,390,260
Surplus/(Deficit) for the period	41,833	-	(584,305)	(542,472)
Balance C/F: 30/06/2016	<u>5,397,197</u>	<u>19,865,377</u>	<u>1,585,213</u>	<u>26,847,788</u>

XI. STATEMENT OF FINANCIAL POSITION
As at 30th June 2016

	Notes	2015-2016 Kshs'000	2014-2015 Kshs'000' <i>Restated</i>
Assets			
Current Assets			
Cash and Cash equivalents	20	930,442	1,257,923
Receivables from Exchange Transactions	21	136,184	151,309
Receivables from Non-exchange Transactions	22	368,289	537,509
Prepayments	23	51,937	39,250
Inventories	24	452,496	347,114
Deposits	25	2,331	2,331
		1,941,680	2,335,436
Non-Current Assets			
Property, Plant and Equipment	26	24,677,231	24,904,777
Intangible Assets	27	94,357	106,145
Biological Assets	28	388,203	424,541
Investments	29	2,149	2,149
		25,161,939	25,437,612
Total Assets		27,103,619	27,773,048
Liabilities			
Current liabilities			
Bank overdraft	30	14	10
**Trade & Other Payables	31	182,503	280,503
		182,516	280,513
Non-Current liabilities			
Deferred Income	32	73,315	102,275
Total Liabilities		255,831	382,788
Net assets		26,847,788	27,390,261
**General Reserve	33	1,585,213	2,169,518
Capital Fund	34	5,397,197	5,355,365
Revaluation Reserve	35	19,865,377	19,865,377
Total Net Assets and liabilities		26,847,788	27,390,261

The Financial Statements set out on pages 20 to 24 form an integral part of the Financial Statements.

Chairman, KALRO BoD

Date:

Director General

Date:

**The prior year audited figures have been restated. See note 33

XII STATEMENT OF CHANGES IN NET ASSETS

For the year ended 30 June 2016

	Capital Fund	Revaluation Reserve	General Reserve	Totals
	Kshs'000'	Kshs '000'	Kshs'000'	Kshs'000'
Balance as at 1st July 2014	5,192,383	19,865,377	2,910,941	27,968,701
Surplus/(Deficit) for the period	162,981	-	(727,023)	(564,041)
Prior year adjustments	-	-	(14,400)	(14,400)
Balance as at 30 June 2015(Restated)	5,355,365	19,865,377	2,169,518	27,390,260
Surplus/(Deficit) for the period	41,833	-	(584,305)	(542,472)
Balance C/F: 30/06/2016	<u>5,397,197</u>	<u>19,865,377</u>	<u>1,585,213</u>	<u>26,847,788</u>

XIII STATEMENT OF CASHFLOW

As at 30th June 2016

	Notes	2015-2016 Kshs'000	2014-2015 Kshs'000
Cash Flow from Operating Activities			
Receipts			
Sale of Goods		384,718	381,189
Finance Income		8,045	35,751
Rendering of Services		89,743	87,777
Government & Donor Grants		3,387,803	3,287,494
Commodities levies		1,026,395	1,023,232
Other Incomes		46,501	76,696
Sub-Total		4,943,206	4,892,138
Payments			
Compensation of employees		2,987,846	2,934,253
Goods & Services		1,932,113	2,142,317
Finance Costs		8,741	4,774
Sub-Total		4,928,700	5,081,344
Net Cash flow from operating activities	36	14,506	(189,206)
Cash flow from investing activities			
Purchase of property, plant equipment & intangible assets		(359,072)	(395,566)
Proceeds from sale of Assets		234	674
Revaluation of Biological assets		35,697	(83,265)
Decrease /(Increase)in Inventories		(105,383)	33,001
Decrease /(Increase) in Receivables-Exchange		15,125	(54,956)
Decrease /(Increase)in Receivables-Non-Exchange		169,220	(48,076)
Decrease /(Increase) in Prepayments		(12,687)	(1,581)
Increase/(Decrease)in Creditors		(97,997)	(71,703)
Sub-Total		4,210	(225,905)
Cash flow from Financing Activities			
Capital Grant		41,833	162,981
Deferred Income(Capital)		(28,960)	19,976
Sub-Total		12,872	182,957
Increase in Cash and Cash Equivalent for the Year		(327,481)	(627,745)
Cash and Cash Equivalent at the Start of the Year		1,257,923	1,885,668
Cash and Cash Equivalent at the End of the Year		930,442	1,257,923

The Financial Statements set out on pages 20 to 24 form an integral part of the Financial Statements.

XIV. STATEMENT OF COMPARISON OF BUDGET AND ACTUAL AMOUNTS

	Original budget 2015-2016 Kshs'000	Adjustments 2015-2016 Kshs'000'	Final Budget 2015-2016 Kshs'000'	Actual on comparable basis 2015-2016 Kshs'000'	Performance difference 2015-2016 Kshs'000'
Revenue from exchange transactions					
Goods	650,000		650,000	384,718	(265,282)
Services	100,000	-	100,000	89,743	(10,257)
Interest Received	10,000	-	10,000	8,045	(1,955)
Other Receipts	80,197	-	80,197	46,501	(33,696)
Sub total	840,197	-	840,197	529,008	
Revenue from non-exchange transactions					
GOK Personal Emoluments	4,260,967	(2,049,087)	2,211,880	2,211,831	(49)
GOK Development	626,015	(557,515)	68,500	55,600	(12,900)
World Bank	70,000		70,000	28,875	(41,125)
Other Grants	1,120,373	(68,730)	1,051,643	1,091,497	39,854
Commodity Levy	1,117,759		1,117,759	1,026,395	(91,364)
Sub total	7,195,114		4,519,782	4,414,198	
Total Revenue	8,035,311		5,359,979	4,943,206	
Expenses					
Staff Costs	5,053,342	(2,049,087)	3,004,255	2,987,846	16,409
Administrative Costs	1,999,926	(269,684)	1,730,242	1,686,003	44,239
Board Expenses	58,319		58,319	2,409	55,910
Audit Fees	3,500		3,500	7,953	(4,453)
Depreciation & Amortization expense	386,993	162,360	549,353	598,811	(49,458)
Repairs and Maintenance	387,100	(180,333)	206,767	113,481	93,286
Contracted Services	150,000		150,000	122,267	27,733
Finance cost	6,400		6,400	8,741	(2,341)
Total Expenses	8,045,580		5,708,836	5,527,511	181,325
Surplus/(Deficit)	(10,269)		(348,857)	(584,305)	

XV. NOTES TO THE FINANCIAL STATEMENTS

1. Statement of compliance and basis of preparation – IPSAS 1

The organization's financial statements have been prepared in accordance with and comply with International Public Sector Accounting Standards (IPSAS). The financial statements are presented in Kenya shillings, which is the functional and reporting currency of the organization and all values are rounded to the nearest thousand (Kshs. 000). The accounting policies have been consistently applied to all the years presented.

The financial statements have been prepared on the basis of historical cost, unless stated otherwise. The cash flow statement is prepared using the direct method. The financial statements are prepared on accrual basis

2. Summary of significant accounting policies

a) Revenue recognition

i) Revenue from non-exchange transactions - IPSAS 23

Transfers from other government entities

Revenues from non-exchange transactions with other government entities are measured at fair value and recognized on obtaining control of the asset (cash, goods, services and property) if the transfer is free from conditions and it is probable that the economic benefits or service potential related to the asset will flow to the organization and can be measured reliably.

ii) Revenue from exchange transactions – IPSAS 9

Rendering of services

The organization recognizes revenue from rendering of services only when it is probable that the economic benefits or service potential associated with the transaction will flow to the organization. When the outcome of the transaction involving the rendering of services cannot be estimated reliably, revenue shall be recognized only to the extent of the expenses recognized that are recoverable.

Sale of goods

Revenue from the sale of goods is recognized when the significant risks and rewards of ownership have been transferred to the buyer, usually on delivery of the goods and when the amount of revenue can be measured reliably and it is probable that the economic benefits or service potential associated with the transaction will flow to the organization.

Interest income

Interest income is accrued using the effective yield method. The effective yield discounts estimated future cash receipts through the expected life of the financial asset to that asset's net carrying amount. The method applies this yield to the principal outstanding to determine interest income each period.

Rental income

Rental income arising from operating leases on investment properties is accounted for on a straight-line basis over the lease terms and included in revenue

b) Budget information – IPSAS 24

The annual budget is prepared on the accrual basis, that is, all planned costs and income are presented in a single statement to determine the needs of the organization. As a result of the adoption of the accrual basis for budgeting purposes, there are no basis, timing or organization differences that would require reconciliation between the actual comparable amounts and the amounts presented as a separate additional financial statement in the statement of comparison of budget and actual amounts.

c) Property, plant and equipment – IPSAS 17

All property, plant and equipment are stated at cost less accumulated depreciation and impairment losses. Cost includes expenditure that is directly attributable to the acquisition of the items. All other repair and maintenance costs are recognized in surplus or deficit as incurred. Where an asset is acquired in a non-exchange transaction for nil or nominal consideration the asset is initially measured at its fairvalue.

Biological assets are measured on initial recognition and at the end of each reporting period at fair value less costs to sell in accordance with IPSAS 27

Depreciation is calculated to write off the cost or valuation of fixed assets using the straight-line method at the following annual rates

Buildings	
Motor vehicles and Motor cycles	25.00%
Tractors	25.00%
Plant and machinery	12.50%
Office equipment	12.50%
Computers & Electronics	33.33%
Furniture & fittings	12.50%
Laboratory equipment	12.50%
Infrastructural Assets	25.00%

d) Intangible assets—IPSAS 31

Intangible assets acquired separately are initially recognized at cost. The cost of intangible assets acquired in a non-exchange transaction is their fair value at the date of the exchange. Following initial recognition, intangible assets are carried at cost less any accumulated amortization and accumulated impairment losses. Internally generated intangible assets, excluding capitalized development costs, are not capitalized and expenditure is reflected in surplus or deficit in the period in which the expenditure is incurred.

The useful life of the intangible assets is assessed as either finite or indefinite.

e) Research and development costs

The organization expenses research costs as incurred. Development costs on an individual project are recognized as intangible assets when the organization can demonstrate:

- The technical feasibility of completing the asset so that the asset will be available for use or sale
- Its intention to complete and its ability to use or sell the asset
- How the asset will generate future economic benefits or service potential
- The availability of resources to complete the asset
- The ability to measure reliably the expenditure during development

Following initial recognition of an asset, the asset is carried at cost less any accumulated amortization and accumulated impairment losses. Amortization of the asset begins when development is complete and the asset is available for use. It is amortized over the period of expected future benefit. During the period of development, the asset is tested for impairment annually with any impairment losses recognized immediately in surplus or deficit.

f) Inventories – IPSAS 12

Inventory is measured at cost upon initial recognition. To the extent that inventory was received through non-exchange transactions (for no cost or for a nominal cost), the cost of the inventory is its fair value at the date of acquisition.

After initial recognition, inventory is measured at the lower of cost and net realizable value. However, to the extent that a class of inventory is distributed or deployed at no charge or for a nominal charge, that class of inventory is measured at the lower of cost and current replacement cost.

Net realizable value is the estimated selling price in the ordinary course of operations, less the estimated costs of completion and the estimated costs necessary to make the sale, exchange, or distribution.

Inventories are recognized as an expense when deployed for utilization or consumption in the ordinary course of operations of the organization.

g) Nature and purpose of reserves

The organization creates and maintains reserves in terms of specific requirements. organization to state the reserves maintained and appropriate policies adopted.

h) Employee benefits – IPSAS 25

Retirement benefit plans

The organization provides retirement benefits for its employees. The retirement scheme is contributory with employee and employer contributing as below on the basis of the Basic Salary.

	Employee	Employer
Former CRF	7.5%	15%
Former KARI	5%	10%
Former KESREF	5%	10%
Former TRF	10%	20%

i) Cash and cash equivalents

Cash and cash equivalents comprise cash on hand and cash at bank. Bank account balances include amounts held of at various commercial banks at the end of the financial year.

j) Comparative figures

Where necessary comparative figures for the previous financial year have been amended or reconfigured to conform to the required changes in presentation.

k) Significant judgments and sources of estimation uncertainty – IPSAS 1

The preparation of the organization's financial statements in conformity with IPSAS requires management to make judgments, estimates and assumptions that affect the reported amounts of revenues, expenses, assets and liabilities, and the disclosure of contingent liabilities, at the end of the reporting period. However, uncertainty about these assumptions and estimates could result in outcomes that require a material adjustment to the carrying amount of the asset or liability affected in future periods.

l) Estimates and assumptions

The key assumptions concerning the future and other key sources of estimation uncertainty at the reporting date, that have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial year, are described below. The organization based its assumptions and estimates on parameters available when the consolidated financial statements were prepared. However, existing circumstances and assumptions about future developments may change due to market changes or circumstances arising beyond the control of the organization. Such changes are reflected in the assumptions when they occur. IPSAS 1.140

m) Subsequent events – IPSAS 14

There have been no events subsequent to the financial year end with a significant impact on the financial statements for the year ended June 30, 2016.

n) Related Parties – IPSAS 20

The Organisation regards a related party as a person or an entity with the ability to exert control individually or jointly, or to exercise significant influence over the Organisation, or vice versa. Members of key management are regarded as related parties and comprise senior managers. No related party contracts or dealings were exchanged during the year except for earnings as employees. Further, the key management do not hold any specific interests. Allowances to members of the Board of Management are as shown (see Note 14), while the three key management emoluments for the year were Kshs 16.042million. This is included in the staff costs.

o) Taxes – IAS 12

The Organisation is only liable to income tax payable on interest and dividends received which are payable at source. The organisation is exempt from paying corporation tax.

p) Leases – IPSAS 13

The determination of whether an arrangement is, or contains a lease is based on the substance of the arrangement and requires an assessment of whether the fulfillment of the arrangement is dependent on the use of a specific asset or assets and the arrangement conveys a right to use the asset.

Leases are classified as finance leases whenever the terms of the lease transfer substantially all risks and rewards of ownership to the Organization as the lessee. All other leases are classified as operating leases. Where the Organization is the lessee, the total payments made under operating leases are charged to the statement of financial performance on a straight line basis over the period of the lease

q) Changes in accounting policies and estimates – IPSAS 3

The Organisation recognizes the effects of changes in accounting policy retrospectively. The effects of changes in accounting policy are applied prospectively if retrospective application is impractical.

r) Significant judgments and sources of estimation uncertainty – IPSAS 1

Estimates and judgments are continually evaluated and are based on historical experience and other factors, including expectations of future events that are believed to be reasonable under the circumstances. Although these estimates are based on the directors' knowledge of current events and actions, actual results may differ from these estimates. The estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognized in the period in which the estimate is revised if the revision affects only that period or in the period of the revision and future periods if the revision affects both current and future periods. The key areas of judgments and sources of uncertainty in estimation are as set out below:

i) Useful lives of Property, Plant and Equipment

The Board make estimates in determining the depreciation rates for property and equipment. The rates used are set out in the accounting policy (c) above for property and equipment. The Board reviews the estimated useful lives of plant and equipment at the end of each reporting period. During the financial year, no changes to the useful lives were identified by the Board.

ii) Contingent Liabilities

As disclosed in these financial statements, the Board is exposed to various contingent liabilities in the normal course of business. The Board evaluate the status of these exposures on a regular basis to assess the probability of the Board incurring related liabilities. However, provisions are only made in the financial statements where, based on the Board's evaluation, a present obligation has been established.

iii) Provision for Doubtful Debts

The organization reviews its receivables portfolio to assess the likelihood of impairment. Provision for impairment of receivables is established when there is a objective evidence that the Board will not be able to collect all amounts due. Where necessary, an estimation of the amounts irrecoverable is made in that year. Provision for impairment shall be recognized upon approval by the Board of Management.

iv) Other provisions

Other provisions are recognized when the Board has legal or constructive obligation as a result of past events, for which it is probable that an outflow of economic benefits will be required to settle the obligation, and a reliable estimate can be made of the amount of the obligation.

s) Financial Risk Management Objectives and Policies

The Board has initiated and facilitated the process that will see the enhancement of risk management. The Board has an integrated risk management strategy. The Board's approach to risk management is based on risk governance structures, risk management policies, risk identification, measurement, monitoring and reporting. The risk management policies and systems are reviewed regularly to ensure that they are in tandem with the micro and macro environment, regulatory guidelines, industry practice, market conditions as well as the services offered. The Board recognizes the critical role the risk management will continue to play in its endeavor to carry out its business in a dynamic environment. The Board is committed to ensure that corporate governance and risk management are deeply entrenched in the Organisation and culture.

i) Liquidity risk

Liquidity risk is the risk that the Board will not have sufficient financial resources to meet its obligations when they fall due or will have to do so at excessive costs. This risk can arise from mismatches in the timing of cash flows from revenue and capital/ operational outflows, assets and liabilities according to their maturity profiles and can occur where cash flow streams have been discontinued, etc. Funding risk arises when the necessary liquidity to fund illiquid asset positions cannot be met at expected terms and when required.

The objective of the liquidity and funding management is to ensure that all foreseeable operational and capital commitment expenditure can be met under both normal and stressed conditions and the mismatch is controlled in line with allowable risk levels.

The table shows the undiscounted cash flows on the Organisation financial assets and liabilities on the earliest possible maturity date. The liquidity ratio in FY 2015/16 is 7.86 (FY 2014/15: 6.94)

	Note	2015-2016 Kshs '000	2014-2015 Kshs '000
Financial Assets			
Bank and Cash Balances	20	930,442	1,257,923
Receivables	21&22	504,474	688,818
Total Financial Assets		1,434,916	1,946,741
Financial Liabilities			
Payables	31	182,503	280,503
Total Financial Liabilities		182,503	280,503
Net Liquidity		1,252,413	1,666,239
Liquidity Ratio		7.86	6.94

ii) Currency Risk

Currency risk arises primarily from purchasing and sales of goods and services from/to overseas or indirectly via local supplies. The currency risk is minimal as cash and cash equivalents held with banks are dominated in Kenya Shillings and there are minimal dealings in foreign currency.

iii) Operational risk

Operational risk is the risk of direct or indirect loss arising from a wide variety of causes associated with the Organisation's processes, personnel, technology and infrastructure and from external factors other than credit, market and liquidity risks such as legal and regulatory requirements and generally acceptable standards of corporate behavior.

The Organisation seeks to ensure that key operational risks are managed in a timely and effective manner through a framework of policies, procedures and tools to identify, assess, monitor and report such risks. The Organisation's objective is to manage operational risk so as to balance the avoidance of financial losses and damage to the Organisation's reputation with overall cost effectiveness and to avoid control procedures that restrict initiative and creativity.

iv) Compliance and Regulatory Risk

Compliance and regulatory risk includes the risk of non-compliance with regulatory requirements. The Organisation has complied with all externally imposed requirements throughout the year.

3 Sale of Goods

	2015-2016 Kshs '000	2014-2015 Kshs '000
Sheep & Goats	2,530	1,070
Cows	17,602	18,767
Poultry	19,988	16,888
Maize	4,852	3,464
Sorghum & Millets	296	131
Rice	276	75
Root and Tuber	3,236	2,005
Vegetables	78	262
Herbs	1	6
Beans	380	83
Fruits	579	496
Bananas	649	600
Wheat	8,840	18,828
Cassava	1	8
Seeds	77,591	49,009
Seedlings	42,131	42,426
Trees and Plants	508	233
Manure	187	329
Sand & Ballast	102	419

Firewood	273	554
Flowers	244	31
Pyrethrum	-	122
Cotton	27	64
Fodder	9,873	12,543
Beef	36	185
Milk	21,228	18,723
Eggs	194	147
Tomatoes	45	59
Hay	4,617	4,415
Water	444	754
Other Farm produce	29,156	26,730
Increase/Decrease in Stock	23,533	48,617
Sale of Scrap	4,543	390
Coffee, Milling Cane and Tea Sales	110,677	112,425
Total	384,718	381,189

4. Services

	2015-2016	2014-2015
	Kshs '000	Kshs '000
Soil Analysis	10,801	11,701
Other Lab Services	10,357	2,659
Sale of Journals Periodicals	66	245
Hire-Ground/Conference Facilities	10,675	11,481
Royalties	1,784	5,859
Rent	52,071	52,390
Other services	3,989	3,441
Total	89,743	87,777

5. Interest Received

	2015-2016	2014-2015
	Kshs '000	Kshs '000
Interest Received	8,045	35,751
Total	8,045	35,751

6. Other Receipts

	2015-2016	2014-2015
	Kshs '000	Kshs '000
Cafeteria Income	26,321	30,701
Guest House Income	9,014	11,108
Bus Income	639	686
Utilities Income	4,304	2,182
Sale of Tender Documents	681	142
Grazing Fee	1,717	1,619
Commission Received	43	39
Sale of mature trees	2	9
Library coffee	14	14
Gain/(Loss) on Foreign exchange	1,195	24,568
Gain/(Loss) on revaluation of assets	-	3,935
Gain/(Loss) on Sale of Fixed Assets	2,570	1,692
Total	46,501	76,696

7. GOK Personnel Emoluments

	2015-2016	2014-2015
	Kshs '000	Kshs '000
Grants-Personal Emoluments	2,211,831	2,058,125
Total	2,211,831	2,058,125

8. GOK Development Funds

This represents GoK funds received from development research activities.

	2015-2016 Kshs '000	2014-2015 Kshs '000
Development Grant -GoK	55,600	41,500
Sub-Total	55,600	41,500

9. World Bank

	2015-2016 Kshs '000	2014-2015 Kshs '000
Development Fund - KAPAP	21,651	177,463
Development Fund - EAAPP	7,224	82,195
Total	28,875	259,658

10. Development Funds - Other Donors

These represent grants received from various donors for research activities.

	2015-2016 Kshs '000	2014-2015 Kshs '000
Development Grant - EU	329,517	77,169
Development Grant - USAID	4,715	12,415
Development Grant - CIP	45,834	77,644
Development Grant - CIAT	3,288	5,509
Development Grant - ICRAF	1,085	3,629
Development Grant - FAO	5,461	7,575
Development Grant - ILRI	2,675	35,078
Development Grant - ADB	-	16,535
Development Grant - ICRISAT	1,690	4,111
Development Grant - CIMMYT	93,110	63,805
Development Grant - IDRC	-	5,745
Development Grant - AGRA	14,321	39,711
Development Grant - ASARECA	-	8,807
Development Grants -CORNEL UNI	-	4,571
Development Grant - Small Grants	589,801	565,907
Total	1,091,497	928,211

11. Commodity levy

	2015-2016 Kshs '000	2014-2015 Kshs '000
Commodity levy	1,026,395	1,023,232
Total	1,026,395	1,023,232

12. Staff Costs

	2015-2016 Kshs '000	2014-2015 Kshs '000
Basic Salary	1,477,070	1,521,272
House Allowance	466,519	328,678
Other Personal Allowance	97,362	53,901
Commuter Allowance	212,041	223,588
Transfer Allowance	4,632	2,738
Passage & Leave Expenses	22,114	24,654
Gratuity & Pension Contribution	198,694	251,172
Medical Expenses	213,876	193,282
Casual Labour	295,539	334,967
Total	2,987,846	2,934,253

13. Administrative Costs

	2015-2016 Kshs '000	2014-2015 Kshs '000
Fuels, Oils and Lubricants	63,138	109,592
Vehicle Insurance	30,401	28,314
Road Tax & Licenses	370	1,715
Hire of Transport	2,711	6,865
Freight, Clearing & Shipping	370	1,492
Purchase of Supplies Production	149,200	211,105
Purchase of Drugs	3,993	5,502
Purchase of Sierra & Vaccines	7,383	1,414
Farm Development	30,978	76,942
Purchase of Fungi Insecticide & Sprays	49,096	9,612
Purchase of Farm Input	62,455	49,450
Purchase of Laboratory Stores	45,376	58,785
Research Materials	20,782	87,357
Purchase of Animals	7,331	1,060
Purchase of Dressing & Non Pharmaceutical	5	90
Purchase of Consumables Stores	5,887	20,709
Miscellaneous. Operating Expenses	1,157	12,584
Hire Machinery & Equipment's	1,143	14,168
Purchase of Workshop Tools, Spares & Equipment	3,137	2,140
Farm Grants (CIGs/CBOs)	42,779	17,283
Office Running Expenses	10,308	9,034
Office Stationery	21,293	25,923
Computer Expenses	18,876	7,420
Printing and Publishing	10,259	6,665
Advertising and Publicity	31,930	23,306
Library Expenses	1,337	1,331
Show Expenses	13,155	18,602
Cafeteria Expenses	22,421	24,973
Food and Ration	14,110	10,035
Official Entertainment	4,720	2,580
Conference and Seminars	18,891	38,671
Rent and Rates	7,914	4,951
Commission and Honoraria	12,567	15,802
Security Expenses	78,531	49,150
Insurance - Property	20,945	3,815
Uniforms and Clothing	4,522	3,282
Miscellaneous Charges	22,116	16,204
Subscriptions to Newspapers	626	508
Insurance - GPA & GL	6,529	25,001
Daily Subsistence Allowance	566,957	639,118
External Travels and Per Diem	27,333	30,876
Travel Costs (Air & Bus) Mileage	22,813	19,629
Training	64,446	52,387
Water Expenses	8,016	4,610
Electricity Supplies	81,144	100,179
Gas Expenses	96	45
Telephone Expenses	8,570	12,187
Postage and Courier Expenses	2,962	2,852
Internet Connections	19,763	4,848
Leased Communication Lines	-	1,394
Membership Fees & Subscription	9,343	1,957
Legal Dues, Arbitration & Compensation	25,821	7,687
Total	1,686,003	1,881,202

14. Board Expenses

Board	2015-2016 Kshs '000	2014-2015 Kshs '000
Board and Committees	2,409	8,593
Total	2,409	8,593

15. Audit Fees

These are fees incurred by the Institute during external audits.

	2015-2016 Kshs '000	2014-2015 Kshs '000
Audit Fees	7,953	3,713
Total	7,953	3,713

16. Depreciation & Amortization Expense

	2015-2016 Kshs '000	2014-2015 Kshs '000
Buildings	124,327	123,941
Plant and Machinery	30,065	25,925
Motor Vehicles	128,501	104,571
Motor Cycles & Bicycles	1,926	1,937
Lab & Scientific Equipment	95,984	74,551
Office & Computer Equip.	124,747	118,488
Office Furniture & Fittings	25,735	20,542
Infrastructure (G/hses, fences, streetlighting)	7,482	12,417
Amortization - Tea Bushes	642	-
Amortization-Software	59,401	55,446
Total	598,811	537,817

17. Repairs and maintenance

These refers to repairs and maintenance on the various assets of the organisation

	2015-2016 Kshs '000	2014-2015 Kshs '000
Repairs & Maintenance of Vehicles	52,801	59,349
Repairs & Maintenance of Motor Cycles	77	160
Repair & Maintenance of Buildings & Stations	32,451	43,602
Repair & Maintenance of Water Supplies and Pumps	3,457	4,281
Repair & Maintenance of Office Equipment	2,800	4,393
Repairs & Maintenance Laboratory Equipment	1,271	946
Repairs & Maintenance Furniture	103	271
Maintenance of Plant and Machinery	20,063	29,454
Maintenance of Roads, Ferries	203	1,296
Minor Alteration & Maintenance of Works	255	4,261
Total	113,481	148,014

18. Contracted Professional Services

	2015-2016 Kshs '000	2014-2015 Kshs '000
Contracted Professional Services	122,267	100,795
Total	122,267	100,795

19 Finance cost

	2015-2016 Kshs '000	2014-2015 Kshs '000
Bank Charges	8,741	4,774
Total	8,741	4,774

20 Cash and cash equivalent

	2015-2016 Kshs '000	2014-2015 Kshs '000
Bank Balances	930,442	1,257,923
Total	930,442	1,257,923

21 Receivables from Exchange Transactions

	2015-2016 Kshs '000	2014-2015 Kshs '000
Trade Debtors	70,189	57,134
Kenya Seed	33,287	33,287
Prepayments	1,592	1,592
Rent dues	1,523	721
Bungoma Union	746	746
Mugama Co-op Union	1,863	1,863
Other Receivables	31,636	60,011
Former staff debtors	663	663
Provision for Doubtful Debts	-5,315	-4,709
Total	136,184	151,309

	2015-2016 Kshs '000	2014-2015 Kshs '000
22 Receivables from Non-exchange Transactions		
GoK recurrent	-	159,750
Commodity Levy	314,223	315,269
Staff Imprest	34,957	45,021
Staff advances	3,519	1,781
Medical Debtors	-	98
Coffee Board of Kenya	23,445	23,445
KPCU	124,496	124,496
Provision for Doubtful Debts	(132,351)	(132,351)
Total	368,289	537,509
23 Prepayments		
	2015-2016 Kshs '000	2014-2015 Kshs '000
Medical cover	51,937	39,250
Total	51,937	39,250
24 Inventories		
	2015-2016 Kshs '000	2014-2015 Kshs '000
Consumables	303,933	172,635
Livestock	142,562	167,136
Crop	6,342	7,684
Provision for obsolete stock	(341)	(341)
Total	452,496	347,114
25 Deposits		
	2015-2016 Kshs '000	2014-2015 Kshs '000
Deposits	2,331	2,331
Total	2,331	2,331

26. Property, plant and Equipment

	LAND	BUILDINGS	MOTOR VEHICLES	PLANT & MACHINERY	OFFICE EQUIP.	FURNITURE & FITTINGS	LAB EQUIPMENT	MOTOR CYCLES & BICYCLES	INFRASTRUCTURE(G/hses,fences,streetlighting)	WORK IN PROGRESS	TOTAL
Cost	Kshs'000'	Kshs'000'	Kshs'000'	Kshs'000'	Kshs'000'	Kshs'000'	Kshs'000'	Kshs'000'	Kshs'000'	Kshs'000'	Kshs'000'
As at 1 July 2014	18,065,734	5,932,300	489,183	222,516	374,140	169,904	690,545	7,748	75,251	265,556	26,292,876
Prior Year Adjustment on b/f cost	-	-	-	-	-	-	-	-	-	-	-
Addition for the period	-	13,567	21,812	7,999	14,331	26,236	21,858	-	324	289,439	395,566
Reclassification of assets categories	-	-	-	6,489	-	-	(6,489)	-	-	-	-
Transfer to Biological assets	(201,432)	-	-	-	-	-	-	-	-	-	(201,432)
Disposal for the period	-	-	(2,093)	-	-	-	-	-	-	-	(2,093)
Transfer from WIP	-	158,943	-	-	-	-	-	-	-	(158,943)	-
As at 1 July 2015	17,864,302	6,104,810	508,902	237,004	388,471	196,140	705,913	7,748	75,575	396,052	26,484,917
Addition for the period	-	11,309	36,524	11,227	25,557	17,338	51,226	-	29,503	128,771	311,456
Transfer from WIP	-	229,739	-	-	-	-	-	-	-	(229,739)	-
Reclassification of assets categories	-	-	-	(6,489)	4,575	1,914	-	-	-	-	-
Transfer to Biological assets	-	-	-	-	-	-	-	-	-	-	-
Disposal for the period	-	-	(675)	(700)	-	-	-	-	-	-	(1,375)
Cost to end of period	17,864,302	6,345,858	544,751	241,042	418,602	215,393	757,140	7,748	105,078	295,084	26,794,998
Depreciation											
Accumulated Depreciation b/f	-	409,132	350,418	105,139	257,668	84,666	299,147	5,110	68,861	-	1,580,140
Prior Year Adjustment on b/f Depreciation	-	-	-	-	-	-	-	-	-	-	-
Adjusted Depreciation b/f	-	409,132	350,418	105,139	257,668	84,666	299,147	5,110	68,861	-	1,580,140
Charge for the period	-	124,327	128,501	30,065	125,211	25,271	95,984	1,926	7,482	-	538,768
Accumulated depreciation on disposal	-	-	(674)	(467)	-	-	-	-	-	-	(1,141)
Depreciation on reclassification	-	-	-	-	-	-	-	-	-	-	-
Accumulated depreciation to end of period	-	533,458	478,245	134,737	382,879	109,936	395,131	7,036	76,343	-	2,117,767
Net Book Value at 30 June 2016	17,864,302	5,812,400	66,505	106,305	35,723	105,456	362,009	712	28,734	295,084	24,677,231
Net Book Value at 30 June 2015	17,864,302	5,695,679	158,484	131,865	130,803	111,475	406,767	2,638	6,713	396,052	24,904,777

27 Intangible Assets

	2015-2016 Kshs '000	2014-2015 Kshs '000
Cost at the start of the Year	182,746	182,746
Addition for the period	47,616	-
Cost or Valuation at end of Period	230,362	182,746
Accumulated amortization b/f	76,604	21,155
Amortization for the period	59,402	55,446
Accumulated amortization at the end of period	136,005	76,601
Net Book Value at end of Period	94,357	106,145

28 Biological Assets

	2015-2016 Kshs '000	2014-2015 Kshs '000
As at 1st July	424,541	146,738
Reclassification of assets category	-	200,792
Loss in value due to reclassification	-	(1,283)
Sold during the year	(1,272)	(5,481)
Gain in Value during the year	(35,067)	88,535
As at 30th June	388,203	429,301
Apportionment:		
Current portion (cane over 6 months)	-	4,760
Non-current portion (cane below six months)	-	630
	-	5,390
Total	388,203	424,541

29 Investments

Quoted Investments:

1,672 B A T Kenya Limited shares-
Fairvalue is Kshs 1,396,120 (2014/2015:Kshs 1,238,211)

Other Investments:

KPCU Unsecured Loan Stock
KPCU Redeemable Ordinary shares
Fairvalue is Kshs 0 (2014/2015:Kshs 0)

Total

	2015-2016 Kshs '000	2014-2015 Kshs '000
	17	17
	40	40
	2,092	2,092
Total	2,149	2,149

The fair value of BAT shares is determined by reference to published price quotation in the active market (NSE). On 30th June 2016, the shares traded at Kshs 835 per share.

The KPCU unsecured loan stock and redeemable ordinary shares are unquoted investments classified as available for sale and measured at cost. The fair value of KPCU is estimated at zero as the KPCU is under the statutory management by Kenya Commercial Bank.

30 Bank Overdraft

	2015-2016 Kshs '000	2014-2015 Kshs '000
Bank overdraft	14	10
Total	14	10

31 Trade and Other Payables

	2015-2016 Kshs '000	2014-2015 Kshs '000
Trade Creditors	109,962	88,278
Statutory Deductions	6,566	31,330
Other Creditors	9,586	104,547
Rent Deposits	532	491
Capital WIP Retention	15,856	15,856
Provision for Liabilities(Arbitration - Dinesh Construction)	40,000	40,000
Total	182,503	280,503

32 Deferred income

Grants received from donors for specific projects are classified as non-current liabilities. They are carried at amortized cost of which amortization is recorded as other grants in proportion to expenditure incurred on the project over the life of the project.

	2015-2016 Kshs '000	2014-2015 Kshs '000
Balance Brought Forward as a 1st July	102,275	82,298
Additional Receipts	74,224	36,483
Total	176,499	118,782
Expenditure Incurred	(103,184)	(16,507)
Balance Carried Forward as at 30th June	73,315	102,275

33 General reserve

	2015-2016 Kshs '000	2014-2015 Kshs '000
Balance Brought Forward as at 1 July	2,169,518	2,910,941
Surplus/(Deficit) for the Year	(584,305)	(727,023)
Prior year adjustments	-	(14,400)
Balance Carried Forward as at 30 June	1,585,213	2,169,518

34 Capital fund

	2015-2016 Kshs '000	2014-2015 Kshs '000
Capital Funds Brought Forward as at 1st July	5,355,365	5,192,383
Capital Funds during the year	41,832.63	162,981
Balance Carried Forward as at 30th June	5,397,197	5,355,365

35 Revaluation reserve

	2015-2016 Kshs '000	2014-2015 Kshs '000
Balance Brought Forward as a 1st July	19,865,377	19,865,377
Balance Carried Forward as at 30th June	19,865,377	19,865,377

36 Net cash flow from operating activities

	2015-2016 Kshs '000	2014-2015 Kshs '000
Surplus/(Deficit)	(584,305)	(727,023)
Add : Depreciation	598,811	537,817
Net Cash Flow	14,506	(189,206)

37 Provisions for contingent liabilities

(i) During the financial year under review, liability relating to actual deficit as per the report on actuarial valuation of the Kenya Agricultural and Livestock Research Organization Staff retirement benefits Scheme indicated a valuation figure of Kshs.427 million. It is worth noting that this figure keep on changing every year and could not be disclosed under trade payables as it would materially affect the working capital of the Institute.

(ii) As at the end of the financial year, KALRO-Sugar Research Institute was involved in an arbitration process with Dinesh Construction Company Limited relating to disputed values of certificates of completion of the new office block. The arbitration process had been completed but award was not yet out. The award has now been given for Kshs. 108.6 million in favour of Dinesh Construction Company Ltd on 13th September 2016. The management is still reviewing the ruling to determine whether an appeal should be made.

(iii) Liability relating to NSSF penalty for the period January 1998 to January 2008 which amounted to Ksh. 206.49million is as shown below. The matter is still being negotiated to have the penalty waived and thus could not be disclosed under trade payables.

	2015-2016 Kshs '000	2014-2015 Kshs '000
Balance Brought forward as a 1st July	127,094	141,494
Payments	(14,400)	(14,400)
Balance Brought down as a 30th June	112,694	127,094

38 Prior year adjustments

During the financial year under review, the following prior year adjustments were made

Item	Kshs '000
NSSF Penalties	14,400
General Reserve	<u>(14,400)</u>
Total	<u><u>-</u></u>