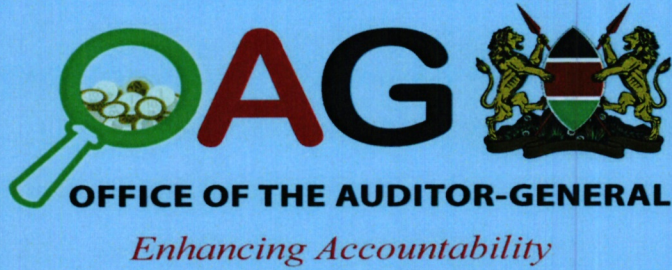



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REPORT

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THE AUDITOR-GENERAL

ON

**KENYA AGRICULTURAL AND LIVESTOCK
RESEARCH ORGANIZATION**

**FOR THE YEAR ENDED
30 JUNE, 2020**

11/11/11



**KENYA AGRICULTURAL AND LIVESTOCK RESEARCH
ORGANIZATION
(KALRO)**

ANNUAL REPORT AND FINANCIAL STATEMENTS

**FOR THE FINANCIAL YEAR ENDING
JUNE 30, 2020**

**Prepared in accordance with the Accrual Basis of Accounting Method under the International Public
Sector Accounting**

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ABBREVIATIONS

AIA	Appropriation in Aid
AMRI	Agricultural Mechanization Research Institute
APVC	Agricultural Product Value Chains
ASA	American Society of Agronomy
ASAL	Arid and Semi-Arid Lands
BoM	Board of Management
CBPP	Contagious Bovine Pleuro-Pneumonia
CEO	Chief Executive Officer
CNA	Competence Needs Assessment
CS-APP	Climate Smart Agricultural Productivity Project
DUS	Distinctness Uniformity Stability
EAAPP	East African Agricultural Productivity Project
ECF	East Coast Fever
ERP	Enterprise Resource Planning
ESAMI	Eastern and Southern African Management Institute
FFS	Farmer Field Schools
GAP	Good Agricultural Practices
GCHERA	Global Consortium of High Education for Africa
GIZ	German Development Agency
HRI	Gesellschaft für Internationale Zusammenarbeit
ICWES	Horticulture Research Institute
IPSAS	International Conference of Women Engineers and Sciences
KALRO	International Public Sector Accounting Standards (IPSAS)
KARI	Kenya Agricultural and Livestock Research Organization
KEPHIS	Kenya Agricultural Research Institute
KEVEVAPI	Kenya Plant Health Inspectorate Services
KCSAP	Kenya Veterinary Vaccines Production Institute
MNLD	Kenya Climate-Smart Agriculture Project
NPT	Maize Lethal Necrosis Disease
MoUs	National Performance Trials
MT	Memorandum of Understandings
MTP	Metric Tons
NACOSTI	Medium Term Plan
NPT	National Commission for Science, Technology and Innovation
PCPB	National Performance Testing
PPR	Pest Control Products Board
RVF	Peste des Petits Ruminants
SSSEA	Rift Valley Fever
ToTs	Soil Science Society of East Africa
USAID-FtF	Trainer of Trainers
	United States Agency for International Development - Feed the Future

Our Vision

Excellence in agriculture and livestock research towards transformed livelihoods.

Our Mission

To conduct agricultural research through application of science, technology and innovation to catalyse sustainable growth and development in agriculture and livestock Product Value Chains.

Organization Goal

To contribute to the growth of the agricultural sector through research coordination and regulation; technology and innovation development; and catalyse transfer and utilization of agricultural research outputs.

Our Guiding Core Values

KALRO will be guided by the following core values in its operations:

a) Customer orientation

The central focus of KALRO is to provide timely and responsive demand-driven research interventions aimed at addressing the needs of the customers within the agricultural sector. KALRO will achieve this by maintaining a culture that promotes responsiveness to customer needs.

b) Professionalism

KALRO will uphold high standards of excellence in the provision of services to their customers. One of the hallmarks of excellence is integrity and ethics in all areas of operation. In this regard, KALRO research outputs and recommendations will adhere to the highest standards of scientific rigour, ethics and sound evidence base.

c) Innovativeness

KALRO recognizes the need for innovation in order to be responsive to the agricultural sector challenges. In this regard KALRO commits to develop flexible and integrated solutions in-tandem with the needs of customers and stakeholders.

d) Collaboration

Given the multi-stakeholder interest that the agricultural sector attracts, KALRO is expected to collaborate and forge partnerships for the development of the sector in Kenya and beyond. KALRO will therefore endeavor to create beneficial opportunities for agricultural research and development.

e) Environmental consciousness

KALRO will ensure that the environment is conserved while discharging its mandate.

f) Integrity

KALRO is committed to ethical delivery of its mandate to all stakeholders.

I. KEY ORGANIZATION INFORMATION AND MANAGEMENT

(a) Background information

The Kenya Agricultural and Livestock Research Organization (KALRO) is a 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, Fisheries and Cooperatives, 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 Organization's mandate is to undertake, streamline, coordinate and regulate all aspects of research in agriculture and livestock development, and promote the application of the research findings, technologies and innovations. Its mission is to conduct agricultural research through application of science, technology and innovation to catalyze sustainable growth and development in agriculture and livestock product value chains. 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.

(c) Key Management

The Organization's day-to-day management is under the following:

1. Director General
2. Deputy Director General (Livestock)
3. Deputy Director General (Crops)

(d) Fiduciary Management

The key management personnel who held office during the financial year ended 30th June 2020 and who had direct fiduciary responsibility were;

No.	Designation	Name
1	Director General	Dr. Eliud K. Kireger
2	Deputy Director General-Livestock	Dr. Joseph Mureithi
3	Deputy Director General -Crops	Dr. Felister Makini
4	Director, Livestock Systems	Dr. Foustine Wandera
5	Director, Socio-Economics & Policy Development	Dr. Festus Murithi
6	Director, Knowledge Management.	Dr. Jack Ouda
7	Director, Crops Systems	Dr. Lusike Wasilwa
8	Director, Natural Resources Management	Dr. David Kamau
9	Director, Partnership & Business Development	Dr. Monicah Waiganjo
10	Director, Planning & Performance Contract	Dr. Joseph Kimemia

No.	Designation	Name
11	Director, Human Resources & Administration	Mr. Sammy Ndei
12	Director, Finance & Accounts	Mr. David Muriithi
13	Director, Supply Chain Management	Mr. Stevens Musewe
14	Director, Information Communication and Technology	Mr. Boniface Akuku
15	Director, Internal Audit	Mr. Francis Langat
16	Principal Legal Officer	Ms. Patricia Ngutu

(e) Fiduciary Oversight Arrangements

- Ministry of Agriculture, Livestock, Fisheries and Co-operatives
- The National Treasury

(f) Organization Headquarters

Kaptagat Road, Loresho
P. O. Box 57811-00200
Nairobi, Kenya

(g) Entity Contacts

Telephone : 0709 104 000, 0722 206 986/8/ 0733 333 223/4
Email: director@kalro.org
Website: www.kalro.org

(h) Organization Bankers

1. Kenya Commercial Bank
P.O. Box 46950-00100
Nairobi
Tel No. 020-2214878,
2. NCBA Bank Kenya
P.O. Box 44599- 00100
Nairobi.
Tel No. 020-4450882,
3. Co-operative Bank of Kenya Ltd
P O Box 48231 - 00100
Nairobi
Tel No. 020-2776000
4. Stanbic Bank Kenya
P.O Box 30550-00100
Nairobi.
Tel No. 020-3268888.

5. National Bank of Kenya
P.O Box 72866-00200
Nairobi.
Tel No.020-2828000.

7. Absa Bank Kenya
Westend Building,
Off Waiyaki Way.
PO Box 30120 - 00100.
Nairobi.
Tel: +254 (20) 3900000. Cell: +254 (722) 130120. Cell: +254 (732) 130120.

(i) Independent Auditors
Office of the Auditor General,
Anniversary Towers, University Way
P.O. Box 30084-00100
Nairobi, Kenya

(j) Principal Legal Adviser
KALRO Legal Office
P.O. Box 57811 – 00200
Cellphone. 0709 104 000, 0722 206 986/8/ 0733 333 223/4
Email: director@kalro.org
Nairobi

II. THE BOARD OF MANAGEMENT

Mr. Wilfred Chacha Rotich



Mr Wilfred Chacha Rotich is the Chairman of the KALRO Board of Management. He holds a Bachelor's Degree in Social Studies (Government and Public Administration-First Class Honours from Moi University), Masters of Arts in Public Administration and Policy from Moi University and is currently pursuing a PhD in Political Science. His areas of interest are Policy, Governmental Processes Research and Development.

Mr. Wilfred Chacha is appointed Member, Chairman KALRO BoM.

Prof. Walter O. Oyawa, PhD



Prof. Walter O. Oyawa is currently the Director General/Chief Executive Officer of the National Commission for Science, Technology and Innovation (NACOSTI). He holds a PhD in Civil Engineering (Structural Engineering), at Kyoto University, Japan, M.Sc. Civil Engineering (Structural Engineering), at the University of Nairobi, Master of Tropical Veterinary Science at the University of Edinburgh and a B.Sc. Civil Engineering, at the University of Nairobi. He holds an Executive Master of Business Administration (EMBA), at JKUAT. He is a Registered Professional Engineer, Engineers Registration Board of Kenya (ERB), Corporate member, Institution of Engineers of Kenya (IEK), and Lead Expert, National Environmental Management Authority (NEMA).

Prof. Walter O. Oyawa is a member of KALRO BoM.

CPA Margaret Wamuyu



CPA Margaret Wamuyu is a professional accountant with experience at different Boards and is currently pursuing a PhD in Finance. She is a Certified Public Accountant and a Member of Institute of Certified Public Accountants of Kenya (ICPAK). She also holds a Master of Business Administration degree from the University of Nairobi and Bachelor of Commerce degree (First Class Honors) from KCA University. She is a Senior Government Officer with a wealth of experience in Accounting, Performance Contracting and Public Financial Management. She is currently working at the National

Treasury and Planning.

She represents, PS National Treasury

Mrs. Mary W. Mwambia



Mrs. Mary Mwambia is appointed Member. She Chairs Finance and Administration Committee. Mrs Mary Mwambia holds a Bsc in Food science and Technology from the University of Nairobi, an MSC in Agricultural Studies from University of Queensland - Australia and an MA in Counselling Psychology from Daystar University. She also holds a certificate in milk quality Control from Swedish University of Agriculture. Mary has vast experience in Livestock issues and has served as Deputy Director of Livestock in charge of Dairy and Livestock Feeds in the Ministry of Agriculture and Livestock for 30 years. She has chaired Dairy and Livestock Feeds Committee in KEBS and has been involved in dairy and feeds standards development in Kenya, East Africa and Comesa. She is currently running a family business in Tea and Dairy farming in Murang'a.

Mrs. Mary Mwambia is appointed Member. She Chairs Finance and Administration Committee

Mrs. Grace G. Kimaru



Mrs. Grace G. Kimaru is currently Deputy Director in charge of Livestock Market Development and Agribusiness in the Directorate of Livestock Production, State Department of Livestock Production, Ministry of Agriculture, Livestock, Fisheries and Cooperatives. She is currently pursuing a PhD in Entrepreneurship at Jomo Kenyatta University of Agriculture and Technology. She is a member of Animal Production Society of Kenya (APSK).

She also holds a Masters Degree in Entrepreneurship from the Jomo Kenyatta University of Agriculture and Technology and a Bachelor of Science in Agriculture (Upper Second Class honors) from The University of Nairobi. She has a wealth of experience in Policy formulation, Performance contracting and Training.

Mrs. Grace Kimaru represent PS State Department for Livestock

Mr. Elijah K. Nguyo



Mr Nguyo is appointed Member, KALRO BoM.

He Chairs Audit, Governance and Risk Committee

Mr. Harry G. Mwangi



Mr Mwangi holds a Master of Science in Agriculture (Animal Nutrition) and has attended several managerial training courses both locally and overseas. He has over 27 years of experience working for the Government of Kenya in the Ministry of Agriculture, Livestock, Fisheries and Cooperatives with vast experience in agricultural extension systems as well as the National Agriculture Research agenda. He joined the service as a subject matter specialist, Head of Department at the present counties, as well as subject matter specialist at the Provincial level. At the provincial level he headed the Research Liaison Division, where he participated in setting the Agriculture Research Agenda. Currently, he is serving as the Director Agriculture Research and Innovation. He is a member of Animal Production Society of Kenya (APSK) and also serves as a livestock judge in the country. Among his many achievements, is the development of the sheep and goats breeding policy and supplying farmers with sheep and goats breeding stock.

He represents, PS State Department for Crops Development and Agricultural Research

Mr. Lawrence Okudo

Mr. Lawrence Okudo represents Inspector General, State Corporations. He is a member with no voting rights

Dr. Eliud K. Kireger, OGW



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. He is the Secretary to the KALRO Board of Management.

III. MANAGEMENT TEAM

**1. Dr. Eliud K. Kireger-B.Sc.; M.Sc.; PhD, OGW
Director General**



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**



Dr. Joseph G. Mureithi 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 to this, he served as the Deputy Director in-charge of the Research and Technology at KARI. 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 an 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 at KARI. Recently together with others she published an operational field guide to innovation platforms as the lead author.

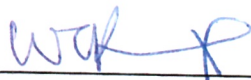
IV. CHAIRMAN'S STATEMENT

In the year under review, the KALRO Board of Management (BoM) ensured that the environment for the implementation of the 1st KALRO Strategic Plan (2017-2021) was created and sustained. This included implementation and adherence to Covid-19 pandemic guidelines by the Ministry of Health in conducting research activities. In addition, the Board spearheaded the implementation of policies that guided the annual activity planning and milestones of the Organization. Subsequently, a performance contract with the Ministry of Agriculture, Livestock, Fisheries and Cooperatives was drawn and we committed ourselves to the achievement of the set targets. I am glad to report that we recorded commendable achievements on the targets for the year. Going forward, the Organization will continue to adopt the Agricultural Productivity Value Chain (APVC) approach for all research programs and projects.

Investment in fundamental research went up during the year under review. Whereas the extended drought and the outbreak of COVID-19 during the period under review negatively affected AIA from sale of farm produce, the Organization realized marginal increase in total AIA. Further relief has been realized with the onset of the implementation of CS –APP and KCSAP Projects and support from the National Government. The BoM ensured that the Organization's innovation programs were developed and implemented in collaboration with sector, especially the county governments, industry and funding stakeholders. This was and remains important for sustainable investments in research to build technical and operational capabilities for KALRO to play a significant 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 built to enhance stakeholder awareness and support for agricultural and livestock 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 recognizes the need for continual improvement of internal efficiencies in order to respond to challenges facing the agricultural innovation system promptly, effectively and affordably. Management has been tasked to accelerate plans already underway to address these challenges.

I thank the 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.



Mr. Wilfred Chacha Rotich
Chairman, KALRO BoM

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 priorities. The research projects undertaken during the year were aligned to the first KALRO Strategic Plan (2017-2021), Government Medium Term Plans (2018-2022), the Agriculture Sector Growth and Transformation Strategy (ASTGS 2019-2029) and the Big Four Agenda. Furthermore, research projects focused on the assessment, validation and development of agricultural technologies identified along the Agricultural Product Value Chains (APVC).

Despite the difficulties experienced due to Covid-19 pandemic during the last two quarters of the contract period, researchers continued conducting various projects activities with funding mainly from the USAID FtF, World Bank and European Union and other development partners. The Organization managed to achieve A.I.A totaling to over Ksh. 887 Million down from Ksh. 938 Million in 2018/19 largely due to the slow demand for KALRO's research products and services caused by the COVID-19 uncertainty. The Management continued to apply the best practices by ensuring that funds allocated to the Institutes were utilized for the programmes and activities for which they had been planned. In this regard, the management is committed to the application of Enterprise Resource Planning (ERP) system in Procurement, Financial and Human Resource Management.

A major achievement during the year was the submission of 34 promising lines of different crops to KEPHIS for NPT, including (5) maize varieties with resistance/tolerance to Maize Lethal Necrosis Disease (MLND). In 2019/20 FY, testing of 13,796 soil samples was achieved through collaborative linkages with the Counties and International partners. In addition, the Adaptive Research Programme evaluated 2 pesticides for crop pest management and 2 biopesticides from (*Beauveria bassiana* & *Bacillus thuringiensis*) for Integrated Pest Management (IPM) application. Further, (3) botanical extracts were evaluated and recommended three for FAW control for the Fall Army Worm control.

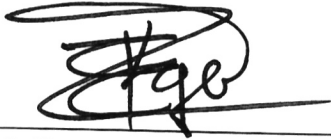
Notable achievements in livestock research included; four (4) vaccines for Contagious Bovine Pleuro-pneumonia (CBPP), Rift Valley Fever, and thermo stable PPR and Camel Mastitis were tested for the fourth year in the field, and East Coast Fever (ECF) vaccine was rolled out for use by farmers. On research knowledge sharing, over 134 papers from KALRO researchers were published and/or accepted for publication in renowned peer reviewed journals. Another 353 papers were presented in conferences around the world and some 121 technical papers were published with 138 Extension materials developed/updated and availed to users. This offered an opportunity to our researchers to communicate to farmers, the extension workers and other stakeholders on the technologies available. A total of 613 farmer training workshops, field days and demonstrations were held during the period under review.

To ensure that farmers used improved crop varieties and livestock breeds around the country, the Organization produced and sold 2,470.5 metric tonnes of basic seed and availed to farmers. This also included 2.94 million tea cuttings, 7.8 million coffee seedlings, 29,300 improved

coconut seedlings and 23,212 cashew-nut seedlings of improved varieties to enhance crop production. On livestock production side, 149 Breeding Boran and Sahiwal bulls and 270,499 indigenous chicks among other technologies were availed to farmers. To ensure availability of quality livestock feed, the Organization tested 1940 feed samples for development of feed rations, produced and availed to farmers 1,924 thousand clean Napier planting materials.

Through the KALRO Training Master Plan, the management continued to ensure human resource development by coordinating, monitoring and evaluating staff on PhD and MSc training in both local and overseas universities as well as identifying potential sponsors for the trainings. KALRO also provided 8 Youth Internships and 444 students' industrial attachment and 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 met the set targets leading to a commendable achievement of most of our Performance Contract targets



**Eliud Kiplimo Kireger (PhD, OGW)
DIRECTOR GENERAL**

VI. CORPORATE GOVERNANCE STATEMENT

Overview

The Kenya Agricultural and Livestock Research (KALR) Act, No 17 of 2013 established the Kenya Agricultural and Livestock Research Organization (KALRO) as a consequence, Kenya Agricultural Research Institute (KARI), Kenya Sugar Research Foundation (KESREF), Tea Research Foundation of Kenya (TRFK) and the Coffee Research Foundation (CRF) were merged. The Organization consists of the Board of Management and a Secretariat which implements Board decisions. The Act further established 16 Research Institutes which focus on different thematic research areas. KALRO 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.

The KALRO Board of Management held 19 Board meetings during the period under review. A schedule of the board meetings held and attendance by members is attached herein. The Board has a board charter; new members are issued with a copy upon joining the board. The process of appointment and removal of board members is outlined in the KALR Act Sections 6,7 and 8. Further, the roles and functions of the Board are listed under Section 9 of the KALR Act. The Board ensures that a performance evaluation is conducted annually and results therefrom discussed. The Board's remuneration is guided by the Guidelines for Terms and Conditions of Service for Chancellors of Public Universities, Board Chairpersons, Board Members and Staff of State Corporations. New members are taken through induction by being issued with copies of the KALR Act, Strategic Plan, Board Charter, main organizational policies and a presentation on the Organization which is done by the Director General. Training for Board Members is conducted from time to time on a needs basis

Organization structure

KALRO is governed by a Board of Management as per the KALR Act No. 17 of 2013, while the day to day management is vested in the Director General who is the secretary to the Board.

The object and function for which the organization is established is to:

- a). Promote, streamline, coordinate and regulate all research in crops, livestock, genetic resources and biotechnology in Kenya;
- b). Promote, streamline, coordinate and regulate research in crops and animal diseases; and
- c). Expedite equitable access to research information, resources and technology and promote the application of the research findings and technology in the field of agriculture.

Appointment of the Board

The Board is appointed pursuant to the provisions of KALRO Act No 17 of 2013. The Chairman of the Board is appointed by the President of the Republic of Kenya. Members of the Board are appointed by the Cabinet Secretary, Ministry of Agriculture, Livestock and Fisheries on recommendation of various nominating institutions provided under the KALR Act.

Board Organization and Structures

The composition of the KALRO Board of Management consists 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 for the time being responsible for livestock;
- e) The Secretary to the Science Council appointed under paragraph 6 of the Second Schedule to the Science and Technology Act;
- f) Five persons appointed by the Cabinet Secretary, of whom
 - i) One represents the interests of farmers;
 - ii) One shall represent the interest of the general public;
 - iii) One shall be a representative of an institution of higher learning;
 - iv) Two persons co-opted by the Board, who may be non-citizen scientists in the field of agriculture and who possess such knowledge and experience as may be necessary for the better carrying out of the functions of the Board; and
 - v) The Director General appointed in accordance with Section 14.

Role of the Board of Management

The Board provides organizational strategic direction and oversight to management as provided in the KALR Act which states that the functions of the Board of Management of KALRO shall be:

- a) Carry out the objects and functions of the Organization;
- b) Advise the Cabinet Secretary on Matters of policy relating to agricultural research;
- c) Oversee the effective co-ordination of the operations of the Organization;
- d) Ensure that the activities of the Organization 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 Organization;
- f) Direct strategic research and policy and prioritize and determine the research agenda;
- g) Co-operation with other lead agencies and organizations in carrying out agricultural research;
- h) Development of an economic, efficient and cost effective internal management structure, strategic Annual plan of the Organization;
- i) Implementation and fulfilment of the polices and agreed objectives, performance targets and service standards of the Organization;
- j) Provision of advice as required on all matters within the responsibility of the Organization; and

- k) Perform such other functions as may be necessary for the exercise of its powers under the Act.

Board Meetings

The Board and its Committees' are required to 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. In addition to the regular Board meetings, there may be other special meetings to deal with specific matters. During the financial year under review the KALRO BoM held meetings as per attendance report Table below;

Names of Members	Board Meetings		Board Committee Meetings			
	Scheduled	Special	Research, Technical & Innovation	Finance & Administration		Audit, Risk & Governance
				Scheduled	Special	
	4	8	1	3	2	1
Mr. Wilfred C. Rotich	2	4				
Mrs. Mary Mwambia	2	4		1	2	1
Mr. Elijah K. Nguyo	3	7		2		1
Mrs. Grace G. Kimaru	2	4		1	1	1
Mr. Harry G. Mwangi	4	7	1	3	2	1
Ms. Margaret Wamuyu	2	2		1	1	1
Prof. Walter O. Oyawa						
Mr. Lawrence Okudo	3	3		3	1	3
Dr. Eliud K. Kireger	4	6		3	2	

NOTES: - Except for Mr. Elijah Nguyo, all the other Members were appointed in the 1st half of the 2019/20 (October, 2019) Financial Year, hence the few meetings attended. Prof. Walter Oyawa (Director General, NACOSTI) was appointed in May 2020.

Other Board information

The KALRO Board of Management is answerable to the Government through the parent Ministry. The board signs a Performance Contract (PC) every financial year with the Government through the same Ministry outlining performance targets in line with the above stated functions. The signed PC is monitored and evaluated periodically and at the end on the contract term.

Board Committees

To effectively discharge its mandate, the Board established committees with specific terms of reference.

The Board appointed into committees, members with requisite skills and competence to discharge allocated responsibilities. In the event that a committee lacked specific skills within its

membership, the Board, with the approval of the oversight body, co-opt skilled non-Board members to serve on the committee, provided that the chair of a committee shall not be a co-opted member or the Chairperson of the Board. The Board may, from time to time, rotate Board members between the Committees.

The Board remains collectively responsible for the decisions and actions taken by any committee. A committee may only perform the tasks delegated to it by the Board and may not exceed the authority or powers of the Board.

The Chairperson of each committee, in consultation with the Board, determined the frequency of committee meetings as is necessary to fulfill the committee's functions. The Chairperson of each committee, in consultation with management, developed the committee's agenda. The Board however determined the procedure and process within which committees take independent professional advice at the organization's expense.

The committees promptly reported to the Board any actions taken for ratification and any major developments that they become aware of. The Board as set out in the terms of reference of the respective committees, received reports of the committee's findings and actions.

The Board established the following standing committees:-

- i. Audit, Risk and Governance,
- ii. Finance and Administration,
- iii. Research, Technical and Innovation

The Organization may establish any other ad hoc committees to handle any special business. The above committees permit and facilitate more in-depth deliberations on issues that 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.

Communication

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

VII. REVIEW OF KALRO PERFORMANCE FOR FY 2019/2020

Section 81 Subsection 2 (f) of the Public Finance Management Act, 2012 requires the Accounting Officer to include in the financial statement, a statement of the national government entity's performance against predetermined objectives.

KALRO has *five* strategic pillars and objectives within its Strategic Plan for the FY 2018/2019-2022/2023. These strategic pillars are as follows:

Pillar 1: Technologies and innovations for priority agricultural products value chains generated and disseminated;

Pillar 2: Knowledge, information and technologies on priority agricultural products value chains research collated, stored and shared;

Pillar 3: Socio-economics information, market and policy options supporting priority agricultural product value chains generated and advocated;

Pillar 4: Organization's capacities and resource management strengthened;

Pillar 5: Systems for coordination, prioritization and regulation of research developed and operationalized.

KALRO develops its annual work plans based on the above *five* pillars. Assessment of the Board's performance against its annual work plan is done on a quarterly basis. The *organization* achieved its performance targets set for the FY 2019/2020 period for its 5 strategic pillars, as indicated in the diagram below:

Strategic Pillar	Objective	Key Performance Indicators	Activities	Achievements
Pillar 1: Technologies and innovations for priority agricultural products value chains generated and disseminated	1. To improve crop production, productivity and utilization	No. of crop varieties developed	Develop improved crop varieties for better nutrition and industrial development.	34 promising lines against a target of 59 were submitted to KEPHIS for National Performance Trials (NPT) two (2) varieties of wheat were released
		Technologies developed	Develop good agronomic technologies and practices for priority APVCs	Evaluation of: 2 fall army worm products; 300 lines undertaken at KALRO Kiboko; Evaluation of 2 bio pesticides from (<i>Beauveria bassiana</i> & <i>Bacillus thuringiensis</i>); three (3) botanical extracts for FAW control; and cropping systems and vegetation cover in FAW prevalence management;
		No. of disease resistant crop varieties for food safety.	Improve and maintain crop health and food safety	200 entries of Maize crosses with Maize Lethal Necrosis Disease (MLND) resistance/tolerance was conducted, and 77- three way crosses were planted for PYT.
		Technologies	Develop pre and	3 Technologies developed (1) pre

Strategic Pillar	Objective	Key Performance Indicators	Activities	Achievements
		developed for pre and post-harvest	post-harvest handling and storage technologies and practices	(Aflasafe KE01) and two (2) post-harvest technologies to reduce food contamination and wastage were developed
		Genetic resources conserved	Support plant genetic resources conservation.	Undertook a study to determine rate of crops biodiversity loss; Identified ten (10) crop germplasm tolerant to climate change.
	2. To improve livestock production, productivity and products utilization	Develop improved livestock breeds	Develop improved livestock breeds	Evaluated and selected dams and sires based on breeding values; performance evaluation and pedigree recording of selected dams and sires by Kenya Stud Book; Carried out two (2) assessments to approve bulls for availing to farmers in the first quarter and third quarter; Availed 149 breeding bulls to farmers. 164 rams and bucks were availed to farmers. 270,499 improved indigenous chicks were availed
		No. of forage varieties developed	Develop forages, improved feeds and feeding systems	Evaluation of three (3) <i>Bracharia brizantha</i> , <i>Panicum maximum</i> and one <i>Bracharia decumbens</i> cultivar
		Forage seed Systems developed	Develop a robust and sustainable forage seed systems	1,924,050 clean nappier grass cuttings and 3,857kg rangelands grass seed were produced
		No. of vaccines developed	Improve and maintain livestock health and food safety	Vaccine Efficacy trials for: Contagious Bovine Pleuro-pneumonia-CBPP), Rift Valley Fever, thermostable PPR and Camel Mastitis). multivalent Lumpy Skin Disease and Field trials for validation of thermostable PPR vaccine for commercial production;
		No. of diagnostics developed		Validated three (3) techniques for testing Mycotoxins, drug residues and heavy metals (in feeds and food) and developed guidelines on preventing the residues.
		Tests for		1 Survey for Mycotoxins, drug residues and heavy metals in milk in Kisumu and

Strategic Pillar	Objective	Key Performance Indicators	Activities	Achievements	
		mycotoxins, drug residues and heavy metals (in feeds and food) validated		Nandi. Validated three (3) techniques for testing Mycotoxins, drug residues and heavy metals developed guidelines on preventing the residues.	
		Number of feed samples analysed for contaminants	Improve and maintain livestock health and food safety	1,421 feed samples were analyzed and feedback provided to farmers.	
		No. of value added livestock products developed	Support the development of processing and value addition of livestock products	Two value added products (propolis ginger and body cream) Developed	
	3. To develop appropriate agricultural machinery and equipment/implements	No of Machinery acquired deployed	Machinery acquired deployed	Improved efficiency	Determined the level of mechanization in beans by collecting data and analyzing it.
			Processing machinery developed and deployed		Disseminated user-friendly and efficient bean thresher to reduce post-harvest losses in Machakos, Makueni and Meru Counties
Pillar 2: Knowledge, information and technologies on priority agricultural products value chains research collated, stored and	1.Promote knowledge and information management and outreach	No of Databases developed	Collect and collate KALRO Knowledge Information and Technologies (KITs) for storage, ease of retrieval and dissemination;	updated and posted Mobile App on FAW on KALRO website Developed and disseminated 5,000 copies of FAW brochures in collaboration with Ministry of agriculture	
		No of Mechanisms for ease of retrieval deployed	Strengthen, digitalize and provide innovative library products	Good Agricultural Practice (GAP) online portal & mobile App; KALRO Macadamia Nuts Mobile App; Kenya Poultry Consultancy Platform (KPCP) online portal & mobile App and; Simple Wooden Box for Hay Production Mobile App.	

Strategic Pillar	Objective	Key Performance Indicators	Activities	Achievements
shared		No of Digital libraries services in place	and information services;	two (2) technology transfer tools i.e. M-services
		No of Improved Journals for information sharing	Sustain and improve publication of the organization's peer reviewed journals to international repute, including the East African Agricultural and Forestry Journal and the Tea Quarterly Journal	Submitted 88 papers in peer reviewed refereed journals; 133 technical publications; 164 extension materials, 112 papers in scientific conferences. Held the Soil Science Society of East Africa Conference
		No. of Capacity building programs No. of Counties covered	Provide capacity building services within the 47 counties and in the African region in order to enhance synergy and benefits from agricultural research and products	Trained 72 Agricultural Product Value Chain (APVC) and Innovation Platform champions; Conducted 258 stakeholder training sessions ; Established seedling nurseries of the underutilized fruits collected, in Schools and Agriculture Training Centers (ATCs) and Propagated 200,000 in 5 Counties;
Pillar 3: Policies and market options supporting and facilitating priority agricultural product	To generate socio-economics, gender and promotion of Participatory Research Methods information	No. of Improved information generated and shared	Generate and promote socio-economics information;	Developed four marketing information guidelines for Avocado, coffee, macadamia and potato.

Strategic Pillar	Objective	Key Performance Indicators	Activities	Achievements
value chains developed and advocated				
Pillar 4: Capacity building to undertake research on priority agricultural product value chains strengthened	1. To improve human resource capacity development and management	% of Competitive remuneration package in place	Develop a reward and recognition system with an attractive and competitive salary and benefits package commensurate with work output;	Identified and documented data needs and data gaps under KALRO mandate; Captured, organized and processed data and information in a consistent manner; Established patterns, trends and attributes of the processed data and information
		No. of staff trained	Learning and development through regular short and long term training (technical and operational) of staff based on identified needs;	Identified skills gaps and training needs through Capacity building/training of 50 staff members.
		Level Improved Leadership index	Develop leadership and management skills in order to meet the corporate goals while observing integrity and good governance;	The training of disability mainstreaming committee and Senior Management
		% of rollout of HRIS in place	Establish an integrated Human Resource	Established and implemented an automated integrated Human Resource Information Management System (HRIS) providing centralized and simplified services (25%)

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Strategic Pillar	Objective	Key Performance Indicators	Activities	Achievements
			Information Management System (HRIS) for the acquisition, storage, analysis, retrieval and sharing of information about the organization's human resources.	Drew insights from the data and knowledge intelligence in addressing critical problems to inform on policy and resource allocation
	2. To mobilize and manage financial resources	Revenue generated	Increase Internally Generated Revenue through commercialization of technologies, products and services; Strengthening the KALRO Seed Unit (KSU); Raising revenue from royalties, contract research and consultancies;	Ksh. (Million) 879.73
	3.To improve organizational business processes	Cumulative % to achieve a Robust ICT	Establish, maintain and manage Information and Communications	Implemented an ICT based agro-advisory system Increased ICT security measures by ensuring 100% anti-virus updates and 100% data backup throughout the year

Strategic Pillar	Objective	Key Performance Indicators	Activities	Achievements
	for effective management and coordination		Technology (ICT)	
		Support and facilitate KALRO Security Service for effective services	Security service implemented	Developed draft Security Policy and manual; Implemented the Information Security Management System (ISMS) by creating an ISMS Risk Management Action Plan. (Risk Registers)
	4.To enhance collaboration and partnerships	No. of collaborative initiatives	Build and maintain collaborations with other NARS such as universities, county governments, NGOs, agro-industry, commercially-oriented farms, and international organizations	Collaborations 1.universities and other national and international research organizations in tapping knowledge gaps 2. Biotechnology and Biological Sciences Research Council (BBSRC) for seven plant clinics in rice irrigation schemes in Kisumu, Bunyala, Ahero and Kwale, and 13 Plant doctors trained; 3. Drought Resilient Livelihoods Support Program (DRSLP) established 7 Plant Clinics in Turkana, Marsabit, West Pokot and Baringo and West Pokot and had 14 Plant Doctors trained; 4. GIZ established 45 Plant Clinics in Busia, Bungoma and Kakamega. Training of 100 Plant Doctors was conducted; 5. Small Holder Development Programme (SHDP), where nine (9) Plant Clinics in Machakos, Kajiado, Narok, Elgeyo Marakwet were established in 9 schemes and 18 Plant Doctors trained.
		No. of linkages with Country Governments	Establish and maintain linkages with County Governments	Held sixteen (16) meetings to promote soil analysis services in five (5) Counties as follows (Kakamega (6), Embu (2), Kericho (4), Trans Nzoia (2) and Kiambu (2)).
Pillar 5: Systems for coordination and regulation of research	To coordinate and regulate Agricultural and Livestock Research in	Procedures and standards established and implemented	Establish and implement criteria, procedures and standards for agricultural research regulation in	Developed priorities for research

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Strategic Pillar	Objective	Key Performance Indicators	Activities	Achievements
developed and operationalized	Kenya		close collaboration with NACOSTI.	

VIII. MANAGEMENT DISCUSSION AND ANALYSIS

a) Operational performance

During the Financial Year 2019/20, KALRO implemented various projects and programmes under the Crops and Livestock Research as discussed in detail in the report of the directors. The Programmes were mainly funded through Government grants, Development partners and internally generated funds.

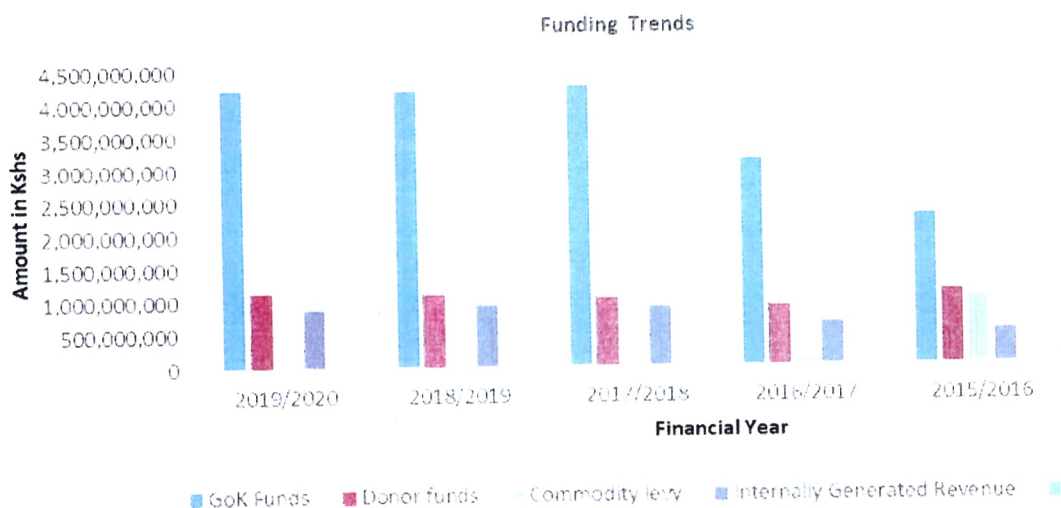
Government grants were mainly used for personnel emoluments, operations and maintenance. Donor funds were used for research technologies in line with partnership agreements. Internally generated funds were used to cater for utility bills and ploughed back to generate revenue

b) Financial performance

i. Funding trends

The following is a summary of the income organization received in the last five years;

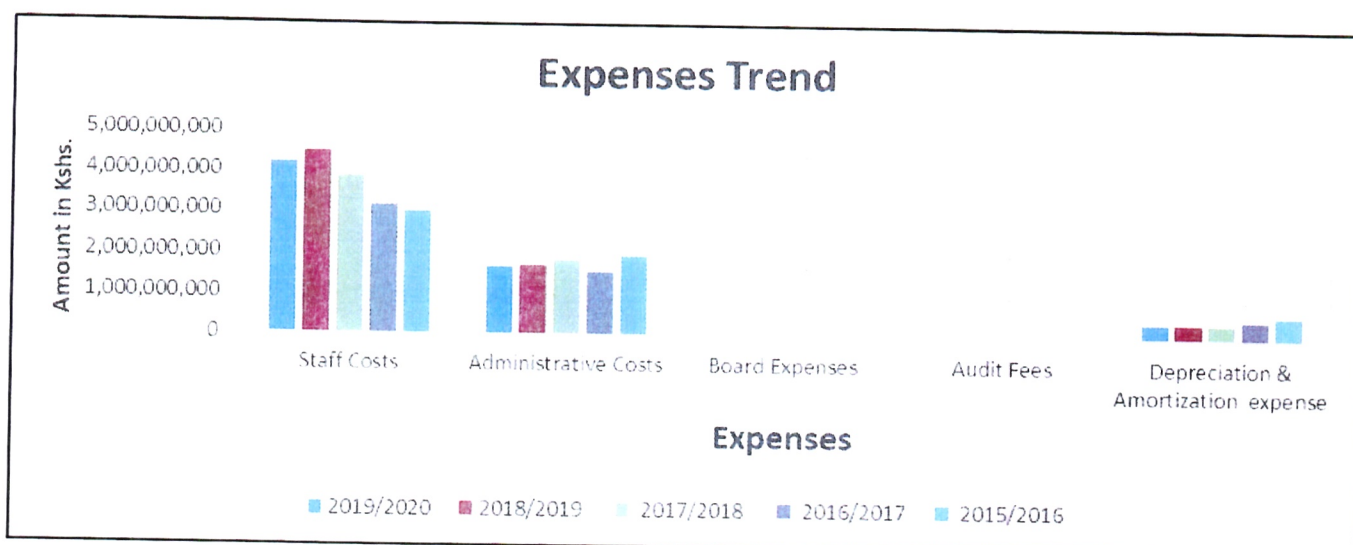
Source of Funds	2019/2020 (Kshs.)	2018/2019 (Kshs.)	2017/2018 (Kshs.)	2016/2017 (Kshs.)	2015/2016 (Kshs.)
GoK Funds	4,216,316,275	4,199,461,130	4,253,740,000	3,128,261,405	2,267,431,333
Donor funds	1,159,964,834	1,103,777,575	1,028,292,514	901,441,578	1,120,371,629
Commodity levy	0	0	0	73,976,211	1,026,395,079
Internally Generated Revenue	887,744,746	938,341,409	888,673,027	646,020,904	529,007,550
Total Revenue	6,264,025,855	6,241,580,113	6,170,705,540	4,749,700,098	4,943,205,591



ii. Expenditure trends

The following is a summary of the expenditure in the last five years;

Expenses	2019/2020 (Kshs.)	2018/2019 (Kshs.)	2017/2018 (Kshs.)	2016/2017 (Kshs.)	2015/2016 (Kshs.)
Staff Costs	4,170,360,651	4,468,850,596	3,839,385,842	3,145,121,525	2,987,846,387
Administrative Costs	1,732,797,778	1,704,613,365	1,820,038,861	1,543,984,176	1,930,490,838
Board Expenses	12,345,491	13,408,978	5,827,027	4,693,830	2,409,366
Audit Fees	3,940,000	3,800,000	6,749,844	6,490,355	7,952,992
Depreciation & Amortization expense	385,381,833	360,221,967	369,254,021	464,166,620	598,811,028
Total	6,304,984,442	6,241,580,113	6,170,705,540	4,749,700,098	4,943,205,591



The staff costs decreased during the year under review as compared to 2018/19 due to retirement of staff.

Administrative costs caters for research materials, travelling and accommodation, farm development, fuel and lubricants supplies for production, laboratory materials, utilities cost, repairs and maintenance, contracted services, finance costs, property & staff insurance, purchase of animals & seeds, farmer grants, office running expenses, cafeteria expenses, security expenses, legal dues and provision for bad debts.

Board expenses caters for sitting allowances, travelling and accommodation and honorarium.

c) Compliance with statutory requirements

During the current financial year, KALRO complied with all the statutory requirements and remitted all taxes due in good time. There was no penalty for failure to comply with the statutory requirements.

d) Material arrears in statutory and other financial obligations

During the financial year 2017/18, the Court of Appeal Civil Application No.272 of 2017, Dinesh Construction Vs KESREF case was determined in favor of the claimant and a decretal award of Kshs. 164.621million given. KALRO has partly paid the award and the outstanding amount as at the end of 2019/20 Financial year was Kshs. 63.845million and is recognized in the financial statement as a liability.

Also, KALRO is faced with liability relating to NSSF penalty for the period January 1998 to January 2008 which amounted to Ksh. 206.49million. KALRO continues to settle the obligation and the amount outstanding as at 30th June 2020 was Kshs.55.09 million. This is recognized in the financial statement as a liability.

IX. CORPORATE SOCIAL RESPONSIBILITY STATEMENT

KALRO is committed to contribute to the economic development of the country while improving the quality of life its 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. The Organization through its Centers engaged in different CSR events to foster a mutual and beneficial relationship in the future.

KALRO through Food Crops Research Institute participated in the following:

- KALRO Kabete
 - Staff paid a visit to the Gardens children's home and school in Kawangware. donated stuff items.

KALRO through Coffee Research Institute:

- Facilitated a public health checkup during the Ruiru trade fair at Coffee Research Institute, Ruiru Centre
- Provided free Health Care clinic for staff, farm workers and visiting public.

KALRO through Dairy Research Institute:

- Ol Joro Orok Centre
 - Donated pasture and fodder planting materials for use by local communities and county extension staff while training farmers
 - Visited home for orphaned children by HIV and AIDS, Prison and supported them with various food stuff
 - Joined the community in environment management by cleaning, clearing of bushes and drainage

KALRO Tea Research Institute:

- Sponsored Utafiti Primary school
 - By paying monthly stipend to two Parent Teachers Association and Electricity, bill for the School.
- Carried out nine (9) health talks to its staffs and Community that covered on promotion and attainment of universal health care screening package.
- Carried out a prayer day for its staff and Community
- Marked this year's environmental day themed the importance of conservation regardless of a pandemic on 5th June 2020 at Utafiti primary.
- Visited Bethel children's home in Kericho County where staff. Encouraged and presented gifts to the.

KALRO through Apiculture Research Institute donated donating 100 assorted fruit tree seedlings (mango, citrus, banana) during an environmental and conservation activity organized by Sandai Child and youth development organization in Marigat, Baringo County

X. REPORT OF THE DIRECTORS

TECHNICAL RESEARCH PROGRAMME ACHIEVEMENTS: FY/2019/2020

Although the year recorded significant achievements in various projects under Crops and Livestock Research, the lock down because of COVID 19 limited the existing potential in most of KALRO activities to record higher achievements. This is because establishing trials, monitoring and evaluation as well as data collection was totally constrained in some cases. Presented below is the summary of the key achievements for the FY 2019/2020 as per the set Performance Contracting document.

i) Improved crop production, productivity and utilization

Soil Analysis and Recommendations

During the financial year, 13,796 soil samples were analyzed against a target of 27,000 hence a shortfall of 13,204. The shortfall was mainly due to a broken laboratory equipment, and uneven rainfall distribution mainly in sugar belt area.

KALRO held sixteen (16) meetings to promote soil analysis services in five (5) Counties as follows (Kakamega (6), Embu (2), Kericho (4), Trans Nzoia (2) and Kiambu (2)).

Development of improved crop varieties

This involves preliminary field trial which goes to advanced field trial to select promising lines for particular agro ecological zones. These promising lines are registered with KEPHIS for National Performance Trial (NPT) for at least two seasons or two years. The successful candidates are evaluated for distinctness, uniformity and stability (DUS) upon which variety release indicators are confirmed and varieties submitted to National Variety Release Committee (NVRC) for official release and Gazettement. During the FY, KALRO compiled an inventory of promising lines, submitted 31 promising lines to KEPHIS for NPT evaluation. Six promising lines were evaluated for Distinctness, Uniformity and DUS while 10 varieties were officially released and gazetted as per the Table 1 below:

Table 1: NPT, DUS, Variety release for the year 2019/20

Crop	NPT	DUS	Released
Cowpeas	3	1	1
Sunflower	1	-	-
Wheat	2	-	4
Maize	6	-	-
Sweet potato	6	-	4
Bush Bean	2	2	-
Sorghum	4	-	1
Rice	2	-	-
Finger millet	5	-	-
Soya bean	0	3	-
Total	31	6	10

Production of crops' planting materials

During the FY 2019/20, KALRO produced planting materials of various crops species and sold to farmers and seed companies for planting, multiplication and commercialization as shown in Table 2 below.

Table 2: Production of crops' planting materials

Planting Material	Achievement for the FY
Basic seed (cereals, potatoes, and grain legumes) (MT)	2,470.5
Tea plants and cuttings (Millions),	6.76
Coffee planting material (No. Millions)	5.513
Seed cane production (No.'000' MT)	3201.1
Cassava (No. Million)	2.52
Sweet Potato vines (No. Million)	4.244
Coconut seedlings (No.),	21,313
Cashew nut seedlings (No.)	10,806
Macadamia nuts(No)	10,183
Cotton basic seed (ton)	2.174
Mulberry cuttings (No)	400,000
Avocado seedlings (No)	39,612
Mango(No)	11,833
Banana(No)	38,631
Passion fruit – purple	10,581
Passion fruit sweet yellow(No)	14,501
Papaya(No)	30,940
Apple(No)	3,310
Strawberry(No)	5,013
Guava seedlings (No)	92,083
Gooseberry seedlings (No)	53,200
Black raspberry seedlings (No)	8,000
Jack fruit seedlings (No)	19,365
Tree tomato(No)	17,801

Disseminate Pre- and Post-Harvest Crop Handling and Storage Technologies and Practices

During the FY 2019/20, one (1) pre (Aflasafe KE01) and six (6) post-harvest (curing and processing of root and tuber crops and use of diffuse light store; postharvest handling of green grams; use of Dehytray for solar drying; use of hygrometers when drying grains; solar drying of vegetables, processing of cakes from vegetable composite flours; postharvest technologies for gooseberry; and Post-harvest processing technologies of sweet potato) technologies to reduce food contamination and wastage were developed.

ii) Improve and maintain crop health and food safety

• Evaluation of maize clones tolerant to Maize Lethal Necrosis Disease

Maize Lethal Necrosis Disease (MLND) continues to adversely affect maize production in the country, thus affecting food security. During the FY:

- a) 542 entries of maize germplasm continued to be evaluated for MLND resistance for the second year by 31st October 2019;
- b) 77 - three way crosses (TWC) were planted at KALRO-Kiboko and 129 Single crosses (SC) planted at KALRO-Naivasha MLN screening site;
- c) 206 (77 - TWCs and 129-SC) Maize crosses evaluated for preliminary yield trials (PYT) at KALRO-Kiboko
- d) The same 206 Maize crosses were planted at the MLN screen house at KALRO-Kabete
- e) Five (5) maize varieties with MLND resistance/tolerance continued to be evaluated in the NPT.

• Awareness creation and development of control measures for Fall Armyworm (FAW)

The Fall Armyworm (FAW) is an insect pest that invaded the country in March 2017 and has adversely affected maize production. Currently, it has been reported in 42 counties and if not controlled on time it can lead to total loss of the maize crop.

During the contract period the following activities were undertaken:

- a) Evaluation of 2 products (Fawligen SfMNPV and Pherogen Dispenser SPOFR) completed and reports submitted to PCPB for consideration;
- b) Greenhouse evaluation of 300 lines undertaken at KALRO Kiboko;
- c) Evaluation of 2 bio pesticides (*Beauveria bassiana* and *Bacillus thuringiensis*) undertaken as IPM strategy;
- d) Identification of major hosts of FAW: maize and sorghum reported as the common hosts of FAW;
- e) Evaluated and recommended three (3) botanical extracts for FAW control to stakeholders;
- f) Evaluated Integrated Pest Management (IPM) formats: cropping systems and vegetation cover assessed in FAW prevalent ecosystems;
- g) Mobile App on FAW updated and posted on KALRO website (available on Playstore: <https://play.google.com/store/apps/details?id=com.andromo.dev587809.app797785>;
- h) Developed and disseminated 5,000 copies of FAW brochures in collaboration with Ministry of Agriculture and Electronic version of a brochure developed and posted on KALRO website; also availed electronically by email for wide sharing.

- **Production of Aflasafe KE01**

Aflatoxin is a poisonous substance produced by fungi, *Aspergillus flavus*, Aflasafe KE01™ is a biological control of aflatoxin developed to prevent the contamination of food produce by the fungi at the farm level.

During the contract period, 99.1 tons of Aflasafe KE01™ was produced against a target of 270 tons. This was due to reduced demand / order of Aflasafe KE01™ from farmer-sponsoring firms within the County Governments.

- **Evaluation of Pesticides for Crop Pest Management**

KALRO is accredited by Pest Control Products Board (PCPB) to undertake pesticide efficacy trials. During the contract period, the following 31 pesticides whose permits were issued by PCPB and supported by clients were evaluated: Pyegar EC, Pyneem 20EC, SAF-T-Side 800EC, APPEAL 480EC, Nimbecidine EC, Segatron Ultra, Halt 50WP, Stamina 500SC, Shadow 750WG, Pyretone EC, BUGATI 50% SC, SHADOW 750WG, Organ WP, Cyclotron 450EC, EABCL Vital 350 SC, Pyrimite 200EC, Wound-Out NEO 680 SG, Weed Hammer 68 SG, Starthene Plus 97% DF, Pursuit 6% EC, Hable 5 WG, Matchete 55% WP, Nemix C WP, Tapazol Exit 16.4 SC, Magnaphos Plate, Shadow 750WG, Top Net 500SC, Pyegar EC, Pyneem 20EC, Shadow 750WG, and Pyestar 35EC.

Capacity Building on Crop Health Services

Through interaction with farmers and extension officers, KALRO has noted there is a limited number of a crop health officer at farm level with skills for diagnosing crop pests and diseases and prescribing solutions for their control.

However cumulatively 68 plant clinics were set up and 27 plant doctors were trained to provide crop health services in 9 counties through the following:

- a) Collaboration with partners on the Biotechnology and Biological Sciences Research Council (BBSRC) project established seven plant clinics in rice irrigation schemes in Kisumu, Bunyala, Ahero and Kwale, and 13 Plant doctors trained;
- b) Collaboration on the Drought Resilient Livelihoods Support Program (DRSLP) established 7 Plant Clinics in Turkana, Marsabit, West Pokot and Baringo and West Pokot and had 14 Plant Doctors trained at KALRO-Katumani;
- c) Collaboration with GIZ established 45 Plant Clinics in Busia, Bungoma and Kakamega. Training of 100 Plant Doctors was conducted in 2019-2020 where KALRO updated crop health information for vegetables and fruits; rice pest and disease factsheets were shared to enrich reference material in rice production systems (material was place in the Rice Knowledge Bank);
- d) 63 farmers were trained on the importance of using Plant Clinics to sort out crop health issues and water quality

Develop and promote emerging crops

These underutilized fruits (guava, gooseberry, sour soup, custard apple (three types), loquat, pitanga, jack fruit, java plum, black raspberry, tamarind, white sapote and pomegranate) are increasingly becoming important because they are high in nutrients and medicinal value, but they have been neglected despite their benefits. Following sensitization of their usefulness, the demand for their planting materials is growing. During the financial year, the following activities were done:

- a) Collected and conserved 36 underutilized fruit species;
- b) Established seedling nurseries of the underutilized fruits collected, in Schools (three schools in Machakos, Makueni and Kitui Counties) and Agriculture Training Centers (ATCs) in 6 Counties namely: Busia, Bungoma, Trans Nzoia, Kwale, Kilifi and Kiambu;
- c) Propagated 200,000 seedlings of underutilized fruits in the 6 counties;
- d) Developed 11 value added products from these fruits (guava [jam, juice, concentrate, and dried fruit roll]; gooseberry (juice, jam, cake, cobbler); jackfruit (juice, and jam); and loquat (marmalade)
- e) Paid for registration of 11 value added products of four underutilized fruits with KEBS. This activity was not completed because of the late payment.

Conservation of Plant Genetic Resources

KALRO maintains a genebank with 46,000 accessions of different crop species collected all over the country. In addition, the genebank preserves the world simsim and finger millet germplasm collection. These national and international germplasms require regular rejuvenation to maintain their viability. Because of the effects of climate change, there is urgent need to continue with collection and preservation of indigenous crop germplasm that may not have been collected, lest we lose it. During the contract period KALRO:

- a) Undertook a study to determine rate of crops biodiversity loss – a report was prepared;
- b) Identified ten (10) crop germplasm tolerant to climate change – a report was prepared.

iii) Improve livestock production, productivity and product utilization

Breeding Bulls

Sahiwal (milk and beef) and Boran (beef production) cattle breeds are tolerant to a wide range of climatic conditions and diseases that limit dairy and beef production in the country. The use of Sahiwal and Boran bulls to improve local breeds will go a long way in improving milk and beef production in Kenya. During the contract period the following were achieved:

- a) Evaluated and selected dams and sires based on breeding values;
- b) Participated in performance evaluation and pedigree recording of selected dams and sires by Kenya Stud Book;
- c) Carried out two (2) assessments to approve bulls for availing to farmers in the first quarter and third quarter;

- d) Aailed 149 breeding bulls to farmers.

Breeding Bucks and Rams

Goats and sheep are critical livestock in Arid and Semi-Arid Lands (ASAL) areas of the country. Over the years KALRO has provided high quality breeding bucks and rams to the farmers. During the FY, 164 rams and bucks were aailed to farmers.

Improved indigenous chicken

Chicken play an important role in the rural communities as a source of protein delicacy and cash from the sale of eggs and meat. KALRO has a program for enhancing capacity for indigenous chicken production.

During the contract period;

- a) Installation of hatchery was completed;
- b) 270,499 chicks were aailed compared to a targeted figure of 400,000. The hatchery was completed in the 3rd quarter of the contract period hence the under achievement.

Improved honey production

Beekeeping is increasingly becoming important because it contributes to enhanced incomes as well as food security through provision of honey, beeswax, propolis and pollination. Kenya has a rich biodiversity of honey bees due to the varied geographical agro-ecological zones.

During the FY 2019/20, two value added products (propolis ginger and body cream) were generated.

Develop and promote forages, improved feeds and feeding systems

During the contract period KALRO undertook the following activities:

- a) Evaluation of three *Bracharia brizantha* cultivars (Xares, Piata and MG4), Panicum maximum cultivars (Mombasa, Tanzania and Masai) and one *Bracharia decumbens* cultivar Basilik in collaboration with KEPHIS continued.
- b) 1,421 feed samples were analysed against a target of 2,200 and feedback provided to farmers. The shortfall was due to restriction of movement of farmers due to Covid-19 pandemic during the last two quarters of the contract period.

Improve and maintain livestock health

During the FY 2019/20, KALRO had targeted for the vaccine development, testing and strategic use as key factors in maintenance of animal disease-free zones. During the 2019/20 FY research continued on the remaining four vaccines for the fourth year (Contagious Bovine Pleuro-pneumonia-CBPP), Rift Valley Fever, thermostable PPR and Camel Mastitis). In addition, a multivalent Lumpy Skin Disease vaccine was included alongside with the others.

During the contract period the following activities were undertaken for each of the indicators targeted:

a) Efficacy trials in the laboratory for thermostable CBPP sub-unit vaccine by, 31st January, 2020;

Animals were earlier on exposed to infection using intubation and by contact with infected ones, and this was observed not to give satisfactory results. The approach now is to use a nebulizer that has been adopted with other infectious models. In February 2020, the CBPP team was in Kenya and pretested functionality of the nebulizer at ILRI and VSRI with local cattle. One trial for back passage of the mycoplasma was accomplished, in an attempt to increase its virulence and produce clinical disease. The 2nd trial stalled due to the ongoing pandemic as IDRC froze all its activities until further notice.

b) Camel mastitis vaccine;

Sufficient bacterial isolates were collected from camel keeping Counties (Marsabit, Isiolo, Taita Taveta and Kajiado) and successfully typed in the laboratory. Staff training on molecular techniques is partially achieved. Sequencing service providers out of the country are facing shipment challenges of biological samples due to COVID-19.

c) Efficacy trial for the combined, Contagious Caprine Pleuro-Pneumonia (CCPP) and heart water vaccine;

Animals were bought from western Kenya and brought to Muguga for on-station trial. However, it was observed that they were infected with CCPP and hence the activity was moved to International Livestock Research Institute (ILRI) to use their clean goats from Kapiti. VSRI staff did postmortems on the goats at ILRI. Data analysis is ongoing by the CIRAD team.

d) Field trials for validation of thermostable PPR vaccine for commercial production;

KEVEVAPI has successfully produced 500,000 doses of thermotolerant PPR vaccine batch. They passed internal QC at source as well as external QC PANVAC. Once delivered, VSRI will conduct on-station and field validation in readiness for vaccine registration.

Two (2) diagnostics tests for PPR and Rift Valley Fever surveillance were done at Biotech Research Institute (BioRI);

e) Analysis of 100 post-harvest animal products samples for contaminants;

Survey for Mycotoxins, drug residues and heavy metals in milk in Kisumu and Nandi Counties was done. Drug residues were minimal. Heavy metals were higher in Kisumu County such as lead (pb) associated with painting and roadside grazing. Cadmium was also observed in Kisumu due to poor disposal of torch batteries. Mercury was not detected in both counties.

Validated three (3) techniques for testing Mycotoxins, drug residues and heavy metals (in feeds and food). VSRI developed guidelines on preventing the residues. This was done pursuant to (f) above and submitted to USAID FtF.

Develop robust and sustainable forage seed systems

KALRO continues to develop and promote improved feeds and feed systems, during the contract period, 1,924,050 clean napier grass cuttings and 3,857kg rangelands grass seed were produced as shown in Table 3 below:

Table 3: Production of forage seed

Activity	FY achievement
Napier grass cuttings (No.)	1,924,050
Rangelands grass seed (kg),	3,857

Development of improved forage varieties

During the FY, KALRO submitted 4 promising lines to KEPHIS for NPT evaluation as per the Table 4 below:

Table 4: NPT for the year 2019/20

Forage	NPT	DUS	Released
Rhode grass	2	-	-
Range grass	4	-	-
Brachiaria	3	-	-
Total	4	0	0

Develop appropriate agricultural machinery and equipment/implements

In support of development and up scaling of agro-processing equipment/implements, the Organization undertakes to do agricultural mechanization research to determine appropriate agricultural machinery and their level of efficiency at farm level. During the contract period KALRO;

- a) Determined the level of mechanization in beans by collecting data and analyzing it.
- b) Disseminated user-friendly and efficient bean thresher to reduce post-harvest losses in Machakos, Makueni and Meru Counties.

vi) Knowledge, information and technologies on agricultural products value chains research collated, stored and shared

Promotion of knowledge, information and technologies

Low adoption of knowledge, information and technologies (KITS) by various value chain actors is attributable to many factors including weak relationships and linkages coupled with ineffective approaches and methods used to manage and share KITS. KALRO therefore recognizes the need for innovative mechanisms for management and sharing the requisite knowledge. In the FY 2019/20, KALRO undertook the following:

- a) Conduct 258 stakeholder training sessions on various crops and livestock husbandry practices throughout the country. The shortfall was due to Covid-19 pandemic;
- b) Train 72 Agricultural Product Value Chain (APVC) and Innovation Platform champions;
- c) Hold 79 consultative fora as follows;

Research Proposals and Publications

To enhance research funding and ensure research findings are shared with stakeholders on timely basis, KALRO undertook the following:

- a) Developed and submitted to donors 50 mega research proposals for funding;
- b) Submitted 88 internally reviewed papers for publications in peer reviewed refereed journals;
- c) Developed 133 internally reviewed technical publications;
- d) Developed and updated 164 extension materials, that include policy briefs, technical bulletins, pamphlets, leaflets and online library;
- e) Submitted 112 papers internally reviewed for presentation in scientific conferences.

Review of KALRO Strategic Plan (SP)

During the FY 2019/20 the following activities were undertaken:

- a) Developed the annual work plans;
- b) Revised the Implementation Framework.

Project Completion rate

During the FY 2019/20 the following projects had been targeted;

- a) Installation of the hatchery chiller was completed;
- b) Drilling and casing of borehole was completed;
- c) Construction of research apiary was not completed.

XI. 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.

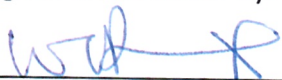
The Directors are responsible for the preparation and presentation of the organization's financial statements, which give a true and fair view of the state of affairs of the organization for and as at the end of the financial year (period) ended on June 30, 2020. This responsibility includes: (i) maintaining 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, 2020, 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.

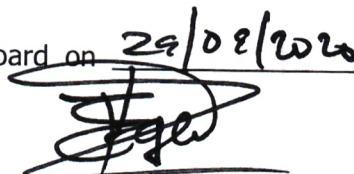
With effect from 1st July 2014, Kenya Agricultural Research Institute (KARI), Kenya Sugar Research Foundation (KESREF), Tea Research Foundation (TRF) and Coffee Research Foundation (CRF), were dissolved in pursuant to the Kenya Agricultural and Livestock Research Act, 2013. Its newly acquired name is 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.

Approval of the financial statements

The KALRO financial statements were approved by the Board on 29/08/2020 and signed on its behalf by:



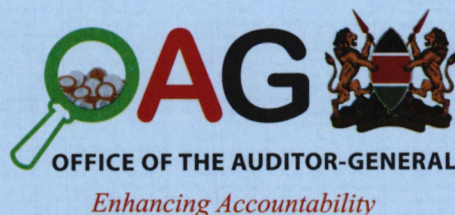
Mr. Wilfred Chacha Rotich
Chairman, KALRO BoM



Eliud K. Kireger (PhD, OGW)
Director General

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REPORT OF THE AUDITOR-GENERAL ON KENYA AGRICULTURAL AND LIVESTOCK RESEARCH ORGANIZATION FOR THE YEAR ENDED 30 JUNE, 2020

REPORT ON THE FINANCIAL STATEMENTS

Qualified Opinion

I have audited the accompanying financial statements of Kenya Agricultural and Livestock Research Organization set out on pages 1 to 23, which comprise the statement of financial position as at 30 June, 2020, 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.

In my opinion, except for the effect of the matters described in the Basis for Qualified Opinion section of my report, the financial statements present fairly, in all material respects, the financial position of the Kenya Agricultural and Livestock Research Organization as at 30 June, 2020 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 the Kenya Agricultural and Livestock Research Act, 2013 and the Public Finance Management Act, 2012.

Basis for Qualified Opinion

1. Receivables from Non-Exchange Transactions

1.1. Debt Recovery

As previously reported, the statement of financial position reflects an amount of Kshs.406,548,000 under receivables from non-exchange transactions which, as disclosed in Note 24 to the financial statements, includes an amount of Kshs.124,496,000 due from the Kenya Planters Co-operative Union (KPCU) – (in receivership) and Kshs.23,445,000 due from the Coffee Board of Kenya relating to the Coffee Research Institute. Although the Management has made a full provision of Kshs.124,496,000 in respect of KPCU debt and forwarded a claim to the receiver manager, no meaningful progress has been reported towards recovery of this debt as at the date of this report.

1.2. Commodity Levy

The receivables from non-exchange transactions balance of Kshs.406,548,000 includes an amount of Kshs.314,473,000 in respect of commodity levy, which has been outstanding for more than one year. Further, the commodity levy also includes an amount of

Kshs.7,073,687 from Nyambene Mills (under receivership). Management did not disclose steps taken to recover the debts. In addition, no provision for bad and doubtful debts in respect of commodities levy, whose recovery remains doubtful, was made in these financial statements.

Under the circumstances, the accuracy and completeness of the receivables from non-exchange transactions balance of Kshs.406,548,000 could not be confirmed.

2. Receivables from Exchange Transactions

The statement of financial position reflects a balance of Kshs.244,079,000 under receivables from exchange transactions which, as disclosed in Note 23 to the financial statements, includes an amount Kshs.4,864,000 and Kshs.19,945,000 owed by various debtors and the Kenya Seed Company, respectively which have remained outstanding for over six (6) years. Further, the receivables balance also includes long outstanding debts of Kshs.537,700 owed by former Members of Parliament. In addition, the other receivables balance increased from Kshs.302,000 reported as at 30 June, 2019 to Kshs.119,436,000 reported as at 30 June, 2020. However, supporting documentation for the increase were not provided for audit review.

Under the circumstances, the accuracy and completeness of the receivables from exchange transactions balance of Kshs.244,079,000 could not be confirmed.

3. Property, Plant and Equipment Without Title Documents

- (i) As previously reported, included in the property, plant and equipment balance of Kshs.24,176,081,000 as at 30 June, 2020 is an amount of Kshs.2,932,785,960 in respect of six parcels of land relating to the former Kenya Agricultural Research Institute for which the Organization has no ownership documents.
- (ii) Further, part of the Organization's land at Manera and Olmagogo farms in Naivasha-Mai Mahiu Road and another property in Katumani Centre measuring approximately 100 hectares were illegally acquired by private developers in 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.
- (iii) Similarly, in January 2011, some individuals invaded the Organization's land 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 and their title documents were revoked by the Chief Registrar on 22 February, 2019 as per the Kenya Gazette Notice No. 1716. However, a review of the position revealed that the invaders had not vacated the land.
- (iv) As reported in the previous years, 56 parcels of land including LR Nos 654/6, 654/6A, 654/II and 654/7 all under Sugar Research Institute in Kibos area did not have ownership documents.

- (v) The property, plant and equipment balance of Kshs.24,176,081,000 as at 30 June, 2020 excludes 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 are in the name of the Coffee Board of Kenya (CBK) which has since merged to form the Agricultural Food Authority.
- (vi) 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 the AMS are not included in the assets balance, 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 Kenya Agricultural and Livestock Research Organization.
- (vii) The property, plant and equipment figure of Kshs.24,176,081,000 also excludes the value of twenty acres' piece of land developed by the Tea Research Institute in Kirinyaga County with an estimated value of Kshs.8,430,634.
- (viii) The property, plant and equipment net book value of Kshs.24,176,081,000 includes an amount of Kshs. 81,650,080 representing the value of buildings allocated to the Kenya Plant Health Inspectorate Service in 1998. The net book value of Kshs.24,176,081,000 is, therefore overstated by Kshs.81,650,000.
- (ix) The property, plant and equipment balance of Kshs.24,176,081,000 includes the value of an office block completed in the year 2012/2013 at a cost of Kshs.663,772,203 in respect of the 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. No explanation was provided on how the value of a new building dropped below the actual construction cost with such a high margin.
- (x) As reported in the previous year, 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.
- (xi) The additions for the 2016/2017 financial year of Kshs.253,798,000 included an amount of Kshs.109,765,000 under building in respect of an arbitration award to a company arising from disputed values of certificates of completion of the new office block at the Sugar Research Institute. The balance, however, differed with the amount of Kshs.122,920,000 in respect of the award. The resulting difference of Kshs.13,155,000, between the arbitration amount and the amount reflected in the financial statements was not explained.
- (xii) Included in the cost of land of Kshs.17,808,626,000 is an amount of Kshs.117,000,000 being the cost for LR No.116/3 Ruiru – Jacaranda where the Coffee Research Institute is located. Although Management indicated that the

title deed was misplaced, efforts being made to replace the title deed was not disclosed.

- (xiii) Available information indicates that title deed for a parcel of land at Muguga was released to the Ministry of Lands, Housing and Urban Development to facilitate the excision of a portion of land allocated to the Kenya Plant Health Inspectorate Service at the time of its inception. However, the title deed got lost while in the custody of the Ministry exposing the land to the risk of alienation, unlawful excision, and subdivision.
- (xiv) KALRO owns 142.06 ha of land in Matuga for which it has a title deed. However illegal informal settlers have encroached on this land making it impossible for the Organization to utilize the land for the purposes of agricultural research.
- (xv) Included in the cost of land of Kshs.17,808,626,000 is a beach plot in Mtwapa valued at Kshs.56,734,160 whose land registry number was given as MN/111/2945. However, the Organization does not have a title deed for the land. The Management explained that the land was illegally subdivided into five plots but the Commissioner of lands revoked the allotments. A private developer filed a suit in court to affirm ownership of the beach plots. The matter had not been determined as at 30 June, 2020 and ownership of the plots could not be confirmed.
- (xvi) KALRO also owns five buildings on its Kitale Lower Farm Block LR No. 13/82 which were part of the L.R. No. 2049R but they were excluded from the title deed. In Kakamega, staff houses belonging to the Non-Ruminant Centre have been constructed on 20 acres of land that were left out during allotment of this land to the Organization. These issues were still outstanding as at 30 June, 2020.
- (xvii) Further, included in the cost of land of Kshs.17,808,626,000 are 1418 Ha of land in Lanet where the National Beef Research Centre is located. Records held at the Organization indicate that in 1984 a farmer surrendered two hundred and thirty acres of his land to the government and it was agreed that he would be compensated with an equivalent acreage of vacant land at the Beef Research Institute. However, the farmer was instead allotted two hundred and seventy acres, an excess of forty acres. Further, the farmer violated the conditions of the land exchange and occupied the developed part of the land leading to destruction of property belonging to KALRO. The said part of the land has since been subdivided into plots for sale to the public. In addition, records availed indicate that another farmer agreed to surrender three hundred and twenty acres of his land in Nakuru but during exchange and transfer of the land he irregularly acquired an extra one hundred and fifty-two acres of KALRO 's land. Additionally, informal settlers have been trying to encroach the land since 2014. There is therefore a high risk that the Organization may lose the disputed parts of its land in Lanet.

- (xviii) The value of land of Kshs.17,808,626,000 does not include the value of the parcels of land listed below whose title deeds are not in the custody of the Organization;

Farm/Details	Land Parcel No.	Location	Measurement
Kitale Lower Farm	Block 13/82	Kitale	10.00 Ha
NDFRC, Katumani	LR No.4937	Machakos	274.8 Ha
Msabaha	LR No.25044	Kilifi	34.11 Ha
KARI, Njoro	LR No.27319	Nakuru	163.8 Ha
KARI, Limuru	LR No.28085	Kiambu	0.8092 Ha
KARI, Limuru	LR No.28086	Kiambu	0.8097 Ha
KARI, Limuru	LR No.28087	Kiambu	0.8093 Ha
KARI, Limuru	LR No.28088	Kiambu	0.8569 Ha
KARI, Limuru	LR No.28089	Kiambu	3.599 Ha
Alupe Sub-Centre	LR No. South Teso/Angoromo/8486	Busia	81 Ha

- (xix) Included under property, plant and equipment are motor vehicles, motor cycles and other machinery owned by KALRO. However, the logbooks of the motor vehicles, motor cycles, tractors and trailers were not kept in one central place, which is prone to misplacement and other possible defalcations.

Under the circumstances, the accuracy, completeness and ownership, and completeness of property, plant and equipment balance of Kshs.24,176,081,000 as at 30 June, 2020 could not be confirmed.

4. Trade and Other Payables

As previously reported, the trade and other payables balance of Kshs.253,564,000 as at 30 June, 2020 includes an amount of Kshs.3,771,786 owed to various hospitals that has remained unpaid for a long time. The balance also includes an amount of Kshs.4,547,866 due to the Kenya Revenue Authority being penalty imposed by unremitted Pay As You Earn (PAYE).

No explanation has been provided for failure to settle the long outstanding liabilities.

5. Investments

The statement of financial position reflects an investments balance of Kshs.2,149,000 which, as disclosed in Note 31 to the financial statements, includes an unsecured loan stock of Kshs.40,000 and redeemable ordinary shares of Kshs.2,092,000 both in Kenya Planters Co-operative Union (KPCU). The investments has a Nil fair value as KPCU has been liquidated by the Government.

In the circumstances, it is not possible to confirm whether the investments amount of Kshs.2,149,000 is fairly stated.

6. Unaccounted for Cash

As previously reported, the cash and cash equivalents' balance of Kshs.775,619,000 as at 30 June, 2020 excludes cash withdrawals totalling Kshs.6,914,345 made in financial year 2009/2010 in respect to the 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 Institute and other arms of Government, the amount of Kshs.6,914,345 remains unaccounted for and the status of investigations was not disclosed.

Under the circumstances, the accuracy and completeness of cash and cash equivalents balance of Kshs.775,619,000 as at 30 June, 2020 cannot be confirmed.

7. Deferred Income

The statement of financial position reflects a balance of Kshs.226,924,000 under deferred income which, as disclosed in Note 34 to the financial statements, relates to grants received from donors for specific projects. The grants are classified as non-current liabilities and carried in the books net of amortization based on the life of the project. The deferred income of Kshs.226,924,000 is net of Kshs.24,539,000 relating to the expenditure incurred during the year, which should have been recognized as income in the statement of financial performance. No explanation was provided for the omission.

Under the circumstances, the accuracy of the financial statements could not be confirmed.

REPORT ON LAWFULNESS AND EFFECTIVENESS IN USE OF PUBLIC RESOURCES

Conclusion

As required by Article 229(6) of the Constitution, based on the audit procedures performed, except for the matter described in the Basis for Conclusion on Lawfulness and Effectiveness in Use of Public Resources section of my report, I confirm that, nothing else has come to my attention to cause me to believe that public resources have not been applied lawfully and in an effective way.

Basis for Conclusion

1. Work in Progress

As previously reported, despite completion of the tea research and development factory at the Tea Research Institute in Kericho and the Government having spent Kshs.304,505,436 on the project, the facility is yet to be commissioned and lies idle owing to lack of funds to purchase machinery for operationalization of the venture.

Consequently, the intended beneficiaries have not received value for money incurred on the project amounting to Kshs.304,505,436 as at 30 June, 2020.

2. Kenya Agricultural and Livestock Research Act, 2013

As previously reported, the Kenya Agricultural and Livestock Research Act, 2013 had set 01 August, 2014 as the commencement date for the operation of the Organization. The Act repealed the Science and Technology Act, 250, Coffee Act (No.9 of 2001), Sugar Act (2001) and the Tea Act, Cap 343 which had established the Kenya Agricultural Research Institute (KARI), the Coffee Research Foundation (CRF), the Kenya Sugar Research Foundation (KESREF and the Tea Research Foundation (TRF), respectively.

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 then Companies Act, 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, however, not provided evidence that this provision of the Companies Act, Cap 486 was complied with in the establishment of KALRO. Although the 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, the Coffee Research Foundation (CRF), the Tea Research Foundation (TRF) and the Kenya Sugar Research Foundation (KESREF) are still legally in existence.

The audit was conducted in accordance with ISSAI 4000. The standard requires that I comply with ethical requirements and plan and perform the audit to obtain assurance about whether the activities, financial transactions and information reflected in the financial statements are in compliance, in all material respects, with the authorities that govern them. I believe that the audit evidence I have obtained is sufficient and appropriate to provide a basis for my conclusion.

REPORT ON EFFECTIVENESS OF INTERNAL CONTROLS, RISK MANAGEMENT AND GOVERNANCE

Conclusion

As required by Section 7(1)(a) of the Public Audit Act, 2015, based on the audit procedures performed, I confirm that, nothing has come to my attention to cause me to believe that internal controls, risk management and overall governance were not effective.

Basis for Conclusion

The audit was conducted in accordance with ISSAI 2315 and ISSAI 2330. The standards require that I plan and perform the audit to obtain assurance about whether processes and systems of internal control, risk management and overall governance were operating

effectively, in all material respects. I believe that the audit evidence I have obtained is sufficient and appropriate to provide a basis for my conclusion.

Responsibilities of Management and those Charged with Governance

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 maintaining effective internal control as Management determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error and for its assessment of the effectiveness of internal control, risk management and governance.

In preparing the financial statements, Management is responsible for assessing the Organization's ability to sustain services, disclosing, as applicable, matters related to sustainability of services and using the applicable basis of accounting unless the Management is aware of the intention to terminate the Organization or to cease operations.

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.

In addition to the responsibility for the preparation and presentation of the financial statements described above, Management is also responsible for ensuring that the activities, financial transactions and information reflected in the financial statements are in compliance with the authorities which govern them, and that public resources are applied in an effective way.

Those charged with governance are responsible for overseeing the Organization's financial reporting process, reviewing the effectiveness of how the entity monitors compliance with relevant legislative and regulatory requirements, ensuring that effective processes and systems are in place to address key roles and responsibilities in relation to governance and risk management, and ensuring the adequacy and effectiveness of the control environment.

Auditor-General's Responsibilities for the Audit

The audit objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes my opinion 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. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with ISSAIs will always detect a material misstatement and weakness when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

In addition to the audit of the financial statements, a compliance audit is planned and performed to express a conclusion about whether, in all material respects, the activities, financial transactions and information reflected in the financial statements are in compliance with the authorities that govern them and that public resources are applied in an effective way, in accordance with the provisions of Article 229(6) of the Constitution and submit the audit report in compliance with Article 229(7) of the Constitution.

Further, in planning and performing the audit of the financial statements and review of compliance, I consider internal control in order to give an assurance on the effectiveness of internal controls, risk management and governance processes and systems in accordance with the provisions of Section 7(1)(a) of the Public Audit Act, 2015 and submit the audit report in compliance with Article 229(7) of the Constitution. My consideration of the internal control would not necessarily disclose all matters in the internal control that might be material weaknesses under the ISSAIs. A material weakness is a condition in which the design or operation of one or more of the internal control components does not reduce to a relatively low level the risk that misstatements caused by error or fraud in amounts that would be material in relation to the financial statements being audited may occur and not be detected within a timely period by employees in the normal course of performing their assigned functions.

Because of its inherent limitations, internal control may not prevent or detect misstatements and instances of non-compliance. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies and procedures may deteriorate.


As part of an audit conducted in accordance with ISSAIs, I exercise professional judgement and maintain professional skepticism throughout the audit. I also:

- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for my opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by the Management.
- Conclude on the appropriateness of the management's use of the applicable basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Organization's ability to sustain its services. If I conclude that a material uncertainty exists, I am required to draw attention in the auditor's report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify my opinion. My conclusions are based on the audit evidence obtained up to the date of my audit report. However, future events or conditions may cause the Organization to cease sustaining its services.

- Evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation.
- Obtain sufficient appropriate audit evidence regarding the financial information and business activities of the Organization to express an opinion on the financial statements.
- Perform such other procedures as I consider necessary in the circumstances.

I communicate with the Management regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that are identified during the audit.

I also provide Management with a statement that I have complied with relevant ethical requirements regarding independence, and to communicate with them all relationships and other matters that may reasonably be thought to bear on my independence, and where applicable, related safeguards.


Nancy Gathungu
AUDITOR-GENERAL

Nairobi

10 November, 2021

XI. STATEMENT OF FINANCIAL PERFORMANCE

For the year ended 30 June 2020

	Notes	2019-2020 Kshs'000	2018-2019 Kshs'000'
Revenue from exchange transactions			
Goods	6	499,808	621,163
Services	7	172,283	115,600
Interest Received	8	10,078	13,457
Other Receipts	9	205,577	188,122
		887,745	938,341
Revenue from non-exchange transactions			
GoK Recurrent	10	4,140,316	4,173,562
GoK Development	11	76,000	25,899
World Bank	12	413,870	80,000
Other Grants	13	746,095	1,023,778
		5,376,281	5,303,239
Total Revenue		6,264,026	6,241,580
Expenses			
Staff Costs	14	4,170,361	4,468,851
Administrative Costs	15	1,619,821	1,570,816
Board Expenses	16	12,345	13,409
Audit Fees	17	3,940	3,800
Depreciation & Amortization expense	18	394,567	360,222
Repairs and Maintenance	19	76,199	114,617
Contracted Services	20	29,475	12,068
Finance cost	21	7,303	7,113
Total Expenses		6,314,011	6,550,895
Surplus/(Deficit)		(49,985)	(309,315)

The notes set out on pages 6 to 21 form an integral part of the financial statements.

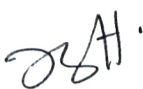
**XII. STATEMENT OF FINANCIAL POSITION
As at 30th June 2020**

	Notes	2019-2020 Kshs'000	2018-2019 Kshs'000'
Assets			
Current Assets			
Cash and Cash equivalents	22	775,619	843,540
Receivables from Exchange Transactions	23	244,079	93,147
Receivables from Non-exchange Transactions	24	406,548	387,247
Prepayments	25	19,930	95,266
Inventories	26	310,265	291,848
Deposits	27	2,585	2,585
		1,759,026	1,713,634
Non-Current Assets			
Property, Plant and Equipment	28	24,176,081	24,389,002
Intangible Assets	29	16,779	25,144
Biological Assets	30	716,185	634,190
Investments	31	2,149	2,149
		24,911,194	25,050,485
Total Assets		26,670,220	26,764,120
Liabilities			
Current liabilities			
Bank overdraft	32	-	3
Trade & Other Payables	33	253,564	359,556
		253,564	359,560
Non-Current liabilities			
Deferred Income	34	226,924	251,463
		480,488	611,022
Total Liabilities		26,189,732	26,153,097
Net assets			
General Reserve	35	812,538	862,523
Capital Fund	36	5,511,817	5,425,197
Revaluation Reserve	37	19,865,377	19,865,377
Total Net Assets and liabilities		26,189,732	26,153,097

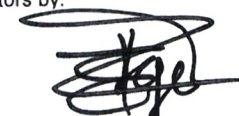
The Financial Statements set out on pages 1 to 21 were signed on behalf of the Board of Directors by:


Chairman, KALRO BoM

Date: 29/09/2020


Director, Finance & Accounts
ICPAK Member Number: 8783

Date: 29/09/2020


Director General

Date: 29/09/2020

XIII STATEMENT OF CHANGES IN NET ASSETS

For the year ended 30 June 2020

	Capital Fund	Revaluation Reserve	General Reserve	Totals
	Kshs'000'	Kshs '000'	Kshs'000'	Kshs'000'
At 1st July 2018	5,397,197	19,865,377	1,171,838	26,434,412
Surplus/(Deficit) for the period	28,000	-	(309,315)	(281,315)
Prior year adjustments	-	-	0	0
At 30 June 2019	5,425,197	19,865,377	862,523	26,153,097
At 1st July 2019	5,425,197	19,865,377	862,523	26,153,097
Surplus/(Deficit) for the period	86,620	-	(49,985)	36,634
At 30 June 2020	<u>5,511,817</u>	<u>19,865,377</u>	<u>812,538</u>	<u>26,189,732</u>

The notes set out on pages 6 to 21 form an integral part of the financial statements.

XIV STATEMENT OF CASHFLOW

As at 30th June 2020

	Notes	2019-2020 Kshs'000	2018-2019 Kshs'000
Cash Flow from Operating Activities			
Cash generated from/(used in) operations	37	125,273	27,800
Net cash generated from/(used in) operating activities		125,273	27,800
Cash flow from Investing Activities			
Revaluation of Biological assets		(81,995)	(66,096)
Purchase of property, plant & equipment	28	(173,261)	(245,931)
Purchase of intangible assets	29	(20)	(15,594)
Proceeds from sale of Assets		-	-
Cash generated from/(used in) investing activities		(255,276)	(327,621)
Cash flow from Financing Activities			
Capital Grant		86,620	28,000
Deferred Income(Capital)		(24,539)	58,906
Cash generated from/(used in)Financing activities		62,080	86,906
Increase in Cash and Cash Equivalent for the Year		(67,922)	(212,915)
Cash and Cash Equivalent at the Start of the Year		843,541	1,056,456
Cash and Cash Equivalent at the End of the Year	32	775,619	843,541

The notes set out on pages 6 to 21 form an integral part of the financial statements.

XV. STATEMENT OF COMPARISON OF BUDGET AND ACTUAL AMOUNTS

	Original budget	Adjustments	Final Budget	Actual on comparable basis	Performance difference
	2019-2020	2019-2020	2019-2020	2019-2020	2019-2020
	Kshs'000	Kshs'000'	Kshs'000'	Kshs'000'	Kshs'000'
Revenue from exchange transactions					
Goods	615,000		615,000	499,808	(115,192)
Services	165,000	-	165,000	172,283	7,283
Interest Received	10,000	-	10,000	10,078	78
Other Receipts	90,000		90,000	205,577	115,577
Sub total	880,000	-	880,000	887,745	
Revenue from non-exchange transactions					
GOK Personal Emoluments	4,129,000	11,663	4,140,663	4,140,316	(347)
GOK Development	56,000	46,872	102,872	76,000	(26,872)
World Bank	1,200,000	-	1,200,000	413,870	(786,130)
Other Grants	949,000	-	949,000	746,095	(202,905)
Sub total	6,334,000		6,392,536	5,376,281	
Total Revenue	7,214,000		7,272,536	6,264,026	
Expenses					
Staff Costs	4,473,004		4,473,004	4,170,361	302,643
Administrative Costs	2,002,036		2,002,036	1,619,821	382,214
Board Expenses	20,000		20,000	12,345	7,655
Audit Fees	3,800		3,800	3,940	(140)
Depreciation & Amortization expense	375,975		375,975	394,567	(18,592)
Repairs and Maintenance	180,000		180,000	76,199	103,801
Contracted Services	150,000		150,000	29,475	120,525
Finance cost	6,400		6,400	7,303	(903)
Total Expenses	7,211,214		7,211,214	6,314,011	897,203
Surplus/(Deficit)	2,786		61,321	(49,985)	

The notes set out on pages 6 to 21 form an integral part of the financial statements.

Budget notes

1. Change between original and final budget is as a consequence of budget adjustment from exchequer
2. Low revenue received from WorldBank against the projection was as a result of Kenya Climate Smart Project(KCSAP) and the fiscal ceiling by the National Treasury
3. The % decrease in revenue from goods against the budget is attributed to decrease in demand of seeds by County Governments
4. The % increase in revenue from services against the budget is attributed to slight increase in demand for services due to the lifting of ban on movement and gathering restrictions as a result of COVID-19.
5. The decrease in revenue from other grants against the budget in realization of the grants from donors is due to low disbursement by the Development Partners as a result of COVID-19
6. Board expenses underutilization against the budget was a result of postponement of Corporate Governance training that were to be conducted to the Board Members
7. Repairs and maintenance decrease was as a result of the delay in the take off of the Kenya Climate Smart Project and austerity measures
8. Contracted services difference was as a result of the delay in the take off of the Kenya Climate Smart Project

XVI. NOTES TO THE FINANCIAL STATEMENTS

1. General Information

KALRO is established by and derives its authority and accountability from Kenya Agricultural and Livestock Research Act, No 17 of 2013. The organisation is wholly owned by the Government of Kenya and is domiciled in Kenya. The entity's principal activity is to undertake, streamline, coordinate and regulate all aspects of research in agriculture and livestock development, and promote the application of the research findings, technologies and innovations.

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

The organization's financial statements have been prepared in accordance with the PFM Act, the State Corporations Act, and 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

3. Adoption of New and Revised Standards

i. Relevant new standards and amendments to published standards effective for the year ended 30 June 2020

i) Relevant new standards and amendments to published standards effective for the year ended 30 June 2020

Standard	Impact
IPSAS 40: Public Sector Combinations	Applicable: 1st January 2019: The standard covers public sector combinations arising from exchange transactions in which case they are treated similarly with IFRS 3 (applicable to acquisitions only) Business combinations and combinations arising from non exchange transactions which are covered purely under Public Sector combinations as amalgamations. <i>interpretations that are not applicable to the entity).</i>

ii) New and amended standards and interpretations in issue but not yet effective in the year ended 30 June 2020

Standard	Impact
IPSAS 41: Financial Instruments	Applicable: 1st January 2022: The objective of IPSAS 41 is to establish principles for the financial reporting of financial assets and liabilities that will present relevant and useful information to users of financial statements for their assessment of the amounts, timing and uncertainty of an entity's future cash flows. IPSAS 41 provides users of financial statements with more useful information than IPSAS 29, by: <ul style="list-style-type: none"> • Applying a single classification and measurement model for financial assets that considers the characteristics of the asset's cash flows and the objective for which the asset is held; • Applying a single forward-looking expected credit loss model that is applicable to all financial instruments subject to impairment testing; and • Applying an improved hedge accounting model that broadens the hedging arrangements in scope of the guidance. The model develops a strong link between an entity's risk management strategies and the accounting treatment for instruments held as part of the risk management strategy.
IPSAS 42: Social Benefits	Applicable: 1st January 2022 The objective of this Standard is to improve the relevance, faithful representativeness and comparability of the information that a reporting entity provides in its financial statements about social benefits. The information provided should help users of the financial statements and general purpose financial reports assess: <ul style="list-style-type: none"> (a) The nature of such social benefits provided by the entity; (b) The key features of the operation of those social benefit schemes; and (c) The impact of such social benefits provided on the entity's financial performance, financial position and cash flows.

<p>Amendments to Other IPSAS resulting from IPSAS 41, Financial Instruments</p>	<p>Applicable: 1st January 2022:</p> <ul style="list-style-type: none"> a) Amendments to IPSAS 5, to update the guidance related to the components of borrowing costs which were inadvertently omitted when IPSAS 41 was issued. b) Amendments to IPSAS 30, regarding illustrative examples on hedging and credit risk which were inadvertently omitted when IPSAS 41 was issued. c) Amendments to IPSAS 30, to update the guidance for accounting for financial guarantee contracts which were inadvertently omitted when IPSAS 41 was issued. d) Amendments to IPSAS 33, to update the guidance on classifying financial instruments on initial adoption of accrual basis IPSAS which were inadvertently omitted when IPSAS 41 was issued.
<p>Other Improvements to IPSAS</p>	<p>Applicable: 1st January 2021:</p> <ul style="list-style-type: none"> a) Amendments to IPSAS 13, to include the appropriate references to IPSAS on impairment, in place of the current references to other international and/or national accounting frameworks b) IPSAS 13, Leases and IPSAS 17, Property, Plant, and Equipment. Amendments to remove transitional provisions which should have been deleted when IPSAS 33, First Time Adoption of Accrual Basis International Public Sector Accounting Standards (IPSASs) was approved c) IPSAS 21, Impairment of Non-Cash-Generating Assets and IPSAS 26, Impairment of Cash Generating Assets. Amendments to ensure consistency of impairment guidance to account for revalued assets in the scope of IPSAS 17, Property, Plant, and Equipment and IPSAS 31, Intangible Assets. d) IPSAS 33, First-time Adoption of Accrual Basis International Public Sector Accounting Standards (IPSASs). Amendments to the implementation guidance on deemed cost in IPSAS 33 to make it consistent with the core principles in the Standard

iii) Early adoption of standards

The entity did not early – adopt any new or amended standards in year 2020

NOTES TO THE FINANCIAL STATEMENTS (Continued)

4. 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. The period covered by the annual budget is the same as the period covered by the financial statements.

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,

Bearer plant are "a living plant that is used in the production or supply of agricultural produce, is expected to bear produce for more than one period has a remote likelihood of being sold as agricultural produce, except for incidental scrap sales. This includes Coffee and Tea plants .

Before maturity, bearer plants are measured at their accumulated cost. After the bearer plants matures, KALRO measures the bearer plants using either the cost model or the revaluation model.

NOTES TO THE FINANCIAL STATEMENTS (Continued)

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

Buildings	2.00%
Bearer Plants	2.00%
Motor vehicles and Motor cycles	25.00%
Tractors	12.50%
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%

Depreciation will be charged in the year of acquisition and not charged in the year of disposal of the asset.

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 finite and amortised over the useful economic life and assessed for impairment whenever there is an indication that the intangible asset may be impaired. The amortisation period and the amortisation method for an intangible asset with a finite useful life is reviewed at least at the reporting date.

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.

NOTES TO THE FINANCIAL STATEMENTS (Continued)

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. The entity's obligation under the scheme is limited to employee and employer contributions

Employee	Employer
10%	20%

The entity also contributes to the statutory National Social Security Fund (NSSF). The entity's obligation under the scheme is limited to employee and employer contributions.

i) Cash and cash equivalents

Cash and cash equivalents comprise cash on hand and cash at bank. Bank account balances include amounts held at various commercial banks at the end of the financial year net of bank overdrafts. In the Statement of Financial Position, bank overdrafts are included as borrowings under current liabilities.

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) Foreign currency transactions IPSAS 4.

Transactions in foreign currencies are initially accounted for at the ruling rate of exchange on the date of the transaction. Trade creditors or debtors denominated in foreign currency are reported at the statement of financial position reporting date by applying the exchange rate on that date. Exchange differences arising from the settlement of creditors, or from the reporting of creditors at rates different from those at which they were initially recorded during the period, are recognized as income or expenses in the period in which they arise

l) 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, 2019.

m) 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. The Government of Kenya is the principal shareholder of the entity, holding 100% of the entity's equity interest. Other related parties include the Parent Ministry (Ministry of Agriculture, Livestock, Fisheries and Co-operatives) and Board of Management. 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 16), while the three key management emoluments for the year were Kshs 20.989million. This is included in the staff costs.

n) 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.

o) 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.

p) 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.

NOTES TO THE FINANCIAL STATEMENTS (Continued)**q) 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 2019/20 is 5.62(FY 2018/19:3.68)

Financial Assets	Note	2019-2020 Kshs '000	2018-2019 Kshs '000
Bank and Cash Balances			
Receivables	19	775,619	843,537
Total Financial Assets	20&21	650,626	480,394
Financial Liabilities		1,426,245	1,323,931
Payables			
Total Financial Liabilities	30	253,564	359,556
Net Liquidity		253,564	359,556
Liquidity Ratio		1,172,681	964,375
		5.62	3.68

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.

NOTES TO THE FINANCIAL STATEMENTS (Continued)

5) 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 an 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 at 5% of the portfolio. 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.

6 Goods	2019-2020	2018-2019
	Kshs '000	Kshs '000
Sheep & Goats	1,592	2,483
Pigs	935	60
Camels	40	25
Cows	23,206	16,065
Poultry	66,322	25,359
Maize	9,954	6,044
Sorghum & Millets	8,217	470
Rice	677	520
Root and Tuber	530	1,748
Vegetables	615	2,281
Herbs	6,445	176
Beans	63,474	640
Fruits	1,011	685
Bananas	1,182	669
Wheat	2,190	8,245
Seeds	65,063	95,280
Seedlings	53,174	76,959
Trees and Plants	1,113	281
Manure	672	681
Sand & Ballast	-	239
Firewood	1,358	947
Flowers	75	54
Pyrethrum	36	7
Cotton	120	128
Fodder	20,296	27,737
Beef	1,480	77

NOTES TO THE FINANCIAL STATEMENTS (Continued)

Milk		
Eggs	34,412	28,769
Tomatoes	4,414	3,315
Hay	121	234
Water	9,270	195
Other Farm produce	3,829	397
Increase/Decrease in Stock	3,354	40,995
Sale of Scrap	18,416	145,656
Coffee, Milling Cane and Tea Sales	72	-
Total	96,143	133,744
	499,808	621,163

7. Services

	2019-2020	2018-2019
	Kshs '000	Kshs '000
Soil Analysis	14,775	12,662
Other Lab Services	1,364	1,482
Sale of Journals Periodicals	173	1,310
Hire-Ground/Conference Facilities	58,015	21,552
Royalties	10,001	12,825
Rent	52,550	61,479
Other services	35,406	4,290
Total	172,283	115,600

8. Interest Received

	2019-2020	2018-2019
	Kshs '000	Kshs '000
Interest Received	10,078	13,457
Total	10,078	13,457

9. Other Receipts

	2019-2020	2018-2019
	Kshs '000	Kshs '000
Cafeteria Income	53,090	90,651
Guest House Income	45,397	24,887
Bus Income	1,991	2,445
Utilities Income	10,852	3,129
Sale of Tender Documents	18	62
Grazing Fee	15	795
Library coffee	-	8
Gain/(Loss) on Foreign exchange	4,926	(3,671)
Gain/(Loss) on Biological assets	81,995	67,159
Gain/(Loss) on Sale of Fixed Assets	7,293	2,658
Total	205,577	188,122

10. GoK Personnel Emoluments

This represents GoK funds received from the Government for payment of staff costs

	2019-2020	2018-2019
	Kshs '000	Kshs '000
Grants-Personnel Emoluments	4,140,316	4,173,562
Total	4,140,316	4,173,562

NOTES TO THE FINANCIAL STATEMENTS (Continued)

11. GoK Development Funds

This represents GoK funds received from the Government for development of research activities.

	2019-2020 Kshs '000	2018-2019 Kshs '000
Development Grant -GoK	76,000	25,899
Sub-Total	76,000	25,899

10 & 11. Transfers from Ministries

Name of the Entity sending the grant	Amount recognized to Statement of Comprehensive Income Kshs '000	Amount deferred Kshs '000	Amount recognised in capital fund Kshs '000	Total grant income during the year Kshs '000	2019-2020	2018-2019
Ministry of Agriculture, Livestock, Fisheries and Co-operatives	4,140,316	-	-	4,140,316	4,140,316	4,173,562
Ministry of Agriculture, Livestock, Fisheries and Co-operatives	76,000	-	-	76,000	76,000	25,899
Total	4,216,316	-	-	4,216,316	4,216,316	4,199,461

12 World Bank

	2019-2020 Kshs '000	2018-2019 Kshs '000
Development Fund - KCSAP	413,870	80,000
Total	413,870	80,000

13. Development Funds - Other Donors

These represent grants received from various donors for research activities.

	2019-2020 Kshs '000	2018-2019 Kshs '000
Development Grant - EU	27,664	(1,177)
Development Grant - USAID	133,291	214,496
Development Grant - Rockefeller	1,515	-
Development Grant - CIP	200	77,715
Development Grant - CIAT	20,040	7,042
Development Grant - ICRAF	3,340	2,831
Development Grant - FAO	4,422	7,522
Development Grant - ILRI	456	598
Development Grant - ILRI	5,625	2,799
Development Grant - ICRISAT	42,524	37,899
Development Grant - CIMMYT	43,793	196,496
Development Grant - NRF	53,992	4,281
Development Grant - IDRC	3,848	-
Development Grant - AGRA	18,476	62,387
Development Grant - KCEP	12,419	-
Development Grants -CORNEL UNI	374,492	410,890
Development Grant - Other Grants		
Total	746,095	1,023,778

14. Staff Costs

	2019-2020 Kshs '000	2018-2019 Kshs '000
Basic Salary	2,008,061	2,198,085
House Allowance	669,761	729,195
Other Personal Allowance	113,506	104,587

NOTES TO THE FINANCIAL STATEMENTS (Continued)

Commuter Allowance		
Transfer Allowance	184,558	201,689
Passage & Leave Expenses	3,264	3,503
Gratuity & Pension Contribution	12,532	14,380
Medical Expenses	417,717	438,830
Contractual Employee	320,299	299,352
Casual Labour	185,545	181,553
Total	255,119	297,675
	4,170,361	4,468,851

15. Administrative Costs

	2019-2020	2018-2019
	Kshs '000	Kshs '000
Fuels, Oils and Lubricants	53,825	67,867
Vehicle Insurance	18,012	19,961
Road Tax & Licenses	886	585
Hire of Transport	4,738	5,599
Freight, Clearing & Shipping	791	1,438
Purchase of Supplies Production	79,650	104,550
Purchase of Drugs	5,797	4,204
Purchase of Sierra & Vaccines	2,559	1,974
Farm Development	20,545	21,901
Purchase of Fungi Insecticide & Sprays	3,733	5,181
Purchase of Farm Input	27,669	44,995
Purchase of Laboratory Stores	60,366	40,145
Research Materials	24,644	23,501
Purchase of Animals	3,012	3,919
Purchase of Dressing & Non Pharmaceutical	318	87
Purchase of Consumables Stores	61,715	4,453
Miscellaneous. Operating Expenses	-	5,180
Hire Machinery & Equipment's	4,848	2,080
Purchase of Workshop Tools, Spares & Equipment	2,731	253
Farmer Grants (CIGs/CBOs)	34,023	19,036
Purchase of seed	82,477	56,698
Office Running Expenses	-	3,839
Office Stationery	21,875	25,072
Computer Expenses	51	4,195
Printing and Publishing	6,211	9,753
Advertising and Publicity	9,487	12,296
Library Expenses	464	909
Show Expenses	17,395	16,016
Cafeteria Expenses	42,343	47,539
Food and Ration	12,916	19,944
Official Entertainment	9,714	1,234
Conference and Seminars	48,970	32,103
Rent and Rates	1,933	4,729
Commission and Honoraria	3,995	-
Security Expenses	122,577	127,746
Insurance - Property	30,375	17,882
Uniforms and Clothing	1,670	1,865
Miscellaneous Charges	-	12,654
Subscriptions to Newspapers	754	386
Insurance - GPA & GL	17,420	22,239
Daily Subsistence Allowance	564,392	536,220
External Travels and Per Diem	20,408	19,949
Travel Costs (Air & Bus) Mileage	5,940	15,039
Training	18,086	16,674
Water Expenses	4,783	6,043
Electricity Supplies	85,625	80,984
Gas Expenses	1,876	1,658
Telephone Expenses	11,564	8,654
Postage and Courier Expenses	3,755	3,033

NOTES TO THE FINANCIAL STATEMENTS (Continued)

Provision for bad debts	0	116
Internet Connections	29,905	42,466
Membership Fees & Subscription	5,015	5,404
Legal Dues, Arbitration & Compensation	27,982	40,572
Total	1,619,821	1,570,816

16. Board Expenses

Board	2019-2020	2018-2019
	Kshs '000	Kshs '000
Sitting Allowance	4,083	13,409
Travelling and Accomodation	4,274	-
Mileage Allowance	847	-
Honoraria	880	-
Training	2,262	-
Total	12,345	13,409

17. Audit Fees

These are fees incurred by the Institute during external audits.

	2019-2020	2018-2019
	Kshs '000	Kshs '000
Audit Fees	3,940	3,800
Total	3,940	3,800

18. Depreciation & Amortization Expense

	2019-2020	2018-2019
	Kshs '000	Kshs '000
Buildings	135,519	136,626
Plant and Machinery	29,154	25,043
Motor Vehicles	52,205	37,898
Lab & Scientific Equipment	95,539	87,502
Office & Computer Equip.	15,666	11,582
Office Furniture & Fittings	37,743	35,646
Infrastructure(G/hses, fences, streetlighting)	16,065	10,658
Amortization -Bearer Plants	4,292	4,861
Amortization-Software	8,385	10,405
Total	394,567	360,222

19. Repairs and maintenance

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

	2019-2020	2018-2019
	Kshs '000	Kshs '000
Repairs & Maintenance of Vehicles	35,682	44,525
Repairs & Maintenance of Motor Cycles	377	140
Repair & Maintenance of Buildings & Stations	22,571	47,891
Repair & Maintenance of Water Supplies and Pumps	2,689	5,842
Repair & Maintenance of Office Equipment	5,718	4,429
Repairs & Maintenance Laboratory Equipment	2,841	1,395
Repairs & Maintenance Furniture	664	128
Maintenance of Plant and Machinery	2,711	7,588
Maintenance of Roads	779	2,166
Minor Alteration & Maintenance of Works	2,167	514
Total	76,199	114,617

20. Contracted Professional Services

	2019-2020	2018-2019
	Kshs '000	Kshs '000
Contracted Professional Services	29,475	12,068
Total	29,475	12,068

21 Finance cost

	2019-2020	2018-2019
	Kshs '000	Kshs '000
Bank Charges	7,303	7,113
Total	7,303	7,113

NOTES TO THE FINANCIAL STATEMENTS (Continued)

22 Cash and cash equivalent

	2019-2020 Kshs '000	2018-2019 Kshs '000
Bank Balances	775,619	843,540
Bank overdraft (Note 32)	-	(3)
Total	775,619	843,537

Cash and cash equivalent are held in various banks as per below summary:

Kenya Commercial Bank	695,348	715,654
NIC Bank	9,629	37,292
Barclays Bank	12,800	11,831
National Bank of Kenya	24,238	22,858
Cooperative Bank of Kenya	27,898	27,477
Stanbic Bank	3,218	23,968
MPESA	1,684	3,815
Cash	805	645
Total	775,619	843,540

23 Receivables from Exchange Transactions

	2019-2020 Kshs '000	2018-2019 Kshs '000
Trade Debtors	103,023	72,363
Kenya Seed	19,945	19,945
Prepayments	1,592	1,592
Rent dues	4,519	3,381
Bungoma Union	746	746
Mugama Co-op Union	1,863	1,863
Other Receivables	119,436	302
Former staff debtors	663	663
Provision for Doubtful Debts	(7,708)	(7,708)
Total	244,079	93,147

24 Receivables from Non-exchange Transactions

	2019-2020 Kshs '000	2018-2019 Kshs '000
Commodity Levy	314,473	314,473
Staff Imprest	69,733	10,909
Staff advances	2,005	1,157
Transfers to other Institutions	679	41,047
Coffee Board of Kenya	23,445	23,445
KPCU	124,496	124,496
Provision for Doubtful Debts	(128,283)	(128,283)
Total	406,548	387,247

25 Prepayments

These are prepayments on insurance covers taken by KALRO with commencement date of 1st October 2019 and expiring on 30th September 2020

	2019-2020 Kshs '000	2018-2019 Kshs '000
Insurance Premium	19,930	95,266
Total	19,930	95,266

26 Inventories

	2019-2020 Kshs '000	2018-2019 Kshs '000
Consumables	307,637	289,220
Crop	2,969	2,969
Provision for obsolete stock	(341)	(341)
Total	310,265	291,848

27 Deposits

	2019-2020 Kshs '000	2018-2019 Kshs '000
Deposits	2,585	2,585
Total	2,585	2,585

NOTES TO THE FINANCIAL STATEMENTS (Continued)

28. Property, plant and Equipment

	LAND	BEARER PLANTS	BUILDINGS	MOTOR VEHICLES	PLANT & MACHINERY	OFFICE EQUIP.	FURNITURE & FITTINGS	LAB EQUIPMENT	MOTOR CYCLES & BICYCLES	INFRASTRUCTURE (G/hses, fences, streetlighting)	WORK IN PROGRESS	TOTAL
	Kshs'000'	Kshs'000'	Kshs'000'	Kshs'000'	Kshs'000'	Kshs'000'	Kshs'000'	Kshs'000'	Kshs'000'	Kshs'000'	Kshs'000'	Kshs'000'
Cost												
As at 1 st July 2018	17,808,626	214,670	6,461,997	597,534	259,237	500,869	249,919	798,881	7,748	113,731	343,603	27,356,815
Addition for the period	-	525	61,222	74,138	6,951	21,019	9,500	68,254	-	4,323	-	245,931
Reclassification of assets categories	-	-	-	-	-	-	-	-	-	-	-	-
Transfer from WIP	-	-	269,811	-	-	-	43,109	-	-	30,684	(343,603)	-
At 30th June 2019	17,808,626	215,195	6,793,029	671,672	266,188	521,887	302,528	867,136	7,748	148,738	(0)	27,602,746
Addition for the period	-	-	2,429	57,363	225	56,011	334	27,387	-	29,512	-	173,261
Transfer from WIP	-	-	-	-	-	-	-	-	-	-	-	-
Reclassification of assets categories	-	-	-	-	-	-	-	-	-	-	-	-
Transfer from Biological assets	-	-	-	7,292	-	-	-	-	-	-	-	7,292
Disposal for the period	-	-	-	-	-	-	-	-	-	-	-	-
At 30th June 2020	17,808,626	215,195	6,795,458	736,328	266,412	577,898	302,862	894,523	7,748	178,250	(0)	27,783,299
Depreciation												
At 1 st July 2018	-	9,892	927,459	597,609	209,350	507,352	195,065	661,283	7,748	97,986	-	3,213,744
Prior Year Adjustment on b/f Depreciation	-	-	-	-	-	-	-	-	-	-	-	-
At 30th June 2019	-	9,892	927,459	597,609	209,350	507,352	195,065	661,283	7,748	97,986	-	3,213,744
Charge for the period	-	4,292	135,519	52,205	29,154	15,666	37,743	95,539	-	16,065	-	386,182
Accumulated depreciation on disposal	-	-	-	7,292	-	-	-	-	-	-	-	7,292
Depreciation on reclassification	-	-	-	-	-	-	-	-	-	-	-	-
At 30th June 2020	-	14,184	1,062,978	657,106	238,504	523,018	232,808	756,822	7,748	114,050	-	3,607,218
Net book values												
At 30 th June 2020	17,808,626	201,011	5,732,480	79,222	27,908	54,880	70,054	137,701	0	64,199	(0)	24,176,081
At 30 th June 2019	17,808,626	205,303	5,865,571	74,063	56,837	14,535	107,462	205,853	0	50,752	(0)	24,389,002

Motor vehicles and motorcycles with a gross carrying amount of Ksh. 450,861,000 and Ksh. 6,606,660 respectively, had been fully depreciated during the year ending 30th June 2020 and are still in use

NOTES TO THE FINANCIAL STATEMENTS (Continued)

29 Intangible Assets

	2019-2020 Kshs '000	2018-2019 Kshs '000
Cost		
At beginning of the year		
Addition	262,756	247,162
At end of the year	20	15,594
Amortization	262,776	262,756
At beginning of the year		
Amortization	237,611	227,206
At end of the year	8,385	10,405
Net Book Value	<u>245,997</u>	<u>237,611</u>
	<u>16,779</u>	<u>25,144</u>

30 Biological Assets

	2019-2020 Kshs '000	2018-2019 Kshs '000
As at 1st July		
Gain in Value during the year	634,190	568,094
As at 30th June	<u>81,995</u>	<u>66,096</u>
Total	<u>716,185</u>	<u>634,190</u>

31 Investments

Quoted Investments:

1,672 B A T Kenya PLC shares-

17 17

Other Investments:

KPCU Unsecured Loan Stock

KPCU Redeemable Ordinary shares

Fairvalue is Kshs 0 (2018/2019:Kshs 0)

Total

40 40
2,092 2,092

2,149 2,149

The Kenya Planters Co-operative Union 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 Government has liquidated KPCU.

For investments in equity share listed under note 31 above, the equity investments is under the following categories:

Name of entity where investment is held	No of shares			Nominal value of shares	Fair value of shares	Fair value of shares
	Direct shareholding	Indirect shareholdin g	Effective shareholdin g		Current year	Prior year
	%	%	%	Kshs '000	Kshs '000	Kshs '000
British American Tobacco Kenya PLC	0.0000167	-	0.0000167	17	531	1,003
	0.0000167	-	0.0000167	17	531	1,003

The fair value of BAT shares is determined by reference to published price quotation in the active market (NSE). On 30th June 2020, the shares traded at Kshs. 317.75(2018/2019:Kshs.600.00) per share.

32 Bank Overdraft

	2019-2020 Kshs '000	2018-2019 Kshs '000
Bank overdraft		
Total	<u>-</u>	<u>3</u>
	<u>-</u>	<u>3</u>

NOTES TO THE FINANCIAL STATEMENTS (Continued)

33 Trade and Other Payables

	2019-2020	2018-2019
	Kshs '000	Kshs '000
Trade Creditors	94,682	143,542
Statutory Deductions	59,642	74,611
Other Creditors	34,581	57,968
Rent Deposits	814	814
Provision for Liabilities(Arbitration - Dinesh Construction)	63,846	82,621
Total	253,564	359,556

34 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.

Description	2019-2020	2018-2019
	Kshs '000	Kshs '000
National Government	-	-
International funders	226,924	251,463
Prior Year Adjustments-International funders	-	-
Public contributions and donations	-	-
Total deferred income	226,924	251,463

The deferred income movement is as follows:

	National government	Internationa l funders	Public contributions and donations	Total	Total
	Kshs '000	Kshs '000	Kshs '000	Kshs '000	Kshs '000
Balance brought forward	0	251,463	-	251,463	192,557
Prior year adjustment*				-	0
Additions		-		-	229,646
Transfers to Capital fund				-	-
Transfers to income statement		(24,539)	-	(24,539)	(170,741)
Other transfers				-	-
Balance carried forward	-	226,924	-	226,924	251,463

35 General reserve

	2019-2020	2018-2019
	Kshs '000	Kshs '000
Balance Brought Forward as at 1 July	862,523	1,171,838
Surplus/(Deficit) for the Year	(49,985)	(309,315)
Prior year adjustments	-	0
Balance Carried Forward as at 30 June	812,538	862,523

NOTES TO THE FINANCIAL STATEMENTS (Continued)

36 Capital fund

	2019-2020	2018-2019
	Kshs '000	Kshs '000
Capital Funds Brought Forward as at 1st July		
Capital Funds received during the year	5,425,197	5,397,197
Balance Carried Forward as at 30th June	<u>86,620</u>	<u>28,000</u>
	5,511,817	5,425,197

37 Reconciliation of operating profit/(loss) to cash generated from/(used in) operations

	2019-2020	2018-2019
	Kshs '000	Kshs '000
Cash Flow from Operating Activities		
Surplus/(Deficit)		
Adjustment for;	(49,985)	(309,315)
Depreciation and Amortisation		
Operating profit/(loss) before working capital changes	<u>394,567</u>	<u>360,222</u>
Working Capital adjustments	344,582	50,907
Decrease /(Increase) in Inventories		
Decrease /(Increase) in Receivables-Exchange	(18,416)	(131,224)
Decrease /(Increase) in Receivables-Non-Exchange	(150,931)	16,237
Decrease /(Increase) in Prepayments	(19,301)	(23,341)
Increase/(Decrease) in Current liabilities	75,336	(12,254)
Decrease /(Increase) in Deposits	(105,996)	77,728
Net changes in Working Capital	<u>-</u>	<u>49,746</u>
Cash generated from/(used in) operations	(219,308)	(23,107)
	125,273	27,800

38 Revaluation reserve

	2019-2020	2018-2019
	Kshs '000	Kshs '000
Balance Brought Forward as a 1st July		
Balance Carried Forward as at 30th June	<u>19,865,377</u>	<u>19,865,377</u>
	19,865,377	19,865,377

39 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.

40 Events after the reporting period

There were no material adjusting and non- adjusting events after the reporting period.

41 Ultimate and holding entity

KALRO is a Semi- Autonomous Government Agency under the Ministry of Agriculture ,Livestock, Fisheries and Co-operatives. Its ultimate parent is the Government of Kenya.

42 Currency


The financial statements are presented in Kenya Shillings (Kshs).

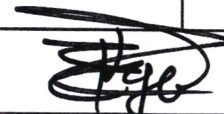
APPENDIX I.PROGRESS ON FOLLOW UP OF AUDITOR RECOMMENDATIONS

The following is the summary of issues raised by the external auditor, and management comments that were provided to the auditor. We have nominated focal persons to resolve the various issues as shown below with the associated time frame within which we expect the issues to be resolved.

Reference No. on the external audit Report	Issue / Observations from Auditor	Management comments	Focal Point person to resolve the issue	Status: (Resolved / Not Resolved)	Timeframe:(Put a date when you expect the issue to be resolved)
1.1	Long Outstanding imprests	New ERP system being implemented to assist in aging	H-Finance	Resolved	Dec-20
1.2	Debt Recovery	Sought for the Public Investment Committee (PIC) assistance during the Parliamentary summons	H-Finance	Not Resolved	Continuous
1.3	Commodity Levy	To seek authority for write off	H-Finance	Not Resolved	Sep-20
1.4	Transfer to other Institutions	Investigate the cause	H-Finance	Not Resolved	Sep-19
2	Receivables from exchange Transactions	To seek authority for write off. Since then, Kenya seed has paid Kshs. 14.044million(Gross)	H-Finance	Partially Resolved	Sep-19
3.1	Property Plant & Equipment without Title Deed	Follow up on acquisition of ownership documents	H-Finance	Partially Resolved	Continuous
3.2	Procurement of Egg Setter Machine	Follow up on full installation of the machine	H-Supplies Chain Management	Resolved	Resolved
3.3	Work in Progress	Follow up on equipping of the completed Tea factory Building	H-Finance	Partially Resolved	Continuous
4	Trade and other payables	Investigate the long unpaid debts with view of write-back. On the outstanding debt to a Contractor, Kshs. 100.775million has been paid	H-Finance	Partially Resolved	Dec-20
5	Investments	Proper disclosure done	H-Finance	Resolved	Resolved
6	Cash and cash equivalents	Matter under investigation by the EACC and National Police Service. Long outstanding unrepresented cheques matter resolved	DG	Not Resolved	Continuous
7	Inventories	To comply with IPSAS 27	H-Finance	Resolved	Resolved
8	Differed Income	To comply with IPSAS 27	H-Finance	Resolved	Resolved
9	Deposits	Documentation given to confirm validity	H-Finance	Resolved	Resolved

Reference No. on the external audit Report	Issue / Observations from Auditor	Management comments	Focal Point person to resolve the issue	Status: (Resolved / Not Resolved)	Timeframe:(Put a date when you expect the issue to be resolved)
10	Prepayments	Reason given to explain the increase	H-Finance	Resolved	Resolved
11	Statement of changes in net assets	Prior year adjustment entry explained	H-Finance	Resolved	Resolved
12	Unreconciled differences between the Financial Statements and Ledger Balances	Variance reconciled and explained	H-Finance	Resolved	Resolved
13	Presentation and Disclosure of the Financial Statements	Description amended from gain on revaluation of assets to gain/loss on valuation of biological assets Development funds not differed	H-Finance	Resolved	Resolved
14	Budget Control and Performance	Budget approval, execution and purpose to ascertain the additional Ksh.500m explained and supported	H-Finance	Resolved	Resolved


 Chairman, KALRO BoM
 Date: 29/09/2020


 Director General
 Date: 29/09/2020

APPENDIX II: PROJECTS IMPLEMENTED BY KALRO

Projects

Major projects implemented by KALRO and funded by development partners

	Project title	Project Number	Donor	Period/ duration	Donor commitment (Kshs'000')	Separate donor reporting required as per the donor agreement (Yes/No)	Consolidated in these financial statements(Yes/No)
1	Kenya Climate-Smart Agriculture Project (KCSAP)	Project I.D. P154784	World Bank	60months	5,000,000	YES	YES
2	Integrated Agricultural Research for Development	AID-615-F-16-00001	USAID	36months	790,059	YES	YES
3	Support to improvement of added value to coffee	CKE 1060.01 E	Agence Française de Développement (AFD)	60months	140,000	YES	YES
4	AGRIFI- Climate Smart Agricultural Productivity Project (CS-APP)	FED/2018/398-876	EU	60months	567,780	YES	YES

Status of Projects completion

	Project	Total project Cost ¹ (Kshs'000')	Total expended to date (Kshs'000')	Completion % to date	Budget (Kshs'000')	Actual (Kshs'000')	Sources of funds
1	Kenya Climate-Smart Agriculture Project (KCSAP)	5,370,000	493,870	9%	1,200,000	413,870	WORLD BANK
2	Integrated Agricultural Research for Development	926,496	773,039	83%	219,000	133,291	USAID
3	Support to improvement of added value to coffee	140,000	6,293	4%	57,710	-	Agence Française de Développement (AFD)
4	AGRIFI- Climate Smart Agricultural Productivity Project (CS-APP)	738,115	229,531	31%	250,000	21,313	EU

1.The project total cost is the total financing for both the Donor and counterpart(GoK)

APPENDIX III: INTER-ENTITY TRANSFERS (Ksh'000')

ENTITY NAME:		KALRO		
Break down of transfers from the State Department for Agricultural Research and State Department for Livestock				
FY 2019/20				
a. Recurrent Grants				
		Bank Statement Date	Amount (Kshs'000')	FY to which the amounts relate
		Aug-19	354,522	2019/20
		Aug-19	677,728	2019/20
		Oct-19	1,032,250	2019/20
		Dec-19	1,032,250	2019/20
		Apr-20	1,032,250	2019/20
		Oct-19	1,329	2018/19
		Jun-20	5,317	2019/20
		Jul-19	4,670	2019/20
		Total	4,140,316	
b. Development Grants				
		Aug-19	20,000	2019/20
		Oct-19	4,500	2019/20
		Oct-19	28,500	2019/20
		Nov-19	11,500	2019/20
		Jan-20	11,500	2019/20
		Total	76,000	
c. Other Grants				
		Jan-20	28,576	2019/20
		Jan-20	30,000	2019/20
		Total	58,576	

The above amounts have been communicated to and reconciled with the Parent Ministry

APPENDIX IV: RECORDING OF TRANSFERS FROM OTHER GOVERNMENT ENTITIES (Ksh'000')

Name of the MDA Transferring the funds	Date received as per bank statement	Nature	Total Amount	Where Recorded/recognized					Total Transfers during the Year
				Statement of Financial Performance	Capital Fund	Deferred Income	Receivables	Others	
Ministry of Agriculture, Livestock, Fisheries and Cooperatives	Appendix III	Recurrent	4,140,316	4,140,316	-	-	-	-	4,140,316
	Appendix III	Development	76,000	76,000	-	-	-	-	76,000
	Jun-20	IG&IR NOC Funds	28,576	28,576	-	-	-	-	28,576
	Jun-20	IG&IR NOC Funds	30,000	30,000	-	-	-	-	30,000
Ministry of Education, Science and Technology - National Research Fund(NRF)	Jul-19	Research Funds	22,899	22,899	-	-	-	-	22,899
	Jun-20	Research Funds	20,843	20,843	-	-	-	-	20,843
Executive Office of the President	Jun-20	Research Funds	14,250	14,250	-	-	-	-	14,250
Kenya Seed Company Ltd	Jul-19	Royalties	2,557	2,557	-	-	-	-	2,557
	Oct-20	Research Funds	4,750	4,750	-	-	-	-	4,750
Total			4,340,192	4,340,192	-	-	-	-	4,340,192