Kenya Plant Health
Inspectorate Service

Annual Report and Financial Statements

June 2012

CONTENTS

Abbreviations

AIRC	Agricultural Information Resource Centre
AQIS	Australian Quarantine and Inspection Service
ASK	Agricultural Society of Kenya
COMESA	Common Market for Eastern and Southern Africa
COPE	Centre of Phytosanitary Excellence
CPM	Commission on Phytosanitary Measures
DFID	Department for International Development
DUS	Distinctiveness Uniformity & Stability tests
EAC	East African Community
EAC SPS	East African Community Sanitary and Phytosanitary Measures
ECS	Electronic Certification System
EPA	Environmental Protection Agency
EU	European Union
EU ACP	European Union African Caribbean and Pacific country producers?
FAO	Food and Agriculture Organisation
FPEAK	Fresh Produce Exporters Association of Kenya
GMO	Genetically Modified Organism
HCDA	Horticultural Crops Development Authority
ICT	Information Communication Technology
IPPC	International Plant Protection Convention
ISO	International Organisation for Standardisation
ISPM	International Standard for Phytosanitary Measures
ISTA	International Seed Testing Association
JKIA	Jomo Kenyatta International Airport
KARI	Kenya Agricultural Research Institute
KSC	Kenya Seed Company
KFC	Kenya Flower Council
KRA	Kenya Revenue Authority
KSTCIE	Kenya Standing Technical Committee on Imports & Exports
LAN	Local Area Network
MRLs	Maximum Residue Levels
MTP	Medium Term Plan
NBA	National Biosafety Authority
NBC	National Biosafety Committee
NPPO	National Plant Protection Organisation
NPT	National Performance Trial
NPTC	National Performance Trial Committee
NVRC	National Variety Release Committee
OECD	Organisation for Economic Co-operation and Development
OPVs	Open Pollinated Varieties
PBR	Plant Breeder's Rights
PCPB	Pest Control Products Board
PIP	Plant Import Permit
PRA	Pest Risk Analysis
QMS	Quality Management System
SANAS	South African National Accreditation System
SADC	Southern African Development Community
SPS	Sanitary & Phytosanitary Standards
STAK	Seed Trade Association of Kenya
UNECE	United Nations Economic Commission for Europe
UPOV	International Union for the Protection of new Varieties of Plants
USA	United States of America
USDA-APHIS	United States Department of Agriculture Animal and Plant Health Inspection Service
USAID	United States Agency for International Development
WAN	Wide Area Network
WTO	World Trade Organisation

Board of Directors

From Left to Right
Ambassador Hussein Dado, Mr. Joseph K. Nthiwa, Mr. Joseph Kariuki, Mr. Partrick K.B. Afwande, Dr. James M. Onsando, Prof. Daniel Mukunya, Ms. Serah N. Kinyua, Prof. Vasey N. Mwaja, Mr. Joseph N'getich and Prof. Thomas E. Akuja

SENIOR MANAGEMENT STAFF

General Manager, Finance & Administration	Mr. Stephen Ithili
General Manager, Phytosanitary Services	Dr. Esther Kimani
General Manager, Quality Assurance	Dr. Joseph Ahenda

REGIONAL MANAGERS AND OFFICERS IN CHARGE

Regional Manager, Mombasa	Mr. James Wahome
Regional Manager, Nakuru	Mr. Jacob Cheptaiwa
Regional Manager, Kitale	Mr. Alfred Musuya
Officer in Charge, Embu	Mr. Joash Nyaribo
Officer in Charge, Kisumu	Mr. Francis Furaha
Officer in Charge, Naivasha	Ms. Faith Ndunge
Officer in Charge, Plant Quarantine Station, Muguga	Mr. Francis Mwatuni
Officer in Charge, Plant Inspection Unit – JKIA	Mr. Kennedy Onchuru

HEADS OF DEPARTMENTS

Corporation and Legal Affairs Secretary	Ms. Margaret Njuguna
Head, Internal Audit	Mr. Samuel Okoth
Head, Finance	Mr. Bartonjo Cheptarus
Ag. Head, Human Resource Development	Mr. Bartonjo Cheptarus
Head, Seed Certification & Plant Variety Protection	Mr. Simeon Kibet
Head, Biosafety and Phytosanitary Services	Mr. Abed Kagundu
Head, Analytical Chemistry Laboratory	Ms.Rosemary Ng'ang'a
Technical Personal Assistant to the MD	Ms. Lucy Namu
Ag. Head, Planning & Quality Management	Mr. Nassir Rajab
Coordinator, Trade & Standards	Mr. Phillip Njoroge
Coordinator, Projects	Ms. Luiza Munyua
Head, Procurement	Mr. Charles Kamau
Ag. Head Information Communication & Technology	Ms. Nancy Wambugu
Head, Transport	Mr. Stephen Kariuki
Public Relations and Communications Officer	Ms. Catherine Muraguri

Statement from The Chairperson

Kenya Plant health inspectorate Service (KEPHIS) was established with a primary mandate of regulating agricultural inputs and produce to assure high quality products. As the Instititution marks 15 years since inception, I take this opportunity to highlight a journey marked majorly by achievements and some challenges that have always been surmounted. We hold our heads high and take great pride to be part of this Institution that has made its presence felt locally and internationally, especially in Agricultural trade.

The Kenya Vision 2030 seeks to implement strategies that will enable Kenya realise a 10% annual growth rate per annum. With the completion of the 1st five year medium term plan in 2012 that coincided with the completion of our own 2008-2012 strategic plan, we are satisfied that we have effectively contributed to the Vision's expectations as is enumerated in this report.

Agriculture is considered a key driver to Kenya's economic development, with the horticulture and tea sub-sectors having posted impressive results in the last 5 years. Combined, the two subsectors generated more than Kshs 180 billion in foreign exchange earnings. This is addition to other benefits including employment creation either directly or indirectly. Given the competitiveness of the global agriculture produce market and concerns on the safety and general quality of produce in the overseas markets, the role of KEPHIS as a parastatal for assurance on the quality of agricultural produce cannot be more critical.

Access to quality inputs, especially seed, is considered the first and most critical step in ensuring high yields and food security for Kenya. We have worked closely with stakeholders to encourage more players across the production and retailing chain while ensuring the quality of seed being availed to farmers meets all the set standards nationally and internationally.

As mentioned elsewhere in the document, the number of licensed seed companies has reached 103, while our seed testing capability has been greatly boosted through the establishment of an additional seed testing laboratory in Kitale in Trans Nzoia County and expansion of scope of testing methods for the main Seed laboratory in Nakuru making it the biggest ISTA accredited laboratory in Africa. There is still need to enhance awareness creation to discourage the use of fake seed in addition to enhancing the penalties on persons found selling fake seed as it has potential devastating effects on the country's food security and economy. This is already in-built in the revised Seeds and Plant Varieties Act in Parliament.

We realise that sustained growth can only be achieved through deliberate investments in infrastructure. Total capital expenditure during the financial year topped Kshs 128,992,863.42. We have sought to expand our office network to cover all key areas in the country - especially at the entry/exit points. In the current financial year, two offices were established at Mbita Point and Bura Irrigation Scheme as well as rehabilitating a number of green houses at the Plant Quarantine Station in Muguga.

In addition, the KEPHIS Laboratory Complex at the headquarters in Karen was completed and is now operational. It is expected that this latest addition will to a large extent increase the country's testing and analytical capacity both for domestic and export produce. We also hope that the increased laboratory capacity will serve to assure global markets of the quality of Kenyan produce, thereby enhancing the potential of Kenya to maintain traditional markets and venture into new ones especially in Australia, USA and Asia.

During the financial year, the Board of Directors approved the purchase of land in Kisumu with the objective of constructing a regional headquarters. This is a major milestone considering the increasing prominence of Kisumu as a major regional hub and the potential of Western Kenya to grow and export horticulture and other produce. This has been boosted by the major infrastructural developments going on including revamping of Irrigation projects and road networks. It is noteworthy that the Kisumu International Airport was also recently officially opened and will greatly boost trade especially with countries in the Great Lakes region.

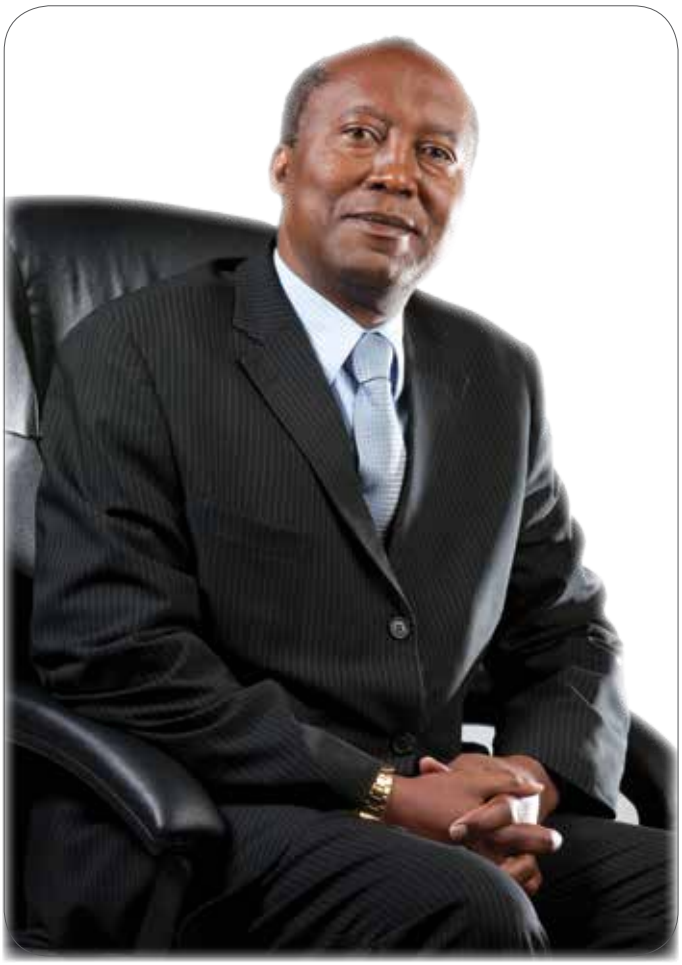
I take this opportunity on behalf of the Board to appreciate the continued support enjoyed from various stakeholders including the Ministry of Agriculture, the Ministry of Finance and major partners including the Kenya Police Service, HCDA, PCPB, and KRA, amongst others. We look forward to continued cooperation. I also wish to thank International Development Partners including USAID, the European Union and The royal Netherlands Embassy whose support has been substantial in ensuring implementation of major projects.

Let me also take this opportunity to salute the management and staff of KEPHIS whose support and diligence to duty has been impeccable. On behalf of the Board, we say asanteni for a job well done. As the Institution's top organ, we reiterate our unwavering support and commitment to improving staff members terms of service, both now and in the long term.

As we venture into our new strategic planning period, we hope to grow further in leaps and bounds as we continue serving the people of Kenya and strive to be true to the words of our National Anthem 'plenty be found within our borders.' Thank You.

Prof Daniel Mukunya
Chair,
KEPHIS Board of Directors

Statement from The Managing Director



It is my great pleasure to present to you the 2011-2012 Annual report.

This is a special edition since activities executed cap actions and programmes that have been implemented over the last 15 years - with each year's achievements laying ground for successive building blocks in the subsequent years. I am greatly honoured to be part of the Corporation's fraternity in celebrating this grand milestone. KEPHIS has truly come of age and is currently renowned not just nationally, but regionally and internationally as a beacon of excellence in the quality assurance of agricultural inputs and produce. This has been variously attested by an independent review of our performance during the strategic planning period 2007-2012.

The horticultural sub-sector has consistently shown remarkable progress over the last 10 years. As export volumes grow, the challenge remains retaining and even growing the country's share of the overseas markets. To this end, KEPHIS plays a pivotal role through building adequate technical and infrastructural capacity to enable inspection, testing and certification of export produce.

During the year, we enhanced the capacity of the Molecular Biology and Plant Health Laboratories; elaborate plans were put in place to initiate a roadmap whose objective is to have the Plant Health Laboratories attain International Accreditation to ISO 17025:2005 Laboratory Management Systems.

In order to further boost the country's overseas horticulture market share, KEPHIS deliberately undertook to strengthen its Pest Risk Analysis capability while on the other hand seeking to influence local, regional and international trade policy through active participation at various levels. Bilateral Agreements with the USA and the Netherlands were signed, while there is renewed urge to expand focus from the traditional markets to new markets such as Australia.

It gives me great pride to note that our efforts are already bearing fruit as Kenyan producers can now access the USA French Beans market and the EAC SPS Protocol is nearing ratification by member states. Negotiations at other levels include the Tripartite COMESA, SADC and EAC which have recognised the need to have SPS issues treated with priority and importance.

Provision of quality agricultural inputs is key to facilitating increased yields, food security and economic growth. We recognize that assuring on the provision of quality seed lies at the centre stage of KEPHIS activities. The current financial year has seen the number of registered seed merchants/ companies grow to 103; the capacity of the ISTA accredited laboratory in Nakuru has been increased through enhancing its scope of testing to 6 methods, making it the biggest ISTA accredited laboratory in Africa.

The recently opened seed testing laboratory in Kitale is now fully operational. Efforts to have the laboratory accredited under ISTA are underway. In order to further reduce instances of fake seed in the market, KEPHIS made tremendous progress in negotiating and agreeing with all stakeholders on the need to introduce security labels on 2kg seed packs.

Irish Potato is arguably a staple food across many of Kenya's households. Consumption has grown exponentially over the years. Sadly, the country's ability to provide adequate quality seed has not kept pace. It is on this realization that we assumed leadership and made a bold step to provide a framework for the importation of novel potato seed varieties to be introduced into the Kenyan market after undergoing rigorous adaptability tests under the National Performance Trials. The potential for increase in production is huge - from the current 3-5 tonnes per hectare to 15-20 tonnes per hectare.

Establishment and maintenance of processes and systems that exude efficiency and effectiveness is a matter that is close to my heart. A performance management culture ensures customer and stakeholder satisfaction and is a key motivator to staff performance. During the last year, KEPHIS was successfully re-certified to ISO 9001:2008 Quality Management Systems.

Additionally, we recorded tremendous improvement in Performance Contract results for the financial year. We are currently working with collaborators to evaluate the possibility of introducing even more effective performance management systems including

the Kenya Institute of Management Organisational Performance Index (OPI), the ISO 17065 product certification system and an integrated monitoring and evaluation system.

We have continued to ascribe to various other international systems, including the OECD seed schemes, the OECD Fruit and Vegetable Schemes, which includes issuance of Certificates of Conformity for export produce, the International Standards for Phytosanitary measures (ISPMs) for which we have actively participated during CPM meetings and preliminary standard development processes. This is in addition to being active participants in WTO SPS forums and Codex Alimentarius Commission meetings.

In order to further inculcate efficiency in service delivery, we have invested heavily in ICT. The Electronic Certification System launched in the last financial year has continued to record runaway success. Currently, more than 600 exporters use the system. During the year, it was rolled out to other regions outside Nairobi. The ECS has indeed been a showcase of our abilities to provide leadership in cutting age technology. This can be demonstrated by the numerous local and International awards recognising excellent performance in ICT processes. It is noteworthy that the IPPC which is the international agreement on plant health is currently pursuing electronic certification as a fundamental agenda item in its activity calendar. The IPPC aims to protect cultivated and wild plants by preventing the introduction and spread of pests.

KEPHIS is now a major player in the development of regional SPS capacity. COPE which was established by a conglomeration of local and international development partners to build regional capacity on SPS issues and which has its secretariat at KEPHIS headquarters has recorded successful growth year after year.

During the period, the Centre collaborated with development partners, key among them being USAID – COMPETE, to develop a standard training curriculum. More than 100 students from countries including Burundi, DRC, Ethiopia, Kenya, Rwanda, Tanzania and Uganda were trained on various SPS aspects. We look forward to the development of much needed trained manpower to drive the region's efforts towards integration. This is besides the primary role of improving processes and systems in home countries to enable the production of high quality produce that is of world class standards.

Collaboration with development partners has been a key pillar to the successes of KEPHIS. In the last year, we engaged partners and as a result were able to implement a number of programmes. It is noteworthy that major development projects in KEPHIS bear some input from a development partner.

Many thanks go to USAID, the Royal Netherlands Embassy, CABI, DFID, CIP, COMESA and many others. We also recognise the role of local development partners including the KFC, FPEAK and STAK. Engagement with the private sector through the Horticultural TaskForce has resulted in maintenance of a vibrant horticultural sub-sector. A major milestone in the period was the development of the Horticultural Policy. We have also agreed on a number of regulatory aspects including introduction of labels on 2kg seed packet labels. We also worked closely in developing strategies for the control of the *Maize Lethal Necrosis Disease*.

We however recognize that these efforts can only be successful if we lay out elaborate publicity and communication strategies which will inform and educate our stakeholders and the public on our mandate and therefore rally participation to the course of protecting Kenya's agriculture.

During the year, KEPHIS particularly engaged members of the *fourth estate* to report positive stories of the Organization. Indeed, the media is becoming a key stakeholder of the Corporation as we strive to publicize our activities and also enhance our corporate image. We hope to engage them further in the coming years as we set the agenda of plant health for our country. We also organized several field days and actively participated in ASK shows countrywide. An independent Customer satisfaction survey put satisfaction levels at 75%, a remarkable feat by any standards.

All the above developments would not have been possible without the participation of staff who currently stand at 406. On behalf of the KEPHIS management, I wish to thank our employees for a job well done. On behalf of the Board of Directors, we reiterate that efforts have been made and continue to be made to improve employee terms of service in order to ensure adequate motivation and retention.

The year has had its own challenges, key among them being the dwindling sources of revenue in the face of increased demand for KEPHIS services and the increased competitiveness for human resources in the job market, making it more challenging to retain some professional staff; emerging diseases and pests, among others. We have boldly faced these challenges and put in place adequate counter measures for the years to come.

On behalf of the Board, management and staff, let me take this opportunity to thank all stakeholders for their support in this financial year. We look forward to more collaboration in the years to come.

Dr James M. Onsando
Managing Director

"A performance management culture ensures customer and stakeholder satisfaction and is a key motivator to staff performance. During the last year, KEPHIS was successfully re-certified to ISO 9001:2008 Quality Management Systems.

Additionally, we recorded tremendous improvement in Performance Contract results for the financial year."

Corporate Information

Our Location (headquarters)	Oloolua Ridge, off Ngong Road, Karen, Nairobi
Our Auditors	Kenya National Audit Office, PO Box 30084-00100 Nairobi
Vision	The Lead Regulator and Facilitator of Globally Competitive Agriculture
Mission	To Provide a Science-based Regulatory Service by Assuring Quality of Agricultural Inputs and Produce to Promote Food Security and Sustainable Development
Core Values	Customer Focus Integrity Teamwork Innovation & creativity Professionalism Corporate Social Responsibility

ISO POLICY STATEMENT

KEPHIS is a regulatory body mandated to undertake quality assurance services of agricultural inputs, plant variety protection and plant health.

The KEPHIS Board of Directors, management and staff are committed to full implementation of ISO 9001:2008 standard requirements in service delivery. This is a deliberate strategic decision to enhance achievement of its vision, mission, goals and objectives.

In pursuit of the above commitment KEPHIS:

- Seeks to understand and address the dynamic needs and requirements of its customers and stakeholders in line with its mandate.
- Provides and manages the resources needed for maintaining compliance to the standard and continual improvement.
- Ensures that the QMS and its requirements are communicated to and understood by staff.
- Provides a framework for establishing and reviewing its quality objectives for continued suitability of service.

The above commitments are geared towards meeting and even exceeding customer needs and expectations.

Dr. James Onsando
Managing Director

Front view of KEPHIS headquarters

Kenya Plant Health Inspectorate Service (KEPHIS) is a regulatory parastatal established under the State Corporations Act (Cap 446) pursuant to Legal No. 305 of 18th October 1996. The Corporation commenced operations in 1997. It has three main operations:

- Seed Certification and Plant Variety Protection
- Phytosanitary and Biosafety Services
- Analytical Chemistry Laboratory Services

KEPHIS was originally part of the Kenya Agricultural Research Institute (KARI) before being carved out with the mandate to assure the quality of agricultural inputs and produce, newly bred plant varieties and the health of plant produce in the agricultural sector to promote sustainable agriculture and economic growth in Kenya. Previously located at the National Agricultural Laboratories (NARL) on Waiyaki Way, Nairobi KEPHIS moved to its current location on Oloolua Ridge, Karen in April 2004.

The Plant Quarantine and Biosafety Station, a state of the art facility at Muguga carries out plant disease and pests diagnostics and offers advisory services for pests identified. The laboratory also carries out viral disease indexing and cleaning of germplasm to enable exchange of clean germplasm. The Plant Inspection Unit (PIU) at Jomo Kenyatta International Airport assures the quality of agricultural produce from Kenya's largest entry and exit point to Kenya's export markets.

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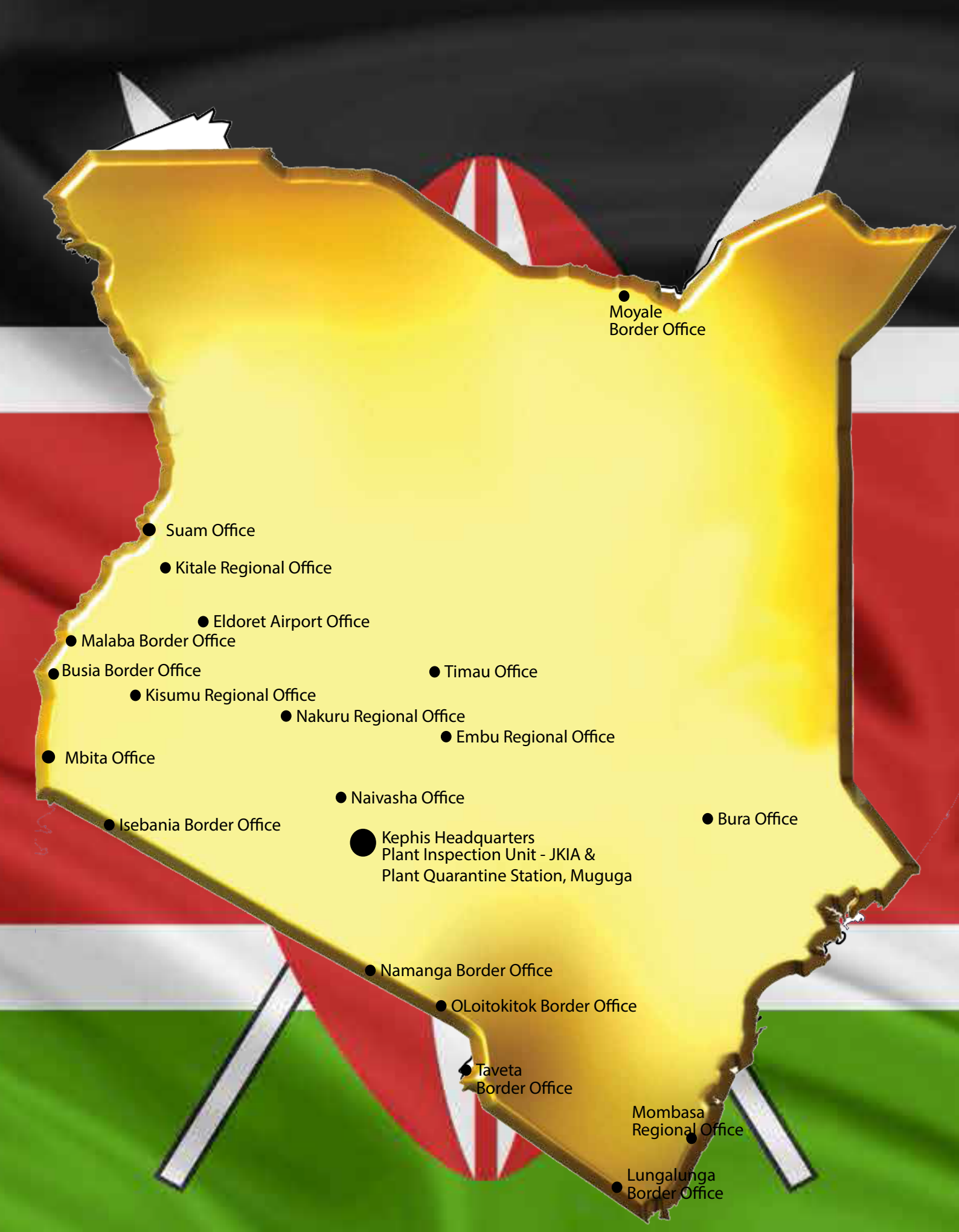


KEPHIS Countrywide offices

1.0 Plant Variety Protection (PVP)

1.1 Plant Breeders Rights (PBR)

One of the functions of the Seeds and Plant Variety Protection department is to administer Plant Breeders' Rights (PBR) in Kenya, besides, serving as a liaison office for UPOV. In addition, it is the custodian of the Plant Breeders Register in Kenya.

A variety of rose flowers: PBRs are proprietary rights exclusively granted by the government to persons or institutions discovering, breeding or developing new varieties of plants and have filed an application for protection of the variety with KEPHIS

Variety protection is safeguarding a plant variety against unauthorized or unlawful use, ie without the consent or authorization by the owner. PBRs are proprietary rights exclusively granted by the government to persons or institutions discovering, breeding or developing new varieties of plants and have filed an application for protection of the variety with KEPHIS. They are granted for a specific period of time and on complying with internationally recognized standards, i.e. Distinctness, Uniformity and Stability (DUS) tests and novelty requirements. The DUS tests are conducted for two growing seasons either locally or in any other UPOV member country.

The purpose of variety protection is to encourage competition among breeders through exclusively exploiting their rights (royalties) during production of the protected varieties. It also allows breeders to recover investments incurred during the breeding process as well as recognizing and rewarding those innovating new varieties.

During the reporting period, 70 new applications for PBR were received. 11 earlier applications were withdrawn. Reasons for withdrawn applications by the breeders included decreased demand of these varieties by consumers and availability of better ones; those applications either did not meet the novelty requirement or failed the DUS testing. These were withdrawn by the KEPHIS Authorized Officer. Withdrawal was also due to incomplete applications caused by missing supportive documents or non-payment of the application fee. **(See Table 1.)**

Table 1: Summary of the number of PBRs received and withdrawn during the reporting period

	APPLICATIONS FOR PBR		WITHDRAWAL OF PBR	
Species	No.	Country of origin	No.	Country of origin
Roses	52	Netherlands, Germany & France	3	Netherlands
Tea	6	Kenya	-	
Statice	2	Netherlands	-	
Dry beans	3	Kenya	-	
French beans	4	United Kingdom, South Africa	-	
Pea	1	United Kingdom	-	
Phlox	2	Netherlands	-	
Gypsophila	-		2	Israel
Cassava	-		6	Kenya
TOTAL	70		11	

The total number of applications for PBRs received since the inception of the PBR processing in Kenya is 1,189. **Figure 1** shows the status of such applications.

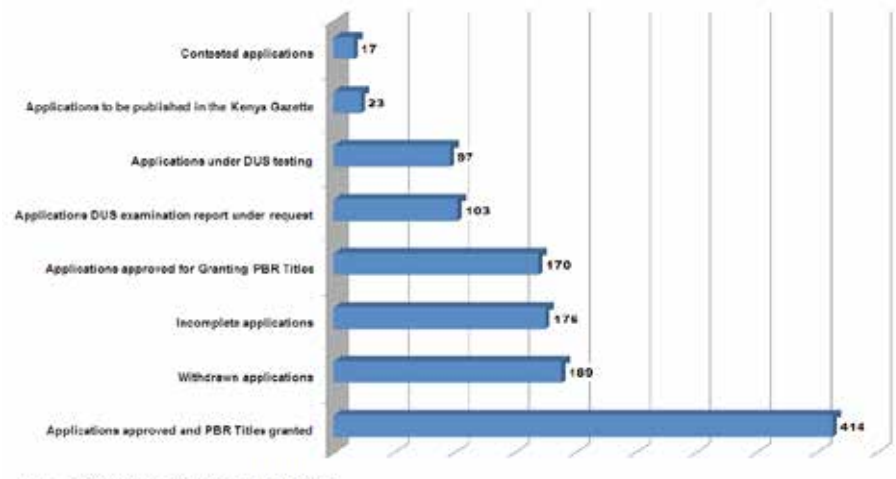


Figure 1

Applications approved for granting of PBR titles were those whose DUS examination report had been finalized and confirmed to be positive and await payment of grant for PBR certificate fee by the applicant. The date of payment of this fee becomes the official commencement date of protection of that variety in Kenya.

During the same period, KEPHIS processed and issued 82 PBR Grants while 24 Grants were surrendered by the Grant Holders. To date the total number of PBR Grants awarded is 415. Out of these, 301 are active grants and 114 are surrendered grants.

1.2 National Performance Trials (NPTs)

KEPHIS is charged with the responsibility of carrying out National Performance Trials (NPTs) on behalf of the National Performance Trials Committee (NPTC). The NPT activity is a continuous activity, which involves testing of potential varieties of various crops and for each season as:

a) Crop varieties being recommended for release. A subset of these will be forwarded to the National Variety Release Committee (NVRC) upon qualification;

b) Stakeholders submitting new crop varieties for evaluation;

c) Crop varieties being dropped due to non-performance or withdrawn by the breeder/submitter for various reasons.

Of concern to KEPHIS are those classified in a) and b) above.

During the reporting period, NPTC meetings were convened on diverse dates to deliberate on reports of results of NPTs that were carried out in 2011 - 2012. Among all the varieties that were tested, 42 were recommended for release. Their distribution is shown in **Figure 2**.

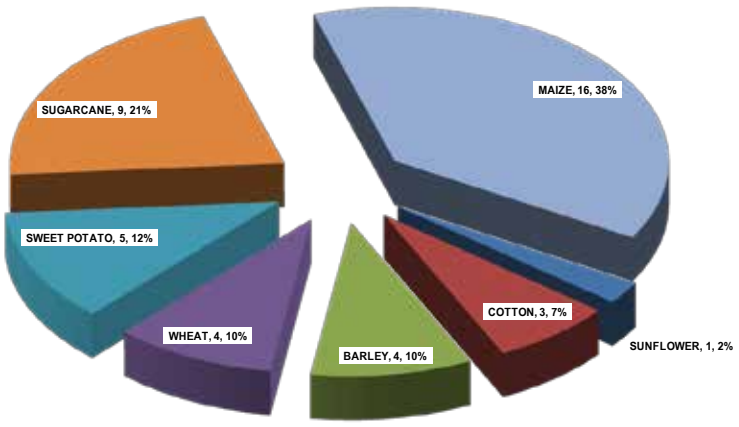
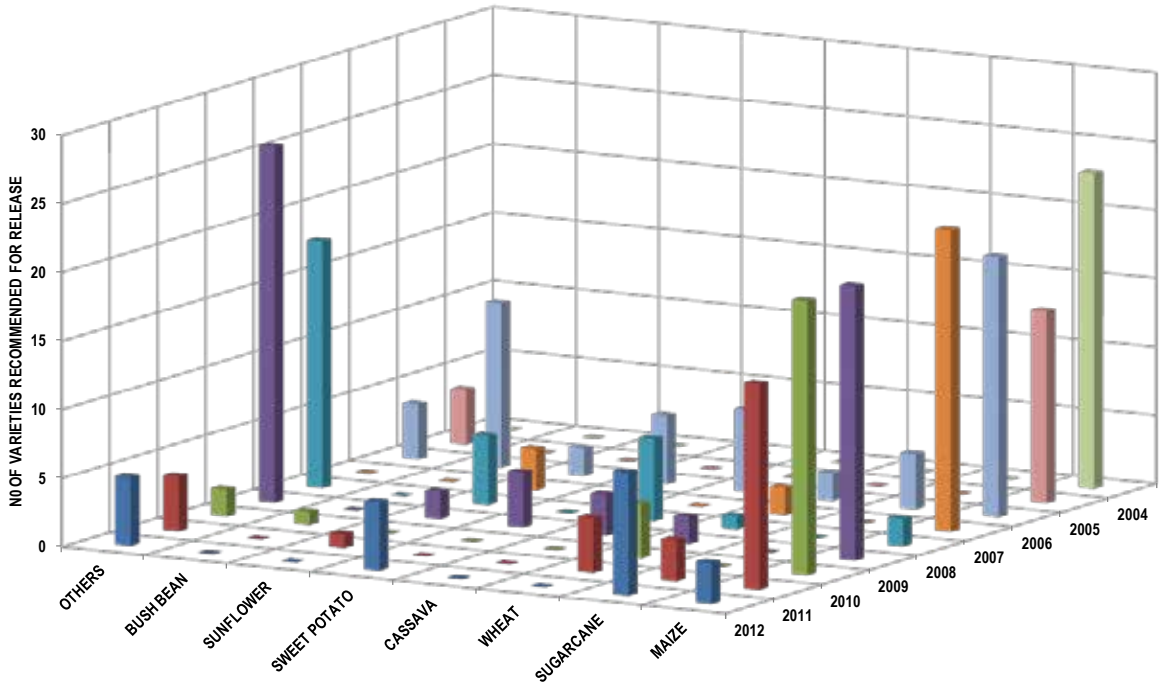


Figure 2

As in the previous period, maize had the highest number of varieties recommended for release. **Figure 3** gives profiles of crops with highest number of releases since the year 2004 to date.

Maize, Kenya's staple food, had the hi ghest number of varieties recommended for release during the year under review

Figure 3: Number of varieties recommended for release by NPTC since 2004



During the reporting period, 31 crop varieties were recommended for release by NVRC. These were gazetted and subsequently added to the National Variety Release Catalogue. Their distributions are shown in **Figure 4**.

Figure 4: Number of crop varieties recommended for release by NPTC and gazzetted

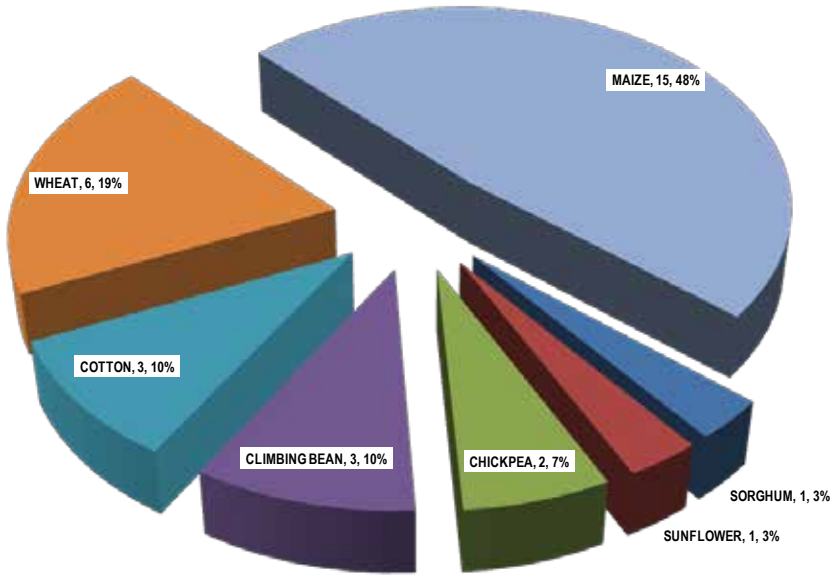
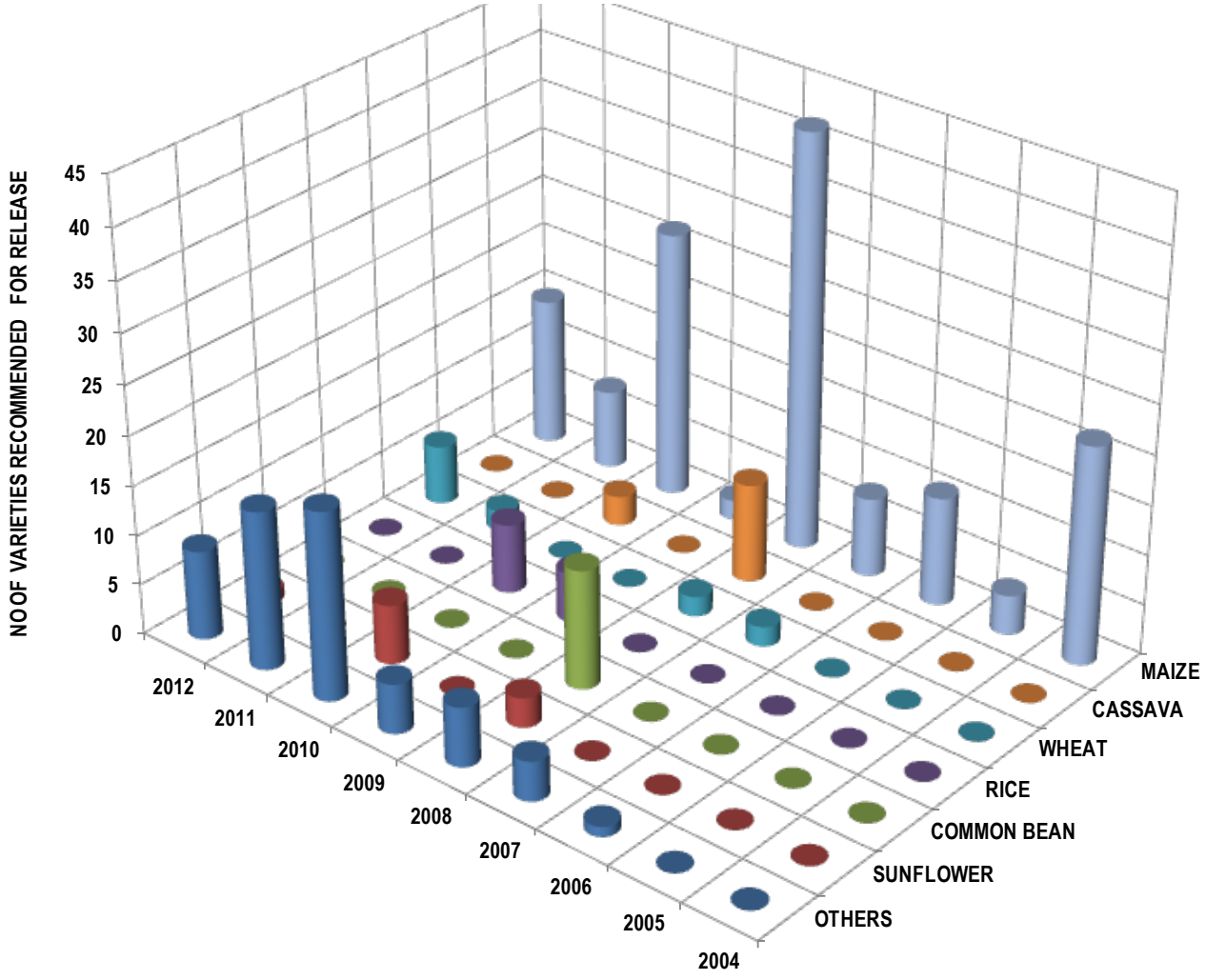


Figure 5 gives profiles of crops with the highest releases since the year 2004.



In the reporting period, the trials were categorized in terms of management, into two:

a) Client managed trials where a client with technical knowledge runs the trials with KEPHIS playing a defined supervisory role on behalf of NPTC;

b) KEPHIS managed trials where KEPHIS fully manages trials on behalf of NPTC

Out of the 299 crop varieties planted, 251(84%) were fully managed by KEPHIS as shown in **Figure 6. Figure 7** shows the management distribution of all crop trials done during the year.

Figure 6: Proportion of crop Management

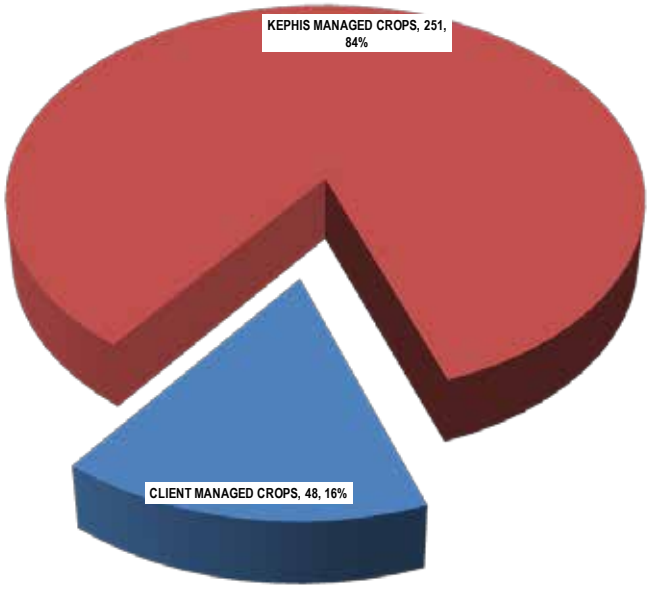
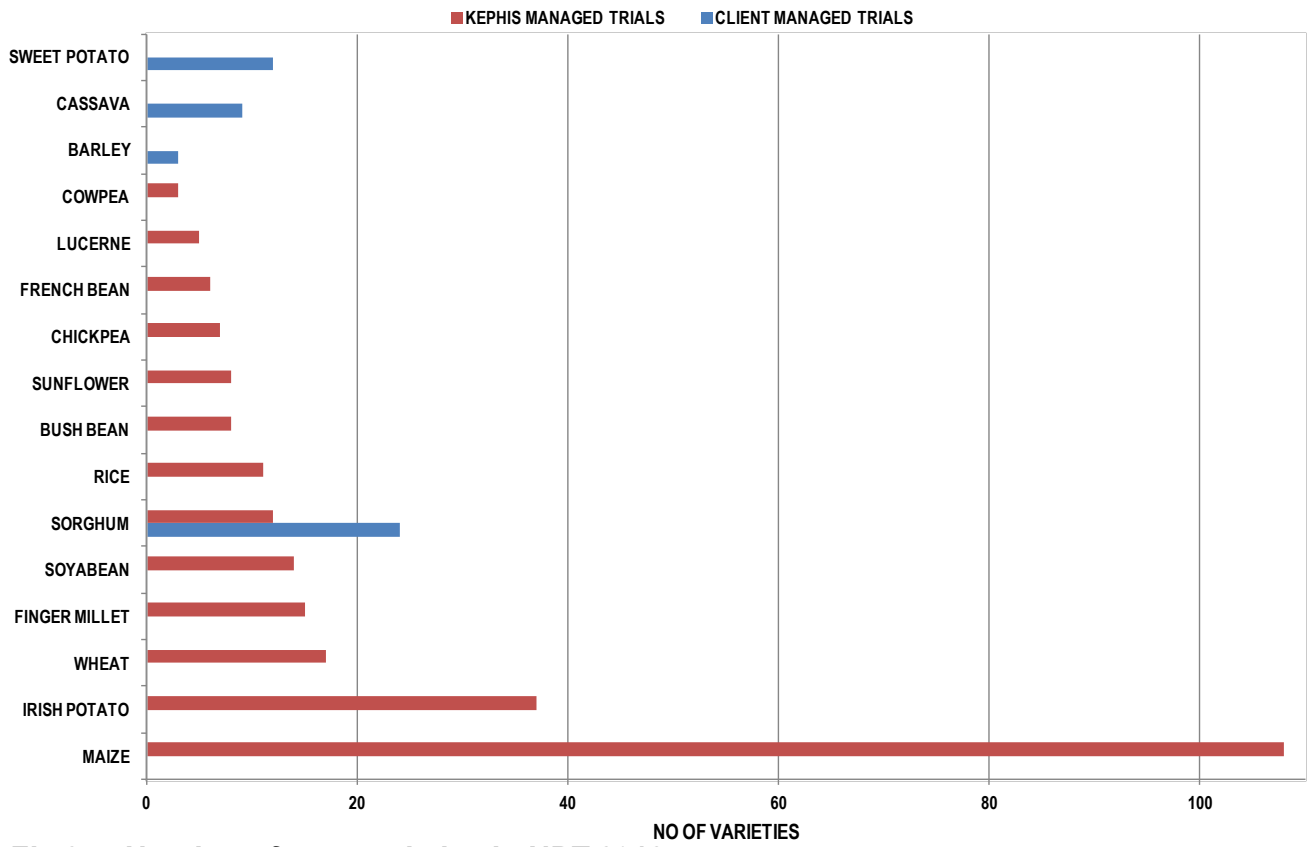


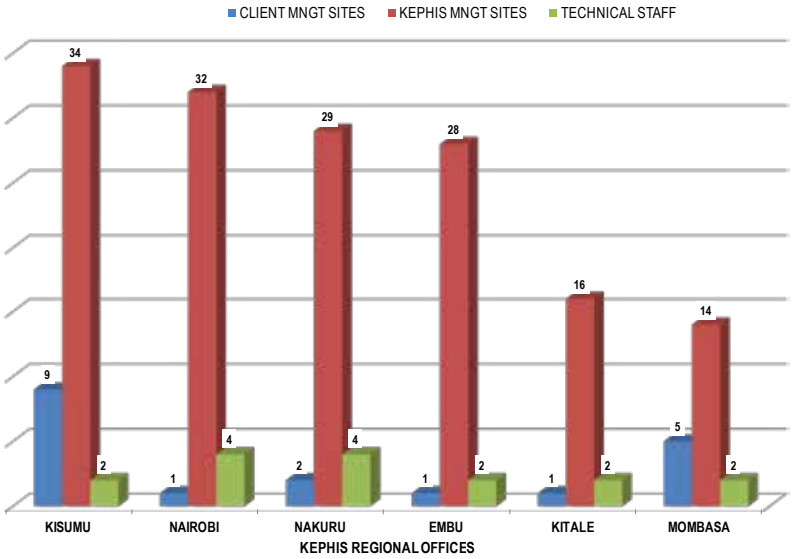
Figure 7: Distribution of crop varieties managed during the year



NPT testing sites were distributed in the relevant Agro-Ecological Zones (AEZs) and were decided upon by NPTC. These sites were managed and/or supervised by KEPHIS at the regional offices.

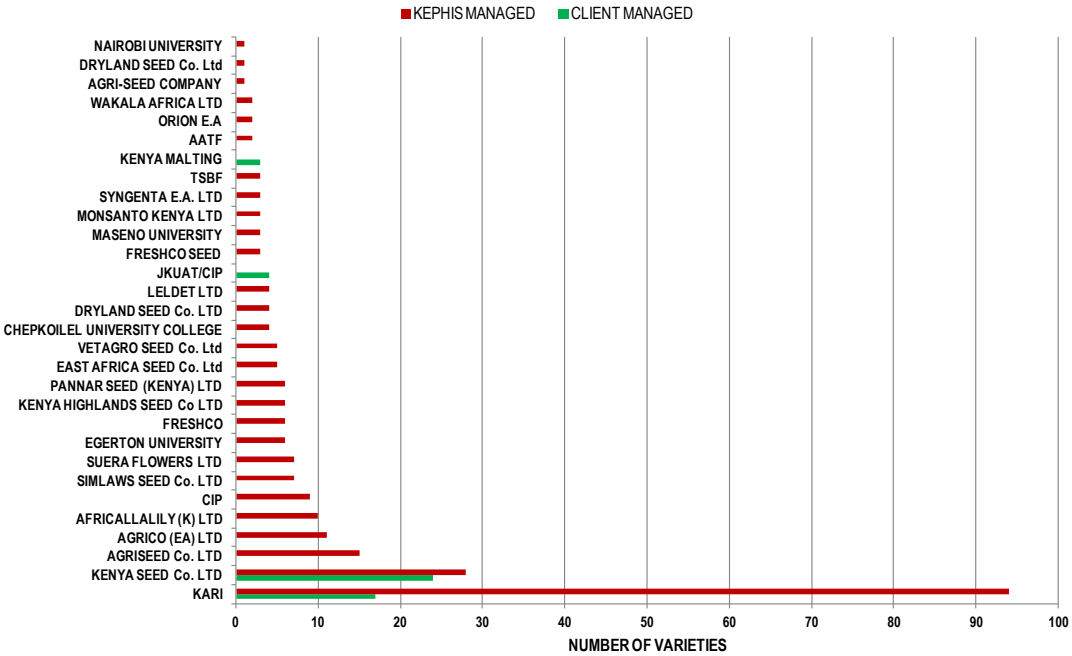
In the reporting period, Kisumu had the highest number (25%) while Kitale office had the lowest (10%). The distribution among the KEPHIS Regional Offices is shown in **Figure 8**.

Figure 8: Number of sites/trials distributed among KEPHIS regional offices



In all the trials that were carried out, there were 299 candidate crop varieties being evaluated. The number of organizations has remained constant over the years. However, KARI and KSC remained in the lead by submitting 37% and 17% respectively of the test materials. **Figure 9** summarizes the sources of test materials handled during the year.

Figure 9: Sources of crop varieties in NPT 2012



In KEPHIS managed trials, maize had the highest number (108) and cowpea had the least (7). In the client managed trials, sweet sorghum had the highest number (24). The candidate varieties tested are in two categories:

- those that are being introduced for the first time(70%) and
- those that have been tested for two or more seasons(30%).

Each year the crop test varieties are managed in the following categories:

i. New varieties are submitted for testing;
ii. Varieties are recommended for release by NPTC;
iii. Varieties are recommended for release by NVRC and gazetted

Different varieties of cowpeas: This was one of the crop varieties managed by KEPHIS on behalf of NPTC in the year under review

1.3 Distinctiveness, Uniformity And Stability (DUS) Trials

DUS is a continuous activity that involves:

- Submission of new varieties for testing each year;
- Collection of data that assists in clearly distinguishing candidate varieties from any other variety/varieties whose existence is a matter of common knowledge;

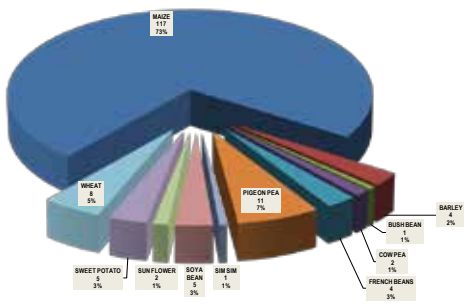
During the reporting period, 160 crop varieties were submitted for testing as shown in the **Table 2.**

Table 2: Varieties submitted for DUS testing

	MAIZE				OTHER CROPS									
SOURCE	HYBRID	OPV	SC	LINE	BARLEY	BUSH BEAN	COW PEA	FRENCH BEANS	PIGEON PEA	SIM SIM	SOYA BEAN	SUN FLOWER	SWEET POTATO	WHEAT	TOTAL
AGRISEED Co. LTD	11		5	21							2				39
CIMMYT		1													1
EAST AFRICA SEED COMPANY	4		3	9											16
EGERTON UNIVERSITY									4						4
FRESHCO SEEDS LIMITED		1													1
KARI EMBU	3	1		2		1									7
KARI KAKAMEGA	3	2		4											9
KARI KATUMANI	5	3		6					2						16
KARI KITALE	1		1	3											5
KARI MUGUGA	1			2											3
KARI NJORO											3		5		8
KENYA HIGHLANDS SEED Co LTD								4							4
KENYA MALTING					4										4
KENYA SEED Co. LTD	3											2		8	13
LELDET LTD									5						5
MASENO UNIVERSITY	2														2
PIONEER OVERSEAS CORPERATION	2														2
SIMLAWS SEED							2			1					3
VETAGRO	5														5
WESTERN SEED CO. LTD			2	11											13
TOTAL	40	8	11	58	4	1	2	4	11	1	5	2	5	8	160

A summary of the crops that had test candidates in DUS is shown in **Figure 10.**

Figure 10: Summary of candidate crop varieties

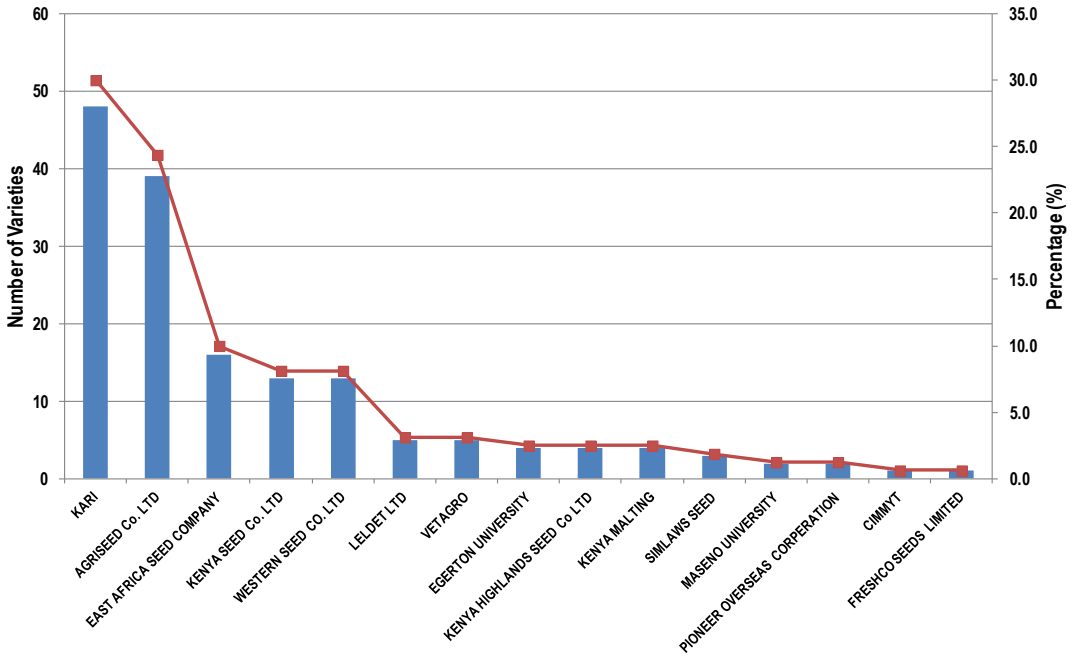


Plant Variety Protection

Maize still leads with the number of test candidates at 117. Simsim had the least at 1. Of the varieties of maize, out of all the tested varieties, 48 were hybrids and OPVs while the remainder were parental.

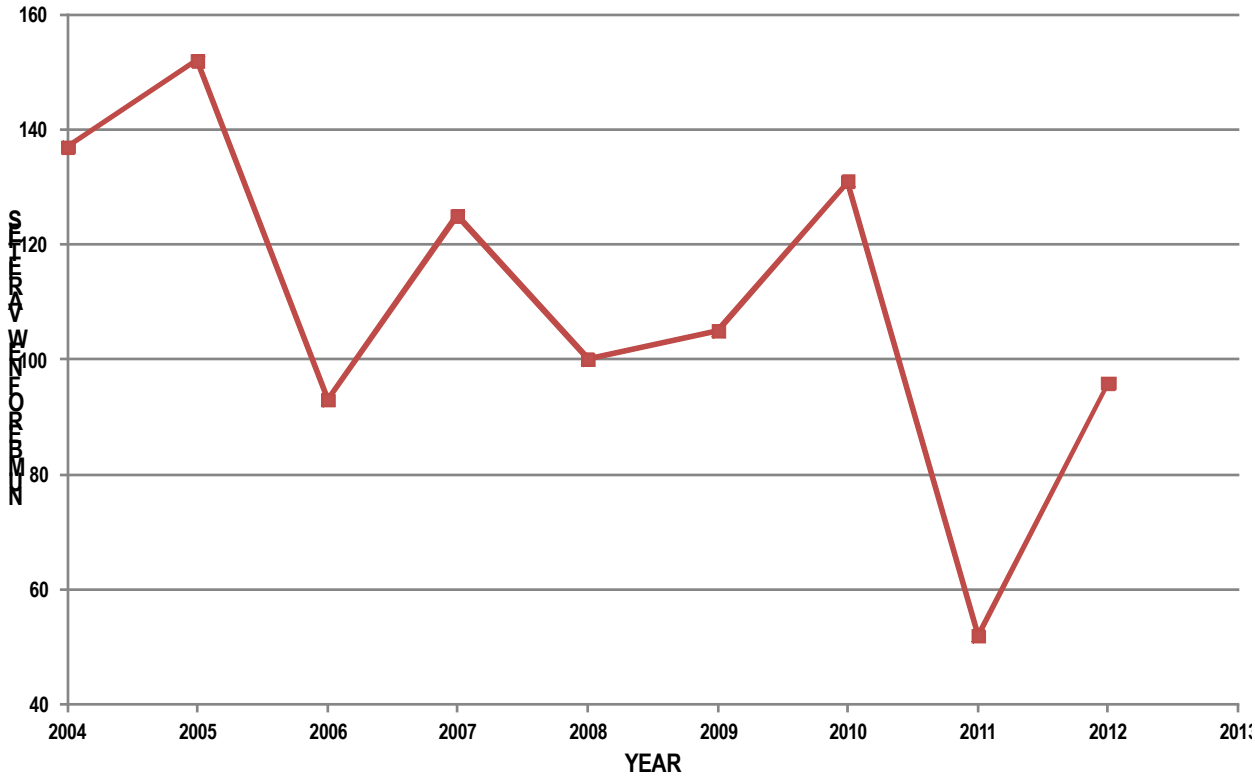
The Organizations that submitted crop varieties for testing are summarised in **Figure 11.**

Figure 11: Sources of candidate crop varieties in DUS during the year



The frequency of new varieties submitted for testing from the year 2004 is presented in **Figure 12.**

Figure 12: New varieties submitted for testing from the year 2004



Unlike NPT, the number of candidate varieties submitted for testing is linearly decreasing.

Seed Certification

Field Inspection

Total hectares of seed crops applied for field inspection was 45,379.95, with 31,924.74 hectares being approved, 1,151.10 hectares rejected and 11,971.67 hectares were still pending inspection and 332.44 hectares were withdrawn as indicated in **Table 3.**

The acreage under seed crops increased by 34.6% compared to the year 2010 - 2011. This increase was largely due to land allocated to seed maize.

Seed farmers improved their management which led to a decrease in rejection from 4.18% last year to 2.5% this year. Rejection was due to off types, drought, harvesting seed crops before final approval, inaccessible and untraceable seed fields, incidence of seed borne diseases, inadequate isolation distances, lack of trueness to type and gapping.

"The acreage under seed crops increased by 34.6% compared to the year 2010 - 2011. This increase was largely due to land allocated to seed maize."

(Top) Potatoes, Kenya's 2nd most important food crop and sourghum(above) a food security crop were among crops inspected by KEPHIS during the year

Table 3: Seed Crop Hectarage inspected

SPECIES	Hectares applied	Approved	Rejected	Pending	Withdrawn
Maize	26,661.40	16,865.68	478.90	9,306.20	10.62
Wheat	3,943.31	3,419.64	26.3	497.37	-
Sorghum	3,838.19	3,297.45	33.57	507.17	0.00
Beans	2,656.82	2,253.39	118.66	246.63	38.14
Green grams	2,235.10	1,717.56	132.80	155.34	229.40
Cowpeas	1,956.58	1,294.58	238.8	371.6	51.6
Pasture/grass	1,166.24	735.98	5.42	424.84	-
Barley	1,120.16	955.27	42.87	122.02	-
Sunflower	598.8	570.85	19.41	7.33	1.21
Rice	330.23	134.95	1.3	193.98	0
Potatoes	208.99	149.09	2.96	56.94	-
Millet	165.93	126.67	2.81	36.45	-
Collards	93.5	58.5	21.6	13.4	-
Peas	90.6	63.4	18.4	8.8	-
Vegetables	90.31	84.94	0.3	4.4	0.67
Oats	80.56	82.16	-	-1.6	-
Pigeon Peas	47.1	31.5	6.4	9.2	-
Okra	34.8	25.8	-	9	-
Finger Millet	30.49	30.49	0	0	0
Dolichos	21.6	19	0.6	2	-
Amaranthus	4.73	3.93	0	0	0.8
Eggplant	1.6	1.6	-	-	-
Pelargonium	1.51	1.03	-	0.48	-
Pepper	0.84	0.84	-	-	-
Catharanthus	0.4	0.3	-	0.1	-
Zinnias	0.14	0.12	-	0.02	-
Pelunias	0.02	0.02	-	-	-
Total	45,379.95	31,924.74	1,151.10	11,971.67	332.44

Seed Processing And Sampling

Locally produced seed was inspected during processing and sampled for laboratory quality analyses. Likewise, all imported seed lots were inspected at ports of entry and sampled for quality analyses as required by seed regulations. Total lot weights sampled were **53,148,866.53** kilograms.

There was an increase of 9% of the seed processed compared to the previous reporting period. Maize accounted for 77.6% of the processed weight which was an increase of 19% above the previous reporting period. Seed potato produced locally and imported also made significant contribution to the increase as shown in **Table 4.**

Table 4: Seed Sampling

Species	Locally produced	Imported	Total
Barley	2,068,900.00	96,000.00	2,164,900.00
Beans	815,794.00	495,183.37	1,310,977.37
Bentgrass	-	227.00	227.00
Bermuda grass	-	500.00	500.00
Cotton	-	3.00	3.00
Cowpeas	172,660.00	-	172,660.00
Desmodium	200.00	-	200.00
Dolichos	3,690.00	-	3,690.00
Finger millet	148,079.00	-	148,079.00
Flowers	-	151.00	151.00
Greengrams	226,190.00	-	226,190.00
Kikuyu grass	5.00	3,600.00	3,605.00
Maize	36,577,586.00	4,176,145.00	40,753,731.00
Millet	106,950.00	-	106,950.00
Pasture	130,481.10	4,900.00	135,381.10
Peas	250.00	458,530.50	458,780.50
Pigeon peas	3,587.00	-	3,587.00
Potato	740,174.00	22,000.00	762,174.00
Rice	104.00	-	104.00
Rice	129,253.00	-	129,253.00
Ryegrass	-	600.00	600.00
Sorghum	2,221,879.00	120,025.00	2,341,904.00
Soya beans	-	50.00	50.00
Sudan grass	-	6,000.00	6,000.00
Sunflower	215,049.00	1.00	215,050.00
Tobacco	-	15.00	15.00
Vegetable	176,182.80	649,663.61	825,846.41
Wheat	3,378,198.00	60.15	3,378,258.15
Total	47,115,211.90	6,033,654.63	53,148,866.53

815, 794 tonnes of locally produced bean seed and 495, 183 tonnes of imported bean seed were sampled during the year

Seed Export

About 4.39% of processed seed was exported as shown in **Table 5** an increase of 0.25% as compared to the previous reporting period. The exported seed was issued with ISTA Orange certificates totalling 453. The seed was exported to neighbouring countries – Burundi, DRC, Rwanda, Somalia, South Sudan, Tanzania and Uganda.

Table 5: Seed Export

CROP	WEIGHT (KG)
Barley	60,000.00
Maize	443,862.00
Oil Crops	29,988.00
Pasture Legumes	50.00
Pasture/Lawn	3,995.00
Pulses	9,592.00
Sorghum/Millet	124,000.00
Vegetables	64,625.78
Wheat	1,596,600.00
Grand Total	2,332,712.78

Seed Testing

Germination and purity

The Nakuru and Kitale seed testing laboratories received 2770 and 745 samples respectively for testing. Kitale tested only maize seed samples. The total number of samples tested by the two laboratories decreased from 3,715 last year to 3,515 this year as shown in **Table 6.**

Table 6: Seed sampled tested

CROP	No. failed	No. Passed	Total samples tested
Barley	32	62	94
Flowers	0	3	3
Maize	32	1253	1,285
Oats	1	3	4
Oil Crops	6	11	17
Pasture Legumes	2	11	13
Pasture/Lawn	58	134	192
Pulses	53	325	378
Rice		16	16
Sorghum/Millet	23	170	193
Tobacco		6	6
Vegetables	199	966	1,165
Wheat	13	136	149
Total	419	3,096	3,515

A field of wheat: Wheat was one of the crops tested by the Nakuru KEPHIS laboratory in the year under review

Proficiency Testing

Proficiency tests are methods of checking laboratory testing performance by means of inter-laboratory tests. The KEPHIS Nakuru seed laboratory is ISTA accredited, hence it undergoes the ISTA proficiency test programme.

The laboratory received samples of three species for proficiency testing. The outcome was scores A and B, which are outstanding scores as shown in **Table 7.**

Table 7: Proficiency samples

CROP	NO. OF SAMPLES	TEST DONE	SCORE
Sorghum bicolor	4	Purity/ Germination/Other Seed Determination/Tetrazolium	'A' in all tests
Trifolium pratense	3	Purity/ Germination / Other Seed Determination	'A' in purity, Germination and 'B' in Other Seed Determination
Triticum aestivum	4	Purity/ Germination /Other Seed Determination/Tetrazolium/Moisture.	'A' in Purity/ Germination /Other Seed Determination/Tetrazolium and 'B' in Tetrazolium test
Total	11		

Seed Health Testing

Seed health testing is mainly done for 2 purposes: to establish if the seed has disease causing micro-organisms which can be carried into the farmers' fields and secondly to establish if the seed is capable of producing normal plants. Presence of disease would curtail growth which lowers quality of seed.

During the year, 260 samples were tested, an increase of 33.33% compared to 2010 – 2011 as shown in **Table 8.** The increase is because of the increase of potato samples and also partly due to the *Maize Lethal Necrosis Disease* at about 13% of the 260 samples submitted.

Table 8: Seed Health Testing

Sample Name	Source	No. Of samples tested	No. Of positive samples	Organisms identified
Potatoes	Nakuru, Kitale, Naivasha & Embu	107	14	Xanthosomas solanacearum (Ralstonia solanacearum ?)
Wheat	Kenya Seed Company	60	Infection range 0.25-4.25% 0.25- 3%	Fusarium spp, Bipolaris sorokiniana
Barley	E AML	46	infection range 0.25- 7% 0.25%-3%	Dreschlera teres Bipolaris sorokiniana
Rice	Mwea	12	Infection range 0-23% 0-3% 0-0.25%	Dreschlera oryzae Fusarium Spp Pyricularia oryzae
Sunflower	Marigat	1	Plant material	Alternaria spp Schlerotinia schlerotiorum Fusarium Spp.
Maize	Marigat & Bomet	34	Plant Materials	Fusarium Spp. Cephalosporium acremonium

Post control

Post control tests are quality control checks designed to determine effectiveness of field inspections during critical active growth stages. In the period under view 2,040 samples were post controlled. Out of this, 88.2% passed while the rest failed mainly due to lack of trueness to type, diseases, off-types, mixtures and selfing.

Licensing of seed stockists

Farmers purchase seed from seed stockists, who are required to be appointed by registered seed merchants and be licensed by KEPHIS upon fulfilment of licensing requirements. During the reporting period 3,470 seed stockists were licensed, compared to 3,689 licensed in 2010 -2011.

Registration of seed merchants

11 new seed merchants were registered having met all the registration requirements in the period under review. This brought the number of registered seed merchants to 98.

Peas in pods: the crop was one of those sampled for laboratory quality analyses in the year under review

1944: The 1st Seed Testing Laboratory set up at the National Agricultural Laboratories (NARL), serving mostly the European large-scale farmers who wanted to determine the quality of cereals and grass seeds before exporting.

1944: Kenya becomes a member of ISTA

1964: The beginning of the process leading to the establishment of the Seed Unit Project, later formalized as the Kenya Inspection Service for Seed (KIS), formed to promote the provision, improvement and use of high quality seed of superior, well adopted varieties of improved crop species in Kenya. KIS played the role of a seed quality control agency; Dr. F.Schoorel, then secretary and later President of ISTA, suggested the possibility of the Netherlands assistance in the implementation of the proposed new Seed Ordinance; (a draft was prepared in 1962 for an entirely new and more comprehensive Seed Ordinance then in operation) and the extension of the Seed Testing Laboratory.

1965: With the support of The Netherlands, an improved Seed Testing Laboratory was put up at NARL to enforce the Seed Ordinance of 1962.

1967: The Schoorel/Goettch mission reviewed the then Seed Act under which inadequate seed inspection was being conducted and recommended in its final draft report submitted in May of the same year, that:

(i) A Seed Unit be established whose task would be to ensure that only high quality seed of adapted varieties would reach the farmers. The Unit was to be responsible for field inspection, certification, seed testing and quality control;
(ii) A new seed law accompanying rules be enacted to provide a legal basis for the operation of the proposed Seed Unit;
(iii) The Seed Unit to be situated near the centre of seed production;
(iv) The physical facilities and staffing of the Unit be reviewed regularly to relate these to the activities of the Unit.

The Seed Testing Laboratory boasts of world classe equipment for assuring the quality of seed availed to Kenya's farming community

Operational Functions of KIS

The head of KIS was the officer-in-charge who, in addition to being responsible for the discharge and supervision of the service, was also secretary to the seeds advisory committee. Nakuru, a town situated optimally at the geographical centre of seed producing areas of Kenya, served as the head office of the KIS. However, the KIS operated a sub-station in Kitale to serve the interests of seed crops of hybrid maize, herbage crop and beans concentrated in that area.

1971: A gradual replacement of Dutch personnel by Kenya personnel. It was the intention of the two governments to wind up the participation of the Netherlands personnel in the KIS by the end of 1976 and hand over entirely to Kenyans.

Preparing the land for National PerformanceTrials at the Nakuru Regional Office

1973: Kenya becomes the first country in black Africa to be honoured when the council of Organization of Economic Co-operation and Development (OECD) in Paris, admitted Kenya as a participant in the OECD cereal and herbage seed certification scheme. These schemes operate on the basis of prescribed principles and regulations, including field inspection procedures and regulations. This one factor underlines dependability of our field inspection techniques and consequently field inspection results, a vital point in international seed trade.

1977: Steps initiated to change the name of the service from the KIS to the National Seed Quality Control Service (NSQCS) because of the wider spectrum of activities the service had assumed.

1977: Construction of new offices in Lanet begins.

1979: The Seed Testing Laboratory was moved from NARL to Lanet. It was then renamed NSQCS and designated as the Official Seed Testing Station. The Official Seed Testing Laboratory was then modernized and joined with the expanded field Seed Certification Program. The station was also mandated to carry out crop variety testing which included Distinctness, Uniformity and Stability (DUS) and National Performance Trials (NPT). In 1980, the Official Seed Testing

Laboratory was further expanded to include seed pathology tests (virus, bacteria and fungi tests). The seed pathology tests were intended to support seed inspectorate in identifying seed borne diseases and to safeguard against importation of seed borne diseases and pests. The establishment of the sub-section within the Official Seed Testing Laboratory has gone a long way in enhancing the quality of seeds being accessed by the farming community. KEPHIS mandate includes undertaking inspections, testing, certification, quarantine control, variety testing and descriptors of seeds and plant materials. These were clearly stipulated during inception of KEPHIS in 1996.

The government therefore felt it was prudent to transfer the National Seed Quality Control Station at Lanet to KEPHIS, which resulted in the organization taking over all the activities of the seed certification and seed testing as per its mandate. The National Seed Quality Control Service (Official Seed Testing Station) now operates under KEPHIS.

Kitale Regional Office: Strategically Serving Kenya's Grain Basket

1971: Started when Kenya with the assistance of the Dutch government started Kenya's seed industry under the Seeds and Plant Varieties Act (1971) Cap 326; was then a sub-station of the main station at Lanet, Nakuru. The main technical operation was certification of seed, mainly maize and pastures grasses. Like the main station, the Kitale substation started a seed certification sub-station known as Kenya Inspection Service for seeds (KIS) later renamed the National Seed Quality Control Service (NSQCS).

1997: Officially becomes KEPHIS Kitale Regional Office. The regional office is situated in the heart of the North Rift's rich farmland serving the seed companies in the region. Counties served by the Kitale station include Trans Nzoia, Bungoma, West Pokot, Nandi, Uasin Gishu, Turkana and parts of Kakamega. The office is also responsible for plant and plant material(s) at Eldoret International Airport and the Malaba border office. Surveillance is also done at Suam and Lwakhakha on the Kenya -Uganda border.

2011: Kenya's 2nd seed testing laboratory located at the office is commissioned.
Services offered:Seed certification, analytical chemistry laboratory services, phytosanitary services and plant variety testing.

Seed Laboratory

Tests all the maize samples from seed companies in the region and due to the proximity of the companies to the laboratory in Kitale, results are quickly availed to enable farmers get the seed in the market on time.

Kitale Soil Analytical Laboratory

Farmers take advantage of testing the soils which are predominantly acidic as a result of over use of Diamonium fertilizers (DAP). Farmers who bring soils for tests are advised on good amendments using alternative recommended fertilizers.

The official opening of the seed testing laboratory at KEPHIS Kitale Regional Office in July 2011.

A healthy patch of cabbage at the Kitale regional office during a farmers field day: The office regularly holds field days to sensitize farmers on the importance of Good Agricultural Practices to enhance food production in the country.

3.0 The Analytical Chemistry Laboratory

During the year, the Analytical Chemistry Laboratory continued to provide comprehensive analytical and advisory services to its customers, thereby enabling them implement and attain their strategic objectives in production, food safety and trade. The laboratory's ISO/IEC 17025:2005 accreditation by the South African National Accreditation System (SANAS) was maintained.

By regularly monitoring the actual needs of our customers, the laboratory has continuously adapted to provide the best possible analytical and advisory services at the required levels through the acquisition of appropriate equipment and stakeholder sensitization. The equipment installed included a Gas Chromatograph Triple Quadrupole Mass Spectrometer (GC-MS-MS), which is essential for

3.1 Samples Analyses

The laboratory sample analyses ranged from plant protection products, fertilizers, manures and organic compost; water for irrigation suitability, soil and plant tissue, animal feed, pesticide residue analysis in agricultural produce and environmental matrices. **Table 9** and **Figure 13** summarize the samples analyzed during the year and compare the same with those analyzed in the previous period.

Table 9: Summary of samples analysed in the years 2010 - 2011 and 2011 - 2012

Sample Matrix	2010-2011	2011-2012
Agricultural Samples	537	548
Fish for Pesticide Residue Analysis	48	95
Water for Pesticide Residue Analysis	54	64
Sediment for Pesticide Residue Analysis	16	47
Soil	143	164
Water for Irrigation Suitability Analysis	20	35
Fertilizer	125	69
Manure and Organic Compost Analysis	9	10
Agrochemical Pesticide Formulations	170	201
Heavy Metal Contaminants	28	399
Foods and feeds	63	67
Plant tissue	35	0
Total	**1248**	**1699**

Figure 13: Samples summary 2010-2011 and 2011-2012

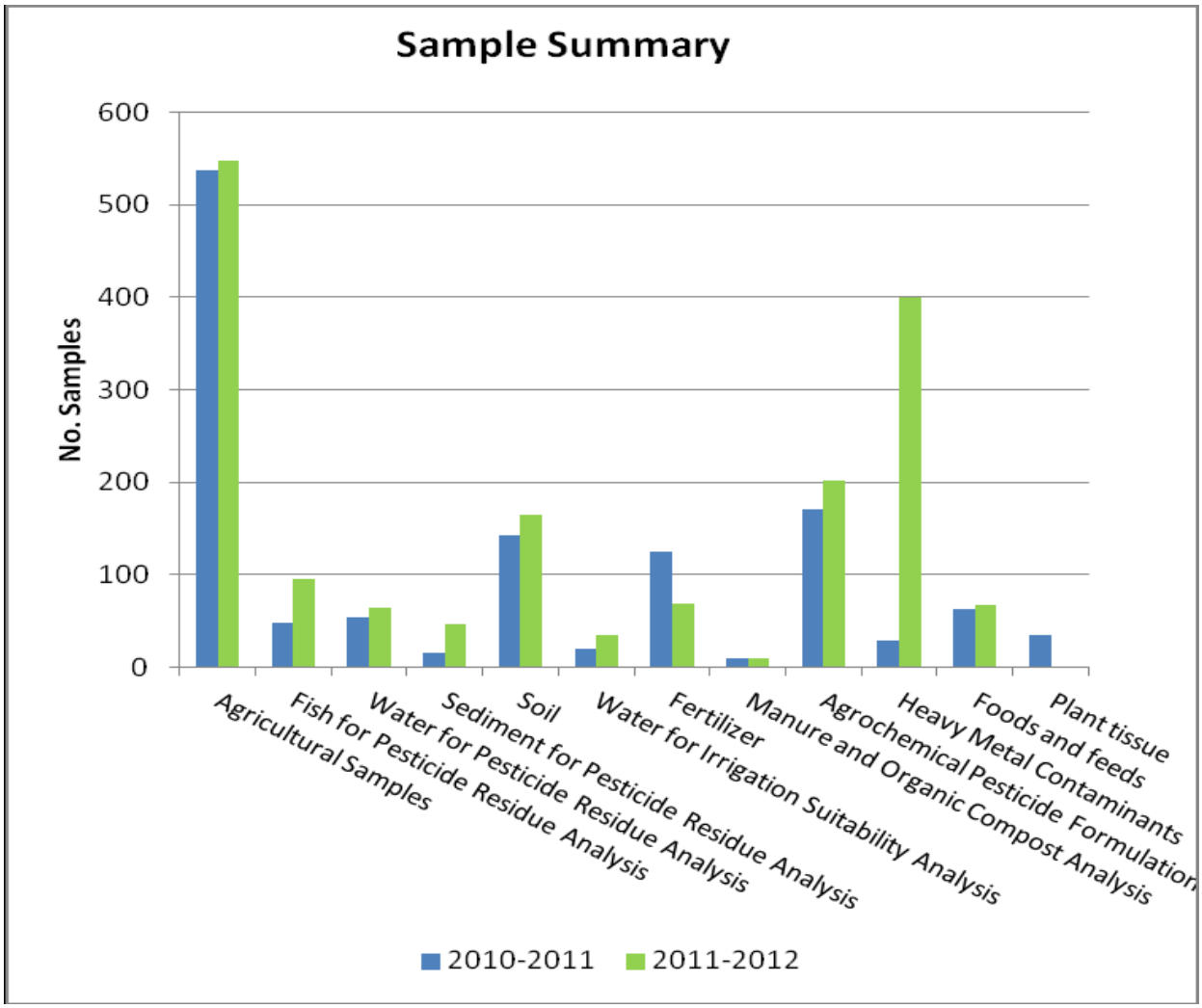
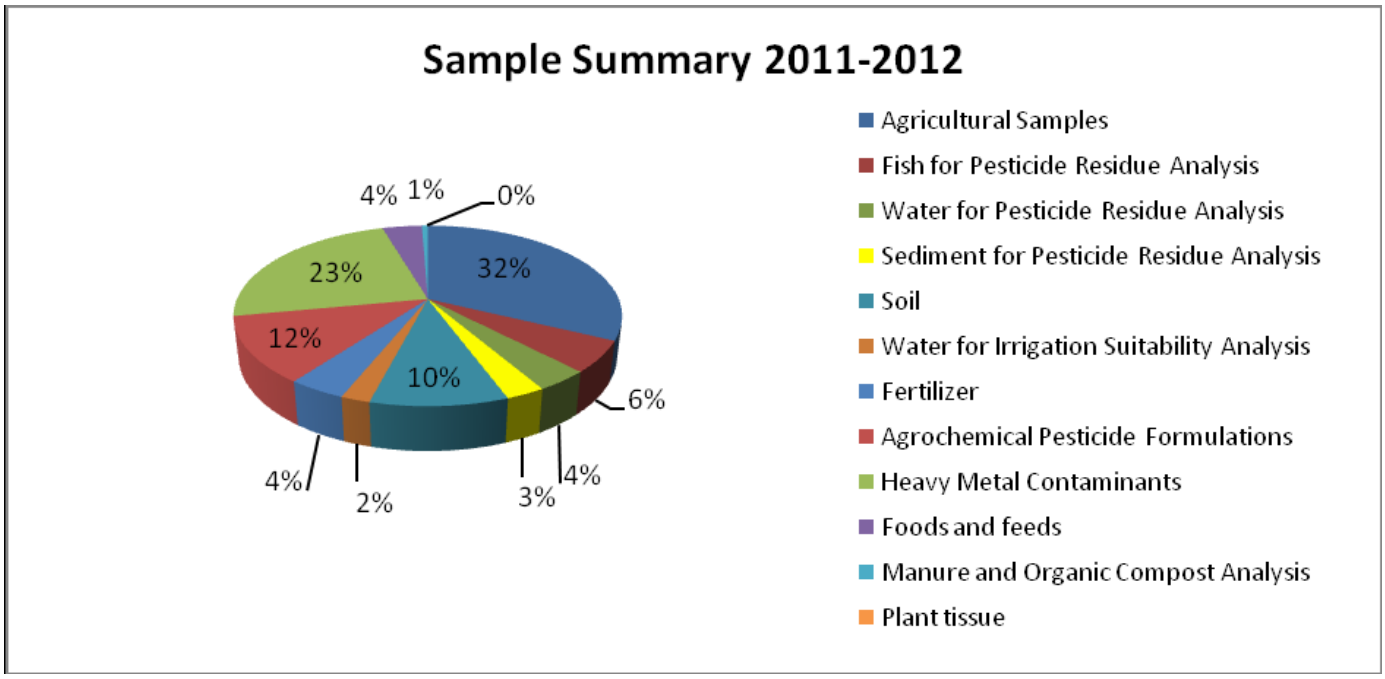


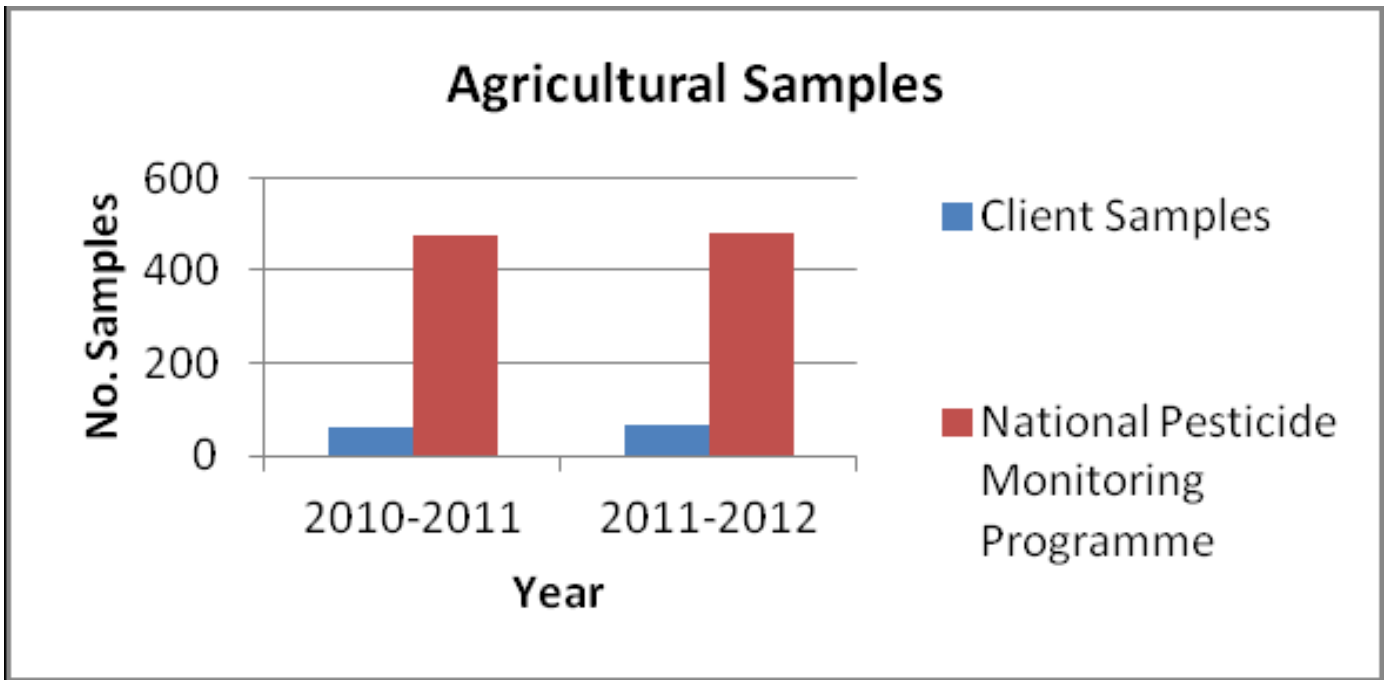
Figure 14: Sample summary for 2011- 2012



3.1.1 Agricultural samples

During the year, 548 agricultural samples were analyzed and reported. Of this, 65 were submitted by external customers indicating a 10.17% increase from the previous year, while 483 were from the monitoring programme. **Figure 15** summarizes comparison of agricultural samples analyzed in the period 2010 - 2011 and 2011 - 2012.

Figure 15: Summary of agricultural samples analysed in 2010-2011 and 2011-2012



Commodities included in the monitoring programme were tomatoes, kales and passion fruit. *Chlorpyrifos* and *diazinon* were detected in kales. *Chlorothalonil* and *Lambda-Cyhalothrin* were detected in passion fruits. *Dithiocarbamates* were detected in 69.7 % of the samples. The pesticides detected in kales and tomatoes were below the MRLs while *dithiocarbamates* detected in some passion fruits were above the MRL. **Figure 16** and **17** give a summary of pesticides detected in the various crop samples.

Figure 16: Pesticides detected in agricultural samples

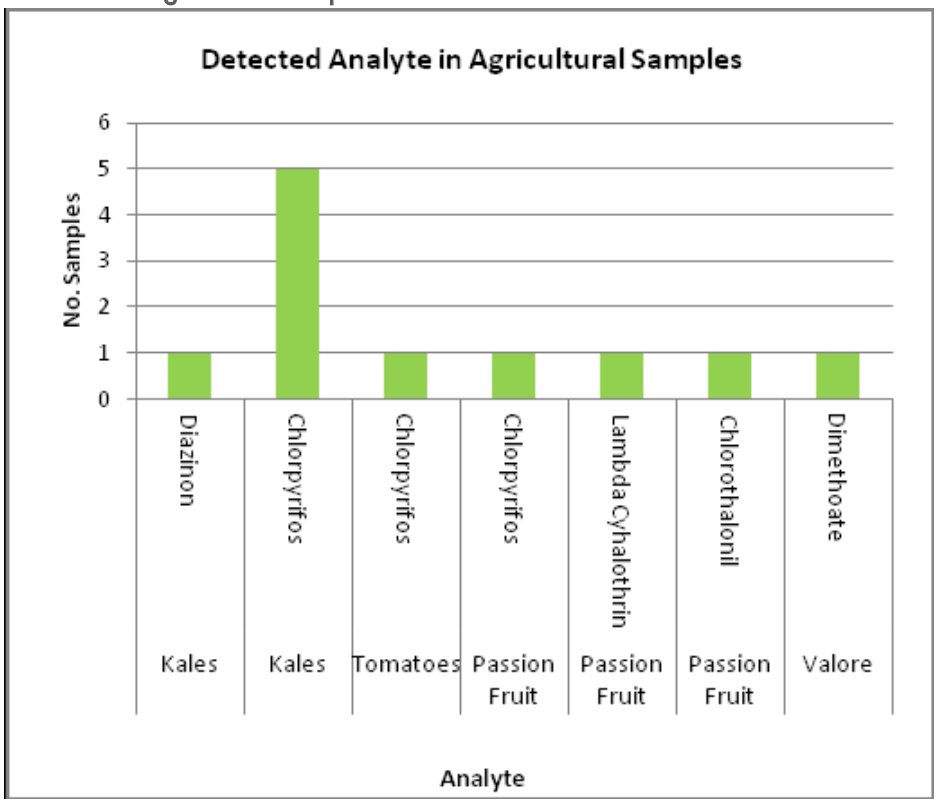
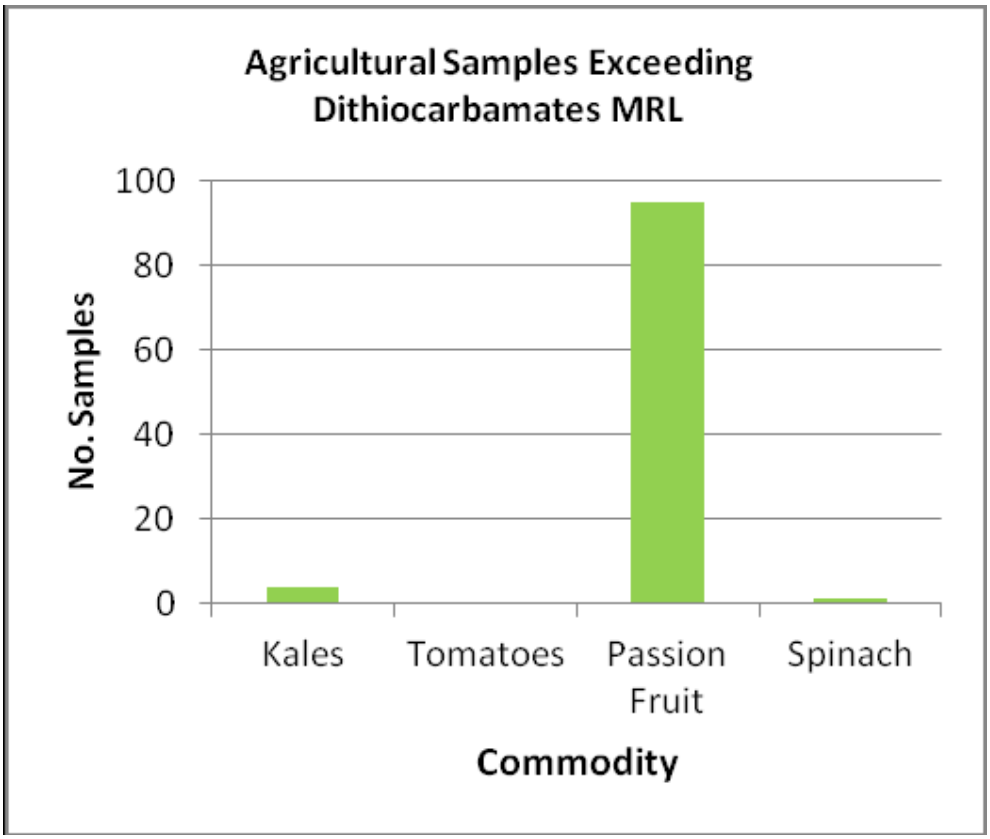


Figure 17: Dithiocarbamates MRL exceedence trend



3.1.2 Environmental Monitoring

Water, sediment and fish were analyzed for Organophosphates, Organochlorines, Pyrethroids, Polychlorinated Biphenyl (PCBs) and Triazines. Atrazine was detected in a water sample at 0.15 mg/L. Dimethoate, Chlopyrifos and Deltamethrin were detected in different water samples. No residues were detected in the sediment and fish samples. **Figures 18** and **19** show the summary of the different matrices analyzed and the pesticides detected.

Figure 18: Environmental samples trend

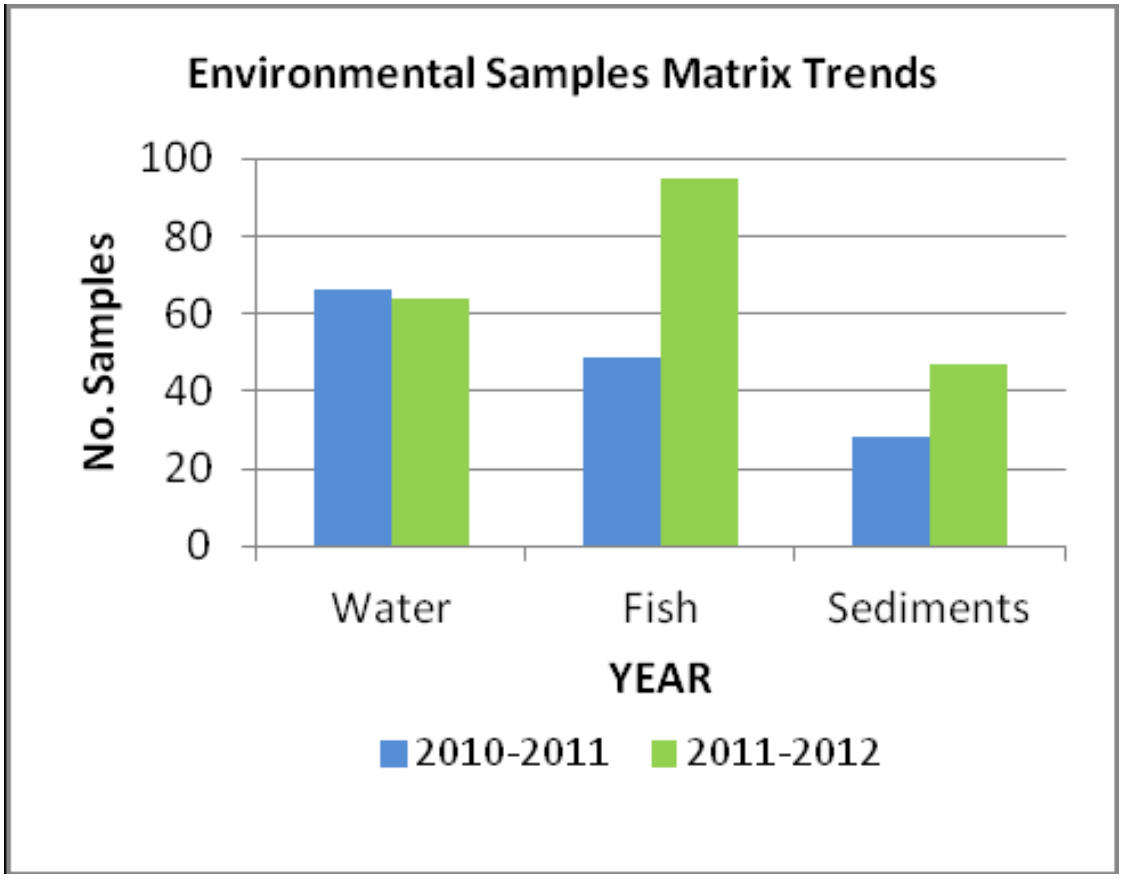
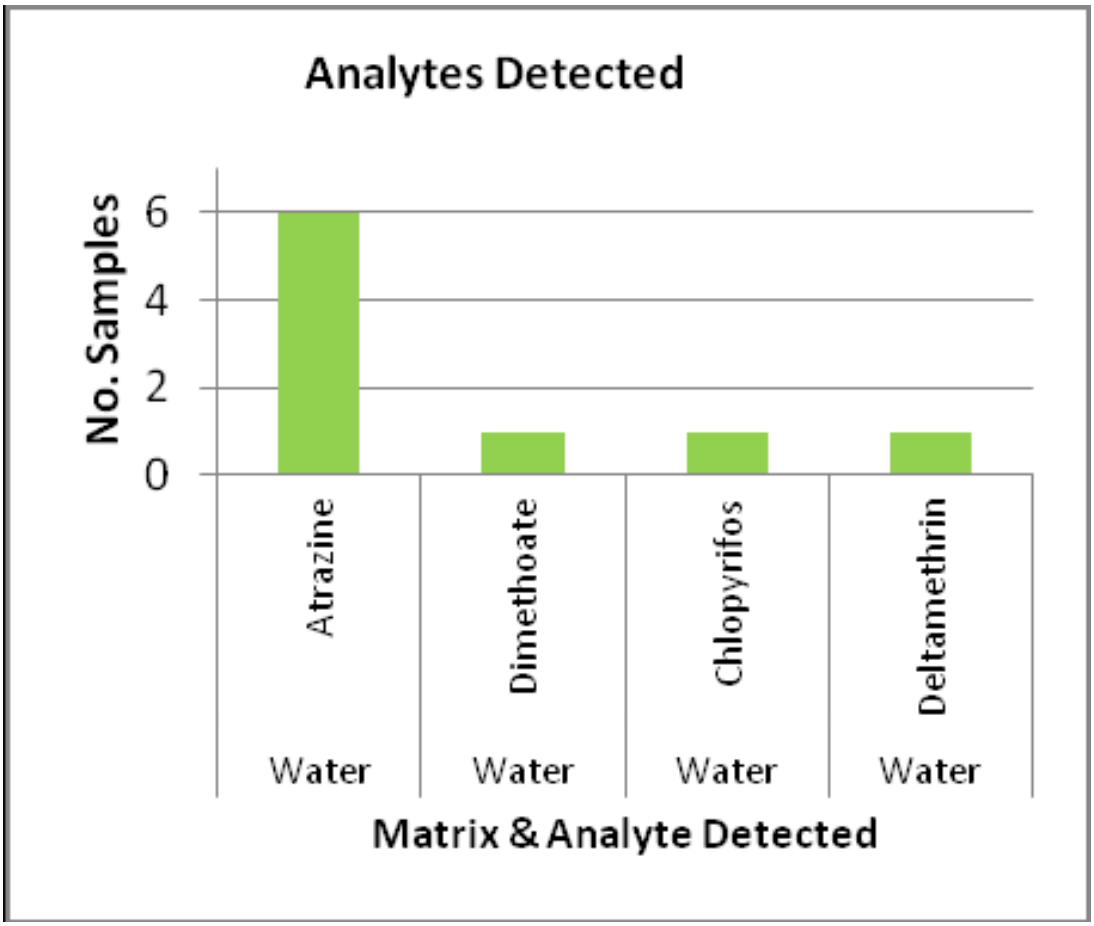


Figure 19: Pesticides detected in water



3.1.3 Soil and plant tissue analyses

164 soil samples were analyzed for fertility evaluation and appropriate recommendations provided to customers. This was an increase of 14.68 % compared to the previous year. No plant tissue samples were received during the year.

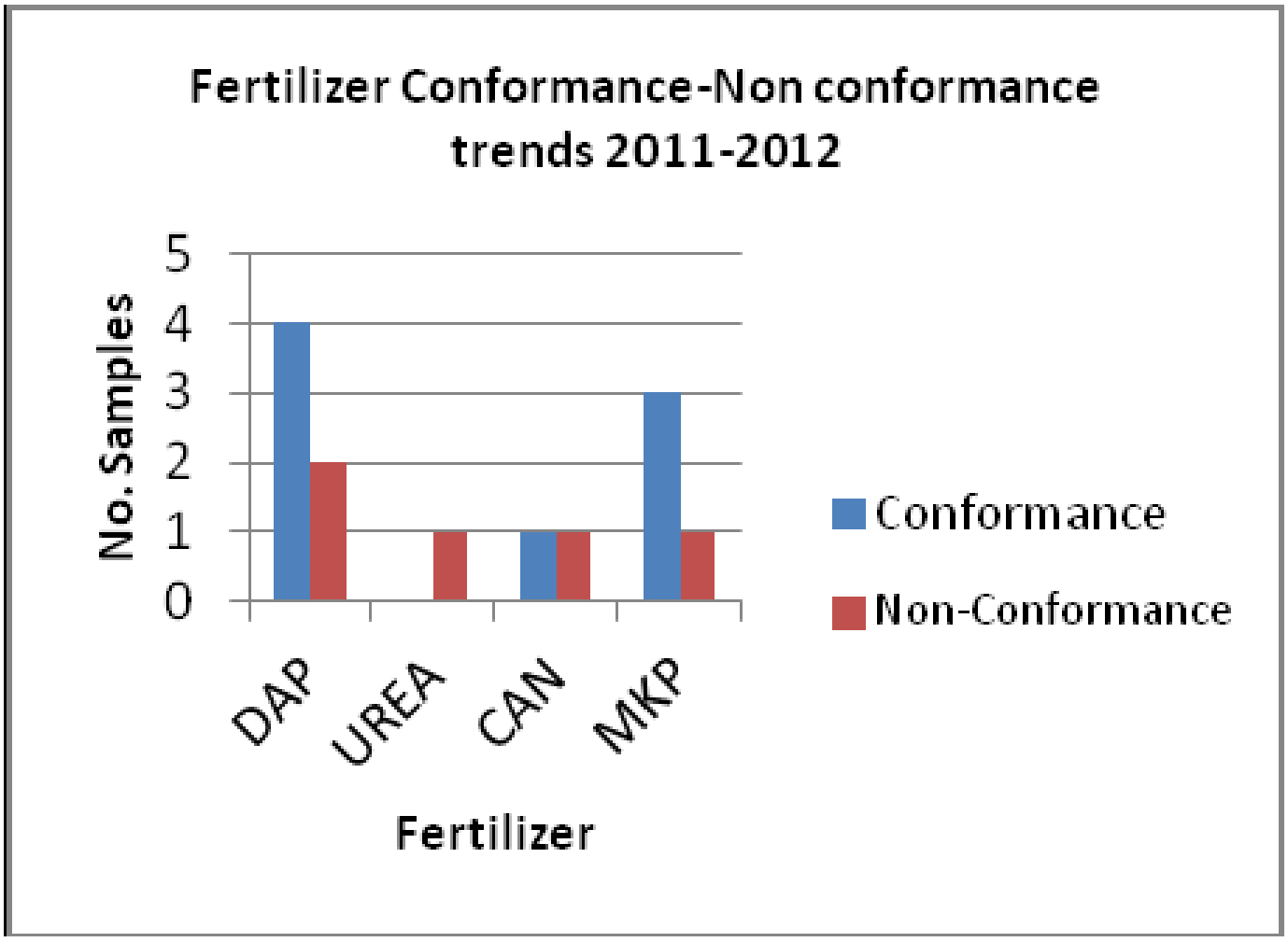
3.1.4 Water for irrigation suitability analysis

35 water samples were analyzed, an increase from 20 analyzed the previous year; advice was provided to clients on the suitability for irrigation in the intended crop(s).

3.1.5 Fertilizer formulation analysis

Fertilizer samples were analyzed to determine their conformity to specifications. 69 samples were received for analysis. The summary in **Figure 20** shows a 52% decrease compared to the previous year. Nitrogen, phosphorous and potassium were the most frequently requested parameters for analysis.

Figure 20: Summary of Fertiliser conformity to specifications



3.1.6 Manure and organic compost analysis

This was undertaken to establish the nutrient contents of these soil amendments and soil structure enhancers to establish their contribution as soil ameliorators. In this period, 10 samples were analyzed and recommendations provided to clients accordingly. This was an 11.11% increase from the previous year.

3.7.7 Food and feed analysis

67 samples were analyzed and reported, which represented about 1.59% increase from the previous year.

3.8.8 Agrochemical formulations analysis

The analysis of active ingredients in formulated agrochemical pesticides was carried out for various active ingredients. There was an 18.24% increase from the previous year as elaborated in **Figure 21** and **22** below.

Figure 21: Summary of agrochemical formulations conformity to specifications

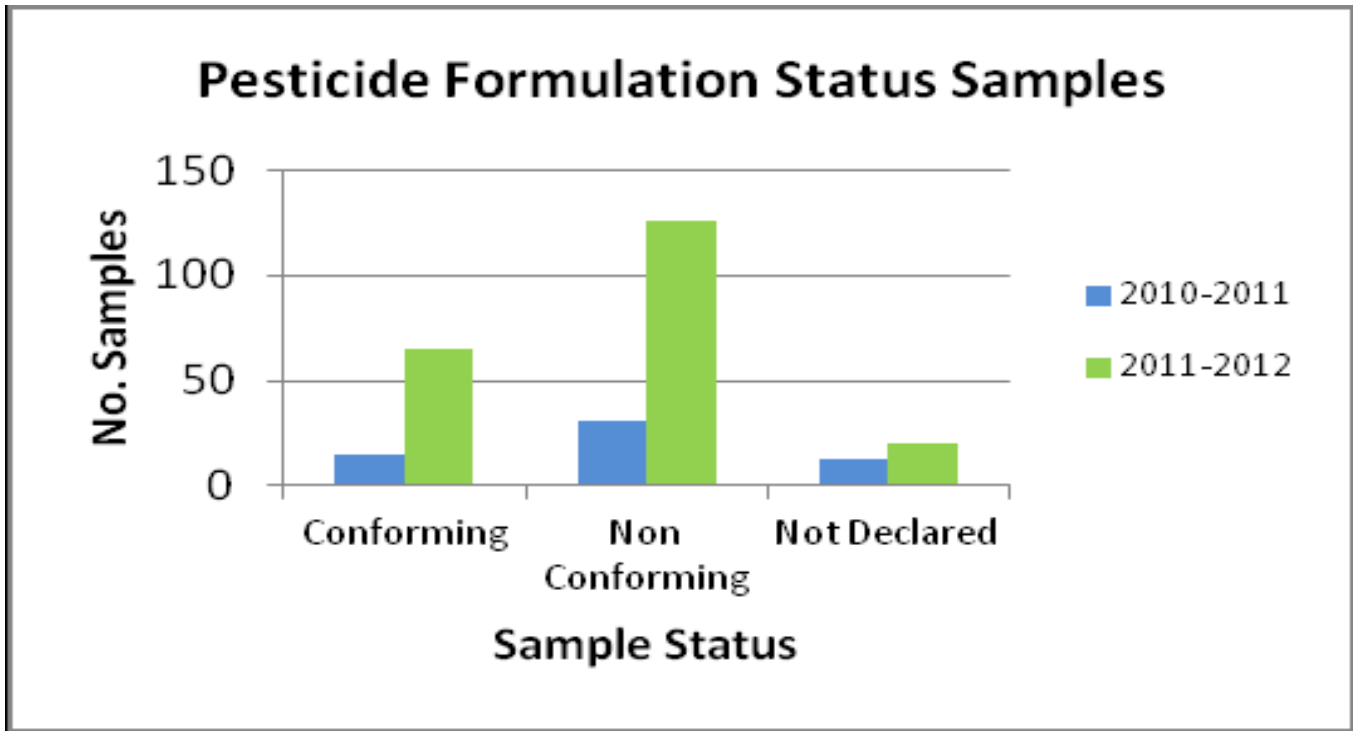
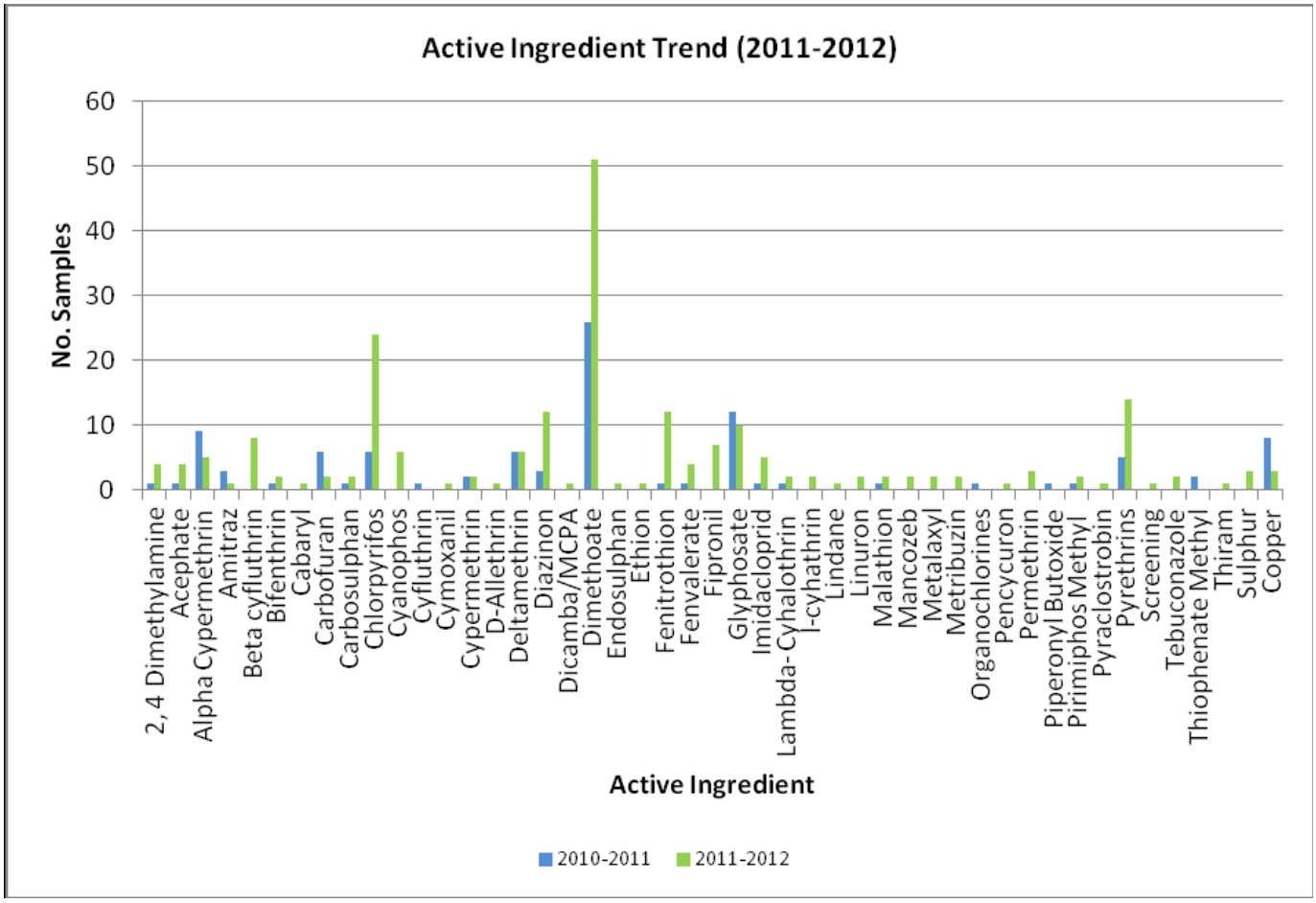


Figure 22: Summary of the Requested Active Ingredient Analytes

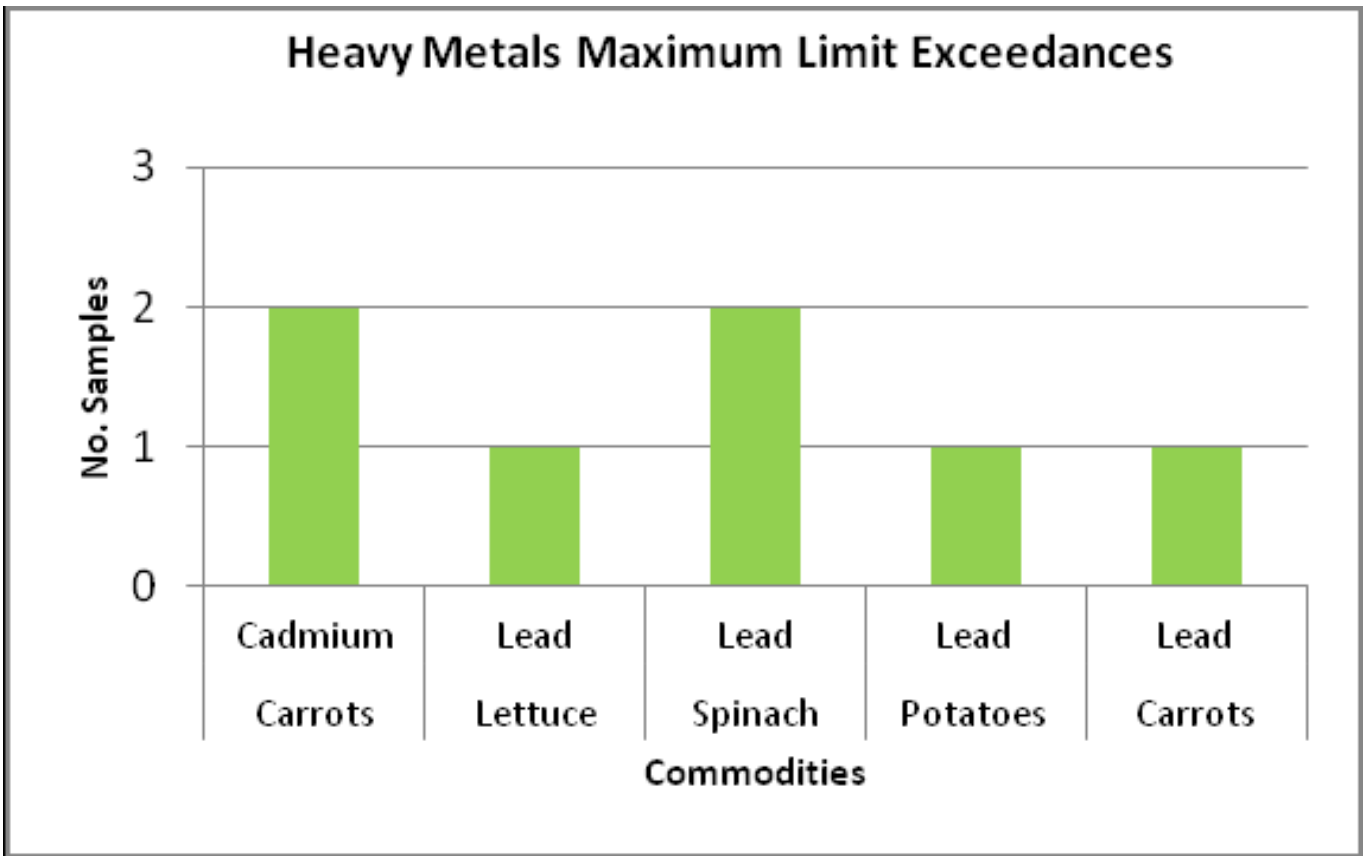


3.1.9 Heavy metal analysis

As part of food safety monitoring, the laboratory implemented a heavy metal monitoring programme for three select contaminant metals i.e. lead, cadmium and mercury in carrots, spinach and potatoes across the country. Customer samples rose from 12 in 2010 - 2011 to 190 samples in 2011 - 2012 as described in **Figure 23.**

345 crops were sampled, analyzed and reported. Lead and cadmium were detected above the recommended maximum levels. 6 samples i.e. 2 carrots, 1 potato, 1 lettuce and 2 spinach samples had lead concentrations above the 1.5 mg/kg while 3 carrot samples registered cadmium levels above the 2.5 mg/kg threshold limit. FAO/WHO Maximum Limits were used in data evaluation. There was no incidence of mercury exceeding the maximum level of 1 ppm in the sampled crops.

Figure 23: Heavy metal Maximum Limit Exceedences



3.2 Pre-Harvest Interval Trials

During the year the laboratory initiated a Pre-Harvest Interval Trial, funded by PIP-COLEACP on two sites, Timau (high altitude) and Thika (mid altitude). The crops under study were baby spinach and pakchoi (Chinese cabbage). The candidate molecules were Thiamethoxam, Azoxystrobin, Lambda-Cyhalothrin, Cyromazine, Copper, Spinosad, Metalaxyl-M, Mancozeb, Pyrethrins Imidacloprid, Beta-Cyfluthrin, Fosetyl, Propamocarb HCl and Fenhexamid.

Kephis Mombasa: Serving the Gateway to East Africa

1924: The Chief Grader and Inspector were charged with grading and inspecting agricultural exports and imports under the Department of Agriculture at Kilindini Port.

They were responsible for overseeing the use of cool stores which were premises for storing agricultural and animal products prior to export. These included butter, meat, fruits and vegetables which attracted charges which were paid to the Chief Grader and Inspector. They had the right to inspect and refuse entry into the cool stores if such products were likely to damage or contaminate other produce.

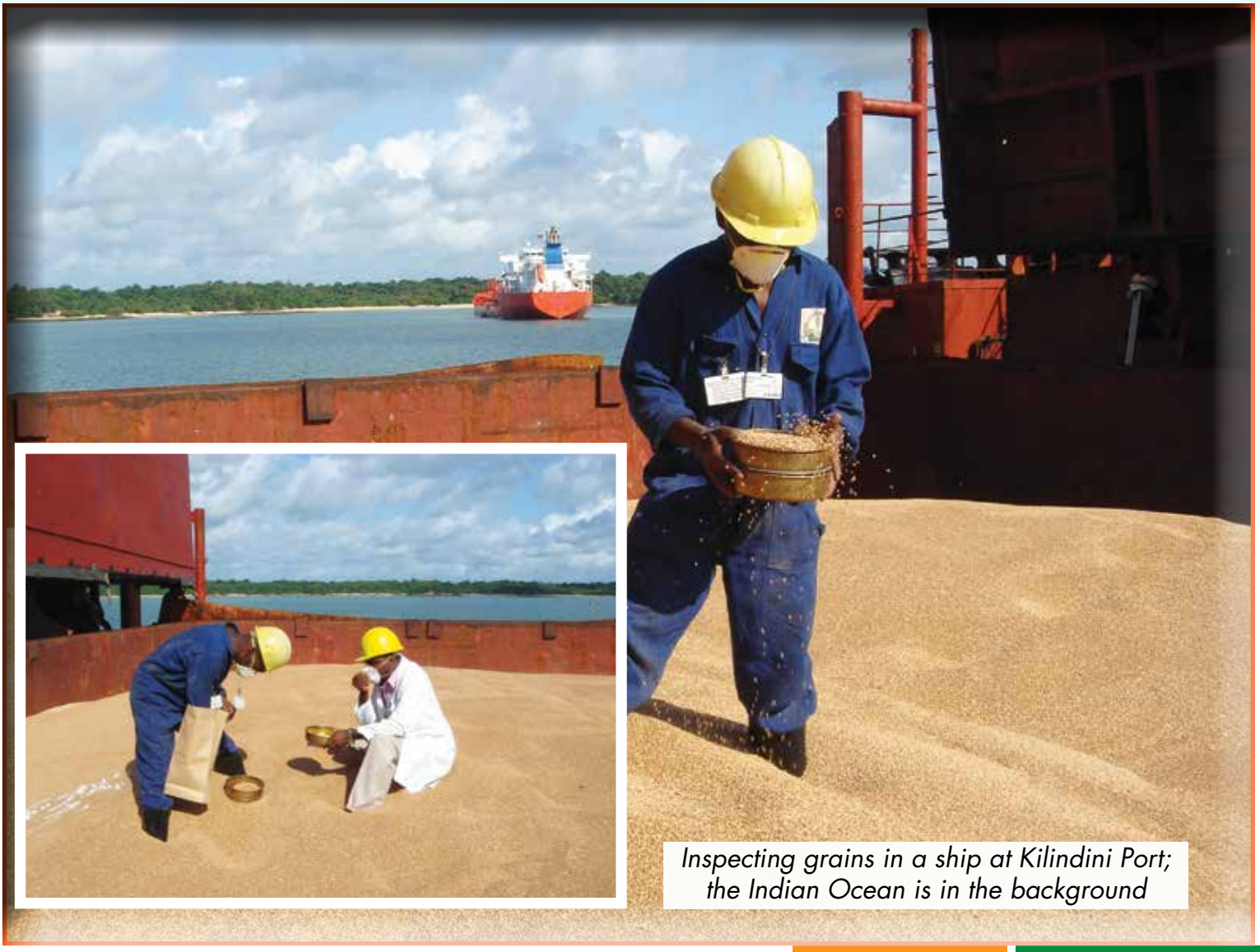
1936: The Chief Grader mandated to give priority to wheat and maize over beans as the *bean beetle* was a threat to the export market; was further responsible for collection of charges on behalf of the Kenya/Uganda railways in regard to haulage and handling of agricultural produce. Later, the responsibilities of the Chief Grader and Inspector became more specific to plants, plant products and ship inspection.

1997: KEPHIS established and the functions of the Chief Grader and Inspector were transferred to the Mombasa office which became one of the Regional offices of the Organization. KEPHIS Mombasa took over the inspection of imports and exports headed by a Regional Manager.

1998: The Regional Office has two border offices at Taveta and Lunga Lunga. KEPHIS Mombasa Regional office offers the following services all of them as quality control measures:

- Phytosanitary services
- Seed certification
- Laboratory analysis
- Public awareness

2011: Bura office opened to cater for the increasing number of seed growers at the Bura and Hola irrigation schemes.



Inspecting grains in a ship at Kilindini Port; the Indian Ocean is in the background

4.1 Inspection of imported plant materials

4.1.1 Quantities and items imported in the year

During the year, approximately 512,311.8 tonnes of plant produce were authorized for import compared to 621,273.90 tonnes last year. To facilitate importation, import permits were issued at different KEPHIS stations as indicated in the **Figure 24**. 23,899 Plant Import Permits (PIPs) were issued during the year as compared to 13,769 PIPs in 2010 - 2011.

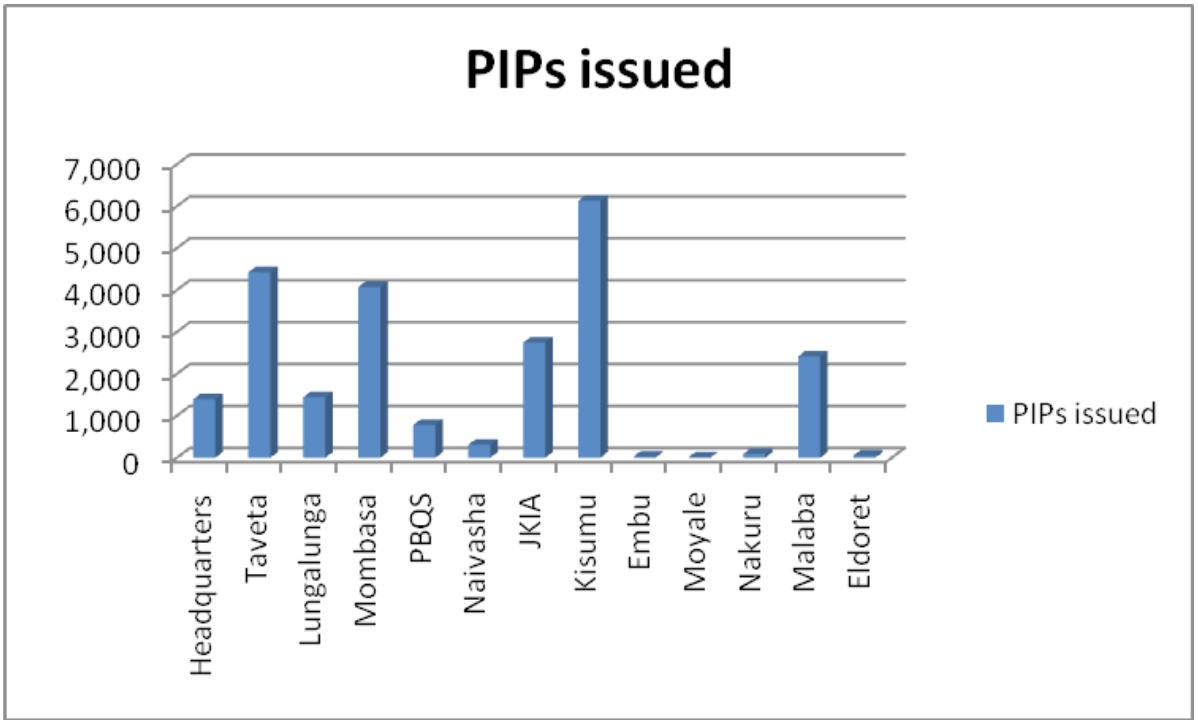
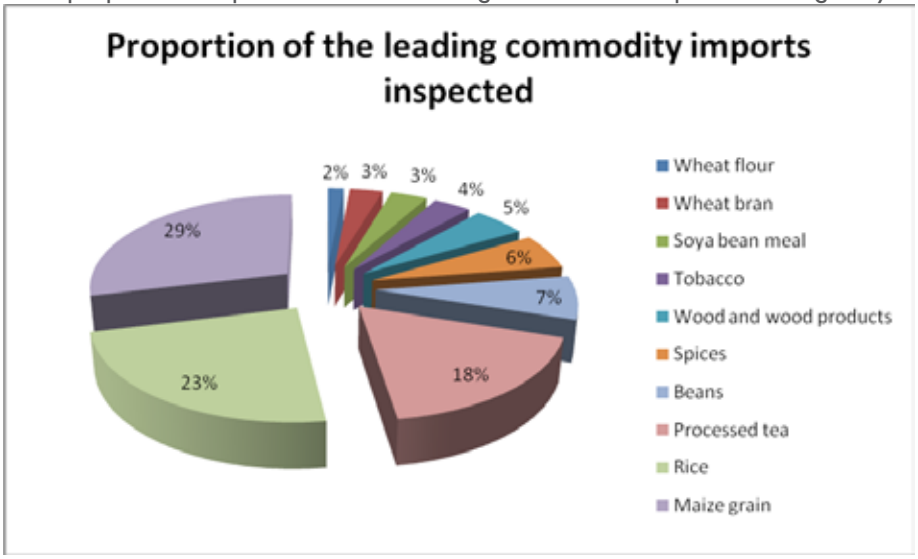


Figure 24: PIPs issued per Station

Of the total imports, maize grain was the leading commodity inspected in terms of quantity at 122,404 tonnes.

Figure 25 summarizes the proportion in quantities of the leading commodities imported during the year.



4.1.2 Importation of biological controls and regulated articles

The past decade has experienced growth in demand for new technologies including the use of biological control agents, bio fertilisers and organic fertilisers. To facilitate importation of these items, the Kenya Standing Technical Committee on Imports and Exports (KSTCIE) evaluated 11 applications and approved 8 bio-control organisms or products during the year. In addition 5 facilities which regularly produce such organisms or products were inspected for compliance to set standards. **Table 10** shows the details of the 77 Biological Import permits issued to facilitate importation of biological material for research purposes as well as those previously approved by the committee for commercial use.

Table 10: Biological organisms/products imported in 2011 - 2012

Organism /Product	Target	No. of Consignments/ Permits	Country of origin
Dactylopius opuntiae	Opuntia stricta	1	South Africa
Xanthomonas campestris pv campestris	Brassicas	1	South Africa
Xanthomonas campestris pv campestris	Brassicas	1	United Kingdom
Phytoseiulus persimilis	spider mites	2	Belgium
Chrysocharis flacilla	Liriomyza huidobrensis	2	Peru
Anagyrus pseudococci	Mealybugs	1	Netherlands
Amblyseius Californicus/ Neoseiulus Californicus	Spider Mite	1	United Kingdom
Amblyseius Californicus /Neoseiulus Californicus	Spider Mite	41	Netherlands
Atoxigenic Aspergillus flavus	Bio displacement of toxigenic Aspergillus spp.	3	Nigeria
Bacillus thuringiensis var. israelensis,	Mosquito larvae	1	USA
Plant extracts	Organic fertilizer/ enhancer	10	USA
Busseola fusca, Sesamia calamistis, Chilo partellus	Research on parasitoid to control stem borers	2	Tanzania
Fusarium oxysporum fsp.strigae (Foxy 2) isolate coated seed	Control of Striga spp.	1	Germany
Mycorrhiza fertiliser	Bio-fertilizer	1	India
Primary nitrogen fixing soil microorganisms from Norway	Bio-fertilizer	2	Norway
Aspergillus strains	For research	1	Tanzania
Frozen dead sweet potato weevil larvae of Cylas brunneus and C. puncticollis	For research	1	Uganda
Mycotal (Lecanicillium muscarium Strain Ve6)	Thrips/whiteflies	1	Netherlands
Aspergillus strains and maize grain inoculated with A. flavus		2	Tanzania
5 plates of Pratylenchus spp and Meloidogyne spp		1	Germany
Ambrydromalus limonicus	Thrips/whiteflies	1	Netherlands
Total		**77**	

4.1.3 Interceptions

Imported commodities are expected to meet the standards and import requirements of Kenya. Some commodities however failed to meet these requirements and consequently were intercepted. Lack of the required phytosanitary documentation was also a major cause interceptions. During the year all intercepted material was subjected to destruction in cases where the possible corrective measure(s) was not achievable. 16 interceptions on imports were reported during the year in Lunga lunga (6), Taveta (5) and Mombasa (5).

4.1.4 Pest Risk Analyses (PRAs) to facilitate imports

During the period, the Corporation undertook various PRAs to facilitate imports. **Table 11** indicates the list of conducted PRAs in the year to facilitate imports of banana, rice, cassava, beans, peas and roses from the eastern African region and other regions of the world.

Table 11: List of PRAs conducted

Crop	Import from
Beans	USA
Grapes	USA
Apple	USA
Roses	Tanzania
Maize	Zambia
Chrysanthemums	Israel
Peas	USA

Peas	Canada
Mango bud wood	USA
Avocado bud wood	USA
Banana	Eastern Africa region
Rice	Eastern Africa region
Cassava	Eastern Africa region
Peas	Eastern Africa region

4.1.5 Surveillance on import of GMOs

The Corporation worked together with the NBA in evaluating introduction of GMOs mainly for research and transit. In order to safeguard against unauthorized imports of GMOs through ordinary permits, samples were taken from various consignments and analyzed in the KEPHIS molecular laboratory. The laboratory also analyzed samples presented by clients. 113 samples were submitted and tested (94 seed samples, 14 maize grain samples and 5 corn meal samples).

4.1.6 Surveillance, Early Warning System (EWS) and rapid alert response of pests

The Corporation operationalized the Rapid Alert and Emergency Response Committee as a build up to an earlier initiative on Early Warning and Rapid Alert. Participating farms have been issued with data loggers to enable the sending of pest data to KEPHIS for analysis. This was a horticultural industry collaborative initiative.

The Rapid Alert and Emergency Response Committee held meetings in the year and drafted a strategy for implementing partner participation in disease early detection and action.

In addition, surveillance activities were carried out for wheat pests specifically Flag Smut, beans targeting the quarantine bacterium, *Curtobacterium flaccumfasciens* as well as for the *Maize Lethal Necrosis* Disease that is an emerging disease in Kenya.

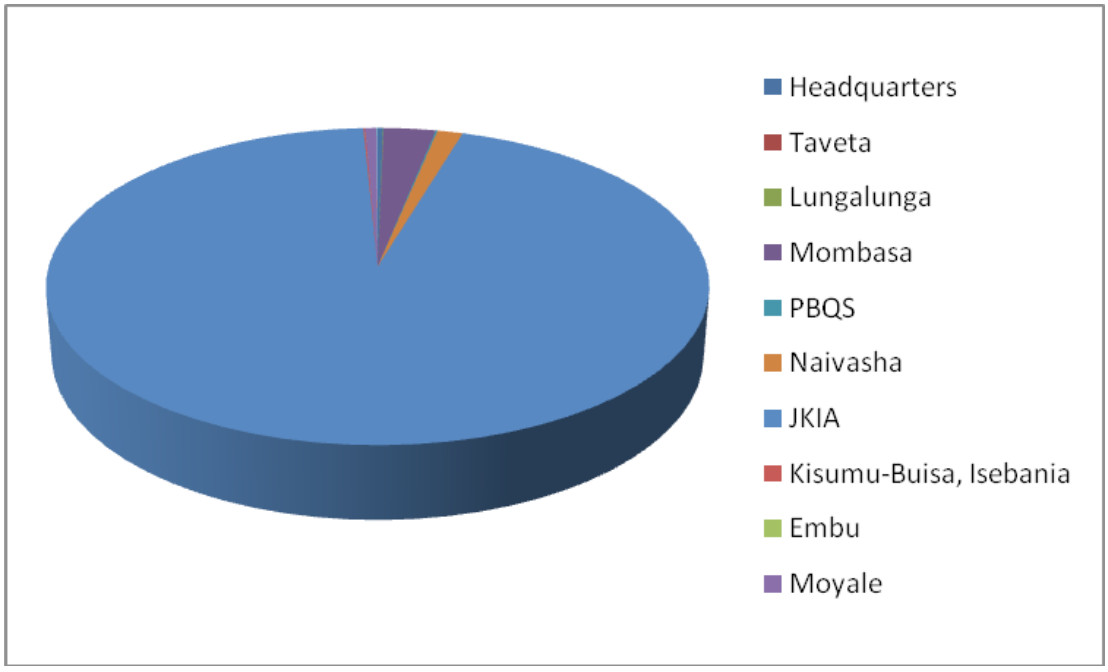
The maize disease presented a challenge to stakeholders in the sector and was compounded by the presence of the fungal pathogen *Cephalosporium spp.* The initial survey showed presence of the disease in Bomet. The disease has since been reported in other parts of the country, and control measures underway to contain the disease.

4.2 Inspection Of Plant Material For Export

199,168 phytosanitary certificates were issued to authorize consignments for export. These were for 1,576,407.450 tonnes of exported produce. **Figure 26** summarizes the number of phytosanitary certificates issued at various exit points.

Sorting and packing of French beans destined for overseas markets: KEPHIS strives to ensure that companies involved in exporting produce overseas adhere to set standards and requirements of importing countries

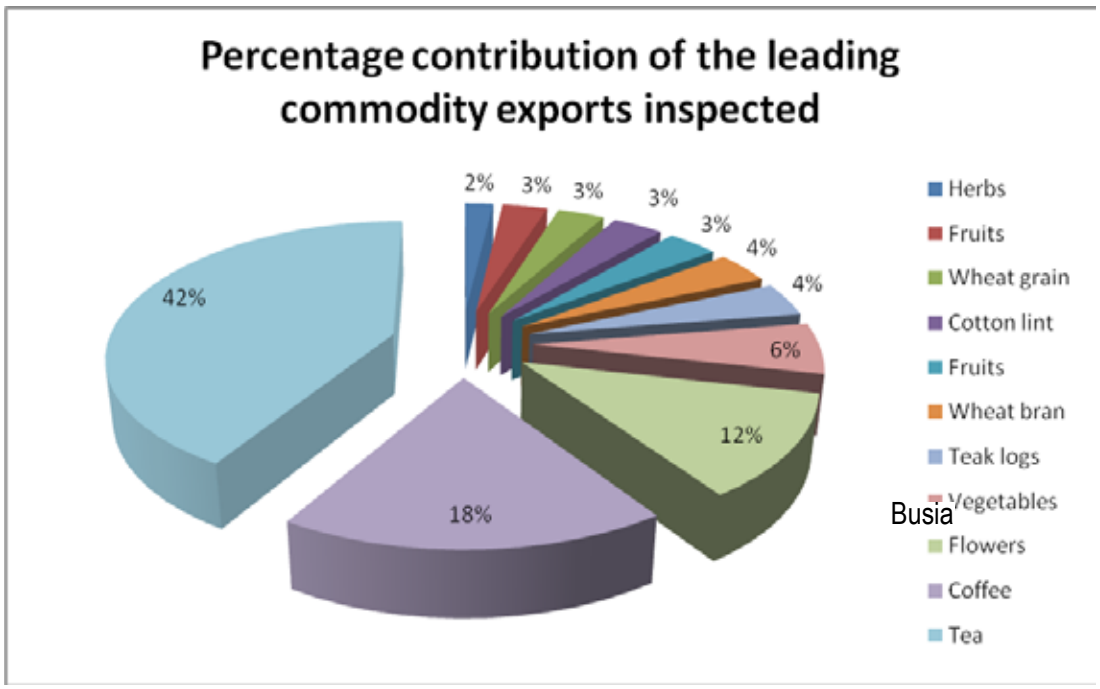
Figure 26: Phytosanitary certificates issued by different stations



Additionally, 5,908 Conformity Certificates were issued at the PIU for some of the exported produce. At least 351,240.612 tonnes of commodities were also certified for transit to the region.

In terms of volumes exported, tea was leading at 42%. This was followed by coffee and cut flowers. This explains the growth experienced in the horticultural industry in the past year and the high returns realized from these crops. **Figure 27** summarizes the percentage contribution in terms of volume of the major plant exports.

Figure 27: Percentage contribution of the leading commodity exports inspected



4.2.1 Export interceptions

Some exported plant material occasionally failed to meet the requirements of importing countries resulting in interceptions at market destinations. Market access and sustenance is largely dependent on the suppliers capacity to comply with market requirements and KEPHIS strives to ensure that these are met. Total notifications due to non compliance were 241 and the major causes of interceptions were regulated pests (Liriomyza spp., Dacus spp, Bemisia spp. and Thrips spp). These accounted for 78% of the interceptions followed by errors and omissions in documentation.

Stakeholders meetings were carried out to address the challenges resulting in interceptions.

Table 12: Major causes of interceptions

Reason for Interception	Cause	Number of interceptions
Presence of harmful organisms	Liriomiza sp.	26
	Dacus sp./Tephritidae/	18
	Spodotpera sp	1
	Frankliniella sp	2
	Diaphania sp	1
	Thrips sp.	2
	Triadleurodes sp.	1
	Bemisia sp.	1
Documentation	Phytosanitary certificate missing	4
	Phytosanitary certificate incomplete	7
Non – compliance with special requirements	Non –compliance with special requirements	2
	Non – compliance with ISPM No. 15	1
Prohibited plant material	Prohibited plant material	1
Incorrect identity	Incorrect Identity declared	1
Additional declaration	Additional declaration missing	4
	Additional declaration inadequate/ invalid	1
	Total	73

4.2.3 Germplasm exchange

The Plant Quarantine and Biosafety Station at Muguga hosts tissue culture and virus cleaning laboratories. During the year, 437,256 plantlets, cuttings, tubers and germplasm were prepared for exchange. 12,736 plant material indexed for viruses were distributed by KEPHIS to other institutions/ countries to support germplasm exchange as shown in **Table 13.**

Table 13: Summary of plant materials indexed for viruses

Description	Quantity	Destination
Sweet potato	1,720	CIP(Ethiopia, Malawi and Mozambique),GTIL for further multiplication
8 clones of cassava	330	IITA(Tanzania, Malawi and Nigeria)
Irish potato	8,686	CIP(Uganda, Rwanda, Tanzania and Ethiopia) and Oserian
Pyrethrum -plantlets	2,000	Kenya

4.2.4 PRA information to facilitate exports

A number of countries requested for pest information to facilitate exports of Kenyan produce into those countries. Sets of information were developed and provided to requesting countries leading to opening of new markets for Kenyan produce.

4.2.5 Farm and facility inspections

To further facilitate trade, KEPHIS carries out final produce inspections to ensure compliance to importing countries requirements. 770 produce inspections were done in the year.

Facility inspections

162 inspections were conducted during the year as shown in **Table 14.**

Table 14: Reasons for and number of inspections carried out

Reasons for inspection	No. of inspections
USDA pelargonium sanitation protocol	23
EC 2000/29 Directive	60
Open Quarantine material	53
Bio controls and Bio- containment facilities	17
AQIS Devitalisation protocol	30
Interceptions follow up	20
Farm visits/nursery	284
Go-down	392
Vessel/bulk inspection	87
Wood packaging materials	21,788 pallets (Mombasa only)

Reasons for inspections:

1. To generate PRA information for export destinations requirements, including facilitation of imports and transit, facilitation of exports and facilitation of use of bio-control organisms;
2. All imports and transits of plant material for compliance to the law including commercial, research, transit at postal and courier, ports of entry – air/sea ports, borders (rail, road);
3. Material imported into the country under quarantine including those requiring provisional quarantine facility and elite germplasm for disease clean up;
4. Export certification for IPPC compliance for inspections before exit including plants for planting, fresh produce (fruits, vegetables, flowers), regulated articles;
5. EU compliance to export requirements (specific requirements other than those required under general IPPC requirements), as contained in the EU Directives including EC Dir 2000/29;
6. Bilateral Agreements for export including those with Australia (AQIS) requiring devitalisation and USA (USDA-APHIS) for inspection of Pelargoniums;
7. Compliance to ISPM No.15.:Guidelines for Regulating Wood Packaging Material used in international trade including audits and inspections of authorized treatment firms;
8. Interceptions in export destinations and interceptions of imports to follow up for corrective action;
9. Rejections at the exit port for follow up on for conformity to Cap 319 – export quality guidelines including follow up of farms/exporters having multiple rejections;
10. Approvals for import and export under national committees (KSTCIE, NBC/NBA) including follow up on recommendations and conditions of approval and monitoring of confinement facilities;
11. Inspections under surveillance including for purposes of pest reporting or reported pests and updating pest lists.

4.2.6 Laboratory Analysis and Pest Diagnostics

The plant quarantine and bio-safety plant health laboratories, molecular laboratory at the headquarters and laboratory at Mombasa conducted various tests during the year for compliance to import and export requirements or as a service to the public. 1,951 samples were received at the stations for analyses as summarised in **Table 15.**

Table 15: Summary of analyses and number of samples

Analysis	No of samples
Curtobacterium analysis	244
Pathological analysis	50
Bacterial Wilt	223
Virus analysis	534
Fungal analysis	685
Nematodes analysis	37
Entomological analysis/identification	64
Mechanical inoculation	26
Validation of grafting method and NCM-ELISA method	32
Rock phosphate	1
aflatoxin analysis	55
Total	**1,951**

4.3 Trade And Standards

During the year, KEPHIS participated in the development of various national, regional and international standards as well as harmonization of the various standards with the aim of trade facilitation. KEPHIS participated in the following activities:

i. Development of International Standards for Phytosanitary Measures

Participated in the revision and drafting of the following ISPMs adopted in CPM 6 and 7:-

ISPM 07:2011 Phytosanitary certification system (originally adopted in 1997, revised in 2011)

ISPM 12:2011 Phytosanitary certificates (originally adopted in 2001, revised in 2011 by CPM 6)

ISPM 26:2006 Establishment of pest free areas for fruit flies

Appendix 1 (2011) - Fruit fly trapping
PT 12: 2011 - Irradiation Treatment for Cylas formicarius elegantulus

PT 13: 2011 - Irradiation Treatment for Euscepes postfasciatus
PT 14: 2011 - Irradiation Treatment for Ceratitis capitata

KEPHIS also participated in CPM 7 which also coincided with the 60 years celebrations of IPPC since its establishment in 1952. CPM also approved 2 diagnostic protocols and two new ISPMs as detailed below:

Supplement 1 (2012) - Guidelines on the interpretation and application of the concept of official control for regulated pests

DP 2:2012 - Diagnostic protocol for Plum pox virus

DP 3:2012 - Diagnostic protocol for Trogoderma granarium Everts

ISPM 35:2012 Systems approach for pest risk management of fruit flies

ISPM 36:2012 Integrated measures for plants for planting

ii. Implementation review and support systems

This system is an overarching program of the IPPC aimed at identifying challenges of contracting parties for implementation of the IPPC and its standards as well as identifying resources for resolving those challenges. During the year, the IRSS was aimed at finding the gaps and challenges faced by NPPOs for the implementation of these standards with a view to making recommendations to the review panel of ISPM4 and ISPM 8 on ways to improve the standards in its upcoming revision of the standards.

KEPHIS also conducted internal surveys to monitor and evaluate the level of implementation of the ISPMs 7, ISPM 8 and 13.

iii. Trade policy Review

KEPHIS actively participated in national and regional meetings to compile trade policy for the Kenyan chapter, in particular the chapter on SPS and agriculture. This information is now finalized by the WTO Secretariat and will be the basis on which the WTO members will use at a scheduled Trade Policy Review for the East African Community in November 2012.

Plant health inspectors from various African countries go through a training sponsored by OECD, which directly assists Kenya's and Africa's horticultural Industries

iv. WTO-SPS notifications

Under the transparency provision of the WTO-SPS, WTO members are obliged to notify other members through the WTO secretariat of any amendments or new laws of sanitary and phytosanitary nature that has an effect on trade. KEPHIS and key stakeholders participate by commenting on the proposed amendments and communicating to the concerned WTO members. Kenya's enquiry point for plant health based at KEPHIS ensures that these notifications are downloaded monthly from the WTO website (http//spsimis.wto.org), circulated to the stakeholders for comments and any substantial comments sent to the member country for consideration. The notifications are also discussed during National SPS committee meetings and posted on the KEPHIS website **(www.kephis.org).**

v. EAC SPS protocol harmonization

KEPHIS provided leadership in re-drafting a regional SPS protocol. The protocol envisages cooperation in the following broad areas, among others:

1. Harmonization of food safety, plant and animal health measures;
2. Promotion of an integrated border management system for the purpose of trading in agricultural commodities;
3. Adoption of harmonized control, inspection, certification and approval procedures;
4. Development of standardized working documents for implementation of these harmonized measures by partner states;
5. Developing national and regional human and institutional capacities in the field of sanitary and phytosanitary measures;
6. Share information and expertise in risk analysis, diagnostics and research and any other relevant information in the field of sanitary and phytosanitary measures;
7. Provision of technical assistance in sanitary and phytosanitary measures;
8. Participation in activities of WTO- SPS committee and international standard setting organizations with a view to advancing the interest of the Community;

vi. Tripartite negotiations

KEPHIS has continued to offer her services in the Tripartite FTA negotiations. The key pillars in the negotiations include:-

1. Market Integration - Trade liberalization resulting in the Free Trade Area;
2. Infrastructure Development - Mainly in the area of air transport, seamless broad infrastructure development, power and energy development, rail and road development, etc;
3. Industrial Development - This involves establishment of industries that will make the tripartite block competitive by creating an enabling environment (addressing the regulatory and legal framework); value addition; diversification; enhancing productivity and competitiveness; and the development of programmes which will result in structural changes.

vii. UNECE & OECD fruit and vegetable scheme

KEPHIS has continued to participate in the development of quality standards in the OECD and UNECE schemes as this directly assists Kenya's horticultural industry. This is by providing necessary comments to standards on the online system which allows member countries to participate in the creation and updating of new and existing quality standards, brochures and inspection methods and to share and reflect on member countries needs and experiences. Also to train member countries on the application of these schemes and learn from the work and discussion procedures of the OECD scheme. Finally, to share and integrate experiences thus encouraging harmonization.

viii. Bilateral trade negotiations

To gain market access for agricultural products and ensure food security in the country, Kenya has entered into trade negotiations with countries such as Mauritius, Netherlands and Ethiopia. KEPHIS has been involved in the negotiations to ensure that key issues of phytosanitary concern are addressed in the negotiations. The negotiations have resulted in increased trade of agricultural produce under favourable yet safer conditions thus ensuring increased food security in the country

vi. EPA negotiation process

KEPHIS continues to participate in ongoing negotiations to enable Kenya access the EU market under the EU-ACP EPA. KEPHIS participated in the preparation of the EAC Position on Economic Development Cooperation Agriculture, Article. 15 FEPA-Export taxes, Article.16 of FEPA-MFN (in conjunction with EAC proposed review of Article 4(d) of the FEPA), Trade, Environment and Sustainable Development, Good Governance in the Tax Area and subsequent negotiations on the same.

Kephis Kisumu: Serving Nyanza & Western counties

2006: Started at the Kenya Ports Authority – Inland Container Depot, to bring KEPHIS services closer to the people of Nyanza and Western counties. The office was hived partly from Nakuru and Kitale regional offices. Initially the office oversaw two entry/exit points, Kisumu railway pier and Busia Plant Inspection Unit, mainly handling phytosanitary matters.

2007: Office officially commissioned by the then Assistant Minister for Agriculture Hon. Kyalo Kaindi Presently, the regional office serves 9 counties: Kisumu, Homa Bay, Migori, Kisii, Nyamira, Siaya, Busia, Kakamega and Vihiga. Office oversees operations at 5 entry/exit points at Kisumu pier, Kisumu International Airport, Busia, Isebania and Mbita PIUs.

Services

The region handles:-

a. Plant variety testing (NPT trials and DUS) - 18 trial sites established during the year.
b. Phytosanitary services including:
   - Surveillance and inspection of plant materials at entry/exit points;
   - Inspection of open quarantine sites/facilities (currently at 7);
   - Fruit tree nursery inspection and farm visits for advisory services;
   - Facilitation of germplasm exchange for research and educational institutions in the region.
c. Hectares of seed fields inspected presently stands at 1663.13. This is bound to increase as the the region produces the highest amount of sorghum seed in the country, with equal potential to produce seed of other high value traditional crops such as cassava, sweet potatoes and finger millet.
d. Annual post seed certification surveys in all the 9 counties;
e. Facilitation of samples for testing at ACL and plant clinics services;
f. Stakeholders' capacity building and awareness activities:
   - Trainings
   - Field days
   - Agricultural shows/exhibitions

Kisumu office handles unique crops such as sugarcane, nerica rice, local vegetables, sweet potato where this office contributed in the development of seed inspection guidelines for these unique crops.

For the first time, the regional office recently managed to clear flowers through the Kisumu International Airport using the Electronic Certification System.

Hon. Kyalo Kaindi officially opened the KEPHIS Kisumu office in 2007

5.0 Corporate Planning Activities

5.1 Strategic Focus

In the period under review, the Corporation reviewed the 2008 – 2012 Strategic Plan and developed the 2012-2017 Strategic Plan, aligning its strategies to key government development blueprints that included the Vision 2030, the Vision 2030 MTP and the ASDS. In addition, the Corporation ensured that its strategies are in line with the Constitution of Kenya. The newly developed Strategic Plan is expected to guide the Corporation in its operations and more importantly chart the way forward as the country moves into a devolved system of government.

5.2 Performance Contracting

Performance Contracting remains to be a very important management tool within the public sector and as such, KEPHIS continues to comply with it. Through its implementation, KEPHIS has managed to ensure continual improvement and growth in its core and non-core operational areas. Key achievements during the period under review included:

i. Implementation and adoption of an electronic export certification system for fresh produce exports to the Netherlands;
ii. Development of the Horticultural Policy;
iii. Continued operationalization of COPE;
iv. Release of 17 varieties of drought tolerant crops

5.3 Quality Management Systems

The Corporation continues to maintain the ISO 9001:2008 certification. During the period, the Corporation was successfully re-certified. This was done through internal and surveillance audits in all stations. Moreover, the Corporation's key laboratories i.e. the Seed Testing and the Analytical Chemistry Laboratories are accredited to ISO 17025:2005. Plans are also at an advanced stage to accredit the Seed Testing Laboratory in Kitale and the Plant Health Laboratory at the headquarters.

5.4 Public Relations and Communications

5.4.1 Communications Strategy

During the year under review, the PR office developed the Corporate Communications Strategy to guide the Corporation's visibility and awareness programs. The strategy identified media management and relations, marketing and information dissemination as key towards communicating effectively to its stakeholders and customers. Marketing of the Seed Certification and Plant Variety Protection, the Analytical Chemistry Laboratory and the Phytosanitary sections will also be emphasized.

5.4.2 Media invitations and coverage

Nine press invitations were issued to journalists,reporters and editors from the various media houses to cover major events of the Corporation. Major events covered included:

i. The release of the first ever report on fruits and vegetables in Kenya, held at KEPHIS headquarters
ii. The Forum for African Seed Testing meeting held at KEPHIS headquarters;
iii. The COMESA sponsored training on Aflatoxins and Mycotoxins held at Headquarters;
iv. Farmers and stakeholders' training on maize growing held at Ahero in Kisumu County;
v. The two week international training on pest risk analysis and pest surveillance in plant health systems and their implications on agricultural production and trade held at KEPHIS headquarters

5.4.3 Advertising

During the two national planting seasons, the Corporation informed and educated the farming community on the importance of using certified quality agro-inputs – seed, soil, fertilizers irrigation water. The SMS service 5354 was showcased as a way for farmers to know the varieties of maize, potatoes, beans, wheat, cowpeas and sorghum to plant in their various ecological zones. The advertising was in the electronic and print media and in English and Kiswahili, as stipulated in the Constitution. The Corporation also publicized its contribution to the Vision 2030. Through advertising support to its stakeholders such as the Ministry of Agriculture, KARI and the NBA, the Organization continually sensitized its stakeholders and customers on its mandate. The ECS, which was showcased at various fora such as the Public Service Innovation Week was feted for outstanding contribution to Kenya's economy and a major contribution to the ICT sector.

5.4.4 Corporate Social Responsibility

The year's CSR activity was held in Kianjai in Meru County; Guteithia Kurera Kaana Children's home received an energy saving jiko to enable 85 orphans have meals daily as they pursue their education. The orphans rely on well wishers for food, clothing and shelter. Barbed wire and wood were also donated to partition a piece of land where a hostel will be constructed in the future to house the orphans.

Children of the home admire the jiko to be used to prepare their meals

KEPHIS Embu staff feed children of Guteithia Kurera Kaana Children's home during the year's CSR activity;

5.4.5 ASK Shows

KEPHIS participates in ASK shows countrywide which is an opportunity to interact with farmers who are the major stakeholders of the Corporation. Staff in different departments explain the importance of using quality agro-inputs to ensure food availability and sufficiency in the country. The Organization scooped first positions at the Nairobi International Trade Fair as well as in other shows countrywide for its immense contribution to Agriculture.

6.0 Projects

The Corporation continues to collaborate with local and international donors and stakeholders in the implementation of various core activities. **Table 16** shows a summary of the projects implemented during the period under review and the milestones achieved.

Table 16: Projects and projects milestones implemented during the 2011-2012 period

PROJECT	PROGRESS
COPE Project ended on 30th November 2010 with a closure period of up to 28th February 2011. The post-project phase is now undertaking capacity building as the main component.	4th to 15th July 2011 • Training course on *Application of Phytosanitary Measures* • 9 students drawn from HCDA, Moi University, KEL Horticultural Exporters, Anirack Limited and KEPHIS were trained.
	5th to 30th September 2011 • COPE and USAID-COMPETE partnered to run a one month course on *Capacity Building on Phytosanitary Skills for Increased Regional Trade.* • 26 participants attended from Kenya, Uganda, Tanzania, DRC, Malawi, Zambia, Rwanda and Burundi
	27th September 2011 COPE presented a paper titled *Bridging Phytosanitary Capacity through the Centre of Phyosanitary Excellence* during the AGRO 2011, 1st Biennial Scientific Conference of the Faculty of Agriculture, University of Nairobi.
	28th November 2011 - 19th December 2011 • COPE-COMPETE partnered to develop standardized training material/curriculum for COPE
	18th January 2012 • Stakeholder workshop was held at KEPHIS headquarters to peer review the COPE standardized training material; document finalized and approved. April 2012 • 300 copies of the COPE detailed curriculum printed to aid in the promotion and formalization of COPE training activities. The curriculum will also be a guiding tool for students/lecturers in COPE.
	COPE organized 3 trainings for staff from Burundi NPPO. 30 staff were trained. Training was supported by IPPC/FAO and Nathan Associates,USAID. 14th to 18th May 2012 Training on *Introduction to the IPPC and Its International Standards for Phytosanitary Measures (ISPMs)* 21st to 25th May 2012 Training on *Phytosanitary Inspection and Certification Systems* • 28th May to 2nd June 2012 – Training on PRA
	11th to 22nd June 2012 • Training for Regional NPPO staff on PRA and Pest Surveillance • 23 staff from Burundi, Ethiopia, Kenya, Rwanda, Tanzania and Uganda trained
	June 2012 Surveillance and data collection for purposes of pest listing for maize, beans and rice in the EAC i.e. Kenya, Uganda, Tanzania, Burundi and Rwanda. The KEPHIS PRA Unit spearheaded the activity in Kenya
HORTICAP	HORTICAP project officially ended on 31st December 2010 but had a closure period of six months of up to 30th June 2011.
	A new contractor was put on site to compete the final works on the laboratory construction.
CLIENT KENYA	The final project report was finalized and forwarded to the Netherlands Embassy. Comments on the report were received from the embassy and the report re-forwarded in October 2011.
	Since registration of exporters started in July 2011, over 600 exporters are registered and using the System. This is for all horticultural produce exporters to all destinations. Implementation of the ECS in the horticulture industry has not only helped in reducing the time it takes to generate a phytosanitary certificate, but also enhanced the industry's capacity in the use of ICT as a trading tool for export of fresh produce.
	KEPHIS presented a paper titled *Horticultural Electronic Export Certification System to Facilitate Trade* on 27th September 2011 during the AGRO 2011, 1st Biennial Scientific Conference of the Faculty of Agriculture, University of Nairobi.
	The electronic system was also implemented in The Netherlands and a review workshop was held on 28th and 29th November 2011 at KEPHIS headquarters. The workshop discussed progress and way forward for the ECS; the goal was to adopt private keys used for Electronic Signature and development of a bilateral agreement between Kenya and the Netherlands on exchange of electronic documents.

National Taskforce on Horticulture	The Cabinet Memo submitting the draft National Horticulture Policy was reviewed in consideration of the comments by the Agriculture Permanent Secretary (PS) Dr. Romano Kiome. The Memo was re-submitted to the PS for further action. The policy drafting committee met between 14th and 18th May 2012 in EAST, Embu and 4th to 5th June 2012 at AIRC, Nairobi to develop a draft Implementation Framework (IF) for the Horticulture Policy. The IF which is a five year plan with a budget proposes a management structure to support actualization of the policy and suggests that the National Taskforce on Horticulture in line with the Constitution be reconstituted and renamed National Horticulture Development Committee (NHDC).
	6th December 2011 – Agriculture PS Dr. Romano Kiome received a presentation on the draft Horticulture Policy. He mentioned it is ready for presentation to the Cabinet but needs adjustments.
CONCEPT NOTES/ PROPOSALS	The EU has approved the support to KEPHIS under the Standards and Market Access Programme (SMAP) project. Over 3.65 million euros is targeted for purchasing laboratory equipment. Other areas of support are: domestication of standards and updating of technical regulations for plant based products; implement a risk-based National Residue and Contaminant Monitoring Plan; update of current monitoring and surveillance plan plus actualization of an early warning system for pest and disease detection, identification and mitigation; update a rapid alert notification system for Kenya's agricultural related commodities; strengthen border, domestic and any other forms of surveillance supporting trade; upgrading of KEPHIS technical infrastructure and KEPHIS technical training.
OTHERS	The annual workshop on *Application of Commercial Quality Standards for Fruits and Vegetables in Eastern Africa* was held from 23rd to 27th April, 2012 at KEPHIS Headquarters and officially opened by Kenya's Agriculture Secretary, Dr. Wilson Songa. The workshop provided information on the consumption trends of fruits and vegetables in Kenya for 2011/2012; the workshop increased knowledge of fruits and vegetables quality standards,stressed the importance of strengthening the institutional and technical infrastructure for their implementation and use of establishing related systems of conformity assessment as well as giving participants opportunities to strengthen networks of national and international counterparts involved in the development and implementation of commercial agricultural quality standards. 62 participants from Zambia, Uganda, Tanzania, Malawi, DRC, Burundi, Kenya, South Africa and Rwanda attended. Trainers and resource persons were from The Netherlands, USA, South Africa and Kenya.
	The report of the study on retail of fruits and vegetables in Kenya conducted in seven provinces (with exclusion of North Eastern province) was released at HCDA on 15th May 2012. The study showed that Nairobi province led in fruit consumption when compared to other provinces; Eastern province led in vegetable consumption. Rift Valley and Western provinces had low trade volumes due to farm gate sales and production for home consumption. There were varied values per province with 97% of sales values being traded by small scale traders; only 3% went to supermarkets. Around sh.140 billion worth of fruits and vegetables was traded between June 2011 and April 2012. The report was a serious attempt to quantify domestic horticulture trade which has remained unquantified for long.
	The EU COLEACP-PIP has funded KEPHIS to conduct supervised pesticide residue field trials for pak choi and baby spinach; the project will run from June to September 2012 in Thika and Timau.

Briefs of Naivasha and Embu offices

History of KEPHIS Naivasha Office

April 2008: Naivasha office opened, to bring services closer to clients and decongest the PIU JKIA office.
The bulk of the work is phytosanitary i.e. produce inspection, field inspection, issuance of phytosanitary certificates, plant import services, advisory services ,inspection of seed sellers premises hence issuance of seed sellers licences.

History of KEPHIS Embu Office

January 2007: Embu office opened under Seed Certification and Plant Variety department.
Office was opened with the sole purpose of being closer to KEPHIS clients(farmers), under the then Rapid Result Initiative(RRI)
-Most of the work done was seed/phytosanitary (50%/50%)
-Upon opening, most exporting farms in the larger Mount Kenya Region were accessed for the first time since inception of KEPHIS.
-Seed inspection has increased in areas covered by KEPHIS Embu;
-KEPHIS awareness has increased in Mt.Kenya region and far areas like Moyale,Garissa,Marsabit and Mandera.
-Coverage on post certification has increased translating to increased issuance of seed sellers licenses, (seed stockists)

7.0 Support Services

7.1 Human Resource Development

KEPHIS highly values its most important asset – staff members. The Corporation has invested heavily in capacity building and continues to put up systems that enhance staff motivation and create a conducive working environment.

During the year, the Corporation undertook an independent Job Evaluation Exercise to assess it's human capital resource and come up with suitable recommendations for improvement. The Corporation also increased its skill base by recruiting 13 new staff members in various departments. This is expected to build unto the current establishment and introduce new skill areas to the Organisation for sustained growth.

7.2 Information Communication & Technology

During the year, the Corporation continued to implement its ICT strategy. The Corporation also made significant improvements in connectivity and technology infrastructure.

This included the Electronic Document Management System, Laboratory Management System, ECS, LAN, ERP and 100% of staff access to broadband at the workplace. The WAN has also been implemented at PIU JKIA, Plant Quarantine and Biosafety Station and at the Kitale regional office. Overall, these systems have enhanced efficiency in service delivery by the Corporation.

Top and above: KEPHIS staff during last year's team building activity.

7.3 Finance

During the year, the Corporation made great strides in revenue collection. This was on the backdrop of new revenue streams and new fee regime on services offered. To increase efficiency, the Corporation linked the major offices of Nakuru, Mombasa, Kitale and Kisumu to the ERP system. This made it possible to have a seamless financial system across the whole organization and greatly reduced the lag-time in completing transactions. To enhance customer satisfaction, the Corporation also embraced the mobile payment system through MPESA for small payments. This has enabled clients to make payments for services rendered at their own convenience and made it hassle free.

General financial performance of the Corporation during the year was on a steady growth as elaborated in the Financial Statements in Section 8.

STATEMENT OF COMPREHENSIVE INCOME
FOR THE YEAR ENDED 30TH JUNE 2012

		NOTES	2011/2012 KSHS	2010/2011 KSHS
INCOME				
	Recurrent Grants - Revenue	3	403,000,000.00	448,000,000.00
	Recurrent Grants- Capital	3	40,000,000.00	
	Project Grants	3	27,840,982.00	64,227,118.00
	Fees for Services Rendered	3	403,131,714.00	301,762,774.00
TOTAL COMPREHENSIVE INCOME		3	873,972,696.00	813,989,892.00
EXPENDITURE				
	Personnel Costs	8	345,795,086.00	331,990,131.00
	Other Operating Expenses	9	384,860,959.00	387,750,643.00
	Depreciation	2	55,986,871.00	49,913,856.00
TOTAL EXPENDITURE			786,642,916.00	769,654,630.00
SURPLUS FOR THE YEAR			87,329,780.00	44,335,262.00
	OTHER COMPREHENSIVE INCOME			
	Currency Translation	14	1,740,996.00	2,001,987.00
TOTAL OTHER COMPREHENSIVE INCOME			1,740,996.00	2,001,987.00
TOTAL COMPREHENSIVE INCOME FOR THE YEAR			**89,070,776.00**	**46,337,249.00**

STATEMENT OF FINANCIAL POSITION
AS AT 30TH JUNE 2012

	NOTES	2011/2012 KSHS	2010/2011 KSHS
ASSETS			
Non Current Assets			
Property, Plant and Equipment	2	1,102,130,841.00	1,028,643,032.00
		1,102,130,841.00	1,028,643,032.00
Current Assets			
Cash and Bank Balances	4	124,036,705.00	128,581,806.58
Debtors and Prepayments	6	177,297,260.00	154,179,038.00
		301,333,965.00	282,760,844.58
TOTAL ASSETS		1,403,464,806.00	1,311,403,876.58
GENERAL FUNDS AND LIABILITIES			
General Funds			
Reserves	10	1,342,936,525.00	1,253,865,749.58
		1,342,936,525.00	1,253,865,749.58
Current Liabilities			
Creditors	5	60,528,281.00	57,538,127.00
		60,528,281.00	57,538,127.00
GENEARL FUNDS AND LIABILITIES		**1,403,464,806.00**	**1,311,403,876.58**