



**REPUBLIC OF KENYA**

**MEDIUM TERM EXPENDITURE FRAMEWORK**

**2013/14-2015/16**

**AGRICULTURE AND RURAL  
DEVELOPMENT SECTOR**

**OCTOBER, 2012**

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## LIST OF ABBREVIATIONS AND ACRONYMS

AFC	Agricultural Finance Corporation
ARDs	Agricultural and Rural Development
ASALs	Arid and Semi Arid Lands
ASCU	Agricultural Sector Coordination Unit
ASDS	Agricultural Sector Development Strategy
CAK	Cooperative Alliance of Kenya
CBO	Community Based Organization
CDF	Constituency Development Fund
CRF	Coffee Research Foundation
DAC	District Agricultural Committee
DLP	Department of Livestock Production
DVS	Department of Veterinary Services
ECCOS	Ethics Commission for Cooperatives (ECCOs)
EEZ	Exclusive Economic Zones
ERS	Economic Recovery Strategy
GAP	Good agricultural practices
GDP	Gross Domestic Product
GIS	Geographical Information System (GIS) technology
GJLOs	Governance Justice Law and Order
GMP	Good manufacturing practices
HIV/AIDS	Human Immunodeficiency Virus/Acquired Immune Deficiency Syndrome
ICT	Information, Communication and Technology
KAGRC	Kenya Animal Genetic Resources Centre

KARI	Kenya Agricultural Research Institute
KCC	New Kenya cooperative Creameries
KDB	Kenya Dairy Board
KEFRI	Kenya Forestry Research Institute
KMFRI	Kenya Marine and Fisheries Research Institute
KENFAP	Kenya National Federation of Agricultural Producers
KEPHIS	Kenya Plant Health Inspectorate Service
KEPSA	Kenya Private Sector Alliance
KESREF	Kenya Sugar Research Foundation
KEVEVAPI	Kenya Veterinary Vaccines Production Institute
KFCU	Kenya Farmers Co-operative Union
KFS	Kenya Forest Service
KLDC	Kenya Leather Development Council
KNBS	Kenya National Bureau of Statistics
KNFC	Kenya National Federation of Cooperatives
KVB	Kenya Veterinary Board
KWS	Kenya Wildlife Services
LERDF	Livestock Enterprise Development Fund
MDGs	Millennium Development Goals
MOA	Ministry of Agriculture
MTEF	Medium Term Expenditure Framework
MTP	Medium Term Plan
NCPB	National Cereals and Produce Board
NGOs	Non-Governmental Organization
NLMIS	National Livestock Marketing System

NRM	Natural Resources management
PATTEC	Pan African Tsetse and Trypanosomiasis Eradication Campaign Council
PAIR	Public Administration and International Relations
PBRs	Plant Breeders Rights
PER	Public Expenditure Review
PPP	Public Private Partnership
SACCO	Savings and Credit Cooperative Organizations
SASRA	SACCO Societies Regulatory Authority
SEAs	Socio-economics and Applied Statistics (SEAS)
TRFs	Tea Research Foundation of Kenya
VSDF	Veterinary services development fund
WCK	Wildlife Club of Kenya (WCK)

## EXECUTIVE SUMMARY

The Agricultural and Rural Development (ARD) Sector comprises of the following eight sub-sectors: Agriculture; Livestock Development; Cooperative Development and Marketing; Lands; Fisheries Development; Forestry and Wildlife; National Land Commission and Agricultural Research & Development (ARD). The Research and Development institutions in the sector are; Kenya Agricultural Research Institute (KARI), Tea Research Foundation of Kenya (TRFK), Coffee Research Foundation (CRF), Kenya Sugar Research Foundation (KESREF), Kenya Forestry Research Institute (KEFRI) and Kenya Marine and Fisheries Research Institute (KMFRI).

In its contribution to GDP, ARD sector directly contributes 24.5 percent of the GDP valued at Kshs 741 billion. The sector also contributes approximately 27 percent to GDP through linkages with manufacturing, distribution and other service related sectors. It further accounts for about 65 percent of Kenya's total exports, 18 percent and 60 percent of the formal and total employment respectively. ARD sector has been identified as one of the six sectors aimed at delivering the 10 percent economic growth rate under the Vision 2030.

The ARD sector goal in line with the Vision 2030 is “an innovative, commercially oriented and modern agriculture and rural development sector”. The policy and institutional framework guiding the sector is the Agriculture Sector Development Strategy (ASDS, 2010-2020) which emanated from a revision of the Strategy for Revitalizing Agriculture (SRA, 2004-2014) to reflect the aspirations of the Vision 2030. The key policy goals of the sector include: raising agricultural productivity through generation and promotion of technologies and increased resource allocations; exploiting irrigation potential; increased commercialization of agriculture; undertaking a comprehensive review of the legal and policy framework for the sector; improving governance of sector institutions; land development; and promotion of sustainable management of fisheries, forestry and wildlife resources.

The key sector's programmes include: Policy Regulation and Coordination, Strategy and Management of Agriculture; Crop Development and Management; Agribusiness and Information Management; Fisheries Development; Cooperative Development and Management; Cooperative Marketing; Land Policy and Planning; Livestock Resources Management and Development; Forestry and Wildlife development; and Research and Development.

During the period under review, a number of achievements were made. These included development/review of various policies and Bills, review of institutional frameworks, enhanced provision of extension services, livestock disease control, release of new plant varieties, increasing forest cover and registration of land titles. However, the sector faced some challenges that slowed down the pace of implementation of activities. These included: inadequate funding, climate change, low value addition and competitiveness, poor marketing systems, poor access roads, low access to financial services and affordable credit. The total resource allocation by the



government to the sector shows a steady rise in the period under review by 36 % from 40.6 Billion in 2009/2010 to 55.6 Billion in 2011/2012. In terms of actual expenditure the sector performance is fair as the overall absorption of the allocated funds averaged 80 %. This high increase in the allocation was due to the Economic Stimulus Programme which supported several sub-sectors. In the period under review the total recurrent expenditure allocation to the sector increased from 24.3 Billion in 2009/10 to 27 Billion in 2011/2012. In 2011/2012 the sector received a total allocation of Kshs 26.7 Billion but managed to spend a total of Kshs 17.0 Billion, translating into absorption level of 63.7%. This drop was attributed to austerity measures introduced mid stream by Treasury. In general the sector needs to beef up its recurrent expenditure absorption capacity. The sector development allocation in 2011/2012 was Kshs 28.9 Billion, which was 1.5 Billion less than the previous financial year. In terms of expenditure, the actual expenditure amounted to Kshs 22.7 Billion, representing 78.5 % utilization level. In the period under review, the sector external funding increased from 8.1 Billion in 2009/2010 to 12.4 Billion in 2011/2012. The actual expenditure has been rising steadily throughout the period. The donor absorption capacity declined from 74.1% in 2010/11 to 71.7% in 2011/12. The absorption of these funds was however mainly due to delays in disbursement.

The sector's total pending bill as at 2011/12 financial year was Kshs. 1,630.9 million. In the period under review the recurrent pending bills dropped from 755.3 million in 2009/2010 to 486.2 million in 2010/2011. In 2011/2012 the bills abnormally increased to 1.19 billion occasioned by delayed budgetary adjustment in respect to austerity measures and delay in communication of revised estimates. The development pending bills dropped from 674.7 Million in 2010/11 to 442.0 million in 2011/12. Over 80% of these pending bills were from the MoA, while the other sub-sectors contributed the balance. The sector will ensure that the pending bills are sorted out as a matter of priority.

The total resource requirement for the sector in the FY 2013/14 is Kshs.103,690 million. This is over 100% increase from the allocated funds in 2012/13 of Kshs 51,099 million. The funds will be utilized on various programmes and sub-programmes in the Sector to ensure the GDP contribution of agriculture sector increases in 2013/14 financial year. The sub-sector resource requirements in 2013/14 for the Agriculture, Cooperatives, Fisheries, Lands, livestock, forestry and Research and Innovations institutes and National Land Commission under those Ministries are projected to increase by Kshs.53,692 millions or by about 105.0 %t from the allocated funds in 2012/13. The increase will be utilized in various programs and projects in agricultural sector.

While allocating resources, consideration was made to; Linkage of the programs with the objective of Medium term plan of Vision 2030 for the period 2008-2012; Degree to which a programme addresses core poverty interventions; Degree to which the programme is addressing the core mandate of the MDAs; Expected outputs and outcomes from a programme; Linkage of a programme with other programmes; Cost effectiveness and sustainability of the programme and Immediate response to the requirements of the implementation of the constitution. This sector report (2012/13- 2014/15) has been prepared in line with the new constitution which provides for

fiscal decentralization of management and resources to 47 counties after the next General Election in 2013. Therefore, the allocations proposed in this report by ministries under the ARD Sector have taken into account these considerations. However, the ministries will be responsible for the overall policy formulation and coordination of their respective subsectors. The emerging international concerns such as effects of climate change, adaptation and mitigation will also be mainstreamed.

In order to continue to steer this sector towards its objectives, it is considered important that the following recommendations are implemented under six thematic areas namely; Kenya Vision 2030 & Medium Term Plan (MTP) - Ensure funding for Vision 2030 flagship projects is provided within the allocation of the sector ceiling; REFORMS - Treasury to consider the proposals by MDAs when allocating financial resources rather than basing it on historical figures, Review procurement procedures to facilitate timely implementation of planned activities

Fast track implementation of the National Land policy and Constitution, Fast track legal reforms in the sector in line with the letter and spirit of the Constitution, and

Develop/rehabilitate necessary infrastructure at National and County levels for improved service delivery; Research & Innovation - Increase funding for research activities; Capacity Building - Strengthen the role of Agriculture Sector Coordinating Unit (ASCU) in the sector and establish a Sector M & E Committee with adequate funding for its activities and Undertake staff recruitment and rationalization to seal staffing gaps; Collaboration & Public Private Partnership (PPP) - Foster closer collaboration between sub-sectors and other stakeholders to ensure availability of subsidized agricultural inputs, Mobilize all stakeholders to implement disease- free-zone and promote value addition of livestock products, Establish a sector committee for commercialization of technologies and products/services developed by the sector, Enhance value addition and marketing of sector products and services and Harness the potential in Exclusive Economic Zones (EEZ); Climate Change & Adaptation - Embrace aspects of climate change mitigation and adaptation in projects/programmes under the ARD sector and link this to Kenya Climate Change Response Strategy Action Plan.

## **CHAPTER 1: INTRODUCTION**

### **1.1 Background**

The Agricultural and Rural Development (ARD) Sector comprises of the following eight sub-sectors: Agriculture; Livestock Development; Cooperative Development and Marketing; Lands; Fisheries Development; Forestry and Wildlife; National Land Commission and Agricultural Research & Development (ARD). The Research and Development institutions in the sector are; Kenya Agricultural Research Institute (KARI), Tea Research Foundation (TRF), Coffee Research Foundation (CRF), Kenya Sugar Research Foundation (KESREF), Kenya Forestry Research Institute (KEFRI) and Kenya Marine and Fisheries Research Institute (KMFRI).

The sector is a key driver of economic growth in Kenya and remains the main source of livelihood for the majority of the Kenyan people. It has also been identified as one of the six sectors critical in delivering the 10 percent economic growth rate under the Vision 2030. In 2011, the sector directly contributed 24.5 percent of the GDP valued at Kshs 741 billion (Economic Survey, 2012). It also indirectly contributes approximately 27 percent to GDP through linkages with manufacturing, distribution and other service related sectors. It further accounts for about 65 percent of Kenya's total exports, 18 percent and 60 percent of the formal and total employment respectively.

The sector goal in line with the Vision 2030 is “an innovative, commercially oriented and modern agriculture and rural development sector”. The policy and institutional framework guiding the sector includes the Agriculture Sector Development Strategy (ASDS, 2009-2020) and other sub-sector policies within the sector. The key policy goals of the sector include: raising agricultural productivity through value addition, generation and promotion of technologies; exploiting irrigation potential; increased commercialization of activities in the sector; ensuring an appropriate policy and legal framework for the sector is in place; improving governance of sector institutions; land development; promotion of sustainable management of resources; and increasing resource allocation to the sector.

The identified sector programmes include; Policy, Strategy and management of agriculture, Crop Development and Management; Agribusiness and Information Management; Fisheries

Development; Cooperative development and management; Cooperative Marketing; Land Policy and Planning; Livestock Resources Management and Development; Forestry and Wildlife policy regulation and coordination, Forestry Development; Wildlife Conservation and management and Research and Development.

The 2012 Public Expenditure Review (PER) shows that resource allocation to the sector allocation increased from Ksh 41 billion in 2009/2010 to Kshs 55 billion in 2011/12. This allocation is still below the level of resources required to achieve the goals of the sector. Additional resources are therefore required to implement the programmes in the sector.

During the period under review, a number of achievements were made. These included development/review of various policies and Bills, review of institutional frameworks, enhanced provision of extension services, livestock disease control, release of new plant varieties, increased forest cover and registration of land titles. However, the sector faced some challenges that slowed down the pace of implementation of activities. These included: inadequate funding, climate change, low value addition and competitiveness, poor marketing systems, poor access roads and low access to financial services and affordable credit.

The sector will continue to give preference to the vision 2030 flagship projects which include consolidated agricultural reforms, input cost reduction, establishment of disease free zones, land registry reforms, land use master plan and development of the arid and semi arid areas(ASAL). Key initiatives will be undertaken in research and development, extension services, public sector reforms, devolving of the cooperative sector among others.

This sector report has been prepared in line with the constitution of Kenya, 2010 which provides for devolution. It has brought on board the following priority areas identified for inclusion in the Second Medium Term Plan (MTP); reduction of dependence of the economy on rain-fed agriculture, faster implementation of reforms and enabling legislation, fast tracking implementation of outstanding Millennium Development Goals and Vision 2030 flagship projects and other emerging issues.

The efforts to transform the future of ARD sector to be more productive will have to address fluctuations in prices of the sector products cost of production, value addition, and the devastating effects of climate change. The sector will therefore continue to explore new frontiers including engaging in public-private partnership (PPP).

## **1.2 Sector Vision and Mission**

### **1.2.1 Vision**

An innovative, commercially-oriented and modern Agriculture and Rural Development Sector.

### **1.2.2 Mission**

To improve livelihoods of Kenyans through promotion of competitive agriculture and innovative research, sustainable livestock and fisheries development, growth of a viable cooperatives sub sector, equitable distribution and sustainable management of land resources and sustainable management of forestry and wildlife resources.

## **1.3 Strategic goals/Objectives of the Sector**

### **1.3.1 Strategic Goals**

The Sector works towards achievement of the following strategic goals:

- i. Competitive agriculture through creation of an enabling environment and provision of support services
- ii. Strengthened research and development
- iii. Development, management and commercialization of livestock and fisheries resources
- iv. Sustainable management, conservation and utilization of forestry and wildlife resources
- v. Vibrant and self-sustaining cooperative movement
- vi. Sustainable administration and management of land resources.

### **1.3.2 Strategic Objectives**

The ARD sector will focus on the following strategic objectives:

- i. Reforming institutions by transforming key organizations into complementary and high performing entities that facilitate growth in the sector
- ii. Increasing productivity through facilitating access to affordable and quality inputs and services.
- iii. Transforming land use to ensure better utilization of high and medium potential lands

- iv. Facilitating comprehensive land reforms
- v. Developing arid and semi-arid areas for crops, livestock and fisheries production
- vi. Increasing market access through value addition.
- vii. Diversifying into new markets, products and services while increasing forest cover and area under conservation.
- viii. Developing technologies and innovations for increased productivity and value addition.

#### **1.4 Sub-sectors and their Mandates**

The mandate for each of the subsector is outlined below:

##### **1.4.1 Agriculture**

- i. Formulation, implementation and monitoring of agricultural legislations, regulations and policies.
- ii. Provision of agricultural extension services.
- iii. Supporting agricultural research and promoting technology delivery.
- iv. Facilitating and representing agricultural state corporations in the government.
- v. Development, implementation and co-ordination of programmes in the agricultural sector.
- vi. Regulation and quality control of inputs, produce and products from the agricultural sector.
- vii. Management and control of pests and diseases in crops.
- viii. Promoting management and conservation of the natural resource base for agriculture.
- ix. Collecting, maintaining and managing information on agriculture.

##### **1.4.2 Cooperative Development and Marketing**

- i. Co-operative Policy and Implementation
- ii. Co-operative Legislation and Support Services
- iii. Co-operative Education and Training
- iv. Co-operative Financing Policy
- v. Co-operative Savings, Credit and Banking Services Policy
- vi. Co-operative Governance
- vii. Co-operative Tribunal

- viii. Co-operative marketing, including value addition processing
- ix. Promotion of Co-operative Ventures

#### **1.4.3 Fisheries Development**

- i. Fisheries policy formulation and review
- ii. Fisheries licensing
- iii. Management and development of marine fisheries including the Exclusive Economic Zone (EEZ)
- iv. Management and development of fresh water fisheries
- v. Commercialization including promotion of formation of fisheries groups and associations
- vi. Promotion of fish quality assurance, value addition and marketing
- vii. Development of aquaculture
- viii. Marine and Fisheries Research

#### **1.4.4 Lands**

- i. Land policy and Physical Planning,
- ii. Land transactions,
- iii. Survey and Mapping,
- iv. Land Adjudication,
- v. Settlement matters,
- vi. Land registration
- vii. Valuation,
- viii. Administration of State and Trust Land
- ix. Land Information Management System

#### **1.4.5 Livestock Development**

- i. Formulation and implementation of livestock sub-sector policies;
- ii. Management and control of livestock diseases and pests;
- iii. Provision and facilitation of extension services;
- iv. Development and co-ordination of development programmes
- v. Regulatory management and quality control of inputs, produce and products

- vi. Livestock research agenda setting, liaison and coordination
- vii. Promotion and development of emerging livestock;
- viii. Information management and Monitoring and Evaluation

#### **1.4.6 Forestry and Wildlife**

- i. Formulation and review of policy and legislation of forestry and wildlife resources.
- ii. Facilitate management and conservation of forestry and wildlife resources.
- iii. Promotion of conservation education programmes for youth in relation to forestry, wildlife and environment;
- iv. Facilitate sustainable utilization of forestry and wildlife products for the benefit of the Kenyan people
- v. Develop and enhance human resource management and physical infrastructure for forestry and wildlife resource management;
- vi. Facilitate research and dissemination of research findings in forestry and wildlife resources and;
- vii. Monitor, evaluate and coordinate KEFRI, KFS, KWS and WCK operations in the implementation of the Strategic Plan.

#### **1.4.7 Research and Development (R&D)**

The main role of institutions involved in R&D is to conduct research of strategic national importance and disseminate technologies, information and knowledge aimed at increasing productivity and competitiveness in the sector.

The mandates of the Research Institutions are as follows:-

##### ***i. Kenya Agricultural Research Institute (KARI)***

Facilitate modernization of the Agricultural Sector through generation and promotion of knowledge, information, technologies and innovations which improve productivity and promote investment in agricultural and agribusinesses enterprises.



***ii. Coffee Research Foundation (CRF)***

To promote research and investigate all problems relating to coffee and such other crops and systems of husbandry as are associated with coffee throughout Kenya, including productivity, quality, value addition and sustainability of land in relation to coffee planting, and/or matters ancillary thereto.

***iii. Kenya Forestry Research Institute (KEFRI)***

Conduct research in forestry, disseminate research findings, and collaborate with other research bodies within and outside Kenya carrying out similar research; and, establish partnership with institutions of higher learning in training and in all other areas of forestry research.

***iv. Kenya Marine and Fisheries Research Institute (KMFRI)***

Undertake research in marine and freshwater fisheries, aquaculture, environmental and ecological studies; marine research including chemical and physical oceanography, in order to provide scientific data and information for sustainable exploitation, management and conservation of Kenya's fisheries resources and aquatic environment, and contribute to National strategies towards food security, poverty alleviation, and creation of employment.

***v. Kenya Sugar Research Foundations (KESREF)***

Generate and promote demand driven agricultural and industrial sugar technologies and innovations for enhancing productivity, value addition and competitiveness of the sugar industry.

***vi. Tea Research Foundation (TRF)***

Promote research and investigate problems related to tea and such other crops and systems of husbandry as are associated with tea throughout Kenya including the productivity (yield), quality and sustainability of land in relation to tea planting; and matters ancillary thereto.

### 1.5 Autonomous and Semi Autonomous Government Agencies (ASAGAs)

	CATEGORY	SAGA	MANDATE
A	<b>AGRICULTURE</b>		
I	Financial Corporations	Agricultural Finance Corporation	To provide customer focused and sustainable financial services to the agricultural sector in Kenya
		Coffee Development Fund	To provide sustainable, affordable credit facilities to coffee farmers for farm development, farm inputs, farming operations and coffee price stabilization.
II	Commercial / Manufacturing Corporations	Kenya Seed Company	To carry out focused research, promote and facilitate production of high yielding, better quality certified seed to farmers and stakeholders
		Nyayo Tea Zones Development Corporation	To effectively protect the gazetted forest cover, achieve high quality tea and fuel wood production.
		Pyrethrum Board of Kenya	To oversee to all activities related to the production and processing of pyrethrum for the benefit of growers and consumers.
		National Cereals and Produce Board	To promote free and fair trade in commodities through research and market development, and ensure that there is timely accessibility of commodities to all
		Miwani Sugar Company (in receivership)	Under receivership
		Muhoroni Sugar Company (under receivership)	To produce high quality sugar as part of a national strategy for achieving self-sufficiency in food production
		Agricultural Development Corporation	To ensure the continued existence of the breeds and the availability of quality stock through production and supply of quality seed, technological transfers and training
III	<b>Regulatory</b>	Coffee Board of Kenya	To promote the production and marketing of high quality coffee for the domestic and international market

	<b>CATEGORY</b>	<b>SAGA</b>	<b>MANDATE</b>
		Tea Board of Kenya	To promote the production and marketing of high quality tea to the domestic and international market
		Horticultural Crops Development Authority	To develop, promote, facilitate and co-ordinate growth of a commercially-oriented horticulture industry through appropriate policy and technologies
		Kenya Sisal Board	To promote the advancement and welfare of the sisal industry in Kenya
		Cotton Development Authority	To promote development of a competitive cotton industry for improved livelihoods and industrialization
		Kenya Sugar Board	To facilitate a multi –product sugar cane industry that is efficient, diversified and globally competitive
		Kenya Plant Health Inspectorate Service	To provide an effective and efficient science-based regulatory service for assurance on quality of agricultural inputs and produce
		Pest Control Products Board	To provide professional, efficient and effective regulatory service for manufacture, trade, safe use and disposal of pest control products
		Kenya Coconut Development Authority	To regulate the coconut industry in the country
IV	Training Institution	Bukura Agricultural College	To Provide Quality Agricultural Education through Training, Innovation and Extension Services
V	Statutory Boards	Central Agricultural Board	To provide dependable and effective policy advise in order to enhance food security and increased farm incomes
		Agricultural Information Resource Centre	To provide quality agricultural information to the farming community and other stakeholders using integrated platforms.
<b>B</b>	<b>COOPERATIVE DEVELOPMENT AND MARKETING</b>		
I	Training	Cooperative College of Kenya	To provide quality education, training, research, consultancy, information and related services with

	<b>CATEGORY</b>	<b>SAGA</b>	<b>MANDATE</b>
			emphasis to the co-operative sector
II	Regulatory	SACCO Societies Regulatory Authority (SASRA)	To license and regulate Sacco societies to carry out deposit-taking business
III	Commercial	New Kenya cooperative Creameries (KCC)	To receive raw milk from farmers, processing it into various milk products and marketing the products
IV	Statutory Boards	Ethics Commission for Cooperatives (ECCOs)	To coordinate receipt, analysis and recommendations on Wealth declarations
<b>C</b>	<b>LANDS SUBSECTOR</b>		
I	Regulatory	National Land Commission	To manage public land on behalf of the national and county governments
<b>D</b>	<b>LIVESTOCK DEVELOPMENT</b>		
I	Regulatory	Kenya Dairy Board (KDB)	To regulate, develop and promote the dairy industry in Kenya
		Kenya Veterinary Board (KVB)	To regulate, develop and promote the veterinary profession in Kenya
II	Commercial	Kenya Meat Commission (KMC)	To procure livestock, operate abattoirs, process meat and by products for export or consumption in Kenya
		Kenya Animal Genetic Resources Centre (KAGRC)	To promote optimum productivity of the national animal population through provision of high quality disease free animal germplasm and related breeding services
		Kenya Veterinary Vaccines Production Institute (KEVEVAPI)	To produce high quality animal vaccines for distribution locally and abroad
III	Service	Kenya Leather Development Council	To oversee and advice the government generally on matters relating to the processing of/and trade in hides, skins, leather and leather products
		Kenya Tsetse and Trypanosomiasis Eradication Council (KETTEC)	To advice the Government on the policy and strategies on tsetse and trypanosomiasis eradication and its implementation as well as promoting stakeholder collaboration.

	<b>CATEGORY</b>	<b>SAGA</b>	<b>MANDATE</b>
		Livestock Trade Authority	To promote and coordinate trade in livestock and livestock products
<b>FORESTRY AND WILDLIFE</b>			
I	Service	Kenya Wildlife Service (KWS)	To sustainably conserve and manage Kenya's wildlife and its habitats for posterity
		Kenya Forest Service (KFS)	To enhance conservation and sustainable management of forests and allied resources

## 1.6 Role of Sector Stakeholders

The stakeholders in the ARD sector include public sector institutions, private sector, research institutions, Non-Governmental Organizations (NGOs), development partners, Community-Based Organizations (CBOs), Community Forest Associations (CFA), professional associations, cooperative societies and consumers. The stakeholders provide services to the sector through provision of inputs, credit, markets, market information, extension services, production, education, information and advocacy for their members. In addition, they drive the reform processes in the sector and fast track implementation of sector goals and strategies. Some of the Key stakeholders include;

- i. Agricultural Sector Coordination Unit (ASCU)
- ii. Private Sector Institutions
- iii. Development partners and regional cooperation
- iv. Farmers Organizations
- v. Training and learning Institutions
- vi. Local level institutions

### 1.6.1 Agriculture Sector Coordination Unit

The ASCU coordinates the sector ministries and other stakeholders towards implementation of the Agricultural Sector Development Strategy (ASDS), which is the sector strategy for addressing Vision 2030. It links the sector players and provides an enabling environment for sector-wide consultations along the various levels of implementation from the sub-counties to the counties and national level. ASCU participates in the review of sub sector strategies and annual work plans to ensure conformity to ASDS, Vision 2030, MDGs and other Government

development agenda. In addition, it supports sector activities such as policy formulation, the budget making process and development of medium term plans.

### **1.6.2 Private Sector institutions**

The key private sector players include Kenya National Federation of Agricultural Producers (KENFAP) which is an umbrella body charged with lobbying for the interests of agricultural producers, the Cooperative Alliance of Kenya (CAK) which is the apex body for all cooperative societies in Kenya and the Kenya Private Sector Alliance (KEPSA) which facilitates effective advocacy and promotion of members' interests. Other private sector institutions include producers, processors, marketing agencies and farm input dealers. They play an important role in the provision of financial, physical and social infrastructure for production, processing and marketing of goods and services.

### **1.6.3 Development partners and regional cooperation**

Bilateral and multilateral development partners play a significant role in supporting Kenya's agricultural and rural development sector through complementing Government's resources and in spearheading new initiatives and facilitating projects.

### **1.6.4 Farmers' organizations**

Farmers' organizations include cooperatives societies, farmers' unions and federations, commodity associations, enterprise-based groups and community-based organizations. These organizations are important economic entities established to enhance representation of farmers as well as lobby and advocate on their behalf at various levels.

### **1.6.5 Training and Learning Institutions**

This category includes both local and international educational institutions i.e. Schools, colleges and universities. They help in collaborative research as well as assisting in dissemination of information. In addition, they play a key role in providing the skilled man power and capacity building for the sector.

### **1.6.6 Local level Institutions**

At the grass roots, there will be various devolved organizations which will support ARD sector. These will include county government institutions, NGOs, and FBOs which support the ARD sector through resource mobilization, capacity building of local communities and assist in identifying priority areas for development and lead in their implementation.

## CHAPTER TWO

### 2.0 PERFORMANCE REVIEW 2009/10-2011/12

#### 2.1 Performance of Sector Programmes

During the period under review, Agriculture and Rural Development Sector implemented Vision 2030 first Medium Term Plan of 2008-2012. The sector identified 9 programmes for implementation by the various subsectors and 6 other programmes under Research and development as indicated below;

##### **Agriculture**

- Policy, Strategy and Management of Agriculture
- Crop Development and Management
- Agribusiness and Information Management

##### **Cooperative Development and Marketing**

- Cooperative Development and Management
- Cooperative Marketing

##### **Fisheries Development**

- Fisheries Development

##### **Lands**

- Land Policy and Planning

##### **Livestock Development**

- Livestock Resources Management and Development

##### **Forestry and Wildlife**

- Forestry and Wildlife conservation

##### **Research & Development**

- Agricultural Research
- Coffee Research
- Tea Research
- Marine and Fisheries Research
- Sugar Research
- Forestry Research



Agriculture Sector Development Strategy (ASDS) was developed re-align the Sector to Vision 2030 Strategy and as result of this, Agriculture Sector Coordination Unit (ASCU) was established. Individual sub-sectors reviewed policies and laws, in addition to restructuring themselves to respond to emerging needs such as Constitution of Kenya 2010. During the review period Agriculture, Livestock, Fisheries and Forest sub-sectors successfully implemented Economic Stimulus Projects countrywide. The project focused on development of sector infrastructure, building fisher folk, farmers and pastoralists’ capacities to improve food security situation, environmental conservation and poverty reduction.

Individual sub-sectors continued to implement Vision flagship projects with significant success. Cooperatives sub-sector Established Ethics Commission to improve governance in Cooperatives and decentralized tribunal services that led to reduction of backlog cases by 77%.

In addition to the above, sector Ministries continued to provide routine services such as extension and regulation. Under research and development basic & applied research for various commodities, services were on-going.

## 2.2 Review of Key indicators of Sector Performance

This sub-section outlines the actual performance of programmes per sub-sector in terms of key indicators, targets set and the achievements.

### 2.2.1 Agriculture

**Table 2.2.1 Agriculture Programmes and key indicators performance 2011/12**

<b>Programme/sub programme</b>	<b>Planned outputs</b>	<b>Achievements</b>	<b>Remarks</b>
<b>Programme 1: Policy, Strategy &amp; Management of Agriculture</b>			
<b>Development/Review of Agricultural Policy, Legal and Regulatory Frameworks</b>	Develop 5 Policies	10 Policies developed	Incorporating stakeholder views was done for following policies: <ul style="list-style-type: none"> <li>• Urban and Peri-urban agriculture and livestock policy.</li> <li>• National emerging crops Policy.</li> <li>• Draft National Cotton policy</li> <li>• Additional work on National Cereals Industry Policy</li> <li>• National Oil and Nut crops policy.</li> <li>• National Organic Agriculture Policy</li> </ul>

<b>Programme/sub programme</b>	<b>Planned outputs</b>	<b>Achievements</b>	<b>Remarks</b>
	Revise 2 Bills	5 Bills revised	<ul style="list-style-type: none"> <li>• Coffee amendment bill resubmitted to AG.</li> <li>• Warehousing receipting bill presented to PS.</li> <li>• National Cereals Bill;</li> <li>• AFC Bill</li> <li>• Pyrethrum Bill</li> </ul>
<b>SP 1.2 Agricultural Planning and Financial Management</b>	Collect Kshs175.0M (AIA)	Kshs.183.5M	Additional contribution from other stakeholders
	Cost save Kshs.14M	14M	No variance in performance
<b>Programme 2: Crop Development and Management</b>			
<b>SP2.1: Land and Crops Development</b>	Construct 242 Constituency based and District based water harvesting structures	0	For water harvesting, community mobilization/ surveying work and EIA have been undertaken in preparation for construction of water harvesting structures in the next financial year
	Promote 13 Appropriate ASAL technologies	14	
<b>SP 2.2: Food Security Initiatives</b>	procured & distribute 3,073 of Assorted Traditional Seeds ( Cereals, pulses & Irish potato) (million)	3,171	
	Produce 2 Crop and food security assessment reports	4	
<b>SP 2.3 Agriculture Extension Services</b>	To reach 3.35 Farmers to be reached (millions )	<b>3.7</b>	Increased number of farmers reached was due to stronger collaborative activities, enhanced food security initiatives due to prevailing food shortages which included the Ministry distributing farm inputs to vulnerable farmers.

<b>Programme/sub programme</b>	<b>Planned outputs</b>	<b>Achievements</b>	<b>Remarks</b>
	Modernize 12 Agricultural Training Centers (ATCs)	12	No variance. Different stages of modernization were achieved in the ATCs.
<b>SP 2.4: Agricultural Research</b>	Hold 5 Agricultural research fora	5	No variance
	Hold 10 Agricultural research meetings	10	No variance
<b>Programme 3: Agribusiness and Information Management</b>			
<b>SP 3.1: Agribusiness and Market development</b>	Develop and promote 7 Agro Processing Technologies	13	Agro-processing technologies developed and promoted include; soya milk processing/nut processing, fruits processing, silo bins & Hermetic storage systems
	Link 40 Producers to markets	43	The farmer groups were linked to business service providers.
<b>SP 3.2: Agricultural Information Management</b>	Publish 308 Market prices in daily newspapers	308	77 market price were published each Quarter. 12 weekly in the standard news paper and 65 daily releases in the Nation Business Daily each quarter and one quarterly in a magazine in collaboration with a partner.
	Publish 14 Market bulletins	14	12 Monthly commodity prices bulletins produced and two semi-annual reports.

## 2.2.2: Cooperative Development and Marketing

### Programme outcome:

**Table 2.2.2: Programme: Cooperative Development**

Programme	Target	Achievement	Remarks
Cooperative Development and Management	Reduction in outstanding remittances to SACCOs (by 100%)	Reduction from Kshs 4.5 Billion in 2009/10 to Kshs 800 Million in 2011/12. This is 82.2%	Demand notices and agency notices have continued to be issued to non-compliant employers
	Revival of dormant cooperatives (100) and registration new cooperatives (350)	180 co-operatives revived and 433 new co-operatives registered in 2011/12	These includes SACCOs in the diasporas, Matatu SACCOs and sharia compliant SACCOs that were not initially covered
	Setting up of the Ethics Commission for Cooperatives (ECCOS)	ECCOS established	ECCOS is developing governance policy
	Reduced backlog of pending disputes lodged in the co-operative tribunal reduced by 40 %	Reduction in case backlog by 77.6%	Additional funding to decentralize the tribunal services to the counties required.
<b>Cooperative Marketing</b>	Capacity building for value addition in six value chains	Five value chains in Livestock ,honey, Fish, Cashew nuts and Mango developed	Funding for Infrastructure to implement the value chains lacking.
	Register and operationalize Kenya Farmers Co-operative Union	The KFCU was registered and procurement of fertilizer has been initiated in collaboration with NCPB	The ministry to continue with capacity building
	Register and Promote Cereal Milling Co-operative in the North Rift	Union registered	The ministry to continue with capacity building

### 2.2.3 Fisheries

**Table 2.2.3: Programme: Fisheries Development**

<b>Sub programme</b>	<b>Planned out put</b>	<b>Achievement</b>	<b>Remarks</b>
Aquaculture Development	Upgrade 7 fish farms	7 farms upgraded	These sub programmes will be carried forward under the fisheries Vision 2030 flagship project
	Construct 48,000 fish ponds,	46,824 fish ponds constructed	These sub programmes will be carried forward under the fisheries Vision 2030 flagship project
	Produce 48 Million fingerlings	38 Million fingerlings produced	These sub programmes will be carried forward under the fisheries Vision 2030 flagship project
<b>Management and development of capture fisheries</b>	Develop and finalize 3 species management plans	3 species management plans developed	These sub programmes will be carried forward under the fisheries Vision 2030 flagship project
	Restock of 46 dams	27 dams restocked	These sub programmes will be carried forward under the fisheries Vision 2030 flagship project
	Promotion of Co-management for sustainable fish exploitation	Trained 117 BMUs and 8 CIGS	These sub programmes will be carried forward under the fisheries Vision 2030 flagship project
	Protect one critical fisheries habitat in lake Naivasha	Achieved	These sub programmes will be carried forward under the fisheries Vision 2030 flagship project
<b>Fish safety and quality assurance, value addition and marketing</b>	Construct 8 fish mini processing plant	4 min processing plants are ongoing	These sub programmes will be carried forward under the fisheries Vision 2030 flagship project
	Issue 4500 fish	6893 certificates	These sub programmes will be carried forward under the

Sub programme	Planned out put	Achievement	Remarks
	health certificates	issued	fisheries Vision 2030 flagship project
	Construct 4 fish auction centers	3 are ongoing and is still pending	These sub programme s will be carried forward under the fisheries Vision 2030 flagship project

## 2.2.4 Lands

**Outcome:** Improved livelihood of Kenyans

**Table 2.24: Programme name: Land Policy and Planning**

Programme/Sub-Programme	Planned Output (2009-2012)	Output Achieved (2009-2012)	Remarks
<b>Sub-Programme 1:</b> Development Planning and Land Reforms	Implement the Constitution of Kenya 2010 and the National Land Policy	<ul style="list-style-type: none"> <li>The following Acts were enacted by Parliament: Environment and Land Court Act, 2011, National Land Commission Act, 2012, Land Act, 2012 and Land Registration Act, 2012 in line with the Constitution of Kenya 2010.</li> </ul>	<ul style="list-style-type: none"> <li>regulations for operationalizing the enacted Acts being prepared</li> <li>Land Bill, Eviction and Resettlement Bill and Spatial Planning Bill to be prepared</li> </ul>
	Collect Kshs.18 billion in revenue and AIA of Kshs. 894million	Collected Kshs.23.33billion in revenue and Kshs.1.315 billion in A.I.A	Addressing corruption issues, implementation of ILRIS, Continuous monitoring the collection of revenue
<b>Sub-Programme 2:</b> Land Information Management	50% of the National Land Information Management System developed	<ul style="list-style-type: none"> <li>Initiated Safeguarding and digitization of land records in Ministry headquarters, Mombasa, Kitale and Nakuru Registries.</li> <li>Established a Land Records Conversion Centre (LRCC) at the Ministry headquarters;</li> </ul>	Inadequate funding affected the achievements of the target

Programme/Sub-Programme	Planned Output (2009-2012)	Output Achieved (2009-2012)	Remarks
		<p>and safeguarded and scanned 129,388 Government Land Act (GLA) and Registration of Titles Act (RTA) titles and 8,998 parcel files.</p> <ul style="list-style-type: none"> <li>• Acquired and installed an electronic Records Management System in the Ministry headquarters</li> <li>• Developed and implemented the Integrated Land Rent Information System and captured details of 135,000 Government Leased plots into the system</li> <li>• Installed of LAN in Thika, Nakuru, Isiolo, Kisumu, Eldoret Ardhi houses</li> <li>• Modernized the National Geodetic Framework by constructing the twenty (20) zero order Pillars/Stations</li> </ul>	
	Complete construction of 12 land registries and rehabilitation of 12 land registries	<ul style="list-style-type: none"> <li>• Completed the construction of 5 Ardhi houses.</li> <li>• Rehabilitated nineteen (19) land registries</li> </ul>	Inadequate funds affected the construction of the land registries
<b>Sub-Programme 3:</b> Land Surveying, Mapping and Management of National Spatial Data	Prepare and revise 90 national topographical and thematic maps	109 national topographical and thematic maps prepared and revised	Over achievement in FY 2011/12
	Inspect and maintain 532 national and international boundary pillars.	984 national and international boundary pillars inspected and maintained.	Includes national and international pillars
	Development and	• A Draft Kenya	Established digital

Programme/Sub-Programme	Planned Output (2009-2012)	Output Achieved (2009-2012)	Remarks
	Implementation of the Kenya National Spatial Data Infrastructure Policy	<p>National Spatial Data Infrastructure policy prepared and being shared with stakeholders.</p> <ul style="list-style-type: none"> <li>Constructed 40% of the Kenya National Spatial Data Infrastructure Centre</li> </ul>	topographical and cadastral databases and acquired aerial photographs
<b>Sub-Programme 4:</b> Land Settlement	Settle 39,000 poor households	Settled 46,009 poor households	The number includes 3,447 IDPs and Forest Evictees
	Finalize and register 90 adjudication schemes	90 adjudication schemes finalized and registered.	Certificate of finality issued
	Register and issue 360,000 titles	Registered and issued 315,640 titles	Policy directions given within the period reduced the number of titles issued
	Prepare the National Land Use Policy	Draft National Land Use Policy prepared	To finalize the National Land Use Policy
	Prepare the National Spatial Plan	40% of the National Spatial Plan prepared	<ul style="list-style-type: none"> <li>To finalize the National Spatial Plan</li> <li>Inadequate funding the major hindrance</li> </ul>
	60 Local Physical Development Plans for townships and municipalities in the country prepared.	60 Local Physical Development Plans for townships and municipalities in the country completed.	Achieved
	Prepare local physical development plans for Diani/Ukunda and Kilifi resort cities	Finalized the concept plans for local physical development plans for Diani/Ukunda and Kilifi resort cities	More funds required for preparation of local physical development plans for Diani/Ukunda and Kilifi resort cities



## 2.2.5 Livestock

**Table 2.2.5: Programme Programme: Livestock Resources Management and Development**

<b>Sub-Programme:</b>	<b>Planned Outputs</b>	<b>Achieved Outputs</b>	<b>Remarks</b>
<b>Livestock diseases management Vector and Pest control</b>	Vaccination of 20 million animals against Foot and Mouth and other trade-sensitive diseases	19.2 million vaccinations were done	None
	EIA for construction of 13 zonal offices and 2 quarantine stations established in the Coastal Disease Free Zone	EIA for construction of 13 zonal offices & 2 Quarantine stations done Phase 1 construction was undertaken	Construction to continue
	Establishment of electronic disease reporting in 50 districts using digital pen technology	50 districts reporting using digital pens and mobile phones technologies	<b>No variance</b>
	Support 700 community groups to control tsetse and trypanosomiasis	A total of 700 community groups were supported in the three project areas	No variance
	Survey for tick control policy and legal review to be carried out.	Survey tools developed and enumerators trained. Actual survey not done.	Actual survey and policy review to be done.
<b>Livestock Production and Extension services</b>	Support 80 groups through provision of AI equipment	80 groups supported	Target achieved
	Hold 118,000 farm visits, 2,500 field days exhibitions	129,165 farm visits made, 6560 field days made	Target surpassed due to increased demand by farmers
	Purchase of 1,000 rabbit breeding stock and construct 95 model demonstration houses	772 rabbits bought and distributed to farmers groups, 95 units constructed	Higher prices of breeding stock
	Construction of 144 improved poultry housing units for demonstration and purchase of 12,000 indigenous breeding stock	149 units built and 15,000 chicken bought and distributed to farmers	Cost saving through use of locally available materials

<b>Sub-Programme:</b>	<b>Planned Outputs</b>	<b>Achieved Outputs</b>	<b>Remarks</b>
	Reseeding of 20,000 Ha denuded rangelands in 20 ASAL counties	40,000,ha reseeded	More support was received from development partners
<b>Food safety, Animal Products and laboratory services</b>	Analyse 650 honey samples and Conduct 2 bee equipment for quality control	900 samples analyzed	None
	Takeover of meat inspection in 15 Districts and 6 towns in the ASAL areas	15 Districts and 6 towns in ASAL areas taken over.	Target achieved
	Construction of 4 export and 17 local medium size slaughter houses under Economic Stimulus Program.	21 slaughter houses were in various stages o completion	Construction to be completed in the subsequent years
	Rehabilitation of 8 Investigation Laboratory	Rehabilitation was underway in 7 laboratories, and is on-going	On-going
<b>Livestock marketing Value addition and early warning</b>	Undertake poultry value chain analysis in 2 major market centres in Western	2 poultry value chain analysis in undertaken major market centres in Western	Target achieved
	Rehabilitate Athi River Meat Training Institute	Rehabilitation carried out	Target achieved
	Construction of camel milk mini dairy in Garissa	Mini Dairy under construction	Target achieved
	Rehabilitation of pasture in project districts	- 26 acres reseeded in Mbeere North & Kyuso district	Target achieved
	Increase the number of markets reporting to the National Livestock Marketing System (NLMIS) and Training of 30 Data Monitors	16 more markets linked to the NLMIS and 30 data monitors trained	Target achieved
	Rehabilitate 3 holding grounds	3 holding grounds rehabilitated i.e. Kiina,	Target achieved

<b>Sub-Programme:</b>	<b>Planned Outputs</b>	<b>Achieved Outputs</b>	<b>Remarks</b>
		Bachuma, and Miritinii	
<b>Livestock Policy and Capacity building</b>	Establishment of Leather Development Council and Construction of 6 mini-leather processing units ) tanneries) namely; Buna, Wote, Isinya, Garissa, Mogotio and Bungoma.	Leather Development Council Developed and The tanneries were at 75% completion status.	To be completed in the subsequent year with provision of Ksh 53 million
	Restocking carried out in 50,000 households and 100,000 livestock unit off takes undertaken	3,000 households benefited ( Each household received 10 goats) & 41,270 livestock units purchased (32,000 households reached)	Variance due to inadequate funds
	Rehabilitation and improvement of infrastructure development of AHITI ndomba, Nyahururu and Kabete	5 hostels were renovated; Administration block and a modern milking parlor were constructed. Laboratories and classrooms ongoing	Target achieved
	Livestock Enterprise Development Fund (LERDF) established	LREDF established with a fund of Kshs.500 million	Target achieved

## 2.2.6 Forestry and Wildlife

**Table 2.2.6: Programme Forest and wildlife**

Programme	Key Output (KO) / Target	Key Performance Indicator. (KPIs)/ Achievements	Remarks
<b>Programme 1 : Forestry and Wildlife Policy Regulation and Coordination</b>			
<b>Outcome: Enhanced protection, management and conservation of forestry and wildlife for national development</b>			
SP 1.1: Forestry and Wildlife Regulations	Conservation Secretariat at Ministry HQ Established	Secretariat established and Operationalized	Secretariat will be Strengthened by recruiting more technical personnel
	Eviction of all settlers in all the water towers and State forests	<ul style="list-style-type: none"> <li>Settlers in water towers evicted from 19,000 ha in Western Mau</li> <li>4,530 ha land reverted back to state forests</li> </ul>	Eviction will be hastened to enhance conservation efforts
	Wildlife Compensation Policy and Forest Policy in place	<ul style="list-style-type: none"> <li>Wildlife Compensation Policy established</li> <li>Forest policy reviewed</li> </ul>	Ongoing process
<b>Programme 2: Forestry Development &amp; Management</b>			
<b>Outcome: Increased forest cover</b>			
SP 2.1 Institutional Strengthening and Provision of Skilled Manpower	Gazette 30,000 ha of forest land	25,500 ha of forest gazetted	The gazettment of the balance of 4,500 ha will done during the next period
	Branding of all 5 flagship projects	2 Project sites branded	Resources will be required to brand the remaining projects in the next period.
	Management of 4,000 ha Masaita forest as training blocks	4,000 Ha of Masaita forest managed	The block will continue to be used as a training block
SP 2.2 Natural	Rehabilitate 200, 000 ha	207,793 ha of forest	Rehabilitation will be enhanced to cover other

<b>Programme</b>	<b>Key Output (KO) / Target</b>	<b>Key Performance Indicator. (KPIs)/ Achievements</b>	<b>Remarks</b>
Forest Conservation	of forest rehabilitated	rehabilitated	degraded areas.
	Establishment of 240 nature based SME's established	233 enterprises established	This activity will be boosted to cover the balance and achieve more.
SP 2.3 Industrial Plantation Establishment	Establishment of 18,000 ha of plantation forest	17,500 ha forest plantation established	The activity will be given more focus during the next period.
	Conduct a 125,000 ha management inventory of forest plantation	125,000 ha of inventory report	The data collected will be used to develop management plans in the next period.
SP 2.4: Farm and Private Commercial Forestry	360,000 ha of farmland planted with trees	450,000 ha planted on farms	The activity will be given more attention to ensure attainment of the 10% tree and forest cover
	30,000 ha commercial forest established on farms	<ul style="list-style-type: none"> <li>• 11,500 ha established</li> <li>• Capacity has been created for effective take off of this activity</li> </ul>	The balance will be rolled over to the next period.
SP 2.5: Dry land Forest Conservation & Management	540,000 ha of dryland forest rehabilitated	<ul style="list-style-type: none"> <li>• 300,000 ha rehabilitated</li> <li>• Structures and capacity have been put in place</li> </ul>	The balance will be implemented during the next period
	Commission 6,000 forest based small and micro enterprise	<ul style="list-style-type: none"> <li>• 500 SME's established</li> <li>• Structures and capacity have been put in place</li> </ul>	The balance will be rolled over to the next period.
SP 2.6: Road and infrastructure development and Maintenance	Improve 4,000 KM forest roads and erect protection barriers	<ul style="list-style-type: none"> <li>• 1,500 km road network Improved</li> <li>• Equipment procured and staff hired</li> <li>• 20 km of electric fence established</li> </ul>	The balance will be rolled over to the next period.

Programme	Key Output (KO) / Target	Key Performance Indicator. (KPIs)/ Achievements	Remarks
	Construction of KFS Headquarters, 10 conservancy & 20 zonal offices, 100 forest rangers residential camps and house	<ul style="list-style-type: none"> <li>• 4 conservancy offices built</li> <li>• 1 Information center completed</li> <li>• 1 Hospitality center completed in KFC</li> <li>• 1 Administration block completed in Moi University</li> </ul>	Resources will be required to implement the remaining offices and residential quarters.
<b>Programme 3 : Wildlife Conservation and Management</b>			
<b>Outcome: Enhance wildlife conservation for national development and vision 2030</b>			
SP 3.1: Conservation & Protection and of Wildlife	100 % response rate to poaching incidences	1071 number of offenders arrested and prosecuted in various courts	Additional resources required as poaching has escalated to alarming levels (Flagship)
	Recovery of trophies	3151 pieces of assorted trophies (including 1769 pieces of ivory)	
		54 firearms recovered and 1305 rounds of ammunitions.	
	- 1000 officer trained.	- 1,449 officers trained	More skills required to cope with emerging and sophisticated security challenges
	Border patrols conducted.	8 cross border wildlife security operations (Kenya – Tanzania – Uganda - Ethiopia))	This to be sustained and intensified
115 kilometers of fence in Mt.Kenya done and Tsavo.	<ul style="list-style-type: none"> <li>• 10km fence done in Mt.Kenya MKEPP</li> <li>• 30km community fence done in Tsavo East</li> <li>• 21km Construction of Rhino Sanctuary Fence in Meru Park</li> </ul>	Need for fences has been increasing overtime as human wildlife conflict escalates and assist in maintenance of ecological integrity.	

<b>Programme</b>	<b>Key Output (KO) / Target</b>	<b>Key Performance Indicator. (KPIs)/ Achievements</b>	<b>Remarks</b>
			Hence more funds required (Flagship)
	80% Response rate to human wildlife conflict issues	100% response rate to human wildlife conflict cases	With climate change and land use change human wildlife conflict cases have become a daily concern. This has significantly increased our operational costs
	Enhance Financial sustainability	- Endowment fund set up with trustees. - Draft Operations Manual	Significant contribution from the exchequer required given the susceptible nature of KWS internal revenue to internally happenings (Flagship)
	Habitat areas of Mt. Kenya, Tsavo and Meru restored	14 Translocations done	More funds required to address the human wildlife conflict and habitat management. These are a very expensive undertaking (Flagship)
	2 park management plans developed	3 park management plans done (Kakamega Forest, Hell's Gate and Mt. Longonot and Kisumu Impala. 2 Draft management plans also developed. (Kisite Mpunguti and Watamu Pas)	This a continuous exercise until all parks have operational management plans. Its also an expensive undertaking as it involves various stakeholders' participation
SP 3.2: National Parks & Reserves Management	Maintaining integrity of the ecosystems and landscapes.	Assessment of status of ecosystems and landscapes done.	This is a continuous process which generates useful information for management decision

Programme	Key Output (KO) / Target	Key Performance Indicator. (KPIs)/ Achievements	Remarks
			making
	Branding of national parks and reserves	5 parks branded. Shimba Hills National Reserve Hell's Gate National and Longonot National Park and Kisumu Impala and Ndere Island.	Vision 2030 flagship project to have premium parks for tourism purposes
	International marketing of the parks.	10 exhibitions participated including London, Rome, Paris, Germany, Dubai, and South Africa. Local tourism promotion done through the Tujivinjari campaign	Effort to improve national revenue and ensure future financial sustainability for KWS. Require adequate funding as part of initial investment
	400 km of road routinely maintained	487.5 kilometres done in various parks	For quick responses to poaching incidences and boost tourism in our parks (Flagship)
	1 airstrips uplifted to bitumen level	1 airstrip upgraded to bitumen (Nakuru)	
SP 3.3: Youth Conservation education	Sensitizing youth groups in wildlife conservation and protection	37,155 youths sensitized country wide.	As part wining support for conservation from Kenyans (Flagship)

## 2.2.7 Research and Development

### Table 2.2.7.1: Programmes: KARI

**Outcome:** Agricultural Knowledge, Information and Technologies (KITs) generated and promoted



<b>Sub-Programme</b>	<b>Planned outputs</b>	<b>Achievements</b>	<b>Remarks</b>
<b>Crops (Food and horticultural crops)</b>	Generation and promotion of crops KITS	<ul style="list-style-type: none"> <li>Released 35 new staple Crop varieties</li> <li>Produced 2,000 Kg of maize, 178 Kg of finger-millet, 402 kg of root-rot resistant bush beans breeder seeds, 15.47 MT of Certified Seed of maize and wheat, 756,200 Cassava cuttings and 1,108,600 Sweet-potato vines for planting</li> </ul>	- The released varieties being availed to seed companies for commercialization
<b>Livestock</b>	Generation and promotion of livestock KITS	<p><b>Animal Health</b></p> <ul style="list-style-type: none"> <li>Immunised Over 1,500 cattle with East Coast fever vaccine</li> </ul> <p><b>Animal Production</b></p> <ul style="list-style-type: none"> <li>One hybrid scavenging bird with a sex-linked gene developed and is available to farmers</li> <li>22,866 ft cuttings of sweet potato vines; 39,037 ft cuttings of Napier grass farmers; 462 ft cuttings of Desmodium ; 273 ft cuttings of Giant Panicum and 100 ft cuttings of Edible Cana produced and sold to farmers.</li> </ul>	<ul style="list-style-type: none"> <li>The ECF vaccine is being commercialized</li> <li>The hybrid bird is being characterised for formal registration and release for commercialization</li> </ul>
<b>Natural Resources management (NRM)</b>	Generation and promotion of NRM KITS	<ul style="list-style-type: none"> <li>Analyzed 18,031 soil, plant, fertilizer/manure and water and 9,770 chemical/ biological samples</li> <li>Created 328 GIS databases; and prepared 608 client thematic maps.</li> </ul>	- Will continue to provide analytical services to various clients
<b>Range Management programme</b>		<ul style="list-style-type: none"> <li>Developed a prototype simple milk cooler using local materials (charcoal) and adapted to the pastoral areas</li> <li>Produced 2708 kg of range grass seed and availed to farmers</li> </ul>	- Cooler to be commercialized by local artisans
<b>Biotechnology and Genetic Resources</b>	Generation and promotion of biotechnology	<p><b>Livestock Biotechnology</b></p> <ul style="list-style-type: none"> <li>Contagious Caprine Pleural Pneumonia (CCPP) pen-side</li> </ul>	- The developed diagnostics kits to be fine tuned

Sub-Programme	Planned outputs	Achievements	Remarks
	and genetic resources KITS	<p>diagnostic kit being ready for commercialization, and launching.</p> <ul style="list-style-type: none"> <li>• RT-PCR for Newcastle Disease virus fusion gene developed being evaluated for use as diagnostic test.</li> </ul> <p><b>Crop Biotechnology</b></p> <ul style="list-style-type: none"> <li>• 538 plants of 9 local cassava varieties were multiplied for germplasm conservation.</li> <li>• Disease diagnostic procedures were developed and optimized for Cassava BSV and other strains including optimization of RT-PCR on CMD and CBSD.</li> </ul> <p><b>Biodiversity Conservation</b></p> <ul style="list-style-type: none"> <li>• Viability for the conserved germplasm was investigated and determined for 807 accessions and over 95% were viable.</li> <li>• 1447 assorted accessions of sorghum, finger millet, pigeon pea cowpea, and African Leafy vegetables were regenerated and characterized.</li> </ul>	<p>for commercialization by the private sector</p> <ul style="list-style-type: none"> <li>- More collections of local germplasm for safe storage in the gene bank to continue</li> <li>-</li> </ul>
<b>Socio-economics and Applied Statistics (SEAS)</b>	Generation and promotion of SEAS knowledge and information	<ul style="list-style-type: none"> <li>• Analyzed the rice and maize-meal value chains</li> <li>• Completed study on Agricultural Science and Technology Indicators (ASTI) for Kenyan NARS.</li> </ul>	- Capacity built for scientists to be involved in market and policy research
<b>Planning, Monitoring and Evaluation</b>		<ul style="list-style-type: none"> <li>• Inventorized and monitored 450 on-going research projects</li> <li>• Developed the KARI Project Performance System (KPPMS)</li> </ul>	- Rolling out of the KPPMS to centres and programme to continue

### 2.2.7.2 Coffee Research Foundation

**Table 2.2.7.2: Programme: Coffee Research**

**Programme outcome;** Technologies and recommendations that will ensure the industry gets competitive advantage globally and sustainable income to farmer.

<b>Sub Programme</b>	<b>Planned Output</b>	<b>Achievements</b>	<b>Remarks</b>
<b>Crop development</b>	Release of 3 coffee disease resistant varieties	Released Batian coffee disease resistant varieties and release of Batian, 2 and 3 in progress.	Establishment of coffee seed gardens and nurseries in main coffee growing areas is required
	Develop soil fertility management protocols	Developed 2 fertilizer regimes for various coffee farming systems across agro-ecological zones. -Developed coffee establishment protocols and soil map	Develop more fertilizer regimes, establishment protocols and maps required.
	Generate coffee research technologies to enhance coffee production	-45 research projects undertaken. -42 scientific publications produced.	-Among these projects, 43 are on-going and 8 new projects in new areas of certification, planting materials , geographical indications and value addition were initiated
<b>Technology transfer and socio-economic studies</b>	No. of coffee technical packages released. -No. of stakeholders Trained.	-260 coffee technical products repackaged and disseminated.	Produce more coffee technical packages to meet the rising demand for technical information due improved coffee prices.
	Computerize research departments	-15 departments computerized.	Establish a coffee resource centre linked to the coffee industry
	No. of stakeholders Trained.	-135 trainers trained. -220 stakeholder forum held. -3500 farmers trained.	Train more trainers and stakeholders
	Develop domestic coffee market profiles and the studies on the impact of external shocks on the viability of the coffee business.	Domestic coffee profiles developed and impact of external viability of coffee business.	Undertake regular coffee profiles and market impact on coffee business.

### 2.2.7.3 Kenya Forestry Research Institute (KEFRI)

**Table 2.2.7.3: Programme: Agricultural Research**

**Programme outcome;**

Sub-Program	Planned output	Achievements	Remarks
<b>Technology Development</b>	Popularize and demonstrate five high value on-farm tree species	Six high value on-farm tree species ( <i>Gmelina</i> , <i>Neem</i> , <i>Milicia excelsa</i> , <i>Acacia polyacantha</i> , <i>Eucalyptus urophylla</i> and <i>E. grandis</i> ) demonstrated and popularized	Target achieved and there is need to demonstrate and popularized more species
	Incubate 8 new tree products	10 new tree products under industrial incubation	Target met and their need to have the products certified and linked to markets
	Produce 20,000 Kg of high quality tree seed	24,000 kg of high quality tree seed produced and distributed	Target met
<b>Technology Dissemination</b>	Produce 100 publication on various research findings	114 publications produced	Target met
	Organize 130 publicity events to disseminate research findings to stakeholders	132 publicity events (open days, field days, ASK shows) held	Target met
<b>Infrastructure Development</b>	Construct office block and laboratories in Kakamega and Garissa Sub-centres	Constructed office block and laboratories in Kakamega and Garissa Sub-centres	Target met
	Construct insectary at Muguga Centre	Constructed insectary at Muguga Centre	Target met

### 2.2.7.4 Kenya Marine and Fisheries Research Institute (KMFRI)

**Table 2.2.7.4: Programme: Marine and Fisheries Research**

**Programme outcome;**

Sub programme	Planned out put	Achievement	Remarks
SP1. Aquaculture Research and Development	National fish seed certification standards developed	National fish seed certification standards developed for tilapia and catfish	The certification of tilapia seed with Kenya Bureau of Standards is at an advanced stage and a manual for fish farmers and students produced
	Demonstration farms and nurseries for seaweed farming established to promote commercialization of seaweed farming	A pilot seaweed farm and nursery have been established in the south coast to provide seed to seaweed farmers	Techniques for production of commercial seaweeds have been developed and disseminated to the local communities
SP 2. Fisheries research	Mapping of breeding and fishing grounds	GIS maps of fishing and breeding grounds for Lakes Victoria, Naivasha, Turkana and Baringo developed	The mapping of breeding and fishing grounds in Lakes Victoria, Naivasha, Turkana and Baringo is 90% complete
SP.3 Value Addition and Post Harvest technology	Innovative technology for reducing post-harvest losses developed and transferred	Three innovative techniques for reducing post-harvest losses (improved fish smoking ovens and 2 solar driers) have been developed and disseminated.	The process of patenting two out of the three techniques for reducing post-harvest losses is at an advanced stage
SP4. Oceanography and Hydrography	Biophysical studies undertaken and disseminated to improve management of aquatic ecosystems	Technical reports biophysical studies and tide tables produced	Technical reports have been produced and 50 tide tables produced and disseminated to stakeholders who work in the sea
SP 5. Socio-economics research	- Electronic Fish Market Information System developed for the fisheries sector	- Electronic Fish Market Information System developed for Lake Victoria and major fish markets	The Fish Market Information System that was developed for Lake Victoria and will be expanded to cover the coastal fisheries and aquaculture
SP 6. Limnology	Biophysical studies undertaken and disseminated.	Technical reports have been produced with recommendations for the management of inland water	Improved management of aquatic ecosystems

Sub programme	Planned out put	Achievement	Remarks
		lakes	

### 2.2.7.5 Kenya Sugar Research Foundation

**Table 2.2.7.5: Programme: Sugar Research**

**Programme outcome;** Sugar research technologies and policy recommendation

Sub Programme	Planned Output	Achievements	Remarks
<b>Crop Development</b>	Release of two improved sugarcane varieties	Three improved sugarcane varieties released for commercial production in 2011 (KEN 82-121, KEN 82-493 and KEN 82-601);	Multiplication of seedcane varieties released is required
	Identification of three smut resistant varieties identified	5 varieties identified	Varieties undergoing National Performance trials
<b>Agricultural Engineering, Milling and Processing Programme</b>	Establishment and operationalization of a GIS/Remote sensing unit	GIS/RS established in 2010	Unit is operational
	Development of a GIS/RS based sugarcane yield estimation model	Study concluded	Model ready for use the sugar industry
<b>Technology Transfer, Economics and Biometrics Research</b>	Development of a sugarcane – mill synchrony model	Model was developed and automated and availed to stakeholders for use in the industry	Model is available for use in the sugar industry on the Foundation website
	Formation of 50 Farmer Research Groups	A total of 56 farmer research groups have been formed in various sugarcane zones	The groups are operational and used for seed seedcane and technology dissemination

### 2.2.7.6 Tea Research Foundation of Kenya

**Table 2.2.7.6: Programme: Tea Research Foundation of Kenya**

**Outcome:** The tea industry empowered towards increased profitability, sustainability and global competitiveness through innovative research

Sub-Programme	Planned outputs	Achievements	Remarks
<b>Crop Improvement &amp; Management</b>	Productivity and quality of tea in smallholder and large estate improved and sustained.	<ul style="list-style-type: none"> <li>• Released 50 high yielding and quality tea varieties for utilization in black and green tea processing. Applied for Plant Breeders Rights (PBRs) for one new tea variety for product diversification.</li> <li>• Identified three morphological, two biochemical and ten molecular markers for marker-assisted breeding and selection in tea.</li> <li>• Published and availed a catalogue for all released and promising Kenyan tea varieties.</li> <li>• Cost effective and environmentally friendly techniques of identifying and managing pests and diseases developed and availed.</li> </ul>	- The released varieties and technologies under different stages of adoption and commercialization
<b>Sustainable Ecosystem Management and Conservation</b>	Tea germplasm and ecosystems managed sustainably and conserved	<ul style="list-style-type: none"> <li>• Developed and availed Fertilizer utilization manual for use by tea farmers.</li> <li>• Minimum economic land units for tea in major tea growing in Kenya established.</li> <li>• Kenyan tea soil maps partly developed using Geographical Information System (GIS) technology.</li> <li>• Mechanized tea pruning and plucking technologies developed and disseminated.</li> <li>• Good agricultural practices (GAP) and good manufacturing practices (GMP) developed and disseminated to the tea industry.</li> <li>• Improved leaf and soil analytical techniques developed and availed.</li> </ul>	Developed technologies availed for commercial use
<b>Tea Processing and Value Addition</b>	Product diversification and value addition in the	<ul style="list-style-type: none"> <li>• Cost-effective biochemical analytical techniques developed and availed.</li> <li>• Kenyan tea processors and packers</li> </ul>	- Stakeholders sanitized on the value of value addition and

Sub-Programme	Planned outputs	Achievements	Remarks
	Kenyan tea industry promoted	sensitized on benefits of branding of finished tea products.	product diversification in various fora
<b>Economics, Field Advisory and Corporate Communications</b>	Adoption levels of the proven tea production and quality technologies improved ICT infrastructure	<ul style="list-style-type: none"> <li>• Smallholder tea farmers sensitized on economic land units for tea.</li> <li>• Extension posters, flyers and pamphlets developed and availed to all tea factory catchment areas.</li> <li>• TRFK Strategic Plan for period 2010-2015 developed and undergoing implementation.</li> <li>• Sensitized staff on HIV/AIDS.</li> <li>• Attained ISO 9001:2008 Certification</li> </ul>	- Farmers educated and sensitised through farmers field schools, field days and visits

### 2.3. Sector Expenditure Analysis

The total expenditure allocation to the sector shows a steady rise in the period under review. In 2009/2010 it was 40.7 Billion and 55.6 Billion in 2011/2012 (Table 2.3.0), an increase of 36.6%. In terms of actual expenditure the sector performance is fair as the overall absorption of the allocated funds averaged 80 %. This high increase in the allocation was due to the Economic Stimulus Programme which supported several sub-sectors.

**Table 2.3.0: TOTAL EXPENDITURE (RECURRENT AND DEVELOPMENT) (Kshs Millions)**

Vote	Approved Budget Estimates			Actual Expenditure		
	2009/10	2010/11	2011/12	2009/10	2010/11	2011/12
Recurrent	24,318	25,535	26,678	23,281	25,004	17,011
Development	16,333	30,414	28,897	12,101	20,933	22,714
<b>TOTAL</b>	<b>40,651</b>	<b>55,949</b>	<b>55,575</b>	<b>35,382</b>	<b>45,937</b>	<b>39,735</b>

#### 2.3.1 Analysis of Recurrent Expenditure

In the period under review the total recurrent expenditure allocation to the sector increased from 24.3 Billion in 2009/10 to 26.7 Billion in 2011/2012 (Table 2.3.1). In terms of actual expenditure, the sector was not able to spend all the funds allocated. In 2011/2012 the sector received a total allocation of Kshs 26.7 Billion and it managed to spend a total of Kshs 17.0



Billion. This represents about 63.7 % in expenditure. This drop can be attributed to austerity measures introduced mid stream by Treasury. In general the sector needs to beef up its recurrent expenditure absorption capacity.

**Table 2.3.1 Trends in total recurrent expenditure (Kshs. Millions)**

Sub Sector	Approved Budget Estimates			Actual Expenditure		
	2009/10	2010/11	2011/12	2009/10	2010/11	2011/12
Agriculture	8,098	8,570	8,668	7,918	8,328	8,840
Cooperatives	951	1,059	1,129	876	1,011	1,004
Fisheries	732	654	873	672	635	675
Lands	1,735	2,062	2,211	1,613	1,994	2,148
Livestock	4,691	3,686	4,042	4,112	3612	3468
Forestry	4,285	5,160	5,328	4,264	5,148	5,296
KARI	1,806	1,984	2,002	1,806	1,993	2,159
KEFRI	681	822	865	681	822	865
KMFRI	419	468	474	461	519	548
KESREF	290	326	496	284	305	358
TRFK	162.8	189.3	34	158.2	161.5	34
CRF	467	555	554	436	475	486
<b>TOTAL</b>	<b>24,318</b>	<b>25,535</b>	<b>26,676</b>	<b>23,281</b>	<b>25,004</b>	<b>25,881</b>

### 2.3.2 Analysis of Development Expenditure.

The sector development allocation in 2011/2012 was Kshs 28.9 Billion; this was a marginal drop by about 1.5 Billion in the previous financial year. In terms of expenditure, the actual was below the approved estimates throughout the period of review. In 2011/2012 the approved allocation was Kshs 28.9 Billion while actual expenditure amounted to Kshs 22.7 Billion. This represents 78.5 % utilization level.

**Table 2.3.2 Trends in total Development expenditure (Kshs. Millions)**

Sub Sector	Approved Budget Estimates			Actual Expenditure		
	2009/10	2010/11	2011/12	2009/10	2010/11	2011/12
Agriculture	7,208	14,458	12,212	4,834	8,989	9,013
Cooperatives	186	146	218	152	149	198
Fisheries	1221	3143	2276	1112	2400	1651
Lands	2,133	3,441	3,821	1,995	2,998	3,725
Livestock	1,668	4,109	3,778	987	2876	3548
Forestry	2,692	2,791	3,724	2,125	1,948	2,499
KARI	805	1,659	1,797	684.29	1,258	1,623
KEFRI	44	44	47	44	44	47
KMFRI	104	389	628	42	68	112
KESREF	175	165	303	111	136	218
TRFK	77	30	30	1	10	25
CRF	20	39	63	14	57	55
<b>TOTAL</b>	<b>16,333</b>	<b>30,414</b>	<b>28,897</b>	<b>12,101</b>	<b>20,933</b>	<b>22,714</b>

**2.3.3 Analysis Of Externally Funded Programmes.**

In the period under review, the sector external funding increased from 8.1 Billion in 2009/2010 to 12.4 Billion in 2011/2012. The actual expenditure has been rising steadily throughout the period. The donor absorption capacity is 75.6 % . on average.

**Table 2.3.3: Trends in Externally funded Programmes (Kshs. Millions)**

Sub Sector	Approved Budget Estimates			Actual Expenditure		
	2009/10	2010/11	2011/12	2009/10	2010/11	2011/12
Agriculture	5,240	7,292	7,329	4,760	6,774	6,256
Cooperatives	-	-	-	-	-	-
Fisheries	-	-	-	-	-	-
Lands	282	225	177	137	18	10
Livestock	808	733	632	476	403	402
Forestry	1,038	1,793	2025	618	808	945
KARI	565	1,383	1,501	423	715	1,107
KEFRI	-	-	-	-	-	-
KMFRI	60	349	590	20	8	74
KESREF	-	45	68	-	-	12
TRFK	-	-	-	-	-	-
CRF	143	194	98	143	198	96
<b>TOTAL</b>	<b>8,136</b>	<b>12,014</b>	<b>12,420</b>	<b>6,577</b>	<b>8,924</b>	<b>8,902</b>

### 2.3.4 Expenditure Review by Programmes

During the period of review the sector implemented 13 programmes in the areas of sectoral policy, food production, forestry and research. A total of Ksh 50 Billion was budgeted for in 2011/12 against an expenditure of Ksh 28 Billion, giving an absorption rate of 94 %.

**Table 2.3.2 Trends in Expenditure by Programmes (Kshs. Millions)**

Sub Sector	Approved Estimates		Budget	Actual Expenditure		
	2009/10	2010/11	2011/12	2009/10	2010/11	2011/12
<b>Agriculture</b>						
P1: Policy, Strategy and Management of Agriculture	2703	2578	2309	2887	2551	2029
P2: Crop Development Management	9816	12207	8,469	8,619	13449	13961
P3: Agribusiness and Information Management	586	668	4642	397	217	203
<b>Sub-Total</b>	<b>13105</b>	<b>15453</b>	<b>15420</b>	<b>11903</b>	<b>16217</b>	<b>16193</b>
<b>Cooperative Development</b>						
P1. General administration & Support services	220	211	319	212	208	279
P2. Cooperative development and management	894	980	1007	793	940	912
P3. Commodity Value Addition/Market Access	23	14	21	22	12	11
<b>SubTotal</b>	<b>1,137</b>	<b>1,205</b>	<b>1,347.</b>	<b>1,027</b>	<b>1,1560</b>	<b>1,202</b>
<b>Fisheries Development</b>	1785	3035	3,149	1,784	3,035	2,326
<b>Lands</b>	3,868	5,503	6,032	3,608	4,992	5,873
<b>Livestock Development</b>	6,442	7,794	7,820	5,099	6,488	7,016
<b>Forestry</b>						
P1. Forestry & Wildlife policy regulation & Coordination	380	708	881	400	705	874
P2. Forestry Research, development and Management	4,866	5,580	6,303	4,403	4,732	5,081
P3. Wildlife Conservation and Management	1,731	1,663	1,868	1,586	1662	1,840
<b>Sub-Total</b>	<b>6,977</b>	<b>7,951</b>	<b>9,052</b>	<b>6,389</b>	<b>7,099</b>	<b>7,795</b>
KARI	2,611	3,643	3,799	3,030	3,251	3,782
KEFRI	753	912	997	753	912	997
KMFRI	523	857	1,101	504	587	660

Sub Sector	Approved Estimates		Budget	Actual Expenditure		
	2009/10	2010/11	2011/12	2009/10	2010/11	2011/12
KESREF	465	491	799	395	441	576
TRFK	240	219	234	159	171	211
CRF	488	594	549	450	531	486
<b>TOTAL</b>	<b>38,395</b>	<b>47,657</b>	50,299	35,101	44,884	47,117

## 2.4 Review of Sector Pending Bills

### 2.4.1 Recurrent Pending Bills

The sector's total pending bill during the 2011/12 financial year was Kshs. 1,630.9 million.

**Table 2.4.1 shows the trend in pending bills during the review period.**

Sub Sector	Recurrent Kshs. millions			Development Kshs. millions		
	2009/10	2010/11	2011/12	2009/10	2010/11	2011/12
MOA	69.3	44	669.3	541.1	589	404
MCD&M	19.4	4.05	9	23.2	6.16	11.4
MFD	2.3	-	-	-	-	-
MoL	11.2	12.98	0.7	3.1	26.9	0.2
MLD	35.7	3.6	3.7	-	29.6	26.4
MFW	1.9	-	-	10	23	-
KARI	444.6	312.9	190.6	-	-	-
KEFRI	-	-	38	-	-	-
KMFRI	91.2	76	60.8	-	-	-
KESREF	-	-	-	-	-	-
TRFK	24.7	4.7	6.8	-	-	-
CRF	55	28	210	-	-	-
<b>Total</b>	<b>755.3</b>	<b>486.2</b>	<b>1,188.90</b>	<b>577.4</b>	<b>674.7</b>	<b>442</b>

In the period under review the recurrent pending bills dropped from 755.3 million in 2009/2010 to 486.2 million in 2010/2011. In 2011/2012 the bills abnormally increased to 1.19 billion occasioned by delayed budgetary adjustment in respect to austerity measures (delay in communication of revised estimates).

The development pending bills dropped from 674.7 Million in 2010/11 to 442.0 million in 2011/12. Over 80% of these pending bills were from the MOA, while the other sub-sectors contributed the balance.

The sector will ensure that the pending bills are prioritized for settlement.

## CHAPTER THREE

### 3.0 MEDIUM TERM PRIORITIES AND FINANCIAL PLAN FOR THE MTEF PERIOD 2013/14 - 2015/16

#### 3.1 Programs and Sub Programs

This Chapter outlines the Medium term priorities of the sector's programs, sub programs, and the resource requirement for implementing them.

##### 3.1.1 Prioritisation of Programs and Sub Programs

This section presents programmes and their objectives, expected outcomes and outputs, besides key performance indicators.

##### 3.1.2 Programmes and their objectives

The following programmes and their respective objectives have been identified for the sector:

#### **Programme 1: Policy, Strategy and Management of Agriculture**

To create an enabling environment through appropriate policy, legal and regulatory frameworks and provision of strategic administrative and financial management direction to the stakeholders.

#### **Programme 2: Crop Development and Management**

To increase productivity and management by promoting competitive agriculture through improved extension advisory support services, appropriate technology transfer, management of pests & diseases while ensuring sustainable natural resource management for agricultural development

#### **Programme 3: Agribusiness and Information Management**

To promote sustained growth in agriculture based on market and product development and information management through the provision of appropriate technical, advisory and logistical support for investments and increased rural off-farm incomes.

#### **Programme 4: Cooperative Development & Management**

To improve governance and management of cooperative society.

**Programme 5: Policy, Planning and administrative services for Co-operatives**

To create an enabling environment through appropriate policy, legal and regulatory frameworks and provision of strategic administrative and financial management services to the ministry.

**Programme 6: Cooperative Marketing**

To enhance capacity building for value addition and market access in cooperatives.

**Programme 7: Fisheries Development**

To maximize the contribution of fisheries to the achievement of national development goals especially poverty reduction, food security and creation of employment and wealth.

**Programme 8: Land Policy and Planning**

To create a conducive environment for land administration and management

**Programme 9: Livestock Resources Management and Development**

To promote sustainable development of the livestock sector by creating a favourable policy and legal framework and provide services that increase productivity, value addition and improve income for the livestock farmers.

**Programme 10: Forestry and Wildlife Development**

To provide a conducive environment for practice and promotion of sustainable and participatory management of forestry and wildlife resources to enhance social economic development of Kenyans.

**Programme 11: Agricultural Research**

To contribute to increased productivity, commercialization and competitiveness of agricultural sector through generation and promotion of knowledge, information, technologies and innovations that responds to client's demands and opportunities.

### **Programme 12. Coffee Research**

To research, develop and disseminate modern and innovative technologies through efficient utilisation of resources for prosperity of stakeholders in the coffee industry.

### **Programme 13: Marine and Fisheries Research**

To contribute to the management and sustainable exploitation of aquatic resources and thus alleviate poverty, enhance employment creation and food security through multi-disciplinary and collaborative research in both marine and fresh water aquatic systems.

### **Programme 14: Tea Research**

To generate and disseminate technologies and knowledge, through innovative research for improved production, processing, value adding and marketing of the Kenyan tea while conserving the environment.

### **Programme 15: Sugar Research**

To contribute to improved livelihood income generation and employment creation through generation and promotion of demand driven agricultural and industrial sugar technologies and innovation for enhancing productivity, value additions and competitiveness of the sugar industry

### **Programme 16: Forestry Research**

To conduct research and provide information and technologies, for sustainable development for forests and arid natural development.

### **3.1.3 Programmes, Sub-Programmes, Expected Outcomes, Outputs and Key Performance Indicators for the Sector**

The agriculture sector is targeting to achieve an average growth rate of 7% during the MTEF period from a recorded 6.4% and 1.5% in 2010 and 2011 respectively. The table below shows the programs, key outputs and the performance indicators and the expected targets.

### 3.1.3.1 Agriculture

**Table 3.1.3.1: Programme: Agriculture**

Programme	Delivery Unit	Key Outputs	Key Performance Indicators	Target
<b>Programme 1: Policy, Strategy and Management of Agriculture</b>				
SP 1.1 Development/Review of Agricultural Policy, Legal and Regulatory Frameworks	Policy & External Relations Directorate,	Policies developed	No. of policies developed	3
		Bills revised	No. of bills revised	2
SP 1.2 Agricultural Planning & Financial Management	Administrative Services	Allocated funds utilized	Percent allocated funds utilized	100
	Accounts	A-in-A collected and submitted in Kshs millions	Amount in Kshs collected and submitted	100
<b>Programme 2: Crop Development and Management</b>				
SP2.1: Land and Crops Development	Agricultural Engineering Services	Community grain storage facilities constructed	No. of grain storage facilities constructed	10
		Water pans constructed	No. of water pans constructed	100
SP 2.2: Food Security Initiatives	Crops Management Directorate	Crop and food security assessments done	No. of assessments done	2
		Assorted Traditional Seeds procured & distributed in MT	Amount of seeds procured and distributed	3,100
SP 2.3 Agriculture Extension Services	Extension and Training Directorate	Farmers reached in millions	No. of farmers reached	3.8
		New Agricultural Training Centers (ATCs) constructed	No. of ATCs constructed	4
SP 2.4: Agriculture Research	Extension and Training	Agricultural research fora held	Minutes of research fora	3



Programme	Delivery Unit	Key Outputs	Key Performance Indicators	Target
	Directorate	Agricultural research meetings held	Minutes	10
<b>Programme 3: Agribusiness and Information Management</b>				
SP 3.1: Agribusiness and Market development	Agricultural Engineering Services & Agribusiness and Marketing Directorate	Market infrastructure projects done	No. of market projects done	10
	Agribusiness and Marketing Directorate	Producer groups linked to markets	No. of producer groups linked to markets	18
SP 3.2: Agricultural Information Management	Agribusiness and Marketing Directorate	Market bulletins Published	No. of bulletins published	14
		Market prices Published in daily newspapers	No. of market prices published	308

### 3.1.3.2 Cooperative Development & Marketing

**Table 3.1.3.2: Programme: Cooperative Development & Marketing**

Programme/Programme Outcomes	Delivery Unit(s)	Key Outputs	Key Performance Indicators	Target
<b>Programme1: Policy Planning and Administrative services for co-operatives</b>				
<b>Outcome: Improved service delivery</b>				
<b>S.P 1 Administrative support services</b>	Administration	Finalized co-operative development policy	Policy in place	1
<b>S.P 2 Finance and procurement services</b>	Finance,Accounts&,Procurement	Budget utilization	Level of utilization	100%

<b>Programme/Programme Outcomes</b>	<b>Delivery Unit(s)</b>	<b>Key Outputs</b>	<b>Key Performance Indicators</b>	<b>Target</b>
<b>Sub-programme 3: Planning and feasibility studies</b>	Planning Unit	Co-operative sector Study report  Monitoring and evaluation	Number of sector studies done  Project/programme completion rate	1  100%
<b>Programme 2: Cooperative Development &amp; Management</b>				
<b>Outcome: Improved governance and management of cooperative societies</b>				
<b>Sub-programme 1 :Governance and Accountability</b>	ECCOS	Enforced anti-Corruption policy in Co-operatives	% of Societies complying with the policy	100%
	SASRA	Licensing and supervision of SACCOs	Number of societies licensed	216
	Co-operative Audit	Register audited accounts  Conduct statutory audits	No. registered  No. Audited	4,200  2,500
	Co-operative Tribunal	Resolution of disputes	Number of cases resolved	50%
	Co-operative Registration	Registration of new co-operatives  Automation of registration process  implementation of inquiry reports	Number registered  Online registration  No. of Reports	432  100%  300
	Co-operative Finance and Banking	Enforce compliance on SACCO	% of Saccos remitting their Sacco dues	100%

<b>Programme/Programme Outcomes</b>	<b>Delivery Unit(s)</b>	<b>Key Outputs</b>	<b>Key Performance Indicators</b>	<b>Target</b>
		remittances  Mobilize additional savings/deposits through SACCOs	Amount of savings in Ksh.	30 billion
<b>Sub-programme2 :Co-operative Extension &amp; Advisory Services;</b>	Extensions department	-Devolve extension services to counties	-No. staff deployed to counties	47
<b>Sub-programme3 :Co-operative Education and Training</b>	Education & Training	-Build capacity on education  & Training for co-operatives	-Awareness level for co-operatives	100%
<b>Programme 3: Cooperative Marketing</b>				
<b>Outcome: Market and market access improved</b>				
<b>Sub-programme1 :Value addition and Market access</b>	Cooperative marketing	Adoption of value addition technologies by co-operatives  Mobilize Producer Cooperatives to supply wholesale /retail trade hubs and other market outlets  Capacity of the co-operative movement to bulk purchase, store and mill cereals/grains.  Bulk fertilizer purchase  Devolve marketing activities to counties	No of technologies  -Reports  No. of cereal mills  No. of unions	6  4  1  1

Programme/Programme Outcomes	Delivery Unit(s)	Key Outputs	Key Performance Indicators	Target
			County offices in place	47
<b>Sub-programme2 :Cooperative Ventures</b>	Cooperative marketing	Promote new products & services in co-operatives  Promote PPPs	No of new ventures  No. of MOUs signed	12  4

### 3.1.3.3 Fisheries Development

**Table 3.1.3.3: Programme: Fisheries Development**

<b>Programme 1: Fisheries Development</b>				
<b>Outcome: Food security</b>				
Sub-Programme	Delivery Unit	Key outputs (KO)	Key performance indicators	Target
<b>S.P.1: Aquaculture</b>	Aquaculture Directorate (AQD)	Increased fish production from aquaculture & Mari culture	Metric tons of annual aquaculture production increased	45000
		Increase fingerlings supplied to farmers	Number of Fish fingerlings supplied	84 million
<b>S.P.2: Management and Development of Capture Fisheries</b>	(IRD), (MCD)	Fisheries monitoring, control and surveillance unit (MCS) established  Domestic fleet capacity for EEZ developed	Number of Offshore patrol vessel  No of domestic fleet vessels	1  2

	IRD, MCD	Degraded fisheries stocks and habitats restored	No of fisheries stocks and habitats restored	4
		Recreational marine park established	No of recreational marine park	1
<b>S.P.3: Fish Safety, Assurance of Quality, Value Addition and Marketing</b>	FIQA	Fish and fishery products certified	No of Fish and fishery products certified	7500
		Fish post-harvest loses reduced	Number of cold chain facilities and fish auction centers established	12
			Establishment of one accredited laboratory	3

### 3.1.3.4 Lands Subsector

**Table 3.1.3.4: Programme: Lands Subsector**

Sub Programmes	Delivery Unit	Key Outputs	Key Performance Indicators	Target
<b>Programme: Land Policy and Planning</b>				
<b>Programme Outcome: Improved livelihood of Kenyans</b>				
<b>SP.1 Development Planning and Land Reforms</b>	Land Reform Transformation Unit and Administration	Comprehensive National Land Policy and Kenya Constitution implemented	<ul style="list-style-type: none"> <li>• % of National Land Policy and Kenya Constitution recommendations implemented</li> <li>• Number of land legislations enacted</li> </ul>	60 4
	Departments of Lands and Administration and Planning	Revenue and AIA collected	Amount of revenue and AIA collected	24.3billion

Sub Programmes	Delivery Unit	Key Outputs	Key Performance Indicators	Target
<b>SP 2 - Land Information Management</b>	National Land Management Information Systems Project Team	National Land Information System developed	% of National Land Information System developed	80
			% of Land records safeguarded and digitized	80
	Lands and Administration and Planning	Land Registries constructed and rehabilitated	Number of Land Registries constructed	12
			Number of Land Registries rehabilitated	12
<b>SP 3 – Land Surveying, Mapping and Management of National Spatial Data</b>	Surveys of Kenya	Construction of Kenya National Spatial Data Infrastructure Centre	% of Kenya National Spatial Data Infrastructure Center constructed	100
	Surveys of Kenya	Kenya National Spatial Data Infrastructure Framework developed	% of Kenya National Spatial Data policy prepared	100
	Surveys of Kenya	Construction of National Cadastral and Geo-referencing Center	% of National Cadastral and Geo-referencing Center Constructed	80
	Surveys of Kenya	Construction of National Geodetic, Astronomical Observatory and International Boundary Center	% of National Geodetic, Astronomical Observatory and International Boundary Center Constructed	80
	Surveys of Kenya	National and International boundaries pillars inspected and rehabilitated	Number of National and International boundary pillars surveyed and maintained	1280

<b>Sub Programmes</b>	<b>Delivery Unit</b>	<b>Key Outputs</b>	<b>Key Performance Indicators</b>	<b>Target</b>
	Surveys of Kenya	National topographical and thematic maps updated	Number of National topographical and thematic maps updated	90
<b>SP 4 – Land Use Planning</b>	Land Reform Transformation Unit	Land use Policy Prepared	% of Land use Policy prepared	100
	Physical Planning	National Spatial plan Prepared and approved	% National Spatial Plan prepared and approved	100
	Physical Planning	Physical Development Plans approved and Prepared	Number of Physical Development Plans approved and Prepared	107
<b>SP 5 – Land Settlement</b>	Land Adjudication and Settlement	Landless Households settled	Number of households settled	36,000
	Land Adjudication and Settlement	Adjudication sections finalized	Number of Adjudication sections finalized	90
	Lands	Issuance of title deed	Number of title deeds registered and issued	320,000

### 3.1.3.5 Livestock Development Subsector

**Table 3.1.3.5: Programme: Livestock Development**

	Delivery Unit	Key Outputs	Key Performance Indicators	Target
<b>Programme:</b> Livestock Resources Management and Development				
<b>Outcome:</b> Improve livestock industry performance				
<b>S.P.1: Livestock Diseases Management, Vector and Pest Control</b>	Department of Veterinary Services (DVS)	Livestock vaccinated against Foot and Mouth Disease and other trade-sensitive diseases and branded	Number of livestock vaccinated and branded	61,000,000 and 960,000
		Construction of offices, zonal boundary survey, rehabilitation of quarantine stations in Coastal Disease Free Zones undertaken	Level of completion	70%
		Strengthen disease surveillance and reporting using Digital Pen technology	Number of counties	47
	KETTEC	Tsetse flies and trypanosomiasis controlled	Reduction in tsetse density (%)	4%
<b>S.P.2: Livestock Production and Extension Services</b>	DLP/DVS	Farmers and Pastoralists reached during field days, Shows farm visits Exhibitions	Number of Farmers reached	5,100,000
		Denuded rangelands rehabilitated	Number of hectares	7,500



	<b>Delivery Unit</b>	<b>Key Outputs</b>	<b>Key Performance Indicators</b>	<b>Target</b>
	DVS/DLP	Farmers groups supported to provide/access Artificial Insemination Services.	Number of groups	630
<b>S.P.3: Food Safety, Animal Products and Laboratory Services</b>	DVS	Municipalities and districts taken over and Gazetted under department of veterinary services	municipalities and districts	24
		Export and medium-size local abattoirs constructed and commissioned.	Number of abattoirs	21
		Construction of the Bio-Safety Level 3 laboratory and  Rehabilitation of the 8 Regional Veterinary Investigation laboratories infrastructure to support Disease Free Zones Undertaken	Level of construction and rehabilitation works	90%
<b>S.P.4 Livestock Marketing, Value Addition &amp; Early Warning System</b>	Department of Livestock Production (DLP)	Farmers groups supported with Milk Value addition facilities in centers along the milk corridors	Number of groups supported	260
	Kenya Leather Development Council (KLDC)	Capacity for stakeholders in the leather industry developed .l	Number of stakeholders trained	440

	Delivery Unit	Key Outputs	Key Performance Indicators	Target
<b>SP:5 Livestock Policy and Capacity Building</b>	DVS/DLP	Pre-service and in-service training at training institutions undertaken	Number of staff trained	6,560
	Department of Veterinary Services	Veterinary services development fund (VSDF) Strengthen through capital injection to enhance delivery of veterinary services	Amounts Injected	1,200,000

### 3.1.3.6 Forestry and Wildlife Subsector

**Table 3.1.3.6: Programme: Forestry and Wildlife**

Sub programmes	Delivery Unit	Key Outputs	Key Performance Indicators	Target
<b>Programme 1: Forestry and Wildlife Policy regulation and Coordination</b>				
<b>Outcome: Enhanced protection, management and conservation of forestry and wildlife for national development</b>				
SP:1.1: Forestry and Wildlife Policy regulation and Coordination	Ministry Headquarter	Finalize the forestry policy Forest Act 2005 and Develop forest subsidiary rules and regulations	Approved Forest policy and Enacted Forest Act	1
		Review of Wildlife Act	Enacted Wildlife Act	1
<b>Programme 2: Forestry Development &amp; Management</b>				
<b>Outcome: Increased forest cover</b>				
<b>SP 2.1 Institutional Strengthening and Provision of Skilled Manpower</b>	Kenya Forest Service (KFS)	Additional forest Gazetted	No of ha of gazetted forest	25,500 ha
		Masaita forest as a training model improved	No of Ha of Masaita forest improved	4,000 ha

<b>Sub programmes</b>	<b>Delivery Unit</b>	<b>Key Outputs</b>	<b>Key Performance Indicators</b>	<b>Target</b>
<b>SP 2.2 Natural Forest Conservation</b>	Kenya Forest Service (KFS)	Degraded natural forest rehabilitated	No. of ha. rehabilitated	100,000
		Indigenous forest planted	No. of ha. planted	12,500
SP 2.3 Industrial Plantation Establishment	Kenya Forest Service (KFS)	Industrial forest plantation established	No of ha forest plantation	15,000
		Forest plantation management plans developed	No of management plans	10
<b>SP 2.4: Farm and Private Commercial Forestry</b>	Kenya Forest Service (KFS)	Farm tree area increased	No of ha planted	150,000
		Farmer capacity developed	No of farmers trained	5,000
<b>SP 2.5: Dry land Forest Conservation &amp; Management</b>	Kenya Forest Service (KFS)	Dry land forest protected and rehabilitated	Hecterage of dry land forest protected and rehabilitated	300,000
		Forest based small and micro enterprise promoted	No. of small and micro enterprise promoted	500
<b>SP 2.6: Road and infrastructure development and Maintenance</b>	Kenya Forest Service (KFS)	Forest roads rehabilitated	Kilometres of road rehabilitated	1,500
		County Forest offices constructed	No of offices constructed	21
<b>Programme 3.: Wildlife Conservation and Security</b>				
<b>Outcome: Enhanced wildlife protection and management</b>				
<b>SP 3.1: Wildlife Conservation and Security</b>	Kenya Wildlife Service (KWS)	Improved security for visitors & Wildlife	Number of officers trained.	525
			% Reduction in poaching incidences	20
		Disaster preparedness in the parks	Disaster preparedness units established	10
<b>SP :3.2 Community</b>	WILDLIFE COMMUNITY	Human Wildlife	Response to human wildlife conflict issues	100%

Sub programmes	Delivery Unit	Key Outputs	Key Performance Indicators	Target
Service	SERVICE DIVISION	conflict Reduced	reported.	
			No. of kilometers of fence Constructed	150
			Number of community rangers trained and equipped	400
		Increased space for wildlife (Migratory Corridors)	Hectares of land Acquired, leased, eased for conservation	116,500 Acres
<b>SP. 3.3: National Parks &amp; Reserves Management</b>	Kenya Wildlife Service (KWS)	Enhanced visitor experiences in national parks.	No. of parks branded	2
			No. of Niche investments and new products introduced	5
		Improved infrastructure in the parks	Refurbishment and construction of staff houses	200
			No. of Kms of Unclassified road and Airstrip routinely maintained	2600
<b>SP: 3.3: Conservation Education</b>	Kenya Wildlife Service (KWS)/WCK	Enhanced Conservation education.	No. of schools, colleges and community groups visited	100
			No. of Community Education Awareness conducted	13
	Wildlife Club of Kenya (WCK)	Essay and art competition posters produced and distributed to schools	Number of essay entries received	1000

### 3.1.3.7 Research and Development

**Table 3.1.3.7.a: Programme: KARI**

<b>Programme</b>	<b>Delivery Unit</b>	<b>Key Outputs (KO)</b>	<b>Key Performance Indicators (KPIs)</b>	<b>Targets</b>
<b>Name of Programme: Agricultural Research</b>				
<b>Outcome: A vibrant commercially oriented agricultural sector propelled by science, technology and innovations.</b>				
<b>SP1. Food and Horticultural crops Research</b>	Crops Programme	Technologies and Innovations of demand-driven crops developed and promoted.	No. of Technologies and innovations for demand-driven crops	33
<b>SP2. Livestock Research</b>	Livestock Programme	Technologies and Innovations of demand-driven Livestock products developed and promoted.	No. of Technologies and innovations for demand-driven Livestock products	38
<b>SP3. Natural Resources Management Research.</b>	NRM Division	Technologies and Innovations of Natural Resource Management developed and promoted.	No. of Technologies and innovations	16
<b>SP4. Biotechnology and Genetic Resource Research</b>	Biotechnology Division	Biotechnologies and Innovations on Genetic Resources developed and promoted.	No. of Technologies and innovations	16
<b>SP5. Socio Economics and Applied Statistics Research</b>	Socio Economics Division	Socio Economics and Applied Statistics studies done	Studies done	15
<b>SP6. Adaptive Research, Outreach and Partnerships</b>	Outreach and partnerships Department	Demand-driven agricultural product value chains technologies and innovations adapted and up scaled.	No. of Technologies adopted	30

**Table 3.1.3.7.b: Programme: COFFEE RESEARCH**

Sub Programme	Delivery Unit	Key outputs	Performance indicator	Target
<b>Programme:</b> Coffee Research <b>Outcome:</b> Technologies and recommendations that will ensure the industry gets competitive advantage globally and sustainable income to farmer.				
SP1: Coffee Breeding	Coffee Breeding Unit	Farmers trained on new coffee varieties	No. of farmers trained.	70
	Coffee Breeding Unit	The production per tree of the new coffee varieties improved	No. of Kg Yield per tree	40
SP 2: Coffee Nutrition & quality improvement	Chemistry(Quality Assurance) Units	Caffeine-free coffee varieties produced	Number of varieties produced	3
	Economic Unit.	Value of the new variety at the NCE Increased. (50Kg)	Price in USD	400
SP 3: Agronomic Research on coffee	Agronomy Unit	CRF environmental conservation policy developed	Policy developed	1
	Agronomy Unit	The small holder farmers trained on good agronomic farm practices	No. of farmers trained	150
Coffee research information dissemination.	CRF Kenya Coffee College and Research Liaison Units	New technologies adopted	No. of technologies adopted	3
Sub Programme	Delivery Unit	Key outputs	Performance indicator	Target
<b>Programme:</b> Coffee Research <b>Outcome:</b> Technologies and recommendations that will ensure the industry gets competitive advantage globally and sustainable income to farmer.				
SP1: Coffee Breeding	Coffee Breeding Unit	Farmers trained on new coffee varieties	No. of farmers trained.	70
	Coffee Breeding Unit	The production per tree of the new coffee varieties improved	No. of Kg Yield per tree	40
SP 2: Coffee Nutrition & quality improvement	Chemistry(Quality Assurance) Units	Caffeine-free coffee varieties produced	Number of varieties produced	3

Sub Programme	Delivery Unit	Key outputs	Performance indicator	Target
	Economic Unit.	Value of the new variety at the NCE Increased. (50Kg)	Price in USD	400
SP 3: Agronomic Research on coffee	Agronomy Unit	CRF environmental conservation policy developed	Policy developed	1
	Agronomy Unit	The small holder farmers trained on good agronomic farm practices	No. of farmers trained	150
Coffee research information dissemination.	CRF Kenya Coffee College and Research Liaison Units	New technologies adopted	No. of technologies adopted	3

**Table 3.1.3.7.c: Programme: Tea Research**

Programme	Delivery Unit	Key Output	Key performance Indicators (KPIs)	Target
Name of Programme: Tea Research				
Outcome: Productivity, quality and conservation of tea ecosystems improved.				
<b>SP 1: Crop Improvement, Ecosystem Management and Conservation</b>	Tea Research Foundation of Kenya (TRFK)	Productivity in large estate increased	% increase in productivity	4.5
	TRFK	Growers adopting high yielding clones increased	% increase in growers adopting high yielding clones	1
	TRFK	Acreage of tea quantified for carbon stocks increased	% increase in Acreage of tea quantified for carbon stocks	3
<b>SP 2: Tea Processing and Value Addition</b>	TRFK	Valued added safe tea products increased	% increase in valued added safe tea products	3.6
<b>SP 3: Economics, Field Advisory and Corporate Communications (EFACC)</b>	TRFK	Appropriate technology transfer tools developed	Number of tools of appropriate technologies	3

**Table 3.1.3.7.d: Programme: Kenya Marine and Fisheries Research Institute (KMFRI)**

Programme	Delivery Unit	Key Outputs (KO)	Key Performance Indicators (KPIs)	Target
<b>Programme:</b> Marine and Fisheries Research				
<b>Outcome:</b> Increased fish production, reduction in conflicts over use of fisheries resources and reduction of post harvest losses on fisheries products				
SP 1. Aquaculture Research and Development	Aquaculture Division	-National fish seed certification standards developed.	-Number of seed certification standards developed	2
		-Feeds for different species and stages of fish formulated.	-Number of new diets for grow-out and laval stages of fish developed	2
		- Demonstration farms and nurseries for seaweed farming established in the south coast to promote commercialization of seaweed farming.	- Number of demonstration farms and nurseries for seaweed farming established	2
SP 2. Fisheries research	Fisheries Research Division	Mapping of breeding and fishing grounds.	GIS maps of fishing and breeding grounds	5
		Technical reports on five distinct fisheries (prawn fishery of Malindi-Ungwana bays, Lake Victoria fishery, Lake Turkana fishery, Lake Naivasha fishery and Lake Baringo fishery) that will be used in fisheries management decisions	Database on fish stocks - Prawn fishery management plan	1
SP.3 Value Addition and Post-Harvest technology	Natural Products & Post Harvest Technology	Techniques for reducing post-harvest losses developed and disseminated.	Number of innovative technologies developed and adopted.	4



Programme	Delivery Unit	Key Outputs (KO)	Key Performance Indicators (KPIs)	Target
	Department			
SP4. Oceanography and Hydrography	Oceanography and Hydrography Department	Biophysical studies undertaken and disseminated to improve management of aquatic ecosystems.  -Vulnerability assessment of aquatic ecosystems to climate change and disasters.	Number of technical reports.  -Number of Tide tables produced  -Number of critical habitats mapped.	2  1 50 1
SP 5. Socio-economics research	Socio-economics Department	Electronic Fish Market Information System developed for Lake Victoria and major fish markets.	- Number of fish landing beaches reporting through the platform  -Number of people using the system.	100
SP 6. Limnology	Research	Biophysical studies undertaken and disseminated.	-Number of technical reports.	5

**Table 3.1.3.7.e: Programme: KESREF**

Sub-Programme	Delivery Unit	Key Outputs	Key Performance Indicators	Target
<b>Programme 1: Sugar Research</b>				
<b>Outcome:</b> Increased sugarcane and sugar productivity in the sub-sector with at least 20% of this attributed to KEREf's technologie				
Sub-Programme	Delivery Unit	Key Outputs	Key Performance Indicators	Target
SP 1.1 Breeding	Crop Development Department	Release of improved varieties	Number of varieties released	4
		Clones selected	Number of clones selected	15

<b>Sub-Programme</b>	<b>Delivery Unit</b>	<b>Key Outputs</b>	<b>Key Performance Indicators</b>	<b>Target</b>
		Selection period Reduced	No. Of years reduced by	3
SP.1.2 Agronomy	Crop Development Department	Agronomic packages developed	Number of packages developed	3
SP 1.3 Crop Protection	Crop Development Department	Integrated Pest Management & Technologies developed	Number of IPM Technologies developed	2
SP 1.4 Agro-metrology	Crop Development Department	Appropriate weather prediction model for application in the sugar industry developed	Developed weather prediction model	1
SP 2.1 Irrigation and Drainage	Agricultural Engineering department	Soil and water, irrigation and drainage conservation techniques developed	Number of S&W, I&D conservation techniques developed	1
SP 2.2 Farm Mechanization	Agricultural Engineering department	Efficient tillage methods developed	Number of methods developed	1
SP 2.3 Sugar Technology and Engineering	Milling and processing department	Improved sugar processing technologies developed	Number of technologies developed	1
SP 2.4 Co-product utilization and value addition	Milling and processing department	Development of alternative products	Number of alternative products developed	1
SP 2.5 Installation of GIS	Agricultural Engineering department	Development of a central geospatial database for the sugar Industry	Establishment of geospatial database	1
SP 3.1 Technology Transfer	Technology transfer department	Adoption of production technologies.	Number of technologies adopted	5

Sub-Programme	Delivery Unit	Key Outputs	Key Performance Indicators	Target
SP 3.2 Economics	Economics and biometrics	Socially acceptable and economically viable technologies identified	Number of socially acceptable and economically viable technologies identified	3
3SP.3.3 Biometrics	Economics and biometrics	Development of appropriate biometrics research methods and services	Number of appropriate biometric research methods and services developed	1

**Table 3.1.3.7.f: Programme: KEFRI**

Programme	Delivery Unit	Output	Performance indicator	Target
<b>Programme:</b> Forestry Research				
<b>Outcome:</b> Improved livelihood and climate change mitigated				
<b>SP1. Farm Forestry</b>	KEFRI	High value on-farm tree species documented and demonstrated	-No. of species	6
		A technical report on facts on growing and management of Eucalyptus in Kenya and a policy brief	- Booklet - policy brief	1
<b>SP2. Natural Forestry Programme</b>	KEFRI	Enhanced capacity on bamboo utilization by training	-No of trained artisans	36
		Demonstration plots on rehabilitation of water catchments established and Community members trained.	No. of demonstration plots  -No of Trained community members	12  200
<b>SP3. Drylands Forestry Programme</b>	KEFRI	New tree products under industrial incubation	-No of tree products under industrial incubation	10

		Model farmers' plantations/seed stands established	No. of model farmers Plantations/seed stands	10
<b>SP4. Industrial Forest Plantations</b>	KEFRI	New tree germplasm plantation established	No. of germplasm established	5
		Area of seed sources established	-Area planted	26 ha
<b>SP5. Tree Seed Programme</b>	KEFRI	high quality tree seed produced and distributed	- kg of seed produced and distributed	24,000
<b>SP6. Partnership and Networks Programme</b>	KEFRI	regional and local collaborative initiatives	No. of regional and local collaborative initiatives	15

### 3.2.0 Analysis of Resource Requirement versus allocation by:

#### 3.2.1 Sector Resource Requirement

The total resource requirement for the sector in the FY 2013/14 is **Kshs.103,690** million as indicated in the table below. This is over 100% increase from the allocated funds in 2012/13 of **Kshs 51,098 million**. The funds will be utilized on various programmes and sub-programmes in the Sector to ensure the GDP contribution of agriculture sector increases in 2013/14 financial year.

**Table 3:2.1 Sector Resource Requirements versus Allocation**

Expenditure Classification	Printed Estimates (Million Kshs)	Projected Estimates (Million Kshs)			
		2012/13	2013/14		2014/15
		Resource requirements	Resource allocation		
Recurrent Expenditure	24,471	41,085	26,300	29,013	29,556
Capital Expenditure	26,628	62,605	28,110	28,330	28,672
<b>TOTAL</b>	<b>51,099</b>	<b>103,690</b>	<b>54,410</b>	<b>57,344</b>	<b>58,229</b>

Expenditure Classification	Printed Estimates (Million Kshs)	Projected Estimates (Million Kshs)			
		2012/13	2013/14		2014/15
% Recurrent Expenditure	48	39	48	51	51
% Capital Expenditure	52	60	52	49	49

### 3.2.2 Sub-Sector Resource Requirement

The sub-sector resource requirements in 2013/14 for the Agriculture, Cooperatives, Fisheries, Lands, livestock, forestry and Research and Innovations institutes and National Land Commission under those Ministries are projected to increase by over 100% from the allocated funds in 2012/13. The increase will be utilized in various programs and projects in agricultural sector.

**Table: 3.2.2: Sub-Sector Recurrent and Development Estimates for 2012/13-2015/16**

Sub sector		Printed Estimates (Million KShs)	Projected Estimates (Million Kshs)			
			2012/13	2013/14	2013/14	2014/15
				Resource Requirement	Resource allocation	
Agriculture	Recurrent	6,968	7,588	7,552	8,330	8,486
	Development	11,494	36,510	11,867	11,962	12,106
	<b>Total</b>	<b>18,462</b>	<b>44,098</b>	<b>19,419</b>	<b>20,292</b>	<b>20,592</b>
	<b>% Recurrent</b>	38	17	39	41	41
	<b>% Development</b>	62	83	61	59	59
Cooperative and marketing	Recurrent	1,225	1,800	1,299	1,433	1,460
	Development	222	800	372	375	379
	<b>Total</b>	<b>1,447</b>	<b>2,600</b>	<b>1,671</b>	<b>1,808</b>	<b>1,839</b>
	<b>% Recurrent</b>					

Sub sector		Printed Estimates (Million KShs)	Projected Estimates (Million Kshs)				
			2012/13	2013/14	2013/14	2014/15	2015/16
				Resource Requirement	Resource allocation		
		85	69	78	79	79	
	% Development	15	31	22	21	21	
Fisheries	Recurrent	783	4,061	825	910	927	
	Development	2,200	6,581	2,350	2,368	2,397	
	<b>Total</b>	<b>2,983</b>	<b>10,642</b>	<b>3,175</b>	<b>3,278</b>	<b>3,324</b>	
	% Recurrent	26	38	26	28	28	
	% Development	74	62	74	72	72	
Lands	Recurrent	2,426	5,426	2,611	2,881	2,934	
	Development	2,418	3,350	1,728	1,741	1,762	
	<b>Total</b>	<b>4,844</b>	<b>8,776</b>	<b>4,339</b>	<b>4,622</b>	<b>4,697</b>	
	% Recurrent	50	62	60	62	62	
	% Development	50	38	40	38	38	
Livestock	Recurrent	4,265	8,657	4,573	5,045	5,139	
	Development	4,278	5,313	4,486	4,521	4,575	
	<b>Total</b>	<b>8,543</b>	<b>13,970</b>	<b>9,059</b>	<b>9,566</b>	<b>9,715</b>	
	% Recurrent	50	62	50	84	31	
	% Development	50	38	50	75	28	
Forestry and Wildlife	Recurrent	5,142	6,964	5,463	6,027	6,140	
	Development	4,374	5,454	4,584	4,619	4,675	
	<b>Total</b>	<b>9,516</b>	<b>12,418</b>	<b>10,047</b>	<b>10,646</b>	<b>10,815</b>	

Sub sector		Printed Estimates (Million KShs)	Projected Estimates (Million Kshs)				
			2012/13	2013/14	2013/14	2014/15	2015/16
				Resource Requirement	Resource allocation		
	% Recurrent	54	56	54	44	44	
	% Development	46	44	46	34	33	
<b>Research and Development Resource Requirements</b>							
Kenya Agricultural Research Institute (KARI)	Recurrent	2,047	2,646	2,107	2,325	2,368	
	Development	1,205	2,265	2,088	2,104	2,130	
	<b>Total</b>	<b>3,252</b>	<b>4,911</b>	<b>4,195</b>	<b>4,429</b>	<b>4,498</b>	
	% Recurrent	63	54	50	52	53	
	% Development	37	46	50	48	47	
Coffee Research Foundation (CRF)	Recurrent	46	551	47	52	53	
	Development	40	247	60	60	61	
	<b>Total</b>	<b>86</b>	<b>798</b>	<b>107</b>	<b>112</b>	<b>114</b>	
	% Recurrent	53	69	44	46	46	
	% Development	47	31	56	54	54	
Tea Research Foundation of Kenya (TRFK)	Recurrent	46	572	62	68	70	
	Development	-	533	70	71	71	
	<b>Total</b>	<b>46</b>	<b>1,105</b>	<b>132</b>	<b>139</b>	<b>141</b>	
	% Recurrent	100	52	47	49	49	
	% Development	-	48	53	51	51	
Kenya Marine and Fisheries Research	Recurrent	495	1,009	647	714	727	
	Development						

Sub sector		Printed Estimates (Million KShs)	Projected Estimates (Million Kshs)				
			2012/13	2013/14	2013/14	2014/15	2015/16
				Resource Requirement	Resource allocation		
Institute (KMFRI)		269	1,275	288	290	294	
	<b>Total</b>	<b>764</b>	<b>2,284</b>	<b>935</b>	<b>1,004</b>	<b>1,021</b>	
	% Recurrent	65	44	69	71	71	
	% Development	35	56	31	29	29	
Kenya Sugar Research Foundation (KESREF)	Recurrent	118	582	122	135	137	
	Development	40	140	100	101	102	
	<b>Total</b>	<b>158</b>	<b>722</b>	<b>222</b>	<b>235</b>	<b>239</b>	
	% Recurrent	75	81	55	57	57	
	% Development	25	19	45	43	43	
Kenya Forestry Research Institute (KEFRI)	Recurrent	910	1,229	992	1,094	1,115	
	Development	88	137	117	118	119	
	<b>Total</b>	<b>998</b>	<b>1,366</b>	<b>1,109</b>	<b>1,212</b>	<b>1,234</b>	
	% Recurrent	91	90	89	90	90	
	% Development	9	10	11	10	10	

### 3.2.3 Programmes and Sub-Programmes

Highlighted in the table below are the resources requirements for the sectors programmes.



**Table. 3.2.3 Programmes and Sub-Programme Resource Requirements versus Allocation**

Sub-Sector	Programme	Sub programme	Printed Estimates 2012/2013	Projections in (Million Kshs)			
				2013/14		2014/15	2015/16
				Resource requirements	Resource allocation		
Agriculture	Policy, strategy and Management of Agriculture	Development / Review of Agricultural Policy, Legal and Regulatory Frameworks	2,282	2,236	2,122	2,237	2,270
		Agricultural Planning and Financial Management	673	1,130	607	640	649
		<b>Sub total</b>	<b>2,955</b>	<b>3,366</b>	<b>2,729</b>	<b>2,876</b>	<b>2,920</b>
	Crop Development and Management	Land And Crops Development	6,801	16,437	8,493	8,952	9,086
		Food Security Initiatives	280	344	278	293	297
		Agriculture Extension Services	6,986	6,251	5,287	5,572	5,656
		Agricultural Research	-			-	-
		<b>Sub-Total</b>	<b>14,067</b>	<b>23,032</b>	<b>14,058</b>	<b>14,817</b>	<b>15,039</b>
		Agribusiness and Information Management	Agribusiness and Market Development	1,346	17,600	2,535	2,672
	Agricultural Information Management		94	100	97	102	104
	<b>Sub-Total</b>		<b>1,440</b>	<b>17,700</b>	<b>2,632</b>	<b>2,774</b>	<b>2,816</b>
	<b>Total</b>		<b>18,462</b>	<b>44,098</b>	<b>19,419</b>	<b>20,468</b>	<b>20,775</b>
	Cooperatives and marketing	Policy planning and administration for cooperatives	Administrative Support Services	320	360	322	339
Planning and Feasibility studies			20	30	21	22	22
Finance and				45			

Sub-Sector	Programme	Sub programme	Printed Estimates 2012/2013	Projections in (Million Kshs)				
				2013/14		2014/15	2015/16	
				Resource requirements	Resource allocation			
		Procurement	36		38	40	41	
		<b>Sub-Total</b>	<b>376</b>	<b>435</b>	<b>381</b>	<b>402</b>	<b>408</b>	
	Cooperative Development & Management	Co-operative Governance and Accountability	342	865	481	507	515	
		Cooperative Advisory and Extension services	652	1,050	700	738	749	
		Cooperative Education and Training	53	100	85	90	91	
		<b>Sub-Total</b>	<b>1,047</b>	<b>2,015</b>	<b>1,266</b>	<b>1,334</b>	<b>1,354</b>	
		Co-operative Marketing	Value addition and Market Access	24	100	24	25	26
			Co-operative Ventures	-	50	-	-	-
	<b>Sub-Total</b>		<b>24</b>	<b>150</b>	<b>24</b>	<b>25</b>	<b>26</b>	
		<b>Total</b>	<b>1,447</b>	<b>2,600</b>	<b>1,671</b>	<b>1,761</b>	<b>1,788</b>	
<b>Fisheries</b>	Fisheries Development	Aquaculture Development	1,629	5,800	1,779	1,875	1,903	
		Management and Development of capture fisheries	1,203	4,457	1,235	1,302	1,321	
		Assurance of fish safety, value addition and marketing	151	385	161	170	172	
		<b>Total</b>	<b>2,983</b>	<b>10,642</b>	<b>3,175</b>	<b>3,346</b>	<b>3,397</b>	
<b>Lands</b>	Land Policy and Planning	Development Planning and Land Reforms	1,800	3,083	1,176	1,240	1,258	

Sub-Sector	Programme	Sub programme	Printed Estimates 2012/2013	Projections in (Million Kshs)			
				2013/14		2014/15	2015/16
				Resource requirements	Resource allocation		
		Land Information Management	712	1,278	485	511	519
		Land Surveying, Mapping and Management of National Spatial Data	1,588	3,081	1,665	1,755	1,781
		Land Settlement programme	468	840	730	769	781
		Land Use Planning	276	494	283	298	303
		<b>Total</b>	<b>4,844</b>	<b>8,776</b>	<b>4,339</b>	<b>4,573</b>	<b>4,642</b>
<b>Livestock</b>	Livestock Resources Management and Development	Livestock disease management , Vector and Pest Control	2,840	6,622	3,966	4,180	4,243
		Livestock production and extension services	1,858	2,372	1,402	1,478	1,500
		Food safety animal Products development and laboratory services	1,240	1,367	1,367	1,441	1,462
		Livestock Marketing Value addition and early warning	647	1,556	956	1,008	1,023
		Livestock policy and capacity building	1,958	2,053	1,368	1,442	1,464
		<b>Total</b>	<b>8,543</b>	<b>13,970</b>	<b>9,059</b>	<b>9,548</b>	<b>9,691</b>

Sub-Sector	Programme	Sub programme	Printed Estimates 2012/2013	Projections in (Million Kshs)			
				2013/14		2014/15	2015/16
				Resource requirements	Resource allocation		
Forestry and Wildlife	Forestry and Wildlife Policy regulation and Coordination	Forestry and Wildlife Policy regulation & Coordination	701	836	747	787	799
		<b>Sub-Total</b>	<b>701</b>	<b>836</b>	<b>747</b>	<b>787</b>	<b>799</b>
	Forestry Development & Management	Institutional Strengthening and Provision of Skilled Manpower	4,533	5,213	4,039	4,257	4,321
		Natural Forest Conservation	513	348	348	367	372
		Industrial Plantation	673	150	150	158	160
		Dry land forest conservation management and research	1,341	1,116	701	739	750
		<b>Sub-Total</b>	<b>7,060</b>	<b>6,827</b>	<b>5,238</b>	<b>5,521</b>	<b>5,604</b>
		Wildlife Conservation & Management	Conservation & Protection of Wildlife	1,277	2,460	2,523	2,659
	National Parks & Reserves Infrastructure		432	2,250	1,493	1,574	1,597
	Youth Conservation Education		46	46	46	48	49
	<b>Sub-Total</b>		<b>1,755</b>	<b>4,756</b>	<b>4,062</b>	<b>4,281</b>	<b>4,346</b>
		<b>Total</b>	<b>9,516</b>	<b>12,419</b>	<b>10,047</b>	<b>10,590</b>	<b>10,748</b>

Sub-Sector	Programme	Sub programme	Printed Estimates 2012/2013	Projections in (Million Kshs)			
				2013/14		2014/15	2015/16
				Resource requirements	Resource allocation		
<b>Research and Development Resource Requirements versus Allocation</b>							
<b>Kenya Agricultural Research institute (KARI)</b>	Agricultural Research	Crops (Food And Horticultural Crops)	1,138	1,375	1,179	1,243	1,261
		Livestock Research Programme	586	980	836	881	894
		Natural Resources Management	522	809	690	727	738
		Biotechnology And Genetic Resources	294	511	436	460	466
		Socio-Economics And Applied Statistics	345	603	514	542	550
		Adaptive Research, Outreach And Partnerships	366	633	540	569	578
		<b>Total</b>	<b>3,251</b>	<b>4,911</b>	<b>4,195</b>	<b>4,422</b>	<b>4,488</b>
<b>Coffee Research Foundation</b>	Coffee Research	Coffee Breeding	10	146	20	21	21
		Coffee Nutrition and quality improvement	10	156	21	22	35
		Agronomic research on coffee	20	137	18	19	19
		Coffee research information dissemination	16	182	24	25	26
		Strengthening capacity of CRF	30	177	24	25	26
		<b>Total</b>					

Sub-Sector	Programme	Sub programme	Printed Estimates 2012/2013	Projections in (Million Kshs)			
				2013/14		2014/15	2015/16
				Resource requirements	Resource allocation		
			<b>86</b>	<b>798</b>	<b>107</b>	<b>113</b>	<b>127</b>
<b>Kenya Tea Research Foundation</b>	Tea Research	Crop Improvement and Management	-	178	16	17	17
		Sustainable Ecosystem management Conservation	16	176	15	16	16
		Tea Processing and Value addition	15	587	86	91	92
		Economics, Field Advisory and Corporate Communications	15	164	15	16	16
		<b>Total</b>	<b>46</b>	<b>1,105</b>	<b>132</b>	<b>139</b>	<b>141</b>
		<b>Kenya Marine and Fisheries Research Institute</b>	Marine and Fisheries Research	Aquaculture Research and Development	172	514	163
Fisheries research	136			437	338	356	362
Value addition and post-harvest technology research	110			448	142	150	152
Oceanography and Hydrography	89			387	126	133	135
Socio-economics research	57			217	69	73	74
Limnology	26			91	40	42	43
Management and Administration	174			190	57	60	61
<b>Total</b>	<b>764</b>			<b>2,284</b>	<b>935</b>	<b>985</b>	<b>1,000</b>

Sub-Sector	Programme	Sub programme	Printed Estimates 2012/2013	Projections in (Million Kshs)			
				2013/14		2014/15	2015/16
				Resource requirements	Resource allocation		
Kenya Sugar Research Foundation	Sugar Research	Crop Development and Research	40	352	100	105	107
		Agricultural Engineering, Milling and Processing research	59	72	60	63	64
		Technology Transfer, Economics and Biometrics	59	298	62	65	66
		<b>Total</b>	<b>158</b>	<b>722</b>	<b>222</b>	<b>234</b>	<b>237</b>
Kenya Forestry Research Institute	Forest Research	Farm Forestry	115	156	121	128	129
		Natural Forest	105	142	110	116	118
		Dry land Forestry	108	146	113	119	121
		Industrial Plantations	82	111	86	91	92
		Tree Seed	89	120	93	98	99
		Technology Dissemination and Service	163	222	197	206	220
		Partnership and Networks	34	45	35	37	37
		Corporate Affairs and Public Relations	38	50	39	41	42
		Management and Administration	169	225	199	210	213
		Strengthening Infrastructure	95	149	116	122	124
		<b>Total</b>	<b>998</b>	<b>1,366</b>	<b>1,109</b>	<b>1,167</b>	<b>1,196</b>

Sub-Sector	Programme	Sub programme	Printed Estimates 2012/2013	Projections in (Million Kshs)			
				2013/14		2014/15	2015/16
				Resource requirements	Resource allocation		
<b>Sector total</b>			<b>51,098</b>	<b>103,691</b>	<b>54,410</b>	<b>57,347</b>	<b>58,230</b>

### 3.2.4 Semi-Autonomous Government Agencies

The resource requirements for the Semi-Autonomous Government Agencies (SAGAs) in the Agriculture Rural Development budget are included in the Parent Ministry's resource requirements. The SAGAs are as follows;

#### **Ministry of Agriculture:**

Cotton Development Authority, Coconut Development Authority, Kenya Plant Health inspectorate Services, Pest Control Product Board, Tea Board of Kenya, Coffee Board of Kenya, Horticultural Crops Development Authority, Bukura Agricultural College and Coffee Development Fund

#### **Ministry of Cooperative Development and Marketing:**

Cooperative College of Kenya, SACCO Societies Regulatory Authority (SASRA)

#### **Ministry of Livestock Development:**

Kenya Dairy Board, Kenya Meat Commission, Kenya Veterinary Board, Kenya Animal Genetics Resource Centre, Kenya Leather Development Council, Kenya Veterinary Vaccine Production, PATTEC Council, Livestock Trade Authority.

#### **Ministry of Forestry and Wildlife:**

Kenya Forest Service, Kenya wildlife Service and Wildlife Clubs of Kenya.

The resource requirement for each SAGA is as shown in Table 3.2.4.



**Table 3.2.4.1 Resource requirement for SAGAS in Agriculture subsector**

**Recurrent Budget**

Name of the SAGA	Approved Estimates	Projected Estimates (Million Kshs)			
	2012/2013	2013/2014	2013/2014 Allocation	2014/2015	2015/2016
		Resource requirement	Resource Allocation		
Tea Board of Kenya	10	60	60	60	60
Coffee Board of Kenya	29	30	30	30	30
KEPHIS	430	448	448	448	448
Horticultural Crops Dev't Authority (HCDA)	307	320	320	320	320
Coconut Development Authority	197	80	80	80	80
Cotton Development Authority	173	180	180	180	180
Bukura Agricultural College	92	92	92	92	92
Pest Control Product Board (PCPB)	120	125	125	125	125
<b>Total</b>	<b>1,358</b>	<b>1,335</b>	<b>1,335</b>	<b>1,335</b>	<b>1,335</b>

**Table 3.2.4.2 Resource requirements for SAGAS in Cooperative Development and Marketing Subsector**

Name of the SAGA	Approved Estimates	Projected Estimates (Million Kshs)			
	2012/2013	2013/2014	2013/2014 Allocation	2014/2015	2015/2016
Cooperative College of Kenya	53	100	53	200	300
SACCO Societies Regulatory Authority (SASRA)	93	160	123	245	330
<b>Total</b>	<b>146</b>	<b>260</b>	<b>176</b>	<b>445</b>	<b>630</b>

**Table 3.2.4.5 Resource requirement for SAGAS in Livestock sub Sector**

Name of the SAGA	Estimates 2012/13 (Million Kshs)	Required 2013-14	Resource Allocation	Required 2014-15	Required 2015-16
Kenya Animal Genetics Resource Centre	61	70	50	100	150
Kenya Dairy Board	83	250	200	300	350
Kenya Meat Commission	106	300	100	360	400
Kenya Veterinary Board	30	35	30	40	80
Kenya Veterinary Vaccines Production Institute	68	100	60	150	200
Leather Development Council	42	60	45	100	150
Livestock Trade Authority	0	100	10	150	200

Name of the SAGA	Estimates 2012/13 (Million Kshs)	Required 2013-14	Resource Allocation	Required 2014-15	Required 2015-16
PATEC COUNCIL	720	850	720	900	1000
<b>Total</b>	<b>1,110</b>	<b>1,765</b>	<b>1,215</b>	<b>2,100</b>	<b>2,530</b>

### Development Budget

**Table 3.2.5.1 Resource requirement for SAGAS in Agriculture subsector**

Name of the SAGA	Approved Estimates	Projected Estimates (Million Kshs)			
		2012/2013	2013/2014	2013/2014	2014/2015
		Resource requirement	Allocation		
KSB	24	24	24	24	24
PBK	200	200	0	200	200
CDF	248	248	248	248	248
KEPHIS	32	32	32	32	32
<b>TOTAL</b>	<b>504</b>	<b>504</b>	<b>344</b>	<b>504</b>	<b>504</b>

**Table 3.2.5.2 Resource requirements for SAGAS in Forestry and Wildlife Subsector**

Sub Programmes	2012/13	2013/14		Projected Estimates	
		Requirement	Allocation	2014/15	2015/16
Kenya Forest Service	7,285	7,125	2,844	8,035	8,251
Kenya Wildlife Service	1,831	4,710	2,416	5,181	5,439
Wildlife Clubs of Kenya	46	46	46	40	45
<b>Total</b>	<b>9,162</b>	<b>11,881</b>	<b>5,276</b>	<b>13,256</b>	<b>13,735</b>

### 3.2.5 Economic Classification in the Agricultural Sector

Under the economic classification; compensation to employees is 21% of the projected resource requirement against 31% in 2012/13FY; use of goods and services is 16% compared to 2012/13 of 16.4% ; Acquisition of non-financial services is at 46% in 2013/14 FY compared to 33.5% in 2012/13.

**Table.3.2.5 Current and Capital Expenditure Economic Classification in Agricultural and Rural Development Sector**

Expenditure Classification	Printed Estimates	Projected Estimates			
	(Million KShs)	(Million KShs)			
	2012/13	2013/14		2014/15	2015/16
		Requirements	Budget Allocation		
<b>(1)Current expenditure</b>					
Compensation of Employees	16,774	21,432	16,921	17,561	18,245
Use of goods and services	5,739	14,063	5,439	6,407	6,379
Current transfers Govt. agencies	3,264	4,238	2,895	4,759	4,664
Other recurrent	603	1,336	342	893	912
<b>(2)Capital expenditure</b>	-				
Acquisition of non-financial assets	18,196	48,101	13,114	11,866	11,793
Capital transfers to Government agencies	3,310	5,849	3,694	3,729	3,723
Other developments	3,212	8,671	12,005	12,130	12,513
<b>Total</b>	<b>51,098</b>	<b>103,690</b>	<b>54,410</b>	<b>57,345</b>	<b>58,229</b>

#### 3.2.5.1 Economic classification by sub-sectors

Expenditure Classification	Printed Estimates	Projected Estimates			
	(Million KShs)	(Million KShs)			
	2012/13	2013/14		2014/15	2015/16
		Requirements	Budget Allocation		
<b>Agriculture</b>					
<b>(1)Current expenditure</b>					
Compensation of Employees		4,537			

Expenditure Classification	Printed Estimates	Projected Estimates			
	(Million KShs)	(Million KShs)			
	2012/13	2013/14		2014/15	2015/16
		Requirements	Budget Allocations		
	4,010		4,143	4,267	4,397
Use of goods and services					
	1,430	1,544	2,002	2,105	2,140
Current transfers Govt. agencies					
	1,528	1,506	1,408	1,421	1,437
Other recurrent			-	-	-
<b>(2)Capital expenditure</b>				-	-
Acquisition of non-financial assets					
	10,040	33,967	4,155	4,340	4,404
Capital transfers to Government agencies					
	1,454	2,544	344	359	364
Other developments					
			7,367	7,800	7,850
<b>Total</b>					
	<b>18,462</b>	<b>44,098</b>	<b>19,419</b>	<b>20,292</b>	<b>20,592</b>
	18,462	44,098	19,419	20,292	20,592
<b>Cooperatives and marketing</b>					
<b>(1)Current expenditure</b>					
Compensation to employees					
	611	760	631	650	670
Use of goods and services					
	486	830	802	836	860
Grants and transfers					
	136	150	136	173	145
Other recurrent					
	22	60	22	23	29
<b>(2)Capital expenditure</b>				-	
Acquisition of non-financial assets					
	-	570		20	22
Grants and transfers					
	80	100	80	86	92
Other developments					
	112	130	-	20	21
<b>Total</b>					
	<b>1,447</b>	<b>2,600</b>	<b>1,671</b>	<b>1,808</b>	<b>1,839</b>
<b>Fisheries</b>					

Expenditure Classification	Printed Estimates	Projected Estimates			
	(Million KShs)	(Million KShs)			
	2012/13	2013/14		2014/15	2015/16
		Requirements	Budget Allocation		
Compensation of Employees	614	814	631	648	667
Use of goods and services	244	3,227	269	312	327
Current transfers Govt. agencies	20	20	20	30	35
Other recurrent					
<b>(2)Capital expenditure</b>					
Acquisition of non-financial assets	2,105	6,581	<b>2,255</b>	2,289	2,295
Capital transfers to Government agencies					
Other developments					
<b>Total</b>	<b>2,983</b>	<b>10,642</b>	<b>3,175</b>	<b>3,279</b>	<b>3,324</b>
<b>Lands</b>					
<b>(1)Current expenditure</b>					
Compensation to employees	1,554	1,720	1,605	1,653	1,703
Use of goods and services	529	3,102	561	620	635
Current transfers Govt. agencies	240	-	297	310	320
Other recurrent	103	604	108	120	135
<b>(2)Capital expenditure</b>					
Acquisition of non-financial assets	1,234	1,710	1,131	1,255	1,220
Capital transfers to Government agencies	-	-	-	-	-
Other developments	1,184	1,640	637	664	684
<b>Total</b>	<b>4,844</b>	<b>8,776</b>	<b>4,339</b>	<b>4,622</b>	<b>4,697</b>
<b>Livestock</b>					
<b>(1)Current expenditure</b>					
Compensation to employees		4,457			

Expenditure Classification	Printed Estimates	Projected Estimates			
	(Million KShs)	(Million KShs)			
	2012/13	2013/14		2014/15	2015/16
		Requirements	Budget Allocations		
	3,391		3,735	3,847	3,962
Use of goods and services					
	2,225	3,485	698	800	880
Current transfers Govt. agencies					
	433	700	103	110	110
Other Recurrent expenditures					
<b>(2)Capital expenditure</b>					
Acquisition of non-financial assets					
	2,494	2,758	2,693	2,720	2,750
Capital transfers to Government agencies					
	-	920	1,190	1,190	1,190
Other developments					
	-	1,650	640	900	822
<b>Total</b>	<b>8,543</b>	<b>13,970</b>	<b>9,059</b>	<b>9,567</b>	<b>9,714</b>
<b>Forestry and Wildlife</b>					
<b>(1)Current expenditure</b>					
Compensation to employees					
	3,329	4,496	2,770	2,853	2,938
Use of goods and services					
	548	340	353	879	650
Current transfers Govt. agencies					
	900	1,854	923	2,706	2,607
Other recurrent					
	365	274	76	607	600
<b>(2)Capital expenditure</b>					
Acquisition of non-financial assets					
	2,205	1,067	2,572	915	824
Capital transfers to Government agencies					
	571	450	450	460	570
Other developments					
	1,598	3,937	2,903	2,226	2,626
<b>Total</b>	<b>9,516</b>	<b>12,418</b>	<b>10,047</b>	<b>10,646</b>	<b>10,815</b>
<b>Kenya Agricultural Research institute (KARI)</b>					
<b>(1)Current expenditure</b>					
Compensation to employees					
		2,346			

Expenditure Classification	Printed Estimates	Projected Estimates			
	(Million KShs)	(Million KShs)			
	2012/13	2013/14		2014/15	2015/16
		Requirements	Budget Allocation		
	2,046		2,107	2,280	2,510
Use of goods and services		300	300	315	331
Current transfers Govt. agencies	-	-	-	-	-
Other recurrent	-	-	-	-	-
<b>(2)Capital expenditure</b>					
Acquisition of non-financial assets	-	430	158	200	150
Capital transfers to Government agencies	1,205	1,835	1,630	1,634	1,507
Other developments	-	-	-		-
<b>Total</b>	<b>3,251</b>	<b>4,911</b>	<b>4,195</b>	<b>4,429</b>	<b>4,498</b>
<b>Coffee Research Foundation</b>					
<b>(1)Current expenditure</b>					
Compensation to employees	-	359	48	49	50
Use of goods and services	46	88	12	12	12
Current transfers Govt. agencies					
Other recurrent	-	104	14	14	14
<b>(2)Capital expenditure</b>					
Acquisition of non-financial assets	40	88	12	12	12
Capital transfers to Government agencies					
Other developments	-	159	21	25	26
<b>Total</b>	<b>86</b>	<b>798</b>	<b>107</b>	<b>112</b>	<b>114</b>
<b>Kenya Tea Research Foundation</b>					
<b>(1)Current expenditure</b>					
Compensation to employees		221			37



Expenditure Classification	Printed Estimates	Projected Estimates			
	(Million KShs)	(Million KShs)			
	2012/13	2013/14		2014/15	2015/16
		Requirements	Budget Allocations		
	30		30	35	
Use of goods and services	16	209	30	30	30
Current transfers Govt. agencies	-	-			
Other recurrent	-	142	2	4	4
<b>(2)Capital expenditure</b>	-				
Acquisition of non-financial assets	-	168		-	-
Capital transfers to Government agencies	-	-			
Other developments	-	365	70	70	70
<b>Total</b>	<b>46</b>	<b>1,105</b>	<b>132</b>	<b>139</b>	<b>141</b>
<b>Kenya Marine and Fisheries Research Institute</b>					
<b>(1)Current expenditure</b>					
Compensation to employees	391	629	522	559	570
Use of goods and services	104	380	125	130	135
Current transfers Govt. agencies					
Other recurrent					
<b>(2)Capital expenditure</b>					
Acquisition of non-financial assets	38	622	38	65	66
Capital transfers to Government agencies					
Other developments	231	653	250	250	251
<b>Total</b>	<b>764</b>	<b>2,284</b>	<b>935</b>	<b>1,004</b>	<b>1,022</b>
<b>Kenya Sugar Research Foundation</b>					
<b>(1)Current expenditure</b>					
Compensation to employees	118	173	-		
Use of goods and services	-	409			189

Expenditure Classification	Printed Estimates	Projected Estimates			
	(Million KShs)	(Million KShs)			
	2012/13	2013/14		2014/15	2015/16
		Requirements	Budget Allocation		
			122	185	
Current transfers Govt. agencies					
Other recurrent					
<b>(2)Capital expenditure</b>					
Acquisition of non-financial assets	40	140	100	50	50
Capital transfers to Government agencies					
Other developments					
<b>Total</b>	<b>158</b>	<b>722</b>	<b>222</b>	<b>235</b>	<b>239</b>
<b>Kenya Forestry Research Institute</b>					
<b>(1)Current expenditure</b>					
Compensation to employees	680	920	699	720	741
Use of goods and services	111	149	165	183	190
Current transfers Govt. agencies	7	8	8	9	10
Other recurrent	113	152	120	125	130
<b>(2)Capital expenditure</b>					
Acquisition of non-financial assets					
Capital transfers to Government agencies					
Other developments	87	137	117	175	163
<b>Total</b>	<b>998</b>	<b>1,366</b>	<b>1,109</b>	<b>1,212</b>	<b>1,234</b>
	51,098	103,690	54,410	57,345	58,229
<b>(1)Current expenditure</b>					
Compensation to employees	16,774	21,432	16,921	17,561	18,245
Use of goods and services	5,739	14,063	5,439	6,407	6,379
Current transfers Govt. agencies		4,238			

Expenditure Classification	Printed Estimates	Projected Estimates			
	(Million KShs)	(Million KShs)			
	2012/13	2013/14		2014/15	2015/16
		Requirements	Budget Allocation		
	3,264		2,895	4,759	4,664
Other recurrent	603	1,336	342	893	912
<b>(2)Capital expenditure</b>	-				
Acquisition of non-financial assets	18,196	48,101	13,114	11,866	11,793
Capital transfers to Government agencies	3,310	5,849	3,694	3,729	3,723
Other developments	3,212	8,671	12,005	12,130	12,513
<b>Total</b>	<b>51,098</b>	<b>103,690</b>	<b>54,410</b>	<b>57,345</b>	<b>58,229</b>

## CHAPTER FOUR

### 4.0 CROSS - SECTOR LINKAGES, EMERGING ISSUES AND CHALLENGES

#### 4.1 Cross - Sector Linkages:

The ARD sector has a direct linkage to all other sectors and is therefore crucial for their operations. The linkages/collaborations are stipulated as follows:

##### 4.1.1 Energy, Infrastructure and ICT

ARD sector has a strong linkage with the Energy, Infrastructure and ICT sector. This is inevitable if the ARD is to perform efficiently and effectively. For example, ARD needs efficient railways, roads, air transport to move inputs for ARD and outputs to the market. Energy is critical to the success of ARD and this includes renewable and non-renewable energy.

The Nairobi metropolis is linked to ARD as a main market for farm and forest products and main supplier of the sector inputs. Further ICT linkage to the sector is equally essential not only for market information for the ARD sector but also for the dissemination of research technologies.

##### 4.1.2 General Economic, Commercial and Labour Affairs:

ARD produce the bulk of the country's exports, raw materials for the manufacturing industries as well as food for the tourism industry. Scientific information from ARD on forest and woodland habitats will support ecotourism. The sector is a backbone of regional and East African development. Further the sector's success depends on applying sound industrial relations. There is therefore strong cross sector linkage in terms of market development, regional development, marketing and supply of labour.

##### 4.1.3 Health:

Human health is important as it affects labour force in the ARD sector activities. A healthy nation is critical to productivity. Pandemics such as malaria and HIV/AIDS pose a big threat to the supply of labour to ARD sector. Conversely, the ARD sector provides food essential for a healthy nation.

#### **4.1.4 Education:**

The education sector works closely with ARD in terms of capacity building, technology development and dissemination. The Education Sector is the source of human Capital for the ARD Sector. A functional literate population is an asset to the ARD sector since it reduces the cost of operations and provides skilled labour force. Conversely the ARD sector provides food, livestock, fishery, tree products etc. to the Education sector.

#### **4.1.5 Governance Justice Law and Order (GJLOS)**

The ARD sector relies on the GJLOS sector for legal instruments and corporate governance. These are crucial towards ensuring administration of justice, resolution of disputes, maintenance of law and order which are essential for the performance of the sector.

#### **4.1.6 Public Administration and International Relations (PAIR)**

The Sector collaborates with PAIR for policy direction and fulfilment of national and international goals by providing an enabling environment. Funding to ARD and other sectors come from PAIR, and the overall national development planning and public expenditure management is undertaken by PAIR. Further the sector is crucial as it provides macroeconomic policy which is essential for the performance of the sector.

#### **4.1.7 National Security**

Security important in ARD investments, it ensures the freedom of stakeholders. The national security promotes public security and minimizes conflicts in the sector resulting in increased productivity.

#### **4.1.8 Social Protection, Culture and Recreation**

The ARD sector needs the support of the sector for Social Protection, Culture and Recreation in development of Arid and Semi-Arid areas in terms of agricultural and pastoralists activities. ARD collaborates with the other sectors in settlement of internally displaced persons. The sectors efficient and effective development would rely on special interventions in unforeseen circumstances such as drought, floods. Accurate information on gender imbalance, vulnerable groups, youth talents and viable areas of investment will be critical for proper planning of ARD Sector.

#### **4.1.9 Environmental Protection, Water and Housing**

The ARD works with the sector for purposes of environmental sustainability. Sustainable environmental management is essential for maintenance of agricultural productivity. Vegetation cover helps in reducing soil erosion and increase water availability. Harnessing the country's irrigation potential, coupled with efficient utilization of available water resources for agriculture through appropriate water harvesting technologies improves food security. Good shelter is vital not only for the success of the sector but also ensuring adherence to the constitutional rights.

#### **4.1.10 Public- Private Partnerships (PPP)**

The ARD Sector links with the Private Sector in programme implementation. Some key Sector programmes are funded through Public Private Partnership (PPP) initiatives. Not only do PPP provide markets, but also technology and information dissemination. The sector provides an enabling environment and infrastructure.

### **4.2 EMERGING ISSUES AND CHALLENGES**

#### **4.2.1 Emerging Issues**

Some of the emerging issues affecting the Agriculture and Rural Development (ARD) sector include;

- **Climate Change**

Climate change includes global warming, rise of sea level and an increase in the frequency of extreme and unpredictable weather changes. This can cause serious challenges to sustainable ARD sector activities. In Kenya, climate change is expected to severely compromise ARD sector activities and performance.

- **Carbon Trade:**

There are benefits to be gained from engaging in Carbon Trade. However, the trade is not well understood by Kenyans and certification is expensive.

- **Use of Information Communication Technology (ICT)**

ICT presents the sector with opportunities for development and expansion. The challenge is how to optimally harness ICT in ARD sector.

#### **4.2.2 Challenges**

##### **i) High poverty levels and drought**

High poverty level in the ARD sector is a challenge to adoption of appropriate technology, investment and sustainable production. The country has been experiencing severe droughts and extreme weather events resulting in loss of livestock, crops and livelihoods. This results in substantial reallocation of resources towards drought mitigation thus affecting service delivery in ARD sector.

##### **ii) Agricultural land sub-division and increased urbanization:**

Rapid population increase, urbanization and inheritance practices have continually reduced land holding to uneconomical sizes for agricultural production. Although rapid urbanization increases the markets for agricultural products, it has resulted in conversion of arable land into housing estates.

##### **iii) Inadequate market and infrastructure:**

Marketing of ARD produce continues to be adversely affected by inadequate market information, market infrastructure, and supportive infrastructure such as roads, cold storage structures and energy. The dependence on a few external market outlets makes agricultural exports vulnerable to changes in the demand and unexpected non-trade barriers by foreign markets.

##### **iv) Limited Value addition and product diversification**

ARD products are mostly sold in raw form instead of value-added form fetching low prices. The challenge is how to enhance value addition.

##### **v) Inadequate Legal and policy framework:**

Currently, there are numerous pieces of legislation in the sector, which have not been reviewed and some are redundant. This coupled with a lengthy process of review have resulted in laws and policies that lag behind the current ARD development.

##### **vi) Limited use of appropriate technology:**

Use of technology and innovation in agriculture is limited. Although the country has a well-developed agricultural and tree research infrastructure there is weak research-extension-farmer linkages. Technology adoption is limited and therefore productivity is low and inefficient.

##### **vii) Inadequate Capacity to manage pests and diseases:**

The country's limited capacity to manage pests and diseases contributes to pre and post-harvest losses and hamper trade. New and re-emerging pests and diseases compound the problem.

**viii) Limited financial services and credit:**

The current high interest rates make it difficult for most ARD stakeholders to access financial services. Further, the formal financial system is yet to develop financial products and services that are particularly suitable to sector activities.

**ix) Challenges of Constitution implementation**

2013/14 will be first year for full implementation of the devolved structures of the Constitution. Challenges that need to be addressed include, ensuring adequate capacity to manage the devolved structures, infrastructure needs for all levels, financial resource requirements, lack of clear guidelines on the role of the various political structures, links between the MTEF sectors and funding of the devolved structures among others. This will limit resources coming to the sector. Further challenge faced by the sector will be putting up and rationalizing the necessary structures at the national and county level. In addition, the pace of undertaking reforms in the legal, policy and regulatory frameworks across the sector is slow.

**x) Inadequate Government funding to the sector**

The current level of government funding to the sector is generally low and this hampers the performance of ARD sector.

**xi) High incidence of HIV/AIDS, malaria and other diseases:**

There is a high incidence of HIV/AIDs and other diseases in the country. These diseases have resulted in the loss of productive ARD personnel hence reducing productivity of the sector. Further, diversion of investible resources to the treatment and care of those infected reduces funding to the sector.

**xii) Conversion of middle level institutions to universities**

In the recent past, the country has witnessed the conversion of middle level ARD institutions to universities. This has lead to a reduction in the number of middle-level technicians with adverse effects on ARD in general.

**xiii) Inadequate monitoring and evaluation:**

The monitoring and evaluation functions are not well linked to the budgetary process. Currently, the production of the annual and medium term progress reports is not clearly synchronized to the



budget cycle. This has made it difficult to track implementation and performance. There is also poor documentation and uncoordinated information management and utilization.

**xiv) Low Youth participation**

There is low youth participation in the sector, leaving the elderly population to be the predominant participants thus affecting overall productivity.

**xv) High cost of production**

Most of the inputs used by the sector are imported. These imports are expensive and face price fluctuations due to frequent changes in foreign exchange rates. This therefore makes the cost of production expensive and has a bearing on earnings for producers in the sector.

**xvi) Wildlife-Human Conflict**

There is an increase in human-wildlife conflict as some of the areas that wildlife habitats are now human settlements, e.g. wildlife corridors. This has caused a conflict between the animals and the people leading to both animal and human deaths in some cases. In addition, losses have also been incurred through crop destruction and domestic animals injury or death.

## CHAPTER FIVE

### 5.0 CONCLUSIONS

Agricultural and Rural Development Sector is the driving force of the Kenyan economy with a direct annual GDP contribution of about 26 percent and indirectly 27 percent. Majority of the population drive their livelihoods from agricultural related activities. The sector also plays a pivotal role in the success of other sectors in the economy.

The sector is anchored on a solid policy and institutional framework through the Agriculture Sector Development Strategy (ASDS, 2010-2020) and Vision 2030 which focuses on improving agricultural productivity, land use, markets and value addition of agricultural products. It also aims at targeting poverty reduction and employment creation. The on-going land reforms are vital to the success of this sector as land is the primary factor of production upon which all other activities are based.

To achieve these broad sector goals, a conducive environment and a multi-sectoral approach in addition to collaboration between the government, private sector and development partners is required. Furthermore, investment in generation and promotion of relevant technologies through research will drive the sector towards its main objective of a competitive, profitable and sustainable ARD sector that will ensure food and income security.

During the period under review, the sectors' performance improved significantly contributing 24.5% of the GDP valued at Ksh.741 billion. This contribution accounts for 65% of the countries total exports. The sector was thus a major contributor to the success of the country's poverty reduction efforts. However, resource allocation remained inadequate despite modest increment in funding. The total expenditure for the sector declined marginally during the period under review by 0.67% from Ksh. 55.95 billion in 2010/11 to Ksh 55.58 billion in 2011/12. Although the Recurrent expenditures increased by 4.48 %, the Development expenditures declined by 4.99. The absorption rate averaged around 69.5% which is relatively low. This was attributed to a number of factors such as reduction of Ministries budgetary allocation due to natural calamities

such as drought and insecurity in the neighboring Countries, delays in disbursements of funds and lengthy procurement procedures among others.

Thirteen priority programmes have been identified for implementation in the sector during the period 2013/14 – 2015/16 both at the National and County level. These programmes are expected to help achieve the sector’s goal of “an innovative, commercially oriented and modern agricultural sector, in line with promoting safety of the state of environment for economic growth.”The current sector allocation for the FY 2012/13 is Ksh55 billion. In the FY 2013/14,the sector requires Ksh103.7 billion that will be utilized both at the National and County level for the implementation of its programmes.

The main emerging issues and challenges affecting the sector are Climate Change, Constitutional dispensation, inadequate funding, emerging diseases for both plants and animals, insecurity situation in the country and within the region, ecosystem approach to fisheries management, wildlife human conflict in addition to cross cutting issues such as HIV/AIDS, drugs and substance abuse, gender and disability mainstreaming. In addition, there is also lack of institutional capacity among cooperatives and other farmer groups of pay their debts and are agitating to be bailed out by the government.

To address emerging issues and challenges mentioned above, the sector has made several recommendations that are aimed at enabling it achieve its full potential. Some of the major recommendations are to develop the necessary infrastructure and a harmonized sector M&E system both at the national and county government levels for efficient service delivery. Further, provision of adequate funding and timely release will enable full implementation of the planned sector programs.

## CHAPTER 6

### 6.0 RECOMMENDATIONS

The ARD sector is one of the major sectors that contribute significantly to the economic development of the country. The sector contributes to the country's food and nutrition security, income generation and poverty reduction, conservation of natural resources, marketing and value addition, generation of agricultural technologies and innovation.

In order for the sector to achieve planned outputs and outcomes more effectively during the 2013/14-2015/16 MTEF period, the sector makes the following recommendations and indicates the agencies responsible for their implementation:-

**Table 6.1 Proposed implementation framework for the recommendations**

S/No.	Recommendation	Actor(s)
<b>KENYA VISION 2030 &amp; MEDIUM TERM PLAN (MTP)</b>		
1.	Ensure adequate funding for Vision 2030 flagship projects is provided within the allocation of the sector ceiling.	MOF/Sector MDAs
<b>REFORMS</b>		
2.	Treasury to consider the proposals by MDAs when allocating financial resources rather than basing it on historical figures.	MOF
3.	Review procurement procedures to facilitate timely implementation of planned activities.	MOF
4.	Fast track implementation of the National Land policy and Constitution.	National Land Commission
5.	Fast track legal reforms in the sector in line with the letter and spirit of the Constitution.	Sector Ministries
6.	Develop/rehabilitate necessary infrastructure at National and County levels for improved service delivery.	Sector Ministries and SAGAs
<b>RESEARCH &amp; INNOVATION</b>		
7.	Increase funding for research activities	MOF

<b>S/No.</b>	<b>Recommendation</b>	<b>Actor(s)</b>
<b>CAPACITY BUILDING</b>		
8.	Strengthen the role of ASCU in the sector and establish a Sector M & E Committee with adequate funding for its activities.	MOF/Sector Ministries/SAGAs
9.	Undertake staff recruitment and rationalization to seal staffing gaps.	Sector Ministries/SAGAs
<b>COLLABORATION &amp; PUBLIC PRIVATE PARTNERSHIP (PPP)</b>		
10.	Foster closer collaboration between sub-sectors and other stakeholders to ensure availability of subsidized agricultural inputs.	Sector Ministries/SAGAs
11.	Mobilize all stakeholders to implement disease-free-zone and promote value addition of livestock products.	Sector Ministries/SAGAs
12.	Establish a sector committee for commercialization of technologies and products/services developed by the sector.	Sector Ministries/SAGAs/MOF
13.	Enhance value addition and marketing of sector products and services	Sector Ministries/SAGAs
14.	Harness the potential in Exclusive Economic Zones (EEZ)	Sector Ministries/SAGAs/Stakeholders
<b>CLIMATE CHANGE &amp; ADAPTATION</b>		
15.	Embrace aspects of climate change mitigation and adaptation in projects/programmes under the ARD sector and link this to Kenya Climate Change Response Strategy Action Plan	Sector Ministries/SAGAs