## JOMO KENYATTA UNIVERSITY OF AGRICULTURE AND TECHNOLOGY

## STRATEGIC PLAN 2009-2012

ISO 9001:2008 Certified

Setting Trends in Higher Education, Research and Innovation

**JUNE 2009** 

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## **FOREWORD**

As a public university, Jomo Kenyatta University of Agriculture and Technology (JKUAT) recognises her pivotal role in helping Kenya achieve her development goals through education, research and innovation. In this respect, JKUAT is keen on providing knowledge, technology and skills required to steer the country towards achieving the economic, social and political goals enshrined in national development instruments. The University also appreciates the global dynamism and is therefore, continually realigning her programmes to suit regional and international standards.

Before this review, the University was guided by a ten-year (2004-2014) Strategic Plan. The principal reference policy at formulation of this Plan was the Economic Recovery Strategy (ERS) for employment and wealth creation that ended in 2007. Subsequently, the Kenyan Government formulated a new national development strategy dubbed the Kenya Vision 2030. Based on this strategy, the Government aims to achieve inter alia the following by the Year 2030: macroeconomic stability; enhanced equity and wealth creation opportunities for the poor; infrastructure development; energy security; science, technology and innovation (STI) and human resource development. The implementation of Vision 2030 is based on five-year planning horizons known as medium-term rolling plans, the first phase of which covers the period 2008 - 2012.

In order to respond to the prevailing national development agenda, JKUAT had to review her strategic plan (2004 – 2014) to align it to the medium-term rolling plan of the Vision 2030 and other relevant national development policies. The review targeted reformulation of the University vision, mission, core values and functions and while also introducing statement of principles, value proposition, and motto. Formative analysis was conducted as a basis for setting the strategic direction for the revised strategic plan. The University appointed a Strategic Plan Review Committee, which engaged various stakeholders in the review process in order to ensure ownership and implementation of the revised strategy. The review process adopted a bottom-up approach in collating views from staff and other stakeholders to come up with a draft strategic plan. The draft was then subjected to rigorous review by the Deans' Committee, Senate and University Council, the result of which is this Strategic Plan.

This Strategic Plan is a revamped tool for achieving University objectives, functions and mandate. This journey will require sacrifice, hard work, self-discipline and determination. I am confident that the entire JKUAT community will live up to these ideals in order to make the University globally competitive.

Let us all individually and collectively commit ourselves to the realization of our vision and continue working together in order to build our University.

MR. ADAN A. MOHAMMED

Chairman of Council

## **ACKNOWLEDGEMENT**

Increasing demands and challenges at all levels has brought to fore the need for institutions of higher learning to continually review their strategies and approaches. The review of the strategic plan was part of a broader range of initiatives to modernize the University planning system and impart relevance to current national development goals. The major focus was to align it to the medium-term rolling plans of Vision 2030.

The new Strategic Plan was meant to refocus the University's activities and operations towards development of technologies and relevant human capital to meet dynamic national and international needs. This effort lays a strong foundation for building the country's capital for research and innovation.

The new JKUAT 2009-2012 Strategic Plan aims at enhancing quality, competitiveness, creativity and innovation in higher education. The plan is a roadmap that provides for changes and transformation emphasizing human resource development as key in the growth of the University and the nation at large.

My sincere appreciation goes to all parties who in one way or another played a role in the review of this strategic plan; namely the private sector, institutions of higher learning, corporate partners, staff, students, and other stakeholders.

I wish to specially thank the Strategic Plan Review Committee, Deans' Committee, the Senate, the Council and the Chancellor for their involvement and participation in the review process. Appreciation also goes to Corplan Consultants for facilitating the review process.

PROF. MABEL IMBUGA

Vice Chancellor

## **Vision**

A University of global excellence in Training, Research and Innovation for development.

## **Mission**

To offer accessible quality training, research and innovation in order to produce leaders in the fields of Agriculture, Engineering, Technology, Enterprise Development, Built Environment, Health Sciences and other Applied Sciences to suit the needs of a dynamic world.

## **EXECUTIVE SUMMARY**

As a public institution of higher learning, Jomo Kenyatta University of Agriculture and Technology has a pivotal role to play in the achievement of national development goals. The review of the JKUAT 2004 – 2014 Strategic Plan arose from the need to integrate and incorporate current national development priorities and agenda as articulated in the Kenya Vision 2030 into the University's operational strategy. Alignment and coordination of sector-specific operational focus to Kenya Vision 2030 will create synergies to drive the achievement of national development aspirations.

The Strategic Plan is premised on formative analysis, informed action, and evaluation of results. These are clearly set out in the strategic issues, goals, strategic objectives, implementation strategies and activities that JKUAT intends to pursue in the next three years.

The strategic direction of Jomo Kenyatta University of Agriculture and Technology is presented in three key statements namely;

The Vision - A University of global excellence in Training, Research and Innovation for development;

The Mission -To offer accessible quality university education, training, research and innovation in order to produce leaders in the fields of Agriculture, Engineering, Technology, Enterprise Development, Built Environment, Health Sciences and other Applied Sciences to suit the needs of a dynamic world

The motto -Setting Trends in Higher Education, Research and Innovation.

The three strategic statements give the University a new focus towards the achievement of its mandate as spelt out in the JKUAT Act, 1994.

The key strategic issues around which the strategic plan was reviewed are academic programmes; student enrolment; number of graduates; staff establishment; infrastructure development; research and innovations; linkages and partnerships; community extension and technology transfer; institutional management and resource requirements.

This plan is presented in five chapters. Chapter 1 gives an overview of JKUAT as an institution, justification of the strategic plan, the strategic planning process and organization of the strategic plan. Chapter 2 presents a review detailing the fundamental statements of the vision, mission, mandate, core functions, and core values, statement of principles, value proposition, policy priorities, current organizational structure, current funding and achievements of the university. Chapter 3 presents the formative analysis covering SWOT, stakeholders, P-PESTEL and situation analyses. Chapter 4 details the strategic issues, strategic goals and objectives as well as strategies and activities that will be pursued during the plan period. The Strategic Plan concludes with Chapter 5 that presents the implementation, monitoring, review and evaluation processes of the Plan.

## CHAPTER ONE ORGANIZATION IN PERSPECTIVE

#### 1.0. Introduction

Jomo Kenyatta University of Agriculture and Technology (JKUAT) is a public institution. Under the Presidential Circular No.1/2008 of May 2008 on organization of Government of the Republic of Kenya, JKUAT among other universities is placed under the Ministry of Higher Education. Science and Technology. Founded in 1981 as a middle level college, the institution was initially named Jomo Kenyatta College of Agriculture and Technology. As a middle level college, the institution ran certificate and diploma courses in agriculture and engineering. It became a constituent college of Kenyatta University and admitted its first group of students to the undergraduate degree programmes in 1989. Later, JKUAT was granted a charter in 1994 and thereby attained full-fledged university status. Until 2001, JKUAT operated under a technical cooperation agreement between the governments of Kenya and Japan. Under the agreement, the Japanese Government made provisions for educational facilities, technical support and human resource development. Prior to 2004, JKUAT had a vision statement that read: 'To Strive to Emerge as a Regional Centre of Excellence in the Fields of Agriculture, Engineering, Technology, Applied Sciences and Enterprise Development. The Mission statement was "To enhance Human Resource Development through Distinctive Training and Research". Subsequently, the University formulated the first ten-year Strategic Plan (2004-2014) with the vision of "To be a World Class Institution of Excellence for Development" and mission statement "To produce Leaders in Training, Research and Innovation in the Fields of Agriculture, Engineering, Technology, Health Sciences, other Applied Sciences and Enterprise Development to suit the Needs of a Dynamic World". JKUAT's competitive advantage lies in her ability to maximise on human capital in the provision of quality university education, research and innovation, which makes her a strategic institution for economic development.

## 1.1. Justification for Review of the JKUAT Strategic Plan

As a state corporation under the Ministry of Higher Education, Science and Technology (MOHEST), JKUAT had to re-focus her strategic direction to be in line with Government policies set out in the Guidelines on Strategic Planning issued by the Ministry for Planning and National Development; Guidelines on MTEF by the Ministry of Finance; Guidelines on Monitoring and Evaluation by National Integrated Monitoring and Evaluation System for Kenya 2007-2012; Guidelines on Performance Contracting by the Public Sector Reform and Performance Contracting Secretariat; Medium-Term Plans of the Kenya Vision 2030; Sessional Paper No. 1 of 2005; EAC Treaty on Education and the Sector Policy and Strategy; IUCEA Development Plan 2006 and Commission for Higher Education guidelines among others. All these take into account the dynamic circumstances in the demand for higher education. In revising the strategic plan, reference was made to all these key policy documents to inform the University's revised vision, mission, core functions, core values, principles, strategic issues, strategic objectives, organizational structure and resource requirements. The emphasis in the strategic planning process has been placed on complements of facts and capacities as a strong basis for implementation. In spite of global economic uncertainties that lie ahead of our country, this Strategic Plan will assist JKUAT to overcome its weaknesses and threats as well as maximize on its strengths and opportunities for the benefit of the country and the region at large.

### 1.2. The Strategic Plan Review Process

Preliminary briefing sessions held with the heads of departments/faculties/schools/directorates/centres, principals of campuses, Deputy Vice Chancellors and the Vice Chancellor provided the first opportunity for a rapid situation analysis to underscore the outstanding issues

and determine the expected outcomes of the strategic plan review process. A review and analysis of a series of key reference materials followed. This was done with a view to integrating the provisions therein that related to the JKUAT mandate and to incorporate the essential planning inputs not taken into consideration during the formulation of the JKUAT Strategic Plan 2004-2014. Additional information was gathered through consultations with key internal and external stakeholders including but not limited to Government Ministries, Parastatals, private companies, University students and staff. Both primary and secondary data were collected, analyzed and evaluated for relevance to this strategic plan review.

#### **1.2.1. Process**

To guide the review process, a Strategic Plan Review Committee (SPRC) consisting of competent and acknowledged practitioners from each of the three administrative divisions of the University and the Directorate of Performance Contracting and Appraisal (DiPCA) was constituted. The Committee together with relevant partners facilitated the review process. Regular consultations were carried out by the SPRC and progress reports communicated. Briefings were made to guide the generation of inputs as well as imparting the principles and concepts for effective planning. A four-day internal stakeholders retreat was held in June 2009 to discuss the formulation of the zero draft. The process of stakeholder validation of the draft included sessions with the governance organs of JKUAT namely the Deans Committee, Senate, University Management Board and Council. The views and suggestions arising thereof were considered and incorporated into the final reviewed strategic plan.

#### 1.2.2. Information Gathering

Through consultations, benchmarking, information review, one on one discussion and workshops, the Committee collected pertinent information and analyzed it to provide an adequately informed basis for developing the components of the reviewed strategic plan.

## 1.3 Organisation of the Strategic Plan

The reviewed JKUAT Strategic Plan 2009-2012 is organised and presented in five chapters. Chapter 1 covers the introduction, which gives an overview of JKUAT, a justification of the strategic plan review and the review process. Chapter 2 covers institutional review, while Chapter 3 discusses formative analysis. Chapter 4 incorporates the strategic direction detailing the strategic issues, objectives, strategies and activities. Chapter 5 concludes with the implementation, monitoring and evaluation processes. The implementation Matrix is presented as Appendix I.

## CHAPTER TWO INSTITUTIONAL REVIEW

The functions and objectives of JKUAT are stipulated in the JKUAT Act, 1994. National, regional, continental and international governance instruments including Government circulars issued from time to time define other areas of the institution's responsibility. Feedback from stakeholders generates further areas of improvement and responsibility. JKUAT formulated her first Strategic Plan (2004-2014), which guided her operations in 2004-2008. An evaluation of its four-year implementation period shows that the plan was not consistent with the principle of sublimity, thereby making the plan ineffective in its intended contribution based on the stated vision and the new national development strategy, Kenya Vision 2030.

#### 2.1. Fundamental Statements

#### 2.1.1. Vision Statement

The vision of Jomo Kenyatta University of Agriculture and Technology's is: "A University of global excellence in Training, Research and Innovation for development"

#### 2.1.2. Mission Statement

The mission of Jomo Kenyatta University of Agriculture and Technology's is:
"To offer accessible quality training, research and innovation in order to produce leaders in the fields of Agriculture, Engineering, Technology, Enterprise Development, Built Environment, Health Sciences and other Applied Sciences to suit the needs of a dynamic world"

#### 2.1.3. Mandate and Core Functions

As provided for in the Jomo Kenyatta University of Agriculture and Technology Act, 1994, the University is mandated as follows:

- (a) To provide directly or indirectly or in collaboration with other institutions of higher learning, facilities for University education (including agriculture, scientific, cultural, technological, and professional education), and integration of teaching, research and effective application of knowledge and skills to the life, work and welfare of the citizens of Kenya;
- (b) To participate in the discovery, transmission and preservation and enhancement of knowledge and to stimulate the intellectual participation of students in the economic, technological, agricultural, professional and cultural development of Kenya;
- (c) To play an effective role in the development of agriculture and technology in conjunction with the industry and to provide extension services so as to contribute to the social and economic development of Kenya;
- (d) Subject to the Universities Act (Cap 210), to cooperate with the Government in the planned development of University education and, in particular, to examine and approve proposals for new faculties, new departments, new degree courses or new subjects of study proposed to it by any constituent college or other post-secondary institution; to determine who may teach, what may be taught, how it may be taught and when it may be taught at the University.

Arising from the mandate, JKUAT has formulated the following core functions:

- 1. Provide quality university education and training
- 2. Stimulate intellectual participation of students and staff

- 3. Provide foundation for professional development
- 4. Carry out research and innovation activities
- 5. Participate in discovery, preservation and application of knowledge
- 6. Engage in productive linkages and partnerships
- 7. Engage in needs-based community service and technology transfer for development

#### 2.1.4. Core Values

JKUAT's core values constitute the fundamental beliefs that drive the University. These beliefs must be upheld because they define expected standards of behavior and culture. The values will guide the University the to achieve the transformation of human conduct in governance and management practices. In this regard, JKUAT remains committed to the following core values: **Quality** Ensure adoption and adherence to systems and processes that guarantee provision of products and services that meet and exceed customers' expectation.

**Teamwork** Inculcate and practice a participatory approach in the conduct of all activities and operations of the University

**Professionalism** Ensure and maintain high standards in the discharge of responsibilities and delivery of services

**Innovation** Adapt and utilize latest and appropriate technology, and practice in achieving efficiency and effectiveness in service delivery

**Dynamism** Demonstrate initiative and responsiveness to changing trends in service provision.

**Transparency** Uphold openness in all activities and provision of services.

**Accountability** Demonstrate and take responsibility in all decisions and actions.

**Integrity** Uphold honesty and strong moral principles in all decisions and actions.

## 2.1.5. Statement of Principles

JKUAT's achievement of the objectives articulated in her Strategic Plan 2009 - 2012 shall be governed by the principles of:

**Shared responsibility** This provides for complementarity in effective delivery of University programmes and projects

**Delegated authority** This provides for devolution of responsibility for ease of execution **Subsidiarity** This provides for multi-level participation and the involvement of stakeholders in realisation of the University's aspirations.

**Equity** Provide for conscious balance in distribution of resources and benefits accruing from the University's programmes and projects.

**Responsiveness** This demands for sensitivity and informed engagement to address the needs and aspirations of stakeholders.

**Asymmetry** This recognises the need to address differentials and imbalances in the University programmes and projects.

**Sublimity** This will enable harmonisation of University programmes and activities with national policies, strategies, standards and with other universities at national, regional and international levels.

#### 2.1.6. Value Proposition

JKUAT's value proposition is: "A dynamic university with a strong focus on excellence through generation and delivery of applicable knowledge for socio-economic development"

#### 2.1.7. Motto

JKUAT's motto is: "Setting trends in higher education, research and innovation"

## 2.2. Organisational Philosophy

JKUAT values the need for visionary leadership, innovation and teamwork. JKUAT shall endeavour to attract, develop, motivate and retain a multi-skilled workforce while nurturing a consultative working environment. JKUAT shall adopt ethical standards and best practices and utilise up-to-date and most appropriate technology. The University shall strive to contribute to the communities and environment among which she operates to realize both her vision and mission.

## 2.3. The Current Organisational Structure and Staffing Levels

As provided for under Clause 11 (1 and 2) of the JKUAT Act, 1994, Jomo Kenyatta University of Agriculture and Technology is headed by a Chancellor. A University Council comprising distinguished leaders and professionals govern the University. The Vice Chancellor is the Chief Executive Officer of the University, and is assisted by the Deputy Vice Chancellor, (Academic Affairs), the Deputy Vice Chancellor (Research, Production and Extension) and the Deputy Vice Chancellor (Administration Planning and Development).

The organizational structure facilitates maximization of resources with training and research as core functions. It enhances unity of purpose, speed in decision-making and results oriented performance. The structure of the University is as shown in Appendix II.

## 2.4. Funding

Over the analysis period (2006 – 2009), the Government capitation for JKUAT has remained at Ksh. 881,070,048 as shown in Table 1. Significant variations are observed between this figure and the budget submission of Ksh. 3,592,321,063, Ksh. 5,709,352,329 and Ksh. 4,463,798,056 for the three years consecutively. In the financial year, 2009/10, the capitation was Ksh.1, 165,000,000 reflecting an increase of 32.2%. However, this too did not match the submission of Ksh.5,720,000,000. As such, the University has continued to receive low capitation despite the key role it plays in economic development of this country.

Apart from government funding, the University generates revenue from alternative sources such as fees from students and other income generating activities. This has substantially increased through the analysis period. In 2006/07, the University raised Ksh. 980,046,960 and in 2007/08 Ksh. 1,160,528,072, which was an increase of 18.4%. In 2008/09, Ksh. 1,708,958,032 was raised thereby reflecting an increase of 47.3%. Based on the above trend, the University targets to raise Ksh.1, 935,000,000 in the Financial Year 2009/10.

Table 1: University's Funding and Expenditure for the Period 2006/07-2008/09

## CHAPTER THREE FORMATIVE ANALYSIS

### 3.0. Introduction

Jomo Kenyatta University of Agriculture and Technology operates within the context of the Kenyan and global environment, which influence realization of its strategic objectives. The University is shaped by her history, traditions, background, surroundings and relationship with all stakeholders. These factors are all taken into consideration as JKUAT conceives and pursues her vision and mission.

## 3.1. SWOT Analysis

JKUAT has therefore identified through SWOT analysis the key strengths, weaknesses, opportunities and threats as presented in Table 2. *Innovative herbal termite repellant paint* 

Table 2: Strength, Weaknesses, Opportunities and Threats

## 3.2. Stakeholder Analysis

JKUAT recognizes the existence of a number of stakeholders with diverse interests and influence on the conduct of its activities. The major stakeholders identified include students, staff, the Government, the community, industry, development partners, research and development institutions, and institutions of higher learning, all with stakes in the performance of the University. JKUAT strongly believes that the identified stakeholders (Table 3) are critical to the success of its activities. It is the commitment of the University to carry out stakeholder analysis on a continuous basis in order to identify changing needs to ensure cooperation and support in the achievement of her mission.

Table 3: Stakeholder analysis

## 3.3. P-PESTEL Analysis

## 3.3.1. Policy Factors

In the last four years, the education sector has been guided by the Sessional Paper No. 1 of 2005 on a policy framework for education, training and research. The policy is premised on the focus on education as enhancing the ability of Kenyans to preserve and utilise the environment for productive gain and sustainable livelihoods. In addition, the development of quality human resource is central to the attainment of national goals for industrial development. Education is necessary for the development and protection of democratic institutions and human rights. Indeed, the provision of quality education and training is a human right for all Kenyans in accordance with the Kenyan law and the international conventions. University education is central to national development. The long term policy of the Government of Kenya is provision of a framework for a sustainable, competitive and autonomous national university system. Any strategic university would ride on her comparative strengths as well as focus on reducing wastage through unnecessary duplication. Further, such a university will pursue the development of a diversified financial base and enhanced managerial independence complete with requisite efficiency and effectiveness. Attention shall be paid to issues of relevance, responsiveness to the market and to national priorities. In practice, university education and training need to be demand-driven, of high quality, gender sensitive, technologically informed, research supported, well-governed and globally marketable. All these will heavily gain through creation of linkages with universities and relevant industries. Admitted, the expansion of higher education over the past two decades has been rapid. However, challenges outstand in the areas of access, equity, quality, modernization, research, governance and prudence in management. Other policies that would impact on the management of JKUAT would be those formulated and/or reviewed by CHE, HELB, JAB and other relevant institutions. On the other hand, JKUAT would draw from

and be bound by policies for higher education formulated by the EAC secretariat, IUCEA, AICAD and AAU.

#### 3.3.2. Political Factors

The current political governance in Kenya is vested in a two-party coalition government. Both parties prior to the December 2007 elections rolled out their manifestos making broad political commitments. In direct reference to higher education, the following political commitments marked their common intentions:

- Rationalise university administration to reduce costs and increase efficiency.
- Encourage the participation of women and other marginalised groups in university education.
- Invest in research, development and innovation through the establishment of an agency that brings together current research, proof of concept, incubator and equity support from the government.
- Allocate more funds to increase learning facilities in public universities.
- Expand HELB support to enable it to disburse greater funds beginning with Ksh. 2 billion in 2008, and to disburse loans to all university students both in public and private universities.
- Restructure CHE to boost its capacity sufficiently in order to fulfill its expanded mandate.
- Start an open university in Kenya in July 2008.
- Design a comprehensive student-financing programme to ensure that all those who enroll for university are given loans by HELB. It is hoped that the foregoing would be key references for government policy formulation and review as well as commitment for university oriented projects and programmes. Meanwhile, under the Kenya Vision 2030, the universities are charged with the responsibility of creating a knowledge-based society that upholds justice, democracy and accountability. In this regard, JKUAT will be under duty to promote a culture of compliance with laws, civility and human decency in behavior among the University community and between the University community and outside world. At the same time, the Government, communities, development partners and other stakeholders continue to make substantial investment to support higher education programmes and projects. The regional political leadership is supportive of regional expansion. JKUAT is already exploring possibilities of setting up a pilot centre in Arusha, Tanzania. The integration of the 5 partner states that form the EAC provides a wider catchment of the students' population due to political will of the states.

#### 3.3.3. Economic Factors

In 2007, the Kenyan economy grew by 6.3% from 0.6% in 2002. The growth rate has since dropped to 1.7% in 2009. On the other hand, the inflation rate has shot up from around 30% to 48% per annum over the same period. Used as economic indicators, these fluctuations impact negatively on the demand for education and government support extended to higher education. By extension, the high inflation rate affects the ability of the students to access basic needs, compromising their academic lives.

At institutional level, the increase in the student enrollment has not been matched by the desired government expenditure on universities. JKUAT has increasingly been compelled to address its funding shortfall from alternative efforts.

#### 3.3.4. Social Factors

Kenya is destined to have a population census in August 2009. The result is bound to realize an increase from the current population estimated at 38 million of which 38% is in the age group of 15-35 years. This age group at which the human capital formation takes place is projected to grow to approximately 45% of the national population, thereby laying further demand on access to university education. Over the years, lack of employment, limited skills, lack of resources and

opportunities have led to the Kenyan youth being highly dependent on household and limited state support. Consequently, criminal tendencies, drug abuse and other varieties of social ills have been attractive. For the same reasons, vulnerability among youths has increased. JKUAT among others is faced with the challenge to develop and execute intervention mechanisms such as counseling, mentorship and provision of pastoral care.

### 3.3.5. Technological Factors

The importance of technology, along with its key components of information and communication, to socio-economic and political development cannot be over emphasized. The Government of Kenya has therefore promoted its development and use. Over the next three years, this will be marked by rapid improvement in ICT infrastructure. Further efforts will be on development and implementation of national and regional policies and regulations aimed at effective governance of the sector as well as growing investor interest. Ultimately, the recognition that information is a resource -which must be generated, collected, organized, leveraged, secured and presented to enhance national prosperity - underscores the central role of institutions of higher learning in the sector. Under the Kenya Vision 2030, JKUAT ICT incubators have been identified to collaborate in the Madaraka PC Project under which the Government intends to implement a project to assemble low cost PCs for the national and regional market. The project is intended to provide an incubation environment for students in local universities. The University therefore has a rare opportunity to develop the requisite capacity to take advantage of such opportunities. The University has realised tremendous growth in adoption and utilization of advanced technology. Towards furthering these gains, JKUAT is in the process of formulating an ICT policy which will broadly draw from the e-government strategy and specifically seeks to take advantage of the installation of the optic fiber network. The University acknowledges the advancement in relevant technologies to support research, teaching and innovative efforts. The University will embrace and seek modern pedagogical approaches such as e-learning and video conferencing towards attaining its goals under this plan. The scenario envisaged ultimately is that of a paperless university in all its programmes and projects.

#### 3.3.6. Environmental Factors

Like any other country, Kenya's economic growth is dependent upon exploitation of its environmental and natural resources. Over the years, this has been marked by heightened activities in the sectors of agriculture, tourism, manufacturing and geo-exploration. These same areas are bound to realise further growth as anticipated in the KV 2030. As a result, there will be increased pollution levels and generation of larger quantities of wastes. In mitigating possible adverse effects, better ways of disposal management will be desirable. The anticipated population growth is likely to impact adversely on environment besides demands for further exploitation of the natural resources. Given its areas of discipline, JKUAT will have to rise up to contribute towards better environmental governance through relevant programmes and projects. Within its own management, the University will endeavour to attain a clean, secure and sustainable environment appropriate for pursuit of its variety of goals. This effort will be accompanied with tapping into its existing potential and utilization of expansive land resource. The dynamic environment that we are serving is under the adverse effects of climate change. The University will therefore embrace green technologies and also play a central role in research into ways of mitigating the general and specific effects of climate change.

## 3.3.7. Legal Factors

Universities in Kenya are considered as state corporations, making them fall under the purview of State Corporations Act Cap 466 of the Laws of Kenya. Legal Notice No. 93 of 2004 introduced performance contracting into the management of all state corporations. Annually developed guidelines by the Performance Contract Steering Committee under the Public Sector Reforms and

Performance Contracting Secretariat have identified the annual performance contracts as the means for implementing the strategic plans. The JKUAT Strategic Plan 2009 – 2012 will also be implemented by the same approach. Other government agencies namely CHE and HELB that directly impact on the management of the various public universities have been established and are governed by equally independent Acts of Parliament. Regionally, the creation of IUCEA provides the scope and opportunity for advancing higher education interests in the region through its legal instruments. Apparently, there exists limited harmonization between these varieties of governing Acts.

There exists a pending bill on university education that was recently placed before a forum of stakeholders for validation. Within it, there exists a proposal for creation of commission for university education to effectively address the ongoing dynamism in the sector. JKUAT stands governed by the constitution of Kenya and hopes to reap from its impeding reviews as well as possible harmonization of existing laws soon after.

The anticipated national constitutional review is indicative of transferring rights to the citizenry that will likely impact on management of university education. There are continuous legal reforms that are being undertaken on existing laws that are governing university education and the management of state corporations of which JKUAT is one. One such reform is the Legal Notice No. 93 of 2005 that has brought performance management in government agencies. Supplementary legislation to the JKUAT act has since led to the constitution of constituent colleges and in the process has provided the university with opportunity to mentor other budding institutions.

## 3.4. Situation Analysis

The JKUAT Strategic Plan 2004-2014 is reviewed on account of the following emerging priority areas due for attention over the next three years:

- 1. Student enrolment
- 2. Academic programmes
- 3. Number of graduates
- 4. Staff establishment
- 5. Infrastructure development
- 6. Research and innovations
- 7. Linkages and partnerships
- 8. Community extension and technology transfer
- 9. Institutional management
- 10. Resource requirement

#### 3.4.1. Student Enrolment

The increasing population growth in the country coupled with the recently introduced government policy on free secondary education has led to exponential growth in demand for higher education in Kenya. Further growth in demand for higher education is expected through the EAC integration process under the guidance of IUCEA. The social demand approach holds that society will continuously seek increased education opportunities out of the perception that education can guarantee a socio-economic advancement.

In 2006/2007 Academic Year, JKUAT had a student population of 10,561. In 2007/2008, the population was 11,370. This was an increase in the student population by 809 (7.66%) from the previous year. In 2008/2009 Academic Year, the population of students was 14,106. This indicates an increase in the student population by 2,736 (24.06%). In 2009/2010 academic year,

JKUAT has a student population of 15,655. This shows that the number of students increased by 1,549 (10.98%).

JKUAT has an opportunity to increase its intake and at the same time appeal to a large market for her programmes. It is envisaged that JKUAT will expand opportunities for qualified Kenyans and East Africans to access university education. The current enrollment level of 15,655 will realize a growth rate of at least 10% annually for the next 3 years. In this regard, JKUAT will implement the relevant national ,regional, continental, international policies, objectives and legal framework that guide access to and quality of higher education. This will directly impact on the University in the areas of infrastructure, information, human and financial resources.

#### **3.4.2.** Academic Programmes

In the recent past, higher education has underscored emphasis on quality and relevance of academic programmes. In response, renowned universities have undertaken rationalisation of academic programmes with the aim of creating centres of excellence in order to acquire comparative advantage. Alternatively, expansion of higher education has been marked by creation of well researched and quality based academic programmes in a bid to address the dynamic needs of society. Other steps have included review of all programmes to ensure incorporation of internships. Programme quality is the degree to which an academic programme has positive impacts on students' knowledge, learning experience and personal development as well as faculty members' scholarship and teaching. The development/review of programmes at JKUAT is done according to CHE, IUCEA, AAU, ACU, and University regulations, Faculty/Institute /School regulations and academic quality policy. This is important to ensure quality of the programmes leveraged on national, regional, continental and international standards. The interest of the University to develop new programmes/courses is necessitated by what goes on in the internal and external environment. Survey to establish courses that are relevant to the market often precedes creation of new campuses. The courses are developed with contributions from industries, alumni and other stakeholders. The programmes are reviewed regularly to reflect changes in the market. They are done after a completion of a full cycle which is four, five or six years depending on the programme. The trends in the market are analysed and alumni, graduates and other stakeholders' views sought through survey so that a programme is updated to match the changing market needs. The course content is then updated accordingly. The total number of programmes in 2005/2006 academic year was 107. In 2006/2007 the total number was 114, an increase of 6.54%. In the year 2007/2008, the University had 121 programmes. Currently, JKUAT has 152 academic programmes cutting across various disciplines including engineering, science, agriculture, information technology, applied science, health sciences, social sciences, and business. The University aims to increase this number to 161 in the next three years.

#### **3.4.3. Number of Graduates**

The total number of graduates in 2005 was 1,590 and in 2006 the number increased by 414 (26.03%) to 2,004. In 2007, the number was 2,544. This was an increase of 540 (26.95%) over the previous year. In 2008, the number grew to 2,912, an increase of 368 (14.46%). JKUAT intends to grow this number by 10% annually up to the end of the plan period.

#### **3.4.4.** Infrastructure Development

Due to the increase in demand for university education, JKUAT recently established additional campuses in Nairobi, Taita Taveta and Mombasa. However, growth in infrastructure has not been congruent with the corresponding increase in student population. The University has inadequate lecture halls, library, offices, laboratories, hostels, and other facilities. In this respect, the University plans to renovate, expand, construct and acquire new infrastructure to meet the

growing needs. Table 4 shows a list of the campuses, infrastructural facilities, area covered, the current number of students and the planned capacity.

#### 3.4.5. Research and Innovations

JKUAT is engaged in a number of funded research and innovation activities, and a number of them have resulted in outputs of commercial value. To strengthen and ensure continuous research and innovation activities, JKUAT currently disburses research and innovation funds to staff on a competitive basis. The University also funds income-generating activities (IGAs).

In the 2008/2009 Financial Year, the University disbursed Ksh.30,148,711 and Ksh. 11,000,000 for research and innovation projects, respectively. During the same period, Kshs.13,527,856 was disbursed for both new and existing IGAs. Each year, JKUAT funds an average of approximately 25 research projects and 10 innovation projects. As a University committed to research and innovations for development and in appreciation of the current trends, the funding for both research and innovations is likely to keep increasing.

Over the years, a number of international organizations have extended funding support for the University research projects. Some of these organizations include AICAD, USAID, DFID, FARA, CHE, RUFORUM, IFS, NCST, DAAD, among others. The University organizes annual scientific conferences where research outputs are disseminated and shared. The University annually publishes a book of abstracts, conference proceedings and the Journal of Agriculture Science and Technology.

The University has made major breakthroughs in research and innovations. Some of the innovations have been commercialized both internally and externally. Internal investments have been through Income Generating Units (IGUs) fully owned and operated by the University. The innovations have been in the areas of food, chemistry, biotechnological and horticultural products. To promote development and commercialization of innovations, the University plans to formulate innovations and commercialization policies. This will provide guidelines for effective and focused innovation initiatives for national development.

Table 4: Campuses, infrastructural facilities and the area in hectares

The University has an operational research policy, which guides her research activities. In order to protect innovations from research activities, the University has an Intellectual Property Policy. In an effort to ensure efficient administration and management of funded research and innovation, JKUAT has an operational Monitoring and Evaluation Committee, which oversees the implementation of funded projects. The University has established centres of excellence namely Institute of Biotechnology Research (IBR) and Institute of Energy and Environmental Technology (IEET). Though students have potential for research and breakthrough innovation, there has been no deliberate effort to fund student projects. In response to this, the University intends to introduce a students' research and innovation fund.

#### 3.4.6. Linkages and Partnerships

JKUAT is engaged in linkages and partnerships with a number of national and international research and development institutions, industry, community organizations, and institutions of higher learning, middle level colleges and centres. Through the collaborations, the University is able to engage in joint projects, exchange programmes and improve accessibility of her programmes. In the years 2006/2007, 2007/2008, 2008/2009, the signed collaborations were 26, 37, and 55, respectively. The University plans to grow the number of collaborations at a rate of 10% annually over the planned period. In this respect, the University has an operational linkages

policy, which guides the management of the collaborations. To ensure adherence to guidelines regarding provision of quality academic programmes at the accredited Centres, the University conducts quarterly quality inspection audits.

#### 3.4.7. Community Extension and Technology Transfer

In an effort to play an active role in socio-economic development in the country, the University provides need-based community extension services and transfer of appropriate technologies for industrialisation. The extension services provided by the University are derived from community surveys conducted from time to time and enquiries from individuals and community groups.

The University has been funding her extension and technology programmes while JICA has been funding some of the community programmes especially training of rural women for socioeconomic development. The funding over the last three years has been as follows: Ksh. 31.943.305 (JKUAT: Ksh. 27.443.305 and JICA: Ksh. 4.500,000) for 2006/2007: Ksh. 57,481,200 (JKUAT: Ksh. 52,981,200 and Ksh. 4,500,000) for 2007/2008, and Ksh. 24,500,000 (JKUAT: Ksh. 13,000,000, JICA: Ksh. 4,500,000 and Kilimo Trust: Ksh. 7,000,000) for 2008/2009. The innovations which have been transferred to the community range from food processing equipment such as a juice extractor to horticultural and biotechnological products namely fruit seedlings and tissue culture banana seedlings, agro-processing equipment which includes walking tractors, chaff cutters, honey extractors, chemistry products such as herbal beauty products (lotions, creams, shampoo, air conditioners and soap) and disinfectants among others. The University operates two demonstration farms at its Juja Main Campus and Kabiruini Extension Centre in Nyeri. Community groups and students learn and practice modern farming techniques in these demonstration farms. In order to make the University's technologies and innovations accessible to the community and industry, the University participates in Annual ASK Shows in Nairobi, Nyeri and Mombasa and participates in exhibitions and trade fairs organized by Commission for Higher Education and the Ministry of Trade and Industrialization.

#### 3.4.8. Institutional Management

As a reputable institution of higher learning in the region, JKUAT is guided by her mandate whose achievement requires adequate planning in order to match the increased demand for university education with existing resources. The Government, as the chief financier of public university education in Kenya, is only able to finance 20% of required resources at JKUAT. Therefore, there is need for stringent controls in utilization of resources to meet the University needs.

The Statutes guide the University to achieve her mandate and functions, taking cognizance of existing policies relevant to higher education. The Statutes define the roles of the various officers, the committees, the Senate, the University Council, and other organs that form JKUAT. The Statutes also provide for the main sources of funds for the University and how the funds are applied. However, global dynamism and existing market trends necessitate backups to ensure that the University maintains quality standards of her programmes and products. This necessitated the development and use of other policy documents and other references alongside the University Statutes. These include the strategic plan, the University calendar, the University prospectus, the University policies, national policies, Commission for Higher Education guidelines, the University quality management systems (QMS), the IUCEA guidelines and other international guidelines as provided from time to time.

The University Council is the topmost organ of JKUAT and her functions are as provided for in the Statutes. The Council is responsible for management of University resources including human, material, finance and information resources. The Council controls human resourcing,

plans, manages, controls and regulates tangible and intangible assets of the university and enters into contracts on behalf of the University. The Council is also involved in the day to day running of the University and is responsible for development of annual work-plans, identification of performance targets, assignment of weights to performance indicators, negotiating performance targets/signing the performance contracts, ensuring achievement of performance targets and preparing employees in JKUAT for the desired changes in working styles, attitudes and work ethics.

The Senate is the topmost academic unit of JKUAT and has the responsibility over all academic issues as provided for in the Act. The responsibility of Senate includes responding appropriately to promote teaching, learning, research and innovation at JKUAT and regulating all academic programmes and students of the University. The Senate is responsible to the University Council and exercises such powers as may be conferred by the Act, by the Statutes or by such other Acts as the Council may authorize. The University Senate is responsible for approval of University programmes; University examinations; academic colleges; faculties, schools, institutes, centres and departments; syllabi, rules and regulations governing teaching, learning, research, innovations, student and staff welfare.

#### 3.4.9. Resources Requirement

#### 3.4.9.1 Financial Resources

According to the KV 2030, the Government's expenditure on education is 7% of the country's GDP. This is the highest expenditure level per student based on the average education GDP in Africa. Much of this expenditure however goes to primary and secondary education with a reduced allocation to universities. Further to this, the government policy for allocating funds to universities is based on the number of students joining the university and not the cost of mounting specific programmes. This is done without the consideration of inflation rates and the high cost of living. In addition, the fees levied to the students do not match the actual cost of running the programmes hence the financial instability at universities. The University programmes are funded by the Government and through fees and other income from activities such as projects and agricultural products. While the Government pays staff remunerations, the University's recurrent activities are now financed from the student fees and other income generated internally. However, the financial allocations from Treasury and the fees have not been sufficient to cover the growing needs of the University. The effect of these financial limitations has been the hindrance in the delivery of the University's mandate. In view of the foregoing, the University will lobby for increased Government funding. In addition, the University will also strengthen other IGAs in order to broaden its revenue base. It is anticipated that JKUAT will endeavour to raise its appropriation in aid by 10% annually.

#### 3.4.9.2 Human Resources

JKUAT has restated its vision and mission and is now focused to offer accessible quality training, research and innovation in order to produce leaders in the fields of Agriculture, engineering, technology, enterprise development, built environment, health and other applied sciences to suit the needs of a dynamic world. In view of this strategic thrust there is need to achieve optimal staffing levels to effectively provide the required support structures. Currently the in-post translates to 53% of the overall human capital requirement of the University (Table 5). This is way below the industrial standard of not less than 85%. The situation is further aggravated by the fact that the government grants to the university currently meet 51% of the in post personnel cost. This scenario, specifically in the background of the envisaged 5% growth on government grants, is indicative of future government grants covering approximately 31% of the same. However, in the first year, the in post should realize an increase of 20%, 15% in the second year and 5% in the

third year of the strategic plan for an overall growth of 77%. Table 5: Status of Human Resource Capacity**Year Approved establishmentIn-post Gap** 2006 1866 1464 402 2007 2351 1583 768 2008 3298 1733 1565 2009 3298 1745 1553

#### 3.4.9.3. Information and Communication Technology (ICT)

Information and Communication Technology (ICT) has become indispensable to overall economic development in terms of service delivery, effective communication, access to market, tapping of global knowledge among others. Kenya, through the Vision 2030, considers ICT as a key to strengthening the foundation for a knowledge economy. In this regard, the Madaraka PC project in the KV 2030 has a direct linkage to JKUAT. The project is intended to provide an incubation environment for students in local universities. In addition, it will give Kenyans access to affordable/robust PCs' and to create a market for hardware and software products and an environment where these products can be developed and manufactured.

JKUAT therefore plays a key role in the development of ICT in the country through the major initiatives by University management. The University can boast of its highly recognized ICT initiatives among other universities in the region. Through improved ICT capacity, the University will achieve most of her functions and mandate as provided in the Statutes, and provide a clear linkage to the integrated vision of the University. ICT optimization will also increase customer satisfaction as well as access to higher education as a contribution geared towards achieving KV 2030. Currently ICT is about evolution towards paperless offices at JKUAT. To achieve this, the University has been involved in various activities aimed at enhancing ICT at various levels (Table 6).

Table 6: Information and communication technology status

#### **Number of Softwares Developed**

By the end of June 2009, JKUAT had eight softwares internally developed by the software development unit. These include the library management system; the estate express; examination processing system; Ushirika management system; university ERP system; student ID card system; transport management system; and the SMS system for student enquiries and examinations. The University intends to grow by 2 new softwares per year for the planned period.

#### **Accessibility to Wireless Network**

The University has made it possible for students and staff to access JKUAT wireless network at various points. Signal strength currently stands at 75% and by the end of the planned period; the strength is expected to be 100% within JKUAT and her environment.

#### **Number of Computers**

Access to computers by staff and students has grown tremendously over the years. In 2008/2009, the total number of computers accessible by students in the laboratories and staff in offices was 1316 computers. The figures are expected to grow by 30% in 2009/2010, 17% in 2010/2011 and 15% in 2011/2012 giving an average growth rate of 21% per annum.

#### **Integration of ICT into University Programmes**

The University is committed to integrating ICT into all University programmes. This is meant to ensure that JKUAT graduates are well equipped with modern ICT knowledge and are able to cope with the dynamic market needs demanding paperless offices. Currently mainstreaming of ICT stands at 50% and this is expected to grow to 100% by the end of the planned period. All new/reviewed programmes are required to incorporate ICT as a minimum requirement before approval by senate.

#### **Increase in Bandwidth**

To cope with the increased growth in ICT use, the university intends to grow her bandwidth from the current 2.5MB to 15MB by 2011. This will allow unlimited and uninterrupted access to internet for all students and staff at all times. Increased bandwidth will also facilitate paperless communication between offices/departments and facilitate online access of student information including result slips, fees status, semester dates and other current information at all times. The University intends to grow her internet access to all students and staff from the current 80% to 100% over the planned period.

#### **Computer Maintenance**

The level of maintenance of computers stands at 85% at JKUAT. The University intends to have a maintenance level of 100% by 2011.

## CHAPTER FOUR STRATEGIC DIRECTION

#### 4.0. Introduction

JKUAT's detailed formative analysis provides the basis upon which strategic issues are generated to inform her strategic direction over the next three years. The strategic issues are identified and guided by the need to respond to the following key result areas:

- 1. Number and quality of students.
- 2. Increase in academic programmes offered.
- 3. Number and quality of graduates.
- 4. Institutional capacity enhancement.
- 5. Quality and distribution of infrastructure.
- 6. Number and quality of research and innovations.
- 7. Institutional management.
- 8. Institutional resources.
- 9. Linkages and partnerships.
- 10. Community extension and technology transfer.

## 4.1. Strategic Issues

The JKUAT Strategic Plan: 2009 -2012 addresses the following strategic issues prioritized for attention over the planned period:

- 1. Students' intake and graduates
- 2. Academic programmes
- 3. Institutional management and resources
- 4. Research and innovations
- 5. Partnerships and linkages
- 6. Community extension and technology transfer

## 4.2. Strategic Goals

In addressing the above issues, the following goals will be pursued:

- 1. JKUAT will provide access to quality and relevant higher education to contribute towards development needs of a dynamic world.
- 2. JKUAT will ensure that academic programmes provided meet high quality standards and are relevant to socio-economic and political needs of the society.
- 3. JKUAT will strive to maintain her reputation as an institution where research and innovation meet global standards.
- 4. JKUAT will ensure an efficient, effective and sustainable management of its resources.
- 5. JKUAT will invest and engage in productive collaborations with national and international institutions and industry.
- 6. JKUAT will contribute to the country's industrialization and socio-economic development through provision of demand-driven community extension services, and transfer of appropriate technologies.

## 4.3. Strategic Objectives Strategic Issue 1:

**Students' Intake and Graduates** 

Strategic Objective 1: To increase the number of admissions by 10 % annually over the plan period Strategies:

1: Feasible academic outreach

- i. Opening strategic campuses
- ii. Admitting students at different times during the year
- iii. Marketing of JKUAT programmes
- iv. Admission of international students

- v. Adopting affirmative action in admission
- vi. Creating flexi-times in academic programmes
- 2: Policy dialogue and advocacy on exchange programme Activities:
- i. Development of exchange policy
- ii. Raise funds
- iii. Memoranda of understanding (MOU) for exchange

#### **Strategic Objective 2:**

## To improve the quality of teaching and examination over the plan period Strategies:

1: Compliance with quality assurance standards on University teaching

#### Activities:

- i. Update the assessment instrument
- ii. Execute the instruments
- iii. Analyse the results
- iv. Reward excelling lecturers
- iv. Pedagogy training
- 2: Benchmarking with existing regional and international quality standards on University examinations

#### Activities:

- i. Tracer studies
- ii. Review programmes in comparison with other universities
- iii. External review of programmes
- iv. iv. External and internal moderation of examinations
- 3: Adherence to facility and equipment standards as provided by CHE, KEBS and other regulatory agencies

#### Activities:

- i. Auditing academic facilities and equipment.
- ii. Construct hostels for international students.
- iii. Provide facilities for the physically challenged.
- iv. Develop and implement an annual inspection and calibration plan of equipment.

#### 4: Restructuring of Faculties, Schools and Institutes

#### Activity:

i. Determine the need and reorganise Faculties, Schools and Institutes.

#### **Strategic Objective 3:**

#### To optimise opportunities in the job market over the plan period Strategies:

### 1: Graduate job market dominance

- i. Develop and continuously update a database of graduates' potential sectors of employment
- ii. Develop and operationalise a framework for tracking graduates' placements
- 2: Policy dialogue and advocacy on placement of graduates

#### Activities:

- ii. Develop a placement policy
- iii. Link students with potential employers
- iv. iii. Employ best performing graduates

#### **Strategic Objective 4:**

To improve retention of students and number of graduates by 10% over the planned period Strategies:

### 1: Academic financial support

#### Activities:

- i. Identification of deserving students
- ii. ii. Liaison with HELB iii. Liaison with sponsors
- iii. iv. Work-study opportunity for deserving students

#### 2: Students' welfare support

#### Activities:

- i. Provide counselling services
- ii. Provide spiritual guidance through the Chaplaincy
- iii. Strengthen the student organization
- iv. Provide adequate catering services
- v. Provide extra curricular activities

## **Strategic Issue 2:**

## **Academic Programmes Offered**

Strategic Objective 1: To raise and sustain academic standards in all JKUAT programmes

#### **Strategies:**

#### 1: Compliance with University academic quality assurance standards

### Activities:

- i. Update the assessment instrument
- ii. Execute the instruments
- iii. Analyse the results
- iv. Implementation of the self assessment programme

#### 2: Programme performance in the market

#### Activities:

- i. Develop and continuously update the programmes
- ii. Develop a framework for tracking programmes' performance
- iii. Review programmes after completion of a full cycle

#### 3: Enterprise development

#### Activity:

i. Integrate entrepreneurship courses into JKUAT programmes

#### 4: Benchmarking with existing regional and international quality standards

- i. Benchmark University programmes
- ii. Participate in regional and international conferences.

#### 5: Meeting customer expectations through market-driven programmes

#### Activities:

- i. Develop and execute instruments to assess market needs
- ii. Develop academic programmes
- iii. Involve industry, alumni and other stakeholders in evaluation of programmes.
- iv. Peer review
- v. Accreditation
- vi. Teach a second international language besides English.
- vii. Credit accumulation and transfer viii. Organize seminars, workshops and conferences.

## **Strategic Issue 3:**

Institutional and Resource Management Strategic Objective 1: To enhance and sustain an optimum human resource base by a cumulative increase of 40% by 2012. Strategies:

#### 1: Optimising human resource capital

#### Activities:

- i. Conduct a human resource audit
- ii. Conduct job analysis and evaluation
- iii. Recruit and retain a qualified human resource
- iv. Reviewing schemes of service for all categories of staff
- v. Adopt an effective Electronic Human Resource Planning (EHRP) system

#### **Strategic Objective 2:**

To enhance a culture of good governance in the management and administration of the University over the plan period.

#### **Strategies:**

1: Adoption of good corporate governance concepts and practices

#### Activities:

- i. Training in good governance, administrative, leadership and management skills
- ii. Develop appropriate good governance policies
- iii. Implement good governance policy
- iv. Create and adopt a good corporate governance system
- v. Establishment of an integrity committee
- vi. Implement a code of ethics

#### 2: Compliance with the national health, safety and security standards

#### Activities:

- i. Develop relevant policies on health, safety and security
- ii. Conduct training on health and safety
- iii. Conduct safety drills for staff and students
- iv. Develop and conduct health programmes for staff and students
- v. Develop and implement a system for monitoring, prevention and control of epidemics

#### 3: National policy on service delivery

- i. Adoption and appliance of the service charter
- ii. Conduct regular review of terms and conditions of service

- iii. Conduct a customer satisfaction survey
- iv. Conduct an employee satisfaction survey
- v. Conduct a work environment survey

#### 4: Compliance with national E-strategy

#### Activities:

- i. Conduct an ICT audit
- ii. Adoption of E-strategy guidelines
- iii. Acquisition and installation of requisite hardware
- iv. Development and application of supportive software

#### 5: Benchmarking with national and international best practices in management

#### Activities:

- i. Adopt relevant benchmarked university management practices
- ii. Adopt a results oriented organizational culture

## 6: Adherence to the strategic plan

#### Activities:

- i. Train staff on strategic plan implementation
- ii. Provide required resources
- iii. Develop and implement departmental work-plans and performance contracts
- iv. Develop an instrument for strategic plan monitoring and evaluation
- v. Execute the instrument, analyze the results and address the variances identified

## 7: Adherence to international quality management systems

#### Activities:

- i. Adopt international quality management standards in all the university operations
- ii. Conduct scheduled QMS audits
- iii. Implement QMS audit findings and recommendations
- iv. Adoption and application of the service charter

#### **Strategic Objective 3:**

#### To generate and effectively manage financial resources of the University Strategies:

#### 1: Growth of current revenue streams

#### Activities:

- i. Increasing students' enrolment
- ii. Lobby Government for additional funds
- iii. Expansion of income generating activities

### 2: Adoption of new revenue streams

#### Activities:

- i. Establishment of new campuses
- ii. Establishment of new programmes and products

## 3: Donations and sponsorships

#### Activity:

i. Develop proposals for fundraising through linkages and collaborations

#### 4: Prudent management of financial resources

#### Activities:

i. Enhance utilization of the financial management system

ii. Identify and implement cost cutting measures iii. Instituting measures for containing financial mismanagement

#### **Strategic Objective 4:**

To enhance University's infrastructure and facilities over the planned period.

#### **Strategies:**

#### 1: Renovation and expansion of existing university infrastructure

#### Activities:

- i. Develop Master Plans for all university campuses
- ii. Conduct renovation and expansion of existing units
- iii. Reconstruct the university main gate

#### 2: Development of new infrastructure

#### Activity:

- i. Carry out new infrastructure development in line with University Annual Plans
- ii. Construction of a water treatment plant (Taita Taveta)
- iii. Construction of a new graduation square
- iv. Construction of a new pathway (new science complex –JKUAT Hospital)
- v. Development of parking space (20,000sq ft)

#### 3: Development of new facilities

#### Activity:

- i. Construction of a Students Hostel
- ii. Construction of a Students Centre
- iv. Construction of a Staff Centre
- v. Construction of a Maternity Wing
- vi. Construction of a Mortuary Wing
- vii. Extension of an Administration Block
- viii. Construction of a Hospital Theatre
- ix. Construction of Classrooms

#### 4: Acquisition of new facilities

#### Activity:

- i. Develop and carry out acquisition plans
- 5: Acquisition, installation and commissioning of machines and equipment

#### Activities:

- i. Development of annual procurement plans for machines and equipment
- ii. Purchase of machines and equipment
- iii. Provide required equipment and facilities for health and safety
- iv. Conduct regular inspection and repair of equipment and facilities for health and safety v. Conduct calibration of health equipment

#### 6: Repair and maintenance of equipment and facilities

#### Activities:

- i. Develop annual inspection and calibration of equipment
- ii. Conduct scheduled repair and maintenance of machines and equipment

## Strategic Issue 4: Research and Innovations Strategic Objective 1:

## To enhance strategic and value-added research and innovation over the planned period Strategies:

## 1: Responsive research and innovation

#### Activities:

- i. Enhance student and staff research and innovation funds
- ii. Fund research and innovation projects
- iii. Monitor and evaluate funded research and innovative projects
- iv. Identify opportunities for exchange programmes
- v. Identify staff and students for exchange programmes
- vi. Support staff for exchange programmes

### 2: Policy dialogue and advocacy

#### Activity:

i. Develop policies on research, innovation, technology transfer, patents and IP

## 3: Encourage staff-staff and staff-student liaisons on thematic research areas

#### Activities:

i. Consultative meetings and workshops for staff and students at departmental, faculty and institutional levels ii. Constitute thematic, multidisciplinary research teams

## 4: Encourage research and innovation proposal development for external funding

Activity: i. Identify potential external funding agencies ii. Formulate, vet and submit research proposals on thematic areas

## 5: Foster and reward undergraduate and postgraduate supervision among university staff Activities:

- i. Undergraduate supervision by staff
- ii. Postgraduate supervision by staff

#### 6: Acquisition of patents and intellectual property (IP) rights

#### Activities:

- i. Establish a patent and intellectual property (IP) office
- ii. Lodge patent and IP claims

### **Strategic Objective 2:**

To attract and retain staff with a demonstrated commitment to excellence in research and innovation Strategies:

### 1: Policy dialogue and advocacy

#### Activities:

- i. Develop special terms and conditions of service for researchers and innovators for inclusion in the existing recruitment policy
- ii. Develop and administer a reward scheme for outstanding researchers

## 2: Acquisition, commissioning and maintenance of appropriate research equipment and facilities

- i. Determine the required research equipment and facilities
- ii. Purchase and/or construction of equipment and facilities

## 3: To increase centres of excellence and institutes for responsive research pursuits on current and emerging issues

#### Activities:

i. Thematic alignment in research and innovation ii. Establish and operationalise centres/institutes of excellence

### **Strategic Objective 3:**

## To increase production and income generation activities within the University Strategies:

1: Policy dialogue and advocacy on commercialization of university research output and innovation

#### Activities:

- i. Develop a commercialisation policy
- ii. Develop and administer guidelines on commercialization of research outputs and innovations
- 2: Maximise application of research and innovation.

#### Activities:

- i. Develop proposals for increased production and income generation
- ii. Fund increased production and income generation
- iii. Monitor and evaluate performance of income generating activities
- iv. Reward staff engaged in production and income generating activities

## **Strategic Objective 4:**

## To facilitate dissemination of research results and innovations to target users for application Strategies:

## 1: Effective and legally bound awareness creation

#### Activities:

- i. Package research results and innovations into a usable format
- ii. Organise conferences and workshops
- iii. Support staff for conferences and workshops

## 2: Provide avenues for publication/demonstration of research findings and innovations

## Activities:

- i. Facilitate presentation of research findings at national and international conferences, seminars and other professional meetings
- ii. Participate in shows and trade fairs at both national and international levels
- iii. Publish proceedings, journals, books and leaflets

## Strategic Issue 5: Partnerships and Linkages Strategic Objective 1:

To improve on University linkages and partnerships with industry, off-shore, research and development institutions among others for joint projects and programmes Strategies:

#### 1: Collaborations

#### Activities:

i. Determine priority areas for collaboration

- ii. Identify institutions for collaboration
- iii. Sign MOUs

#### **Strategic Objective 2:**

To increase access to JKUAT programmes through collaborative arrangements with middle-level colleges as centres for university programmes Strategy:

#### 1: Priority based partnerships

#### Activities:

- i. Determine priority partnerships programmes
- ii. Identify the institutions
- iii. Sign MOUs

#### **Strategic Objective 3:**

To increase the use by industry and other external organizations of the University's technology, research outputs and innovations to create socio-economic benefits, while generating income to support research and education Strategies:

#### 1: Value chain creation

#### Activities:

- i. Identify potential users of technologies, research outputs and innovation
- ii. Package technologies, research outputs and innovations
- iii. Sign and execute supply agreements

#### **Strategic Objective 4:**

To strengthen cultural and technological exchanges with institutions of higher learning Strategies: 1: Peer strengthening mentoring

#### Activities:

- i. Create a data base of peer higher learning institutions
- ii. Organise consultative meetings to determine areas of mutual benefit
- iii. Develop and execute peer mentoring agreements

## Strategic Issue 6: Community Extension and Technological Transfer

#### **Strategic Objective 1:**

To provide community needs-based extension services over the plan period Strategies:

1: Community-based outreach

#### Activities:

- i. Identify target community
- ii. Develop and survey instrument to profile and prioritise the community needs
- iv. Prepare an action plan for the agreed intervention iv. Constitute a joint implementation committee v. Implement the agreed action plan

#### 2: Community-based training

#### Activity:

i. In-country training for rural women

#### **Strategic Objective 2:**

## To facilitate transfer of appropriate technologies and diffusion of new knowledge across the various sectors of the Kenyan economy Strategies:

#### 1: Sector based outreach

#### Activities:

- i. Identify sector specific stakeholders
- ii. Determine priority needs
- iii. Identify appropriate technologies based on agreed needs
- iv. Develop and agree on transfer arrangements
- v. Enter into agreements / contracts

#### 2: Shows and exhibitions

#### Activity:

- i. Participate in annual ASK shows and trade exhibitions
- ii. Transfer of new technologies through the shows and exhibitions.

# CHAPTER FIVE IMPLEMENTATION, MONITORING, REVIEW AND EVALUATION

#### 5.0. Introduction

The JKUAT Strategic Plan 2009 -2012 requires effective implementation of its outlined strategies. The implementation as detailed in the matrix will enable the realization of the full benefits of the aspirations as clearly covered therein. In each respect, the realization or otherwise of the key outputs in the plan will require the integration of a monitoring and evaluation framework as detailed in this chapter. The commitment of the implementing team will be measured based on the action specified for each strategic objective in the implementation matrix. This measurement will be part of the evaluation of this Plan. To assess the effectiveness of the plan, the following six questions shall be addressed in their order of importance:

- i. Does the plan capture the key areas of priority for an excelling university?
- ii. Does the plan enable congruence of these key areas with the JKUAT's mandate?
- iii. Is the strategic plan technically compliant with conventional concepts and practice of effective planning?
- iv. Are the strategic objectives evolutional?
- v. Does the plan enable reinforced implementation?
- vi. Is the strategic plan feasible?

Responses to these questions shall be provided during the plan reviews and evaluation sessions.

## 5.1. Implementation

JKUAT shall comply with the government policy on utilization of performance contracts as a medium for implementation of public agencies' strategic plans. In this regard, the annual performance contracts for JKUAT will draw targets from this plan over the next three years. The recently established Directorate of Performance Contracting and Appraisal (DiPCA) within the University will be tasked with this role. Further, DiPCA will cascade the annual contracts to the respective responsible units within the university. It is anticipated that as this happens, the unit-based work plan will draw from the implementation matrix presented in Appendix I.

## 5.2. Monitoring

The JKUAT Strategic Plan will be monitored through regular and organized reporting of achievements against the set targets as formulated in the various performance contracts. It is recommended that the monitoring instrument presented in Appendix III be applied in concert with the performance contract reporting format to enable easy linkage and consistency in tracking results. DiPCA will be tasked to replicate these arrangements as an approach to monitoring the contribution of the various units towards effective implementation of this Strategic Plan.

#### 5.3. Review

The reviews of this plan shall occur at frequent and specified intervals, either quarterly or biannually. The reviews shall focus on the action programme and assess whether time-bound events, interventions or initiatives have realized targeted outputs. These reviews shall determine whether the implementation of the Strategic Plan is on or off course and identify specific variances and their causes. For this purpose, the approach to be used during the reviews shall entail participatory sessions where reports shall be submitted and validated. Experience has shown that variances in targets or time may be due to inadequate resources, over or under estimation of targets, manacles and obstacles, which were unforeseen initially, among other reasons. The reviews shall be held on site preferably by the team involved in the plan formulation and development.

#### 5.4. Evaluation

The evaluation of the strategic plan shall be undertaken at the end of the month of June in each financial year. This is congruent with budget allocation to public universities, auditing of operational results, budgets and preparation of financial statements. The evaluation approach shall be based on a JKUAT domesticated scale comparable with that applied to all public agencies. JKUAT will integrate a benchmarking process presented as Appendix IV. Some of the main inputs required for the strategic plan evaluation process shall include:

- 1. Strategic plan review reports.
- 2. Strategic plan monitoring and evaluation instruments
- 3. Strategic plan evaluation guidelines.

After assessing the progress of the Strategic Plan, necessary changes shall be made. The revised plan will take into consideration emergent strategies, and changes affecting the University's intended course. The University shall measure current performance against previously set expectations, and consider any changes or events that may have affected the planned course of actions. The Strategic Plan evaluation shall be a measure of success of the JKUAT vision, mission, strategic objectives, strategies and the action plan. Adequate time, preferably five days in every six months, will be allocated for the mid-term strategic review in order to address comprehensively issues raised in the report.

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