



MOUNT KENYA UNIVERSITY

**RESEARCH
STRATEGIC PLAN**

2012 - 2018



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FOREWORD

This seven-year (2012-2018) Strategic Plan of the Research Division of Mount Kenya University (MKU) is geared towards guiding the Division's activities in its earnest pursuit of the research mandate bestowed to it. Although the Division is only one year old, it has drawn important strategic objectives under the umbrella themes of Research, Institutional Linkages, Enterprise and Innovation and Community Outreach. Towards realizing these objectives, the Division has formulated several key guidelines and policy documents including the Research Policy, Enterprise and Institutional Linkages Policy, and Intellectual Property Policy. Furthermore, the Division has continued to establish collaboration with other institutions and industry. Thus, this Strategic Plan document will serve as an overarching framework for achieving not only the Division's goals but also that of the University, and will undoubtedly render a new impetus to the MKU in realizing its Vision and Mission. The Strategic Plan also addresses some of the pivotal issues that will drive research and innovation in a manner that all the stakeholders will find prudent.

MKU prides itself in being agile and able to respond to emerging issues in the field of science, technology and innovation. Thus, this Strategic Plan document will be a flexible one aimed at responding in a timely manner to the socio-economic needs of the Kenyan people, the continent and the world at large. It is therefore envisaged that this Strategic Plan will serve as a clear roadmap for the Research Division as it strives to fulfill its research mandate..

Prof. Stanley Waudo
The Vice Chancellor, Mount Kenya University

EXECUTIVE SUMMARY

This Strategic Plan (2012-2018) redefines Mount Kenya University Research Division's shared vision, mission, core functions, policy priorities, strategic objectives, structure and resource requirements based on its mandate and the prevailing socio-economic environment.

Chapter one gives an introduction of Mount Kenya University with regard to its establishment and the importance it places on research, innovation, community outreach and linkages, in line with Vision 2030.

Chapter two presents the mandate, functions, organizational structure and operational scope of the Research Division. The Division envisions "community driven leadership in research and innovation for social and economic development". The mission of the Research Division is "To provide leadership in research and innovation for social and economic empowerment."

Chapter three presents a situation analysis from a perspective of the internal and external environments affecting the organization and an analysis of the stakeholders with whom the Research Division must work collaboratively to achieve the objectives of the University. The Division's strengths and weaknesses as well as threats and opportunities are identified using the SWOT and PESTEL analysis models. The analysis unveils the issues that require the action of the Division during the planned 7-year period.

Chapter four presents the strategic model. From the SWOT and PESTEL analysis models, four strategic issues were identified, namely: Research, Community Service, Enterprise and Innovation, and Linkages. For each of the stated issues, relevant strategic objectives were formulated along with appropriate strategies and activities to address them.

Chapter five outlines the implementation plan through a detailed implementation matrix for each of the strategic objectives. The matrix summarizes the following: Activities, Expected Outputs, Performance Indicators, Time Frame and the Expected Impact. Budgetary estimates required to undertake each of the activities are presented in *Appendix A*. Actual parameters are contrasted against pre-set targets in order to rate performance during the implementation process. The chapter also presents the Division's projected financial and other resource requirements for implementing this Strategic Plan and gives an indication of risks and their corresponding mitigation strategies.

Chapter six presents a design for an effective and efficient performance evaluation mechanism for the programmes to be implemented. The evaluation will serve two purposes: to enquire into the efficacy of each planned programme; and to assess the progress and overall impact of implemented programmes. It is proposed that a professional Monitoring and Evaluation Officer be assigned the management of M & E programmes of the Division.

ACKNOWLEDGEMENTS

The development of this Strategic Plan was possible through the efforts of several individuals and support by the management of Mount Kenya University. As the Steering team that oversaw the formulation of this Strategic Plan, we wish to most sincerely thank all the people who contributed to its realization.

The Research Division looks forward to a continued collaboration with all its partners, and shall endeavour to implement, evaluate and regularly review and improve on this Strategic Plan.

1.0 INTRODUCTION

Mount Kenya University (MKU) has prioritized research and development as one of its core functional areas. This strategic plan is a manifestation of MKU's commitment to the critical role that research plays in the university's activities. The strategic plan provides the roadmap to the implementation of research activities in the university for the period 2012-2018. Mount Kenya University is a non-profit making University. It was established in May 2008 through upgrading of the former Thika Institute of Technology and was granted a charter in January 2011. It is one of the leading private Universities in Kenya and the Region inclined towards Science and Technology programmes. The University has established strong community outreach programs. For instance, it is pioneering a programme in Dadaab Refugee Camp in collaboration with Association of Volunteer Services International (AVSI) and United Nations High Commission of Refugees (UNHCR). This programme is one of its kind in any refugee camp in the world. The University has also partnered with United Nations Children's Fund (UNICEF) to carry out an Action Review, which is a monitoring and review programme for activities in northern and eastern parts of Kenya.

MKU strongly believes that high quality University education involving training and research not only provides the human capital for socio-economic development but also transforms individuals and societies in ways that reduce poverty and increase global competitiveness. University training and research therefore play a crucial role of developing the necessary human capital to support the national growth as targeted by such policy strategies like Kenya Vision 2030 and Millennium Development Goals (MDGs). The University ascribes to the tenet of synergy through partnership, and the Research Division thus envisages a linkage framework aimed at forging strong partnerships with other universities, the industry, community and development partners. The linkages will be instrumental in boosting the relevance of University education, mobilizing resources and facilitating technology transfer. In this regard, MKU intends to increase the quantity, quality and relevance of research with a view to creating innovations and inventions that will enable the country to effectively transform into knowledge based economy. The University is therefore committed to source funds and to provide the necessary infrastructure and incentives for research.

MKU appreciates that the Government of Kenya has not only increased funding for basic and applied research at higher institutions of learning, but also is committed to facilitate research and development activities in collaboration with industries. The government is committed to transform proven knowledge produced in industries and tertiary institutions including universities into technologies and protect them as intellectual property rights. The government endeavours to encourage innovation and scientific findings through a system of national recognition to honour innovators. MKU therefore through the Research Division seeks to seize this enabling environment by sensitizing its staff and students on the potential opportunities of research and innovation that exist in Kenya. MKU also through the Research Division is in the process of establishing Research and Innovation Centres to serve as vehicles that will propel research and innovative activities forward.

This Strategic Plan not only embraces the Vision and Mission of MKU but also other guidelines such as the ones stipulated in the National Vision 2030 and congeners. It is thus envisaged that the Strategic Plan will aid the Research Division scale the heights of research for the next 7 years.

2.0 RESEARCH DIVISION

The Research Division was established in March 2011.

2.1 Mandate of the Directorate of Research

The Directorate of Research shall undertake the following responsibilities under the following strategic categories:

a) Research

- i) Plan, develop and recommend policies governing research and development programmes to senate
- ii) Mobilize financial and other resources for research and development.
- iii) Promote dissemination of research findings.
- iv) Identify and advice senate on resource requirements for research and development.
- v) Organize, encourage and support public lectures, seminars and conferences
- vi) Gather and disseminate information on research and funding opportunities to academic staff.
- vii) Produce competitive research project proposals.
- viii) Develop a strong multidisciplinary research culture and encourage synergy.
- ix) Coordinate preparation of research project proposals individually or in teams.
- x) Coordinate provision of skills in grant proposal writing to academic staff.
- xi) Provide assistance to departments and schools on writing competitive research project proposals.
- xii) Start and maintain a quarterly research and development bulletin.
- xiii) Work out modalities of implementing funded research projects.
- xiv) Disseminate information on research funding opportunities to departments and schools.
- xv) Develop for approval by senate a format for research project proposals.

b) Institutional Linkages

- i) Provide leadership for collaborative research including capacity building, mentorship, assessing needs and identifying areas of priority.
- ii) Initiate and maintain local and international collaboration for research programmes.
- iii) Promote academic linkages, interchange, contact and co-operation with the public and private sectors.
- iv) Produce annual reports on research and extension and academic linkages.

c) Enterprise and innovation

- i) Coordinate all research activities, publication, production and innovation.
- ii) Assist departments and schools to market their research proposals to funding agencies.

d) Community Outreach

- i) Promote knowledge sharing with stake holders for accelerated development.
- ii) Maintain a list of consultants in various disciplines.
- iii) Coordinate alumni and outreach programmes.

2.2 Operational Scope

The operational scope of the Research Division will be guided by the Research Policy of the University.

2.3 Vision and Mission

2.3.1 Vision

To be a leader in addressing community socio-economic needs through research and innovation.

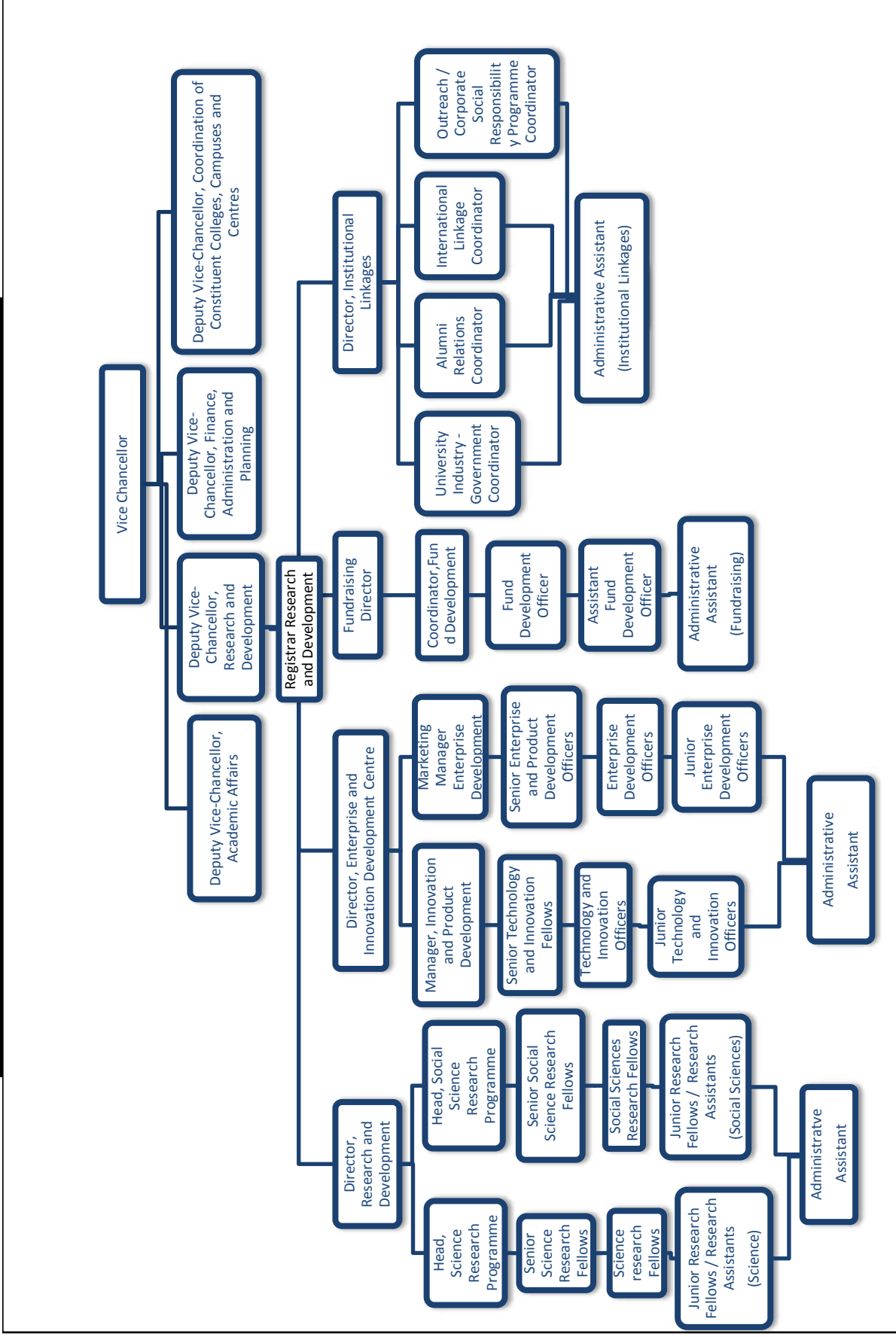
2.3.2 Mission

To provide leadership in research and innovation for social and economic empowerment



2.4 Organizational Structure

ADMINISTRATIVE ORGANOGRAM FOR THE RESEARCH DIVISION



3.0 SITUATION ANALYSIS

3.1 Analysis of the Operational Environment

3.1.1 Political, Economic, Social, Technological, Environmental and Legal (PESTEL) Analysis

a) Political

The East African Community provides opportunities for regional integration to diversify research that can support sector-wide collaborative research and linkages. The government of Kenya has increased funding for basic and applied research through National Council of Science and Technology (NCST) and at higher institutions of learning for research and development. However this funding is still insufficient. As earlier noted, the Government of Kenya has continued to create an enabling environment for research and innovation. Mount Kenya University has exploited this opportunity by motivating its staff and students to embrace research and innovative activities. On the downside, the government has not formulated policies to guide and prioritize research as fast as the universities and community would desire and apparently the political will to embrace research and innovation is meager. Lack of commensurate compensation and remuneration from the government significantly compromise advances in science and research. It is therefore prudent to lobby the policy makers if the gains that can be made out of research and innovation are to be consolidated. Mount Kenya University is in the frontline to lobby and inform the policy makers and various government institutions on the need to increase support for research and development activities including funding conferences and symposia organized by private institutions of higher learning. In this regard, the University recently secured a NCST funding for the International Conference for Advancement of Business and Management Practice in Africa (ICABUMPA) held at Kenyatta International Conference Centre (KICC) in April 2011. This kind of support was previously a preserve of public institutions.

b) Economic

Many Countries in Africa especially sub-Saharan Africa have their citizens living below the poverty line, which makes it difficult for them to embrace technology and research findings due to economic hardships. Research and innovation have the potential to provide increased benefits to the community and the country at large, and thus MKU aims to generate innovations that are affordable so as to address the socio-economic needs of the people of this region. The University is committed to focused research areas that may yield products that are of economic value, are sustainable and are of relevance to the people of Kenya and the Region. To promote research, the University has established a research fund with an initial allocation of Ksh. 7 million to facilitate research and dissemination of findings through publications, seminars and conferences. The fund is expected to grow during the implementation period of this Strategic Plan.

c) Social

Researchers often carry out research without involving all the stakeholders including the community who are the principal beneficiaries of research findings and innovations. MKU will endeavour to involve the community in most of its activities including research to enable them

embrace and appreciate the generated innovations. The University is also committed to plough back the benefits or research and innovations to the community through diverse means such as community outreach. The University has continued to open its arms to the society, and the School of Health Sciences has continued to offer regular medical camps to the surrounding communities and beyond. Any intercourse of the community and the University must be guided by clear national and international ethical guidelines. The Research Division is therefore committed to develop the University's ethical guidelines within the first year of implementation of this Strategic Plan. The Division will also seek to create public awareness on the benefits and shortcomings of its research findings.

d) Technological

The World Economic Forum's Global Competitiveness Report of 2006 noted that technological and scientific progress has been a major driver of the transformation of the world economy since World War II. Vision 2030 recognizes science, technology and innovation as the main driver for industrialization to enable Kenya achieve middle-income economy by the year 2030. The University will endeavour to develop technologies that will meet the socio-economic needs of the African continent. It will also create awareness in the community on the benefits of embracing these technologies and home-made solutions. In this regard, the University is undertaking research in herbal products in an effort to ensure productive and sustainable use of our natural resources and their conservation. The University through the Research Division is funding innovation proposals from both the students and the staff, and endeavours to encourage and protect such innovations through diverse means including the recently launched Intellectual Property Policy.

e) Environmental

Exploitation of our natural resources in a non-sustainable manner is progressing fast with little efforts being secured to tame the depletion, or even replenish the resources. For instance, although the Kenya's forest cover is shrinking at an alarming rate, it is becoming increasingly difficult to stem out the depletion due to socio-ethno-political fabric of our nation. This coupled with inadequate capacity (and will) to adopt new innovations such as green energy (solar, biogas etc) technologies have had a negative impact on the exploitation of natural resources for the benefit of Kenya. For instance, it is incomprehensible as to why tropical countries including Kenya with twelve hours of sunshine would fail to embrace solar energy while heavily relying on charcoal or kerosene which adversely affect the environment. Furthermore, Kenya has great potential to develop bio-resources for food, medicines, industrial and other products. There is need to develop capacity to undertake research and develop products from these resources in a sustainable way. In all its research undertakings, MKU shall seek to adopt the environmental protection guidelines such as the ones stipulated by National Environment Management Authority (NEMA). Thus, Research at the University will engage systems supporting sustainable innovations that are clean and safe in order to safeguard the environment.

f) Legal

There is inadequate legal framework to protect patents, innovations, natural resources and bio-resources and to enforce patents. In order to regulate effectively, there is need for the government to assess the risks involved in research and development and then develop

harmonized legislation based on national, regional and international regulations. In regard to the foregoing, the University has developed an Intellectual Property Rights Policy to protect inventions and innovations developed through research at the University. The University will continue to lobby for a comprehensive legal framework to protect innovations.

3.1.2 SWOT Analysis

Analysis of the internal and external environment, stakeholders as well as an analysis of its strengths, weaknesses, opportunities and threats (SWOT) was undertaken in order to fully understand the current potential of MKU Research Division. The findings are presented as follows.

a) Strengths

The Research Division has the following strengths:

- i) Goodwill support from management
- ii) Operational office and policies governing research and development
- iii) Established strong linkages, collaborations and partnerships
- iv) Qualified personnel in research
- v) The University has a good corporate image
- vi) The Research Division has seed funding for research
- vii) Ability to attract external funding

b) Weaknesses

The Division faces:

- i) Inadequate funding for research and community service
- ii) Inadequate funds for training staff in research
- iii) Inadequate physical facilities and infrastructure for research
- iv) Lack of a unique research programme (flagship brand) associated with the University
- v) Lack of diversified research programmes
- vi) Inadequate research personnel
- vii) Lack of a culture for undertaking research
- viii) Lack of motivation to undertake research
- ix) Brain drain from the University
- x) Inadequate dissemination of research findings

c) Opportunities

The Division has the following opportunities:

- i) Increased demand for higher education hence more opportunities for research and innovation
- ii) Improved ICT facilities for undertaking research
- iii) Potential to collaborate/affiliate with other local and foreign institutions in research
- iv) Potential to commercialize research findings and innovations

- v) Legal frameworks and institutions such as KIPI for protecting research findings and innovations
- vi) Funding opportunities from public and private institutions for research
- vii) Changing tastes and preferences of consumers hence an opportunity to develop innovations

d) Threats

The Division faces the following threats:

- i) Increased completion from other higher education providers
- ii) Increased demand for distance learning where research is faced with challenges
- iii) Poor enforcement of Intellectual Property Rights (IPR) by relevant authorities
- iv) Political dynamics that may affect research undertakings
- v) High cost of attracting and retaining qualified staff in research

3.1.3 Summary of the SWOT Analysis and Interventions

The SWOT Analysis shows that the University Research Division has consistently received support from the management in terms of goodwill and funding to support research activities. However the current funding is inadequate for conducting significant research and for the provision of relevant physical facilities and infrastructure. There is also lack of a culture for undertaking research at the University.

The Research Division will optimally exploit the opportunities in the external environment in order to fully implement the objectives outlined in the Strategic Plan. It will deal with the major weaknesses and threats by working closely with all the stakeholders involved in order to help create synergy and hence turn the weaknesses into strengths while taking advantage of the opportunities created.

In order to achieve its mission, the Research Division has identified the following interventions;

- i) Institutional strengthening and capacity development through fund-raising initiatives
- ii) Search for a unique research programme/brand associated with the University
- iii) Sensitization of staff and students on the need to undertake research
- iv) Identification and protection of patentable research findings and innovation before publication
- v) Provide support for the dissemination of research findings through publications, seminars and workshops
- vi) Exploring opportunities for networking and collaborations with the industry, other universities and development partners
- vii) Diversification into new research programme areas
- viii) Formulation of a community outreach policy to protect innovations

4.0 STRATEGIC MODEL

4.1 Strategic Issues

a) Research

There is need to prioritize the implementation of the Research Policy. To be of benefit to all the stakeholders, the current needs and priorities of the application of research and innovation should be demand-driven and user-oriented. The setting up of infrastructure for research is essential to encourage and revitalize staff and students to undertake research. It will also enhance the research capacity of staff and students. This will be accomplished by providing the required resources and equipment needed for research. There is need to involve the staff and students in undertaking research and also securing the participation of the end-users in research and innovation. This should be achieved through designing and implementing programmes that ensure relevant and adequate stakeholder participation in research and development as well as commercialization of the products developed. There is also need to encourage staff and students to publish their research findings. Towards this end, the Research Division will facilitate the protection and dissemination of the research findings.

b) Community Outreach

There is need to develop and implement a Community Service and Outreach Policy. The policy will enhance the University's capacity to provide community service. This will be done by conducting regular stakeholders' forum including the end-users.

c) Enterprise and Innovation

The Research Division will promote the exploitation and protection of innovations and research findings. This will be accomplished through the establishment of science and industrial parks where research findings can be translated into products and commercialized. There will be increased public awareness of innovations and research findings. The MKU IPR policy will need to be implemented to ensure the protection of intellectual property rights.

d) Institutional Linkages

The Research Division recognizes the need to forge sustainable collaborations, partnerships and linkages among stakeholders and development partners in training and research. In particular, collaborations in research and development activities between stakeholders and development partners have potential to bring benefits to all the parties concerned. Collaborations can help minimize costs and share risks and also help in opening access to each other's markets where cross-border and international collaborations are involved. The role of the Research Division is to identify strategic partners and as such play a facilitator's role. At the local level, mutual tapping into the strengths of each collaborating partner will not only leverage resources but also assist in capacity development occasioned by the learning opportunities involved. MKU is committed to implement the Institutional Linkage Policy.

4.2 Strategic Objectives, Strategies and Activities

Issue	Objective	Strategy	Activity
Research	Develop and improve the infrastructure for research	Facilitate the required funding needed for research	<ul style="list-style-type: none"> i) Increase the allocation for funding from the University for research ii) Solicit for funding from development partners iii) Source and negotiate for funding from public institutions
	Improve on library resources and facilities for research purposes.	Develop and improve ICT infrastructure	<ul style="list-style-type: none"> i) Increased subscription to Journal sites and research databases. ii) Undertake expansion of library research space and facilities iii) Collection and management of research findings and information sharing
	Develop and improve ICT infrastructure	Create awareness on the ethical guidelines and practices in research	<ul style="list-style-type: none"> i) Develop and improve the existing ICT infrastructure
	Institutionalize research ethics	Enforce research ethics and practice	<ul style="list-style-type: none"> i) Prepare information, education and training materials ii) Organize education and training workshops and seminars. iii) Constitute institutional ethics committee and register it with the relevant government agent
	Effective communication	Enforce research ethics and practice	<ul style="list-style-type: none"> i) Screen of research proposals. ii) Screen research reports for adherence to research ethics
	Encourage and energize staff and students to undertake research	Effective communication	<ul style="list-style-type: none"> i) Develop an effective system to deliver information to various user groups ii) Prepare outreach materials including web-based downloadable materials on ethical research issues
	Encourage and energize staff and students to undertake research	Create awareness on calls for proposals, workshops, seminar and conference attendance	<ul style="list-style-type: none"> i) Alert staff and students on calls for proposals, workshops, seminars and conferences through the internet ii) Place calls for proposals on notice boards
	Motivate staff and students to undertake research	Attract and retain qualified	<ul style="list-style-type: none"> i) Facilitate funding to staff and students to undertake research ii) Facilitate attendance of conferences, seminars and workshops iii) Recognize outstanding researchers iv) Facilitate publication of research findings
	Enhance the	15	<ul style="list-style-type: none"> i) Recruit and select qualified research experts

	research capacity of staff and students	staff in research	<ul style="list-style-type: none"> ii) Commensurate remuneration iii) Provide improved terms of service i) Develop quality training materials on research ii) Allocate qualified facilitators in research training
		Provide research capacity-building programmes for students	
		Provide research capacity-building programmes for academic staff	<ul style="list-style-type: none"> i) Organize training workshops for staff on scientific writing ii) Procure software for undertaking research iii) Train staff on the use of software for research
Community Outreach	Enhance the University's capacity to provide community service	Formulate a community service and outreach policy	<ul style="list-style-type: none"> i) Appoint a committee to develop the outreach policy ii) Organize a workshop to develop an outreach policy
		Community participation in research activities	<ul style="list-style-type: none"> i) Involve the community in designing extension programmes ii) Design and carry out extension activities iii) Design and carry out focused outreach
	Address development challenges through research and innovations.	Utilize research findings and innovations	<ul style="list-style-type: none"> i) Share the benefits of research with the community ii) Information sharing with the community
Enterprise and Innovation	Promote exploitation of innovations and research findings	Empower the community	<ul style="list-style-type: none"> i) Provide entrepreneurial skills to start income generating activities based on the research findings ii) Monitor the impacts of research based community projects.
		Establish science and industrial parks at which research findings can be translated into products	<ul style="list-style-type: none"> i) Source for funding for the establishment of the science and industrial park ii) Equip the science and industrial park iii) Produce the products from research findings iv) Establish incubation centres within the science and industrial parks
		Establish within the Research Division a publicity committee to promote or market the research and its findings	<ul style="list-style-type: none"> i) Design the advertisements. ii) Select appropriate media for advertisement iii) Market the products from research
		Support the Innovators	<ul style="list-style-type: none"> i) Provide funding for innovative activities ii) Reward innovators

	Protect Intellectual Property Rights	Implement the Policy on Intellectual Property Rights	<ul style="list-style-type: none"> iii) Recognize innovators
Institutional Linkages	Develop and implement a structured system for stakeholders' networking, collaborations and partnerships	<p>Promote networking protocols and frameworks for partnership and collaboration</p> <p>Promote collaborative relationships and strategic partnerships for R& D</p>	<ul style="list-style-type: none"> i) Identify the human resource to implement the policy ii) Implement the Intellectual Property Rights Policy
			<ul style="list-style-type: none"> i) Undertake an assessment of potential areas for collaboration ii) Develop frameworks for partnership and collaboration iii) Formulate partnership and collaboration tools iv) Facilitate Multidisciplinary and transnational linkages among institutions and organizations i) Identify potential partners and collaborators for programme implementation ii) Build capacity for negotiations and engaging in partnerships, linkages and collaborations iii) Negotiate and enter into agreements, contracts and partnerships for programme support

5.0 IMPLEMENTATION FRAMEWORK

The chapter outlines the framework within which the Research Division intends to successfully implement this plan in the stipulated time. To ensure successful implementation process, the Division will put in place the necessary mechanisms to among other things ensure:

- i) Governance arrangements for all programme initiatives, including ensuring mitigation of risks and implementation of plans
- ii) That reporting arrangements are put in place and met
- iii) Effective coordination of cross-cutting issues such as staffing, systems support, finances, procurement, monitoring and evaluation



5.1 Implementation Matrix

Activities	Expected output	Performance Indicator	Time frame	Expected Impact
STRATEGIC ISSUE 1: RESEARCH				
STRATEGIC OBJECTIVE 1: Facilitate and improve the infrastructure for research				
Strategy 1				
Increase the allocation for funding from the University for research	Increased number of research projects	Number of academic staff and students undertaking research	2012-2018	Quality research findings
Solicit for funding from development partners	Increased number of competitive proposals attracting external funding	Number of funded proposals	2012- 2018	Increased response to external research calls Enhanced relationships with development partners/collaborators Increased funds from competitive proposals Enhanced capacity for research
Source and negotiate for funding from public institutions	Increased organization of conferences Increased funds for research, conferences and capacity building	Number of research projects Number of conferences attended Number of trained staff	2012-2018	Quality research findings
Strategy 2				
Subscription to journal sites and research databases	Improved access to research information	Number of journal publications and research	2012-2018	Quality proposals and research
Undertake expansion of library research space and facilities	More research space and facilities for researchers and postgraduate students	Number of sites and facilities	2012-2018	Enhanced accessibility to information
Collection and management of research	Database created Institutional documentation and	Number of publications Number of databases	2012-2018	Functional and effective documentation and

findings information sharing	publication centre established	At least one documentation and publication centre		publication centre Enhanced access and use of information
Strategy 3	Develop and improve the ICT infrastructure			
Develop and improve the existing ICT infrastructure	Efficient ICT system	-Speed of accessing internet - Reduction on down time -Reduced number of internet interruptions	2012-2018	Enhanced information retrieval and utilization
STRATEGIC OBJECTIVE 2: Institutionalize research ethical methods in research				
Strategy 1	Creating awareness on the ethical policies in research			
Preparing information, education and communication materials	Manuals, pamphlets and electronic media procurement of plagiarism-screening software	Number of manuals pamphlets and electronic media prepared Number of projects screened for adherence to ethical research practices	2012	Awareness of ethical methods in research Increased adherence to ethical research practices
Conduct education and training workshops and seminars	Workshops, seminars	Number of seminars and workshops Reports on seminars and workshops organized Number of academic staff and students trained	2012	Enhanced awareness on research ethics
Strategy 2	Enforcing Research ethics and practice			
Screening and vetting of research proposals	Conforming research proposals	Number of screened research proposals	2012-2018	Increased adherence to ethical research practices
Screening research reports	Original research reports	Number of screened	2012-2018	Reduced cases of plagiarism

for plagiarism	research reports		
Strategy 3			
Effective Communication			
Develop an effective system to deliver information to various user groups	Policy on ethical methods in research	2012	Effective guidelines , rules and regulations on ethical methods in research
Prepare outreach materials including web based downloadable materials on ethics issues in research	Print and electronic materials	2012	Enhanced awareness on ethical issues on research through the delivery of materials and information to specific targets
STRATEGIC OBJECTIVE 3: Encourage and re-energize staff and students to undertake research			
Strategy 1			
Create awareness on calls for paper proposals , seminars and conference attendance			
Informing staff and students on calls for proposals, seminars and conferences through the internet	Postings on emails and social sites	2012-2018	Increased response to calls for proposals, seminars and conferences
Placing calls for proposals on notice boards	Posters, internal memos	2012-	Increased awareness on calls for proposals, seminars and conferences
Strategy 2			
Motivating staff and students to undertake research			
Providing funding to staff and students to undertake research	Funding for research Funding for publications	2012-2018	More funded proposal
Facilitating attendance and participation of conferences, seminars and workshops	Facilitation for conferences, seminars and workshops	2012-2018	Increased attendance and participation to conferences, seminars and workshops

Recognize outstanding researchers and grant awardees	Certificates and other awards	facilitated	2012-2018	Increased outstanding researchers
Facilitating publications	Funding for publications	Number of publications	2012-2018	Publications in high impact journals Recognition of the university through higher rankings
STRATEGIC OBJECTIVE 4: Enhance the research capacity of staff and students				
Strategy 1				
Attracting and retaining qualified staff in research				
Recruiting and selecting qualified research experts	Qualified research experts	Number of selected research experts	2012-2018	Increased pool of research expertise Increased capacity to conduct research
Commensurate remuneration of research experts	Attractive salary scheme	Reviewed salary scheme.	2012-2018	Retention of academic staff who are research oriented
Provision of improved terms of service	Improved terms of service	Reviewed terms of service	2012-2018	Increased motivation of academic staff
Strategy 2				
Provide quality based programmes for students				
Develop quality training materials on research	Curriculum and modules	Number of Curricula and modules	2012-2018	Increased number of research based programmes
Allocating qualified facilitators in research training	Placing research experts in training	Number of qualified staff placed	2012-	Enhanced capacity of student to conduct research
Strategy 3				
Provide capacity building research based programmes for academic staff				
Conduct training workshops for staff on scientific writing	Seminars and workshops	Number of seminars and workshops Number of participants	2012-2018	Enhanced skills in proposal writing, journals and publications
Procure software for undertaking research	Software such as SPSS, S PLUS, R, MATLAB EPI INFOR	Number of soft wares	April 2012- June 2012	Quality data analysis
Training staff on the use of	Workshops	Number of staff	2012-2018	Quality research reports

software for research		trained	
STARTEGIC ISSUE 2: COMMUNITY OUTREACH			
STARTEGIC OBJECTIVE 1: Enhance the University's capacity to provide community service			
Strategy 1			
Formulate a community services and outreach policy			
Appoint a committee to develop the outreach policy	Team of experts	Team encompassing all stakeholders	April 2012- June 2012
Organize a workshop to develop an outreach policy that involves all stakeholders	Outreach policy	Policy document	April 2012- Sept 2012
			All inclusive quality outreach policy Effective guidelines , rules and regulations on outreach
Strategy 2			
Community participation in research activities			
Involve the community in demo-trials	Community driven demo-trials	Number of Community driven demo-trials	2012-2018
Design and carry out extension activities	Extension activities	Number of extension programme	2012-2018
Design and carry out focused outreach	Focused outreach undertaken	Number of designed research activities	2012-2018
			Increased involvement of the community Empowerment of the community through extension programme Enhanced community participation through the Delivery of materials and information to specific targets
STARTEGIC OBJECTIVE 2: Address development challenges through research and innovation			
Strategy 1			
Utilize research findings and innovations			
Sharing the benefits of research with the community	Benefits from research and innovation shared	Types of benefits from research and innovation shared	2012-2018
Information sharing with the community	Demonstrations and seminars	Number of demonstrations, seminars	2012-2018
			Gains from research and innovation Improved livelihood Enhanced knowledge, awareness and skills by the community
Strategy 2			
Empowerment of the community			
Providing entrepreneurial skills to start income	Seminars and workshops	Number of seminars and workshops	2012-2018
			Increased income generating activities

generating activities based on the research findings					
Monitoring the impact of research based community projects	Visits to community projects	Number of evaluation and monitoring reports. Number of evaluated community projects	2012-2018		Sustainable projects
STRATEGIC ISSUE 3: ENTERPRISE AND INNOVATION					
STRATEGIC OBJECTIVE 1: Promote exploitation of innovations and research findings					
Strategy 1					
Source for funding for the establishment of the science and industrial park	Funds for establishment of science and industrial park	Science and industrial park	2012-2014		Proper infrastructure for research and innovation
Equipping the science and industrial park	Equipment procured for science and industrial park	Equipped science and industrial park	2012-2016		Efficient processing of products and services
Produce the products and services from research findings	Products and services from research findings	Number of products and services from research findings	2012-2018		Commercialization of research products and services
Strategy 2					
Establish publicity committees which will promote or market the research and its findings					
Designing the advertisements	Advertisements and promotions	Number of advertisements and promotions	2012-2018		Increased awareness and sales
Selecting appropriate media for advertisement	Appropriate Media	Types of media used	2012-2018		Increased publicity of products and services
Marketing the products and services from research	Sales and profits	Amount of sales and profits generated	2012-2018		Increased income from research products and services
Strategy 3					
Supporting the Innovators					
Providing funding for innovative activities	Funds for innovations	Number of funded innovations	2012-2018		Increased quality and quantity of innovations
Rewarding innovators	Certificates and other awards	Number of Certificates and other awards	2012-2018		Increased motivation to undertake innovative

Recognizing innovators	Acknowledgements	Number of acknowledgements	2012-2018	activities
Increased motivation to undertake innovative activities				
STRATEGIC OBJECTIVE 2: Protecting Intellectual Property Rights				
Strategy 1				
Identifying the manpower to implement policy	Manpower identification	Team of experts	2012-2018	Increased level of expertise
Implementing the intellectual property rights policy	Intellectual Property Rights Regulations and policies put in place	Intellectual Property Rights Regulations	2012-2018	Working policy
Monitoring and Evaluation of IPR	Monitoring and evaluation activities	Number of patented products Number of registered applications for patenting	2012-2018	Adherence to IPR Policy
STRATEGIC ISSUE 4: INSTITUTIONAL LINKAGES				
STRATEGIC OBJECTIVE 1: Develop and implement a structured system for stakeholders networking, collaborations and partnerships				
Strategy 1				
Undertake an assessment of potential areas for collaboration	Assessed potential areas for collaboration	Number of assessments and areas assessed	2012-2018	Facilitation of national and international collaboration
Develop frameworks for partnership and collaboration	Partnerships and collaboration protocols and frameworks developed	Number of protocols/framework developed	2012	Ease of negotiating partnerships and collaborations
Build capacity for negotiation and engaging in partnerships, linkages and collaborations	Trainings and workshop in negotiation skills	Number of trained staff on negotiation skills Curriculum on negotiation skills	2012-2018	Well negotiated and binding agreements
Formulate partnerships and collaboration tools	Partnerships and collaborations tools formulated	Number of tools formulated	2012	Ease of negotiating and implementing partnerships and collaborations

Facilitate multidisciplinary and transnational linkages among institutions and organizations	Interdisciplinary and transnational linkages facilitated	Number of interdisciplinary and transnational linkages	2012-2018	Enhanced collaborations and linkages Enhanced synergies
Strategy 2	Promote collaborative relationships and strategic partnerships for R& D			
Identify potential partners and collaborators for Research programme implementation	Potential collaborators and partners in research programmes implementation identified	Number of potential partners and collaborators identified	2012-2018	Improved programme support
Negotiate and enter into agreements, contracts and partnerships for research programme support	Agreements, contracts and partnerships negotiated	Number of agreements, contracts and partnerships negotiated	2012-2018	Strong foundation for research programme implementation Enhanced synergies



5.2 Resource Requirements

5.2.2 Projected Financial Requirements

The Strategic objectives outlined in this plan will be attained through the associated strategies and activities. The financial requirements are summarized in the tables below.

The university Strategic Plan (2012-2018) has budgeted the amount indicated in column 3 for the strategic issues of the Research Division as indicated in Table 5.1. The projected cost for the strategic issues is given in column 2 and the financing gap is provided in column 4. The financing gap will be filled by a combination of strategies that will include enhanced allocation from the university, external fundraising, external project financing, collaboration synergies, e.t.c.

Table 5.1: Projected Financial Estimates

STRATEGIC ISSUE	ESTIMATED COST (KShs Millions)	BUDGETED COST (KShs Million)	VARIANCE (KShs Million)
Research	286	107	179
Community Outreach	55	21	34
Enterprise and Innovation	501	187	311
Linkages	38	15	25
TOTAL COST	880	330	550

Table 5.2 Tabulates the annual financial requirements per year for the planning period.

Table 5.2: Estimated Cost per Year for the Period (2012-2018)

STRATEGIC ISSUE		AMOUNT (KSHS Million)							
		2012	2013	2014	2015	2016	2017	2018	TOTAL
Research	Estimated Cost	32	35	38	40	43	45	53	286
	Budgeted Cost	12	13	14	15	16	17	20	107
	Variance	20	22	24	25	27	28	33	179
Community Outreach	Estimated Cost	5	5	5	8	8	11	13	55
	Budgeted Cost	2	2	2	3	3	4	5	21
	Variance	3	3	3	5	5	7	8	34
Enterprise and Innovation	Estimated Cost	67	70	80	64	69	81	70	501
	Budgeted Cost	9	14	19	22	34	42	47	187
	Variance	58	56	61	42	35	39	23	314

Linkages	Estimated Cost	5	5	5	5	5	5	8	38
	Budgeted Cost	2	2	2	2	2	2	3	15
	Variance	3	3	3	3	3	3	5	23
TOTAL COST		109	115	128	117	125	142	144	880

PROPOSED SOURCES OF REVENUE OF 550M

SOURCE	PERCENTAGE CONTRIBUTION (%)	AMOUNT (Kshs Millions)
Enhanced allocation from University	40	220
External funding	30	165
Collaborations	10	55
Government funding	20	110
Total	100	550

5.3 Risks and Mitigation

In view of the PESTEL analysis, it is evident that a number of risks can be associated with the plan implementation. Such risks are spread in a areas related to resources, operations, strategies and technology and can be traced to the following:

- a) Resistance to the implementation of proposed programmes and activities by some stakeholders
- b) Staff turnover, redeployment or shortages may deny some programme areas of the requisite skills, with the likelihood of affecting programme implementation and delivery of services
- c) Inadequate funding or delayed, diverted or reduction of funds for the plan implementation
- d) Resistance by stakeholders to adapt to technological changes
- e) Resistance by stakeholders to be guided by the policies of research
- f) Intensive competition from the collaborators

In order to mitigate the effects of the above mentioned risks, it will be necessary to ensure the optimal utilization of the resources available for research and community outreach and also maintain close consultation with its stakeholders. Proper and constant monitoring and evaluation of progress of activities would forestall failure in implementation.

6.0 PERFORMANCE MONITORING, ASSESSMENT AND EVALUATION

6.1 Performance Monitoring

In order to ensure high quality in the delivery of its programmes, the Research Division will ensure that monitoring and evaluation is an essential process in managing and improving research and community outreach programmes. These processes will be an integral part of the Research Division programme implementation at all stages. Monitoring will be undertaken to establish whether a programme is showing any inadequacies. Data will be collected about the programme and analyzed regularly to ensure that there any problems that need action are addressed. Through monitoring, the Research Division shall obtain valuable data that will give indication of the extent of success/failure of the programme implementation. This will therefore provide a quality control mechanism for a given programme.

6.2 Performance Assessment and Evaluation

While monitoring will be an ongoing process to keep track of how a programme is performing, evaluation shall be undertaken periodically to assess the strengths and weaknesses of programmes, their capacities to achieve the goals assigned to them, and their impacts on those for whom they are intended to benefit. As such, evaluation will focus on among other things, the processes of the programmes, their outcomes and their intended impacts. It will give an overall sense of how each programme is working towards the attainment of associated goals and objectives and whether a need exists at a point in time for certain aspects of the programme to be modified to increase efficiency and effectiveness.



6.3 Monitoring and Evaluation Log Frame

M & E Criteria Category	Objectively Verifiable Indicators of Achievement	Sources and Means of Verification	Assumptions/Risks
<p>Vision: To be a community driven leader in research and innovation for social and economic development</p>	<ul style="list-style-type: none"> -Number of research findings and innovations generated in a year. -Number of projects that have been successfully adopted by the communities for income generation. -Number of communities whose social welfare has improved -Number of households which adapt research output and innovations to improve their social welfare 	<ul style="list-style-type: none"> -Regular research Bulletin -Regular household and community surveys -Database of the Research Division 	<ul style="list-style-type: none"> -Staff will be motivated to carry out research and develop innovations -The community will embrace the research innovations -The research findings and innovations will be disseminated to the community
<p>Mission: To provide leadership in research and innovation for social and economic empowerment</p>	<ul style="list-style-type: none"> -Number of publications -Number of journals -Number of patented innovations -Number of international conferences -Numbers of extension programmes -Number of presentations in national and international forums -Number of grants 	<ul style="list-style-type: none"> - Peer reviewed Publications -Peer reviewed Journals -Conferences organized -Grants attracted 	<ul style="list-style-type: none"> -Grants will be available -Researchers will be motivated to publish -The University will fund publications

Strategic Objectives			
1. Develop and improve the infrastructure for research			
Strategies			
Provide the required funding needed for research	<ul style="list-style-type: none"> i) Increase the allocation for funding from the University for research ii) Number of proposals for funding written iii) Number of negotiation meetings attended/convened for funding from government institutions concerned with research 	<ul style="list-style-type: none"> -Regular financial reports from the research division -Media attention 	<ul style="list-style-type: none"> -Availability of funds from the University -Researchers will respond to research calls
Improve on library resources and related facilities for research purposes.	<ul style="list-style-type: none"> i) Number of subscriptions to journal sites and databases ii) Number of people accessing research materials iii) Number of publications in the research archive 	<ul style="list-style-type: none"> -Regular library reports -Updated catalogue -Research database 	<ul style="list-style-type: none"> -Researchers are willing to forward publications -Sufficient and efficient manpower in the library
Develop and improve the ICT of the local area networks(LAN) facility in use	<ul style="list-style-type: none"> i) Speed of accessing internet and reliability ii) Faster network service 	<ul style="list-style-type: none"> -Monitoring reports from IT department -Surveys on user satisfaction 	<ul style="list-style-type: none"> -Efficient internet service providers - Qualified IT expertise

2. Institutionalize the ethical methods in research			
Strategies			
Creating awareness on the ethical policies in research	i) Number of manuals and pamphlets prepared ii) Number of seminars and workshops Reports on seminars and workshops organized	-Manuals and Pamphlets -Research bulletins -Awareness strategies -Research reports -Screening software	-Availability of research reports, pamphlets and bulletins -Willingness to consume the literature -Availability of funding
Enforcing research ethics and practices	i) Number of screened proposals ii) Number of Screened	Research Division reports	-Availability of funding to procure software for screening -Availability of technical personnel
Effective Communication	i) Number of sensitization workshops and seminars ii) Number of bulletins and press releases iii) Number of hits on research websites	-Policy document on ethics -Bulletins, press releases - Website	-Availability of funding -Sufficient expertise on ethical issues

3. Encourage and re-energize staff and students to undertake research			
Strategies			
Create awareness on calls for proposals , papers, seminar and conference attendance	<ul style="list-style-type: none"> i) Number of postings of calls for research proposals, papers seminars and conferences on emails and social sites ii) Number of postings through internal memos on notice boards on calls for proposals, seminars and conferences 	File of postings	Researchers will respond to calls
Motivating staff and students to undertake research	<ul style="list-style-type: none"> i) Amount of funding to staff and students to undertake research ii) Amount of Facilitation for attendance of conferences, seminars and workshops iii) Number of certificates and awards given to recognize outstanding research findings 	<ul style="list-style-type: none"> -Research reports and bulletins -Research Division Database -Regular Financial reports 	<ul style="list-style-type: none"> -Data management systems will be in place -Availability of resources -Willingness of researchers to participate
4. Enhance the research capacity of staff and students			
Strategies			
Attracting and retaining qualified staff in research	<ul style="list-style-type: none"> i) Number of recruited research experts ii) Numbers of reviews of remuneration iii) Staff turnover ratio iv) Reviewed terms of service 	Human resource database	<ul style="list-style-type: none"> -Availability of funding -Availability of expertise
Provide quality research based programmes for students	<ul style="list-style-type: none"> i) Number of Curricula and modules developed ii) Number of qualified staff placed 	<ul style="list-style-type: none"> -List of curricula developed -Human resource database 	<ul style="list-style-type: none"> -Availability of funding -Availability of expertise

	Provide quality research based programs for staff	<ul style="list-style-type: none"> i) Number of seminars and workshops ii) Number of soft- wares purchased iii) Number of staff trained 	<ul style="list-style-type: none"> -Research reports and bulletins -Research Division Database 	<ul style="list-style-type: none"> -Availability of funding -Availability of expertise -Willingness and availability of staff to be trained.
5.	Enhance the University's capacity to provide community service			
	Strategies			
	Formulate a community services and outreach policy	<ul style="list-style-type: none"> i) Number of policy development ii) Policy document 	<ul style="list-style-type: none"> -Policy document on community services and outreach -Research reports -Policy development minutes 	<ul style="list-style-type: none"> -Availability of funding -Availability of expertise
	Community participation in research activities	<ul style="list-style-type: none"> i) Number of designed community extension programmes ii) Number of designed research activities 	<ul style="list-style-type: none"> -Research reports and bulletins on Community participation -Surveys 	<ul style="list-style-type: none"> -Willingness of community participation -Availability of funding -Availability of expertise
6.	Address development challenges through research and innovation			
	Strategies			
	Utilize research findings and innovations	<ul style="list-style-type: none"> i) Number of innovations ii) Number of demonstrations, seminars iii) Number of individuals applying research output and innovations 	<ul style="list-style-type: none"> -Research reports on Utilization of research findings and innovations -Bulletins -Surveys 	<ul style="list-style-type: none"> -Willingness of community participation - Availability of funding
	Empowerment of the community	<ul style="list-style-type: none"> i) Number of seminars and workshops ii) Number of visits to community projects initiated 	<ul style="list-style-type: none"> -Surveys -Research reports on empowerment of the community -Research bulletins 	<ul style="list-style-type: none"> -Willingness of community participation - Availability of funding

7. Promote exploitation of innovations and research findings			
Strategies			
Establish science and industrial parks at which research findings can be translated into products	<ul style="list-style-type: none"> i) Working area established ii) Number and type of equipment purchased iii) Number of products from research findings 	<ul style="list-style-type: none"> -Physical infrastructure of the park -Surveys -Products Reports 	<ul style="list-style-type: none"> -Availability of funding -Availability of expertise -Willingness of researchers to develop innovations
Establish publicity committees which will promote or market the research findings	<ul style="list-style-type: none"> i) Number of advertisements and promotions ii) Number of committee meetings iii) Amount of sales iv) Types of media used v) Number of sales and profits generated 	<ul style="list-style-type: none"> -Financial reports - Research reports and bulletins - Surveys 	<ul style="list-style-type: none"> -Availability of funding -Availability of expertise in media matters -Good corporate image of the University
Supporting the Innovators	<ul style="list-style-type: none"> i) Number of funded innovations ii) Number of Certificates and other awards iii) Number of acknowledgements 	<ul style="list-style-type: none"> - Research reports and bulletins -Research Division Database 	<ul style="list-style-type: none"> -Availability of funding -Willingness to undertake research of innovative products
8. Protecting Intellectual property rights			
Strategies			
Implementing the policy on intellectual property rights	<ul style="list-style-type: none"> i) Number of IPR implementation meetings ii) Intellectual property rights Regulations iii) Number of patent applications iv) Number of patents registered 	<ul style="list-style-type: none"> -Quality Policy document on IPR -Research reports -KIPI 	<ul style="list-style-type: none"> -Availability of funding -Availability of expertise

9. Develop and implement a structured system for stakeholders networking, collaborations and partnerships			
Strategies			
Promote networking , protocols and frameworks for partnership and collaboration	<ul style="list-style-type: none"> i) Number of assessments and areas assessed ii) Number of protocols/framework developed iii) Number of tools formulated iv) Number of inter-disciplinary and trans-national linkages 	<ul style="list-style-type: none"> -Research reports and bulletins -MOU's and MoA's signed 	<ul style="list-style-type: none"> - National and regional policies to enable collaboration in research and innovation -Willing collaborators who share similar interests -Created Partnerships will be Sustainable
Promote collaborative relationships and strategic partnerships for R& D	<ul style="list-style-type: none"> i) Number of potential partners and collaborators identified ii) Number of agreements, contracts and partnerships negotiated 	<ul style="list-style-type: none"> -Research reports and bulletins -MOU's and MoA's signed establishing the collaborations and partnerships 	<ul style="list-style-type: none"> - National and regional policies to enable collaboration in research and innovation -Willing collaborators who share similar interests -Created Partnerships will be sustainable



APPENDIX A: MATRIX ON OUTPUT, ACTIVITIES, PERFORMANCE INDICATORS, IMPLEMENTER AND ESTIMATED BUDGET

Activities	Expected output	Performance Indicator	IMPLEMENTOR	ESTIMATED BUDGET KSHS (MILLIONS)						
				2012	2013	2014	2015	2016	2017	2017
STRATEGIC ISSUE 1: RESEARCH										
STRATEGIC OBJECTIVE 1: Develop and improve the infrastructure for research										
Strategy 1	Provide the required funding needed for research									
Solicit for funding from development partners	Quality and competitive proposals	Number of people responding to international research calls	RD(Research And Development Division and Management	2	2	2	2	2.5	2.5	3.5
Source and negotiate for funding from government institutions concerned with research	Increased organization of conferences and more proposals in conferences	Number of people writing proposals	R & D Division Management(MGT)	2.5	2.5	2.5	4	4.5	4.5	5.5

Strategy 2	Improve on library resources and related facilities for research purposes											
Subscriptions increased links to journal sites	Relevant research findings	Number of subscriptions to journal sites	R&D and Librarian(LIB)	1.3	2.3	3	3	3.5	3.5	4		
Enhance collection and centralization of research findings and publications to the research division	Database for reference	Number of publications in the research archive	R&D	1.5	2	2	2	2	2	2		
Strategy 3	Develop and improve the ICT of the local area networks(LAN) facility in use											
STRATEGIC OBJECTIVE 2: Institutionalize the ethical methods in research												
Strategy 1	Creating awareness on the ethics policies in research											
Preparing information, education and training materials	Manuals, Pamphlets	Number of Manuals and Pamphlets prepared	R&D	1.5	1.5	1.5	1.5	2	2	2.5		
Organize education and training workshops and seminars	Workshops, seminars and resource persons	Number of seminars and workshops Reports on seminars and workshops organized	R&D	1.5	1.5	2	2	2.5	2.5	3		

Enforcing research ethics and practice										
Strategy 2	Pre-screening and vetting of research proposals	Unique research proposals	Number of pre-screened research proposals	R&D	1	1.5	1.5	1.5	1.5	2
	Screening of research reports	Original research reports	Number of screened research reports		1	1.5	1.5	1.5	1.5	2
Strategy 3	Effective Outreach									
	Prepare outreach materials including web based downloadable materials on research issues in ethics	Magazines, press releases	Number of Magazines, press releases	R&D	1.5	1.5	1.5	1.5	1.5	2
STRATEGIC OBJECTIVE 3: Encourage and revitalize staff and students to undertake research										
Strategy 1	Create awareness on calls for proposals , seminars and conference attendance									
	Alerting staff and students on calls for proposals, seminars and conferences through the internet	Postings on emails and social sites	Number of postings of calls for proposals, seminars and conferences on emails and social sites	R&D	0.1	0.1	0.1	0.1	0.1	0.1
	Placing calls for proposals on bulletins	Posters, Internal memos	Number of postings and internal memos on calls for	R&D	0.1	0.1	0.1	0.1	0.1	0.1

Strategy 2 Motivating staff and students to undertake research										
	Funding for research	Amount of funds released	R&D and MGT	4	4.5	5	5	5.5	5.5	6.5
Providing funding to staff and students to undertake research										
Facilitating attendance of conferences, seminars and workshops	Facilitation for conferences, seminars and workshops	Amount of facilitation	2012-R&D and MGT	5	5	5.5	6	6	6	7
Recognize outstanding research findings	Certificates and other awards	Number of certificates and awards given	R&D and MGT	1	1	1	1	1	1.5	1.5
Facilitating publications	Funding for publications	Number of publications	R&D and MGT	3.5	3.5	4.3	4.3	4.3	4.8	5.8
STRATEGIC OBJECTIVE 4: Enhance the research capacity of staff and students										
Strategy 1	Attracting and retaining qualified staff in research									
Strategy 2	Provide quality research based programmes for students									
Develop quality training materials on research	Curriculum and modules	Number of Curricula and modules	R&D	1.5	1.5	1.5	1.5	1.5	2	2
Strategy 3	Provide quality research based programmes for staff									
Organize training workshops for staff on scientific writing	Seminars and workshops	Number of seminars and workshops	R&D	1.25	1.25	1.25	1.25	1.25	1.75	2.75

Training staff on the use of software for research	Workshops	Number of staff trained	R&D	1.75	1.75	1.75	1.75	1.75	1.75	1.75	2.75
STRATEGIC ISSUE 2: COMMUNITY OUTREACH											
STRATEGIC OBJECTIVE 1: Enhance the University's capacity to provide community service											
Strategy 1											
Formulate a community services and outreach policy											
-Organize a workshop to develop outreach policy	Outreach policy	Policy document	R&D	0.5	0.5	0.5	0.5	0.5	0.5	0.5	1
-Implementation of outreach policy that involves all stakeholders											
Strategy 2											
Community participation in research activities											
Involve the community in demo-trials	Community driven demo-trials	Number of Community driven demo-trials	R&D	0.5	0.5	0.5	0.5	1	1	1.5	2
Design and carry out extension activities	Extension activities	Number of extension activities	R&D	0.5	0.5	0.5	0.5	1	1	1.5	2
Design and carry out focused outreach	Focused outreach undertaken	Number of designed research activities	R&D	0.5	0.5	0.5	0.5	0.5	0.5	0.5	1

STRATEGIC OBJECTIVE 2: Address development problems through research in line with the millennium development goals and Vision 2030									
Strategy 1		Utilize research findings and innovations							
Sharing the benefits of research with the community	Benefits from research	Types of benefits from research	R&D	0.5	0.5	1	1	1	1.5
Training the community on utilization of research findings	Demonstrations, seminars	Number of demonstrations, seminars	R&D	1	1	1.5	1.5	2	2
Strategy 2									
Empowerment of the community									
Providing entrepreneurial skills to start income generating activities based on the research findings	Seminars and workshops	Number of seminars and workshops	R&D	1	1	1.5	1.5	2	2
Monitoring the community projects from research	Visits to community projects	Number of visits to community projects	R&D	0.5	0.5	0.5	1	1.5	1.5

STRATEGIC ISSUE 3: ENTERPRISE AND INNOVATION										
STRATEGIC OBJECTIVE 1: Promote exploitation of innovations and research findings										
Strategy 1										
Establish science and industrial parks at which research findings can be translated into products										
	Funds for establishment of science and industrial park	Science and industrial park	MGT	50	50	50	30	23	18	5
Source for funding for the establishment of the science and industrial park										
Equipping the science and industrial park	Equipment procured for science and industrial park	Equipped science and industrial park	MGT	7	8	10	15	20	25	18
Produce the products from research findings	Products from research findings	Number of products from research findings	R&D	6	7	9	10	15	22	27
Strategy 2										
Establish publicity committees which will promote or market the research and its findings										
Marketing the products from research	Sales and profits	Number of sales and profits generated	R&D	1	1	2	2	3	5	6
Strategy 3										
Supporting the Innovators										
Providing funding for innovative activities	Funds for innovations	Number of funded innovations	R&D and MGT	1	2	3	3	4	5	6
Rewarding innovators	Certificates and other awards	Number of Certificates and other awards	R&D and MGT	1	1	2	2	2	3	4

Recognizing innovators	Acknowledgements	Number of acknowledgement	R&D and MGT	1	2	2	2	3	4
STRATEGIC OBJECTIVE 2: Protecting Intellectual property rights									
Strategy 1 Implementing the policy on intellectual property rights									
Organize a workshop to develop the policy	Developing the policy	Policy document	R&D	0.3	-	-	-	-	-
Implementing the intellectual property rights policy	Intellectual property rights Regulations and policies put in place	Intellectual property rights Regulations	R&D	0.1	0.1	0.1	0.1	0.2	0.2
STRATEGIC ISSUE 4: LINKAGES									
STRATEGIC OBJECTIVE 1: Develop and implement a structured system for stakeholders networking, collaborations and partnerships									
Strategy 1 Promote networking , protocols/frameworks for partnership and collaboration									
Undertake an assessment of potential areas for collaboration	Assessed potential areas for collaboration	Number of assessments and areas assed	R&D	0.5	1.25	1.25	1.25	1.25	2
Develop frameworks for partnership and collaboration	Partnerships and collaboration protocols/frameworks developed	Number of protocols/framework developed	R&D	1	-	-	-	-	-
Formulate partnerships and collaboration tools	Partnerships and collaborations tools formulated	Number of tools formulated	R&D	1	-	-	-	-	-
Facilitate Multidisciplinary	Interdisciplinary and trans-national	Number of inter-disciplinary and	R&D	1	1.25	1.25	1.25	1.25	2

and transnational linkages among institutions and organizations	linkages facilitated	trans-national linkages								
Strategy 2	Promote collaborative relationships and strategic partnerships for R& D									
Identify potential partners and collaborators for Research programme implementation	Potential collaborators and partners in research programmes identified	Number of potential partners and collaborators identified	R&D	0.5	1.25	1.25	1.25	1.25	1.25	2
Negotiate and enter into agreements, contracts and partnerships for research programme support	Agreements, contracts and partnerships negotiated	Number of agreements, contracts and partnerships negotiated	R&D	1	1.25	1.25	1.25	1.25	1.25	2

APPENDIX B: MKU TASKFORCE MEMBERS

Prof. John H. Nderitu	DVC, Research and Development
Dr. Francis W. Muregi	Director, Research and Development
Samuel K. Mathenge	Research Assistant
Ann Kariuki	Taskforce Chairperson
Serah Ndambiri	School of Business and Public Management
Emma Anyika	School of Business and Public Management
Kennedy Waweru	Dean, School of Business and Public Management

APPENDIX C: UNIVERSITY RESEARCH COMMITTEE MEMBERS

Prof. Joseph Malusu	Dean, School of Education
Dr. David Nguti	Dean, School of Social Sciences
Mr. Kennedy Muna	School of Health Sciences
Dr. Edward Kamamia	School of Pharmacy
Dr. Edith Wakori	School of Pharmacy
Dr. Hamisi Wainaina	School of Pure and Applied Sciences
Ms. Violet Asiko	School of Health Sciences

APPENDIX D: STAKEHOLDERS

Prof. Jasper Imungi	University of Nairobi
Dr. Benson Kinyagia	National Council of Science and Technology
Dr. Kasina Muo	Kenya Agricultural Research Institute
Dr. Francis Njonge	Jomo Kenyatta University of Agriculture and Technology
Dr. Francis Kimani	Kenya Medical Research Institute
Dr. Patrick N Muthoka	National Museums of Kenya
Mr. Fredrick Musieba	Kenya Industrial Research Institute

APPENDIX E: LIST OF RESOURCE DOCUMENTS

African Biotechnology Stakeholders Forum Strategic Plan 2012-2016
Kenya Vision 2030; Sector Plan for Education and Training 2008-2012
Kenya Vision 2030; Republic of Kenya
Mount Kenya University Linkages Policy 2010
Mount Kenya University Strategic Plan 2008-2018
Mount Kenya University Research Policy 2010

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