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**Book Part**

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*Reference:* In: The Emerald Handbook of Research Management and Administration Around the World (2023). Emerald Publishing Limited, S. 425 - 433.
https://doi.org/10.1108/978-1-80382-701-820231035.
doi:10.1108/978-1-80382-701-820231035.

Chapter 5.2

# Research Management and Administration in Kenya in a Challenging Research Environment

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## Abstract

This chapter provides an overview of the current state of research policy and research management and administration (RMA) in Kenya. Although RMA is an emerging field globally, it is not yet fully recognised in Kenya. The main objective of this chapter is to provide an overview of the vibrant research environment in Kenya, its most important challenges in the field of management and administration of research, and how some Kenyan Universities are dealing with them.

The findings in this chapter are based first on a research policy documents analysis and on literature review. In a second phase, qualitative data were collected through desk-based research and informant questionnaires and interviews.

In the conclusions, concrete suggestions are formulated that could support the enrichment of the research environment, find solutions for RMA-related

**The Emerald Handbook of Research Management and Administration Around the World, 425–433**



**doi:10.1108/978-1-80382-701-820231035**

challenges, but also lead to the development and establishment of RMA as a profession in the country.

*Keywords*: Kenya; research management and administration; National Research Policies; universities; South Eastern Kenya University; Moi University

## Context

The main document outlining the national programmatic documents of Kenya as well as that of other African countries, is the African Union's (AU) Agenda 2063. The Agenda 2063 is a well-developed comprehensive plan for the structural transformation of Africa into a global powerhouse of the future, which was adopted at the AU's golden jubilee summit in 2013. The heads of states and governments assembled at the summit and declared their resolve to make progress in identifying seven aspirations – within which they identify goals and priority areas – which are to be integrated into national development policies and plans.

Agenda 2063 is the concrete manifestation of how the continent intends to achieve this vision within a 50-year period (2013–2063). The need for such a long-term development trajectory for Africa is important as the continent needs to revise and adapt its development agenda due to ongoing epochal transformations. Science, Technology, and Innovation (STI) is recognised as a key enabler promoting the ability of African countries to achieve their economic transformation and development goals.

In 2022, Kenya ranked 13th among the 36 lower-middle-income group economies on the Global Innovation Index (GII),[1] Dutta et al. (2015), which captures the multidimensional facets of innovation by measuring the innovation capacity of countries across the world and which provides tools to tailor policies for promoting long-term output growth, improved productivity, and job growth (Cornell University, INSEAD, and WIPO 2015). It ranked 4th among the 27 economies in Sub-Saharan Africa.

As one of the signatures to the clear vision set out in Agenda 2063 for the future of Africa, Kenya, as most of the African countries, supported its implementation by adopting the Science, Technology and Innovation Strategy for Africa 2024 (STISA-2024) which is one of a series of 10-year strategies planned as part of Agenda 2063. STISA-2024 provides a focus on improving Africa's STI status in human capital, technical competence, infrastructure, the enabling environment, innovation, and entrepreneurial (AUC 2014). To ensure the effective implementation of STISA-2024, African countries agreed to establish an African Science, Technology and Innovation Fund (AAS, 2018) but this had not yet been achieved.

In this political and programmatic scenario, the importance of higher education for development and the roles of universities in relation to development are widely recognised. Indeed, as the main knowledge-producing institutions in any society, it is assumed that universities are well-placed to leverage their research and education capacities to foster more innovative and dynamic economic growth (Cloete et al., 2011, 2018).

[1]https://www.wipo.int/global_innovation_index/en/2022/

## The Kenyan Research Policies and Environment

Despite the challenges Kenya faces as a low-middle income country, its research management system is lacking but not undeveloped as further outlined in this chapter.

Kenya has tried to develop and adopt Science, Technology, and Innovation (STI) policies, as directed by the Kenyan National Research Agenda 2018–2022 that 'recognises the critical role played by research and development in accelerating economic development and proposes to intensify the application of STI to raise productivity and efficiency levels across the economic, social and political pillars of the Vision'. However, according to the African Academy of Sciences (AAS), STI policies in the African continent are predicated primarily on economic growth and competitiveness rationales, rather than on sustainable development. In the last draft of the National Science, Technology, and Innovation Policy (Kenyan Ministry of Education, 2020), what is lacking is the monitoring and evaluation (M&E) mechanisms. These are planned but the procedures and the tools are not clearly implemented.

In 2020, the status of STI policy development in Kenya included policy instruments such as the STI policy, or Science, Technology, and Innovation Policy (revised in 2018 and 2020) (Kenyan Ministry of Education, 2020). other related policies and policy instruments comprise the National Research Priorities 2018–2022 (Kenyan Ministry of Education, 2019), the Science, Technology and Innovation Act (2013), the Third Medium-Term Plan (2018–2022) of Vision 2030 (2008),[2] the National Research Fund (est. 2013), and also the Energy Act (2019).

To understand concretely the commitment of the Kenyan government to implement the STI policies, we must look at the gross domestic expenditure on research and development (R&D) (GERD), a common measure of investment in R&D. Indeed, in 2010, Kenya had one of the highest R&D intensities in Africa, at 0.79% of gross domestic product (GDP). Furthermore, the government has recently committed to allocate 2% of GDP to facilitate research for the advancement of science, technology, innovation, and commercialisation of research products. However, this is yet to be implemented (UNESCO Science Report, 2021).

Kenya's institutional framework for research relies on the role of the National Commission for Science Technology and Innovation (NACOSTI),[3] the National Research Fund (NRF),[4] and the Kenya Innovation Agency (KENIA).[5] Similarly, these national institutions have clear mandates but often lack the financial capacity to implement them effectively. Although funding for research is limited, Kenya's research environment is highly vibrant and productive. Kenya also hosts many international research organisations and intermediary organisations that are well integrated in the national context and make the country a major hub for research in East Africa.

The National Research Priorities 2018–2022, the third of five-year plans to implement the *Kenyan Vision 2030* as indicated by NACOSTI) also align with the national government priorities which are referred to as the Big Four Agenda: food and nutrition security; manufacturing; universal health coverage; and academic R&D and affordable housing.

In this rich policy background and framed institutional structure, the research environment in Kenya is very vibrant with opportunities. An indicator of a positive research

[2]https://vision2030.go.ke/publication/third-medium-term-plan-2018-2022/
[3]https://www.nacosti.go.ke/
[4]https://researchfund.go.ke/
[5]https://www.innovationagency.go.ke/

environment is the number of active research institutions. Indeed, since the introduction of the University Act in 2012, the number of public universities increased from 22 to 32, and that of private universities from 22 to 30 (established and funded mainly by private sponsors). This environment is strengthened by the presence of a large number of specialised think tanks and research institutes (Center for Research and Technology Development, Rift Valley Institute, Agricultural Information Resource Centre, etc.) and around 70 Research Hubs (UNESCO Science Report, 2021).

According to the UNESCO Science Report (2021), the volume of scientific publications from 2011 to 2019 doubled in Kenya. In Central and East Africa countries, Kenya has top five partner countries namely USA, UK, South Africa, Germany, and Uganda with scientific co-authorship of 3,045 papers in the years 2017–2019.

Regarding EU funds, the share of participation from third world countries in FP7 and Horizon 2020 has fallen from 4.9% in the FP7 to 2.4% under Horizon 2020 (Kraemer-Mbula et al., 2018). This is in spite of the efforts to increase the participation of African universities and research institutes in these calls. That notwithstanding, Kenya is among the leading African countries participating in these calls (Kraemer-Mbula et al., 2018). Indeed, Kenya's participation in EU Research Programmes increased from FP7 with 77 projects with 12.5 million euro funding to Horizon 2020 with 82 projects for a total of 32 million euro funding.[6]

Despite the recent policy advances, the rich environment and the active stakeholders at the university, similar overarching obstacles are perceived: lack of mechanism to promote accountability in policy implementation, lack of institutional resourcing and research funding, lack of facilities/resources, and also lack of training/research skills.

## The RMA Community

Although Kenya has a clear research framework and numerous Higher Education Institutions (HEIs), professional organisation for the development of research and innovation management is known as is observed in South Africa (SARIMA – Southern African Research & Innovation Management Association) or in West Africa (WARIMA – West African Research and Innovation Management Association). In 2015, the Eastern Africa Research and Innovations Management Association (EARIMA) was also founded, but the attempt to develop EARIMA seems ambitious since EARIMA membership covers several countries including Tanzania, Kenya, Rwanda, Ethiopia, Somalia, and Eritrea. This broad representation in terms of geographical coverage, especially in times of COVID, might increase difficulties for connecting, sharing, and implementing EARIMA's activities.

Thus, it is difficult to determine the profile of a research manager in the Kenyan universities. What appears from the web search analysis, analysed documents and from the interviews collected in the framework of research collaboration among Kenyan and Dutch universities, Kenyan researchers have the dual role of research managers and principal investigators (PIs). The burden and workload due to this double role seem to be perceived differently from the interviewees in this brief study. For instance, Manguro, Director of the International Center for Reproductive Health in Mombasa, who was interviewed underlined the difficulties of research management in difficulties in Kenyan institutions. Indeed, he states that 'grant-writing takes up much of his time

[6]Data from https://webgate.ec.europa.eu/dashboard/hub/stream/aaec8d41-5201-43ab-809f-3063750dfafd.

as there is no research management office at the institution and yet I must also ensure that the institution survives' (Van der Marwe, 2021).

Conversely, other researchers registered no complaint of having little time or too much pressure to fulfil the expected double duties. Instead, the dual role is perceived as an 'exciting opportunity' which offers the possibility 'to interact with other key players in research, establish collaborations, define priority research areas and participate in proposal development for competitive research grants'.

C. Van der Merwe stressed that Manguro thought that

> Kenyan researchers need help to develop the non-technical skills required to win funding, such as budgeting and ability to develop proposals. A further problem, he adds, is that funding is often tied to researchers from the Global North, demoting Kenyan researchers to 'basically a local implementer'.

No specific training, unless offered by private entities or developed through initiatives by universities, appears to be available to develop the needed research soft skills (e.g. science communication, scientific writing and mentorship). One of the few initiatives is offered by Alliance for Accelerating Excellence in Science in Africa[7] (AESA) – a funding, agenda-setting and programme management initiative created through a partnership between the AAS, African Union Development Agency, and global partners. The International Research Management Staff Development Programme[8] (IRMSDP), another organisation, endeavours to develop individual capacity, promote knowledge and culture sharing and the development of tools and resources by research management professionals in respective regions. IRMSDP is implemented by the Research Management Programme in Africa (ReMPro Africa),[9] which contributes to ReMPro Africa's fourth strand on developing the individual capacity of research management staff, is implemented in partnership with ARMA UK,[10] the professional membership association for Research Managers and Administrators in the UK.

Since this initiative is Africa-wide, only 5 Kenyan research institutions have been selected on the 62 universities so far to participate and to facilitate the needs of all universities and research institutes of Kenya. Indeed, several reports stress the need for training on soft skills particularly on research funding and grant writing.

## Best Practices: SEKU and MOI University

To implement the national research policies and mitigate research challenges, Kenyan universities foster institutional strengthening by embedding the Research Support Services in their organisation, in order to overcome the emergent problems through extensive use of external consultants.

In the semi-structured interviews conducted implementing a collaborative research project assessment, RMA professionals and responsive communities indicated an awareness in the enhancement of RMAs within some universities. As part of the previously mentioned collaborative effort with Kenyan institutions, we focus on the South

[7]https://www.aasciences.africa/programmes
[8]https://arma.ac.uk/international-research-management-staff-development-programme/
[9]https://www.aasciences.africa/aesa/programmes/research-management-programme-africa-rempro-africa#/aesa/programmes
[10]https://arma.ac.uk/

Eastern Kenya University (SEKU) and Moi University as cases in point, partners in the above-mentioned collaborative project.

**Moi University**, located in the Western Kenya, was established in 1984 as the second public university in the country. It is a growing multicampus university whose reputation is increasing. It is ranked as the second Kenyan university. Moi University has a fairly well-structured research management administrative office that is run by an Associate Dean, Research & Innovation which coordinates research and innovation activities in the university. The Directorate of Research has the mandate of:

- enhancing the capacity of researchers and dissemination of research outputs,
- improving the management of research funds,
- incubating research innovations/inventions, and
- partnering with industry to commercialise research outputs for the betterment of society.

The office, in collaboration with schools and faculty, implements the research policy on research teams and themes on various activities such as responding to calls for papers, calls for proposals/grants/projects, conferences, seminars, workshops, grants managements, and technology transfer.

To promote a vibrant and productive research environment that positively contributes to national industrialisation and development goals by putting in place appropriate structures for effective research funding and management of research activities, Moi is also paying particular attention to Intellectual Property (IP) having established a specific IP Policy (IPP) which governs the disposition of IP generated in the institution and promotes creativity and innovation. It has also established a department dedicated to Gender Equality issues. In relation to areas of Open Science and Data Management, the university is organising new offices though requires further government interventions and support from stakeholders.

The **South Eastern Kenya University** (SEKU) is a public university with a main science and technological vocation. SEKU is 'making progress in all fronts' as they state

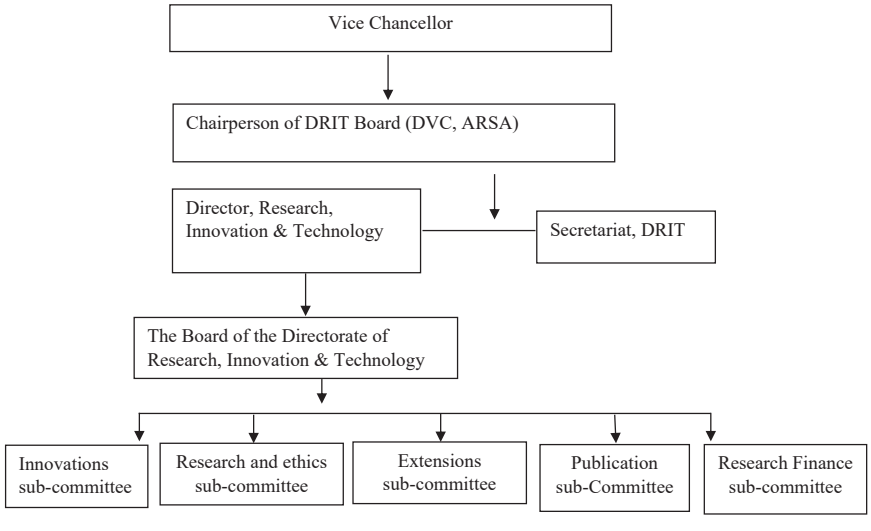


Fig. 5.2.1. Organisational Chart for the Directorate of Research, Innovation and Technology (DRIT) at SEKU.

in their video presentation,[11] taking the lead of the new challenges that society and research have to face. Indeed, SEKU established a well-structured division as Directorate of Research, Innovation and Technology (DRIT), see Fig. 5.2.1.

Responsibilities, duties, and participation in boards are well outlined both at the governance and at the management level. Indeed, the governance level is directly involved in research policy implementation:

- The Vice-Chancellor is the Chief Executive Officer (CEO) of the university. By virtue of this, they are an ex-officio member of the DRIT Board of Management.
- The Deputy Vice-Chancellor of Academic, Research, and Students Affairs (DVC ARSA) is the chairperson of the DRIT Board of Management whose role is to oversee the implementation of the research mandate in the university.
- The Director of Research, Innovation, and Technology is in charge of executing the mandate and duties of DRIT and is therefore the secretary of the DRIT Board of Management.
- The DRIT Board of Management has membership spelt out in the University Statutes.
- The Board of the Directorate of Research, Innovation & Technology is organised in the following subcommittees:

  – Innovations – In charge of the development and implementation of the IP policy.
  – Research and Ethics – In charge of ensuring that research ethics are upheld. The university has established an Institutional and Scientific Ethics Review Committee and is awaiting accreditation by NACOSTI[12] to facilitate the ethical clearance and management of submitted research proposals involving human and animal subjects.
  – Extensions – Promotes community engagement in research activities, training, and sensitisation of the public on matters of research. Currently developing a policy on research extension.
  – Publication – In charge of published works by the university. It is currently developing a publications policy and a proposal to establish the *SEKU Journal of Research*.
  – Research Finance – This committee has membership from the university finance office, university financial audit, and procurement. Its role is to manage research finances/grants and asset disposal, i.e. ensuring proper acquisition and retention of all assets obtained from research activities for sustainable use by the university.

## Conclusions

Considering how active and vibrant the Kenyan research system is, and the contribution by several funded collaborative projects and programmes meant/intended to increase the Kenyan universities and other HEIs capacity building, the authors are willing to see ownership[13] from the Kenyan RMA community and stock take all the

[11]https://youtu.be/J-fxxF_CJ3Q
[12]https://www.nacosti.go.ke/
[13]Ownership is used here as a concept of the Global South which claims ownership on goals, concepts, and procedures within the global south context often not recognised by the Western World which proceeds with a colonialist attitude.

findings and suggested solutions to overcome the common highlighted barriers such as limited research funding and institutional support.

Investment in the professionalisation of a Research Manager and Administrator is an integral element for the development of a rich research environment. Whether through independent, national, or international collaborative research or capacity-building programmes, adequate and continuous investment in RMA training and support mechanisms is required to bring on and foster excellence in research, also creating opportunities to establish or reinforce their professional networks. At the same time, it is important that investments in people also strengthen the wider research base of institutions.

The training events provided by the IPD should be held on regular basis not only to train on the basic RMA professional skills, e.g. research funding opportunities, communication, scientific writing including mentorship and data management, but also to build a common knowledge and promote the notion of the research management 'career' pathway in institutions, supported by an appropriate infrastructure of networks. Meeting in training sessions will facilitate the opportunities to establish a RMA community and association.

The necessity to build an independent Kenyan-based RMA association will not only identify common obstacles in developing a rich research environment but will also lobby for common remedies at top management and political levels. This is indicated by the interviewees as the missing key element to improve properly and achieve a rich research environment in Kenya.

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