



REPUBLIC OF KENYA

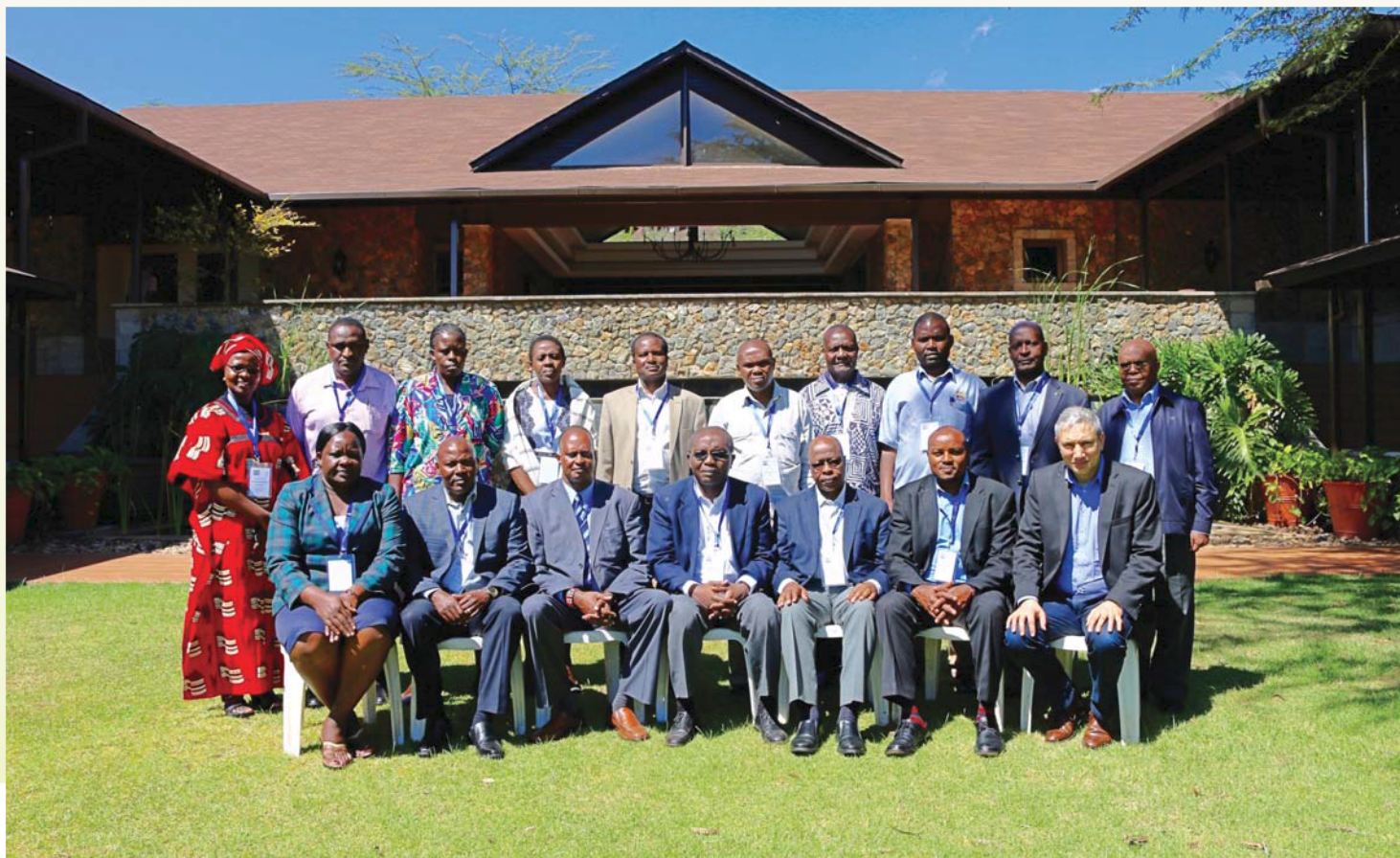
NATIONAL RESEARCH FUND

BOARD OF TRUSTEES WORKSHOP REPORT

JULY, 2016

IN COLLOBORATION WITH





THE NATIONAL RESEARCH FUND BOARD OF TRUSTEES AT THE
WORKSHOP

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Acronyms

AMCOST	African Ministerial Council on Science and Technology
CEO	Chief Executive Officer
CNHR	Consortium for National Health Research
CPA	Consolidated Plan of Action
DFID	UK Department for International Development
GDP	Gross Domestic Product
HRCS	Health Research Capacity Strengthening
IDeaL	Initiative to Develop African Research Leaders
ITES	Information Technology Enabled Services
KENIA	Kenya National Innovation Agency
KWTRP	KEMRI-Wellcome Trust Research Programme
LPA	Lagos Plan of Action
MDAs	Ministries, Departments and Agencies
MoEST	Ministry of Education, Science and Technology
MoH	Ministry of Health
MTP	Medium Term Plan
NACOSTI	National Commission for Science and Technology
NBS	National Broadband Strategy
NCST	National Council for Science and Technology
NIS	National Innovation System
NRDA	National Research and Development Agenda
NRF	National Research Fund
PPP	Public Private Partnership
PWG	Planning Working Group
S,T & I	Science Technology and Innovation
SDPM	State Department of Personnel Management
STEM	Science, Technology, Engineering and Mathematics
STISA	Science, Technology & Innovation Strategy for Africa
TVET	Technical and Vocational Education and Training

Foreword

The Kenya's National Development Agenda recognizes Science, Technology and Innovation (ST&I) as a key enabler to achieve a globally competitive and prosperous status as envisioned in Kenya Vision 2030 (KV 2030). However, low investment in ST&I has been one of the obstacles towards this goal. In acknowledging this challenge, the Government has committed to raise research funding up to 2% GDP annually through budgetary provision and partnerships.



The National Research Fund (NRF), duly established by the Science, Technology and Innovation Act 2013, is mandated to provide research leadership in the National Innovation System by promoting, supporting and funding research for advancement of Science, Technology and Innovation. By laying proper strategies and working collaboratively with all stakeholders, NRF will harness the consolidation of all Research and Development (R&D) funding scattered in various Government Ministries, Departments and Agencies (MDAs).

The workshop therefore, was a platform for learning; exchange of ideas and exploration of opportunities that would fast track the NRF's take off. We look forward to engaging with other key players from time to time to enable the fund strike a balance in meeting the expectations of the stakeholders as well as the partners. The recommendations drawn in this forum will be acted upon starting with the low hanging fruits to hasten the operationalization of the Fund.

Mr. Tirop Kosgey
Chairman,
National Research Fund



Executive Summary

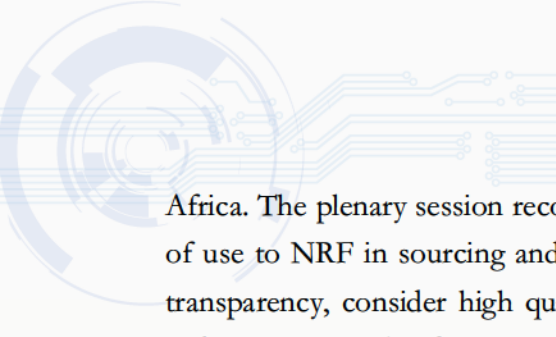
The National Research Fund (NRF) held its first orientation workshop for two days from 25th to 26th February, 2016 at The Great Rift Valley Lodge, Naivasha, Kenya. The main objective of the workshop was to familiarize the NRF Board of Trustees and the Secretariat with Science, Technology and Innovation policies background as well the Planning Working Group Report on conceptual framework for operationalization of NRF constituted was a key instrument in ensuring the workshop objectives were achieved. The Consortium for National Health Research (CNHR) cosponsored this workshop. To enable the Board and the Secretariat get a good foundation for taking off. It was attended by 21 participants drawn from the National Research Fund, the Ministry of Education, Science and Technology, the Ministry of Health, and the Consortium for National Health Research.

Day one commenced with official opening of the workshop where introductory remarks and statement of purpose was done by Prof. Matilu Mwau, the Director, Consortium for National Health Research. In his presentation, he encouraged NRF to embrace excellence in setting up of organizational structure and operations. He also indicated that the stakeholders expect the Fund to come up with a clear road map and prioritized strategies. He noted that NRF will be one of enablers of Vision 2030. It was observed that there seemed to be a lot of research money in the Country that was not coordinated and as such NRF now operational would be a key institution to address this challenge.

The welcoming remarks were delivered by Mr. Tirop Kosgey, the NRF Chairman whose core expectation was the Board getting familiarized with the relevant policy environment and also the report by the Planning Working Group on conceptual framework for operationalization of NRF.

Dr. George Ombakho delivered the opening remarks on behalf of Prof. Colletta Suda, the Principal Secretary, State Department of Higher Education. The opening remarks raised expectations that the workshop could culminate to new ideas and opportunities that would enable NRF's take off towards realization of the overall national development agenda. The remarks indicated commitment by the Ministry of Education, Science and Technology in supporting NRF through its infancy phase. The role of development partners, donors and philanthropists in supporting the Government to raise the Research Fund to 2% GDP was recognized. The remarks also appreciated the efforts by the Consortium for National Health Research in supporting the Planning Working Group and the workshop.

The presentations given in session two of day one were: The Role of Science, Technology and innovation in Kenya's development agenda; an overview of Science, Technology & Innovation Policy and Act, The National Research Agenda and The Health Research Capacity Strengthening Agenda for



Africa. The plenary session recommended validation of the national research agenda as this could be of use to NRF in sourcing and disbursement of funds. The Fund was also encouraged to embrace transparency, consider high quality research and learn from best models through collaborations in order to create value for resources spent. In the presentation on the role of Vision 2030, it was noted that there are recommendations to in-built budgets of MDAs where 1% of their annual allocation will be set aside for internal research to increase the scientific outputs.

Session three of day one presentations entailed: the NRF history, vision, mission and strategic focus and; legal framework and governance structures. It was recommended during the plenary discussion that the research funds scattered within the government institutions should be consolidated into one basket and this could be possible through high level negotiations as well as legislation reviews. Meanwhile NRF would be supplementing on what already exists. Possible gaps noted in the legal framework included the need to mandate NRF to coordinate research funding, create strategic linkages with policy makers and development partners as well as stakeholder participation.

The proposed NRF model and conceptual framework for operationalization of NRF were discussed during the fourth session of day one. Plenary session drew a number of recommendations and those that needs immediate intervention include: as a prerequisite for sourcing of funds, branding of NRF be done well enough to reflect its objectives and mandate; the funding and sustainability strategies for NRF be in place as soon as possible; the Fund to consider a lean organizational structure for efficiency and; the Fund to consider developing a database to account for overall funds spent on research by the Government agencies

Session one of day two comprised of three presentations which include: resource mobilization for NRF; funding opportunities for research and; management of research funds. For resource mobilization, the aspect of sustainability and involvement of the private sector at the earliest stage was emphasized.

It was recommended that Kenya should invest heavily on infrastructure and innovations as this has worked well in Ethiopia and Rwanda which is evident from the numbers of publications in reputable journals produced from these countries. For NRF to grow sustainably, proper strategies should be laid in the first two phases of its sigmoid curve i.e. lag and log to avoid stationary and decline phase. The Fund should borrow a lot from institutions with similar mandate such as CNHR, Higher Education Loans Board, The National Research Fund of South Africa and also consider engaging the stakeholders regularly for critique. It was also observed that the success of NRF will be based on ability, integrity and accountability.

In session two of day two, the funding and grant award mechanism as well as the NRF plan of action were deliberated upon. The first presentation stressed on the need for setting fund objectives, priorities, awarding scheme and monitoring and evaluation (M&E) of funded projects for

accountability. The Board was encouraged to maintain NRF Strategic role in national development by creating awareness on what NRF is and is not, balancing competing interests, public demands and accountability.

In case of NRF plan of action, crucial aspects for NRF's take off were highlighted which include:

- Proper foundation for NRF from parent law (*Regulations, Law review, National Research Agenda*)
- Positioning NRF as a national outfit (*Stakeholder management, The National Treasury, State Corporations Advisory Committee (SCAC), Parliament, Launch, Campaigns, Branding, and Benchmarking.*)
- Internal processes for takeoff (*Secretariat, Technical Committees, Strategic Plan, Financial Budgetary Process, Strategy Docs in Fund management and Investment, Resource mobilization, Communication, Governance Documents of Trust Deed and rules*)
- Sustainability of the Fund (*Strategic partner relations, Fundraising, Endowment Fund, Performance Management, Annual reports*)

This culminated to session three of breakout session to deliberate on the modalities of resource mobilization and NRF's one year roadmap (2016/2017). The two groups presented their output as given in Table 1 and Table 2.

Table 1: Group one report on modalities of resource mobilization based on where, what and how to get funds.

S/No	Activities	Initiation Timelines*
1.	Source of funds	
	Government	July, 2016
	Donors	April, 2016
	Private sector	January, 2017
	Investment	As soon as NRF raises enough funds
2	Requirements for funds	
	Induction of Board members on code of governance (Mwongozo)	March, 2016
	Internal Board Induction	April, 2016
	Categorization	May, 2016
	Appointment NRF Director/acting	April, 2016
	Office space agreement	1 st July, 2016
3	Getting funds	
	Opening of bank accounts	End of March, 2016
	Transfer of existing funds	April, 2016
	Strategic plan	April, 2016
	Branding of NRF	Continuous

* The actual timelines for all activities will depend of the strategic plan and appointment of the CEO hence the dates given are indicative of the initiation of processes.

Table 2: Group two report on NRF's one year roadmap (2016/2017)

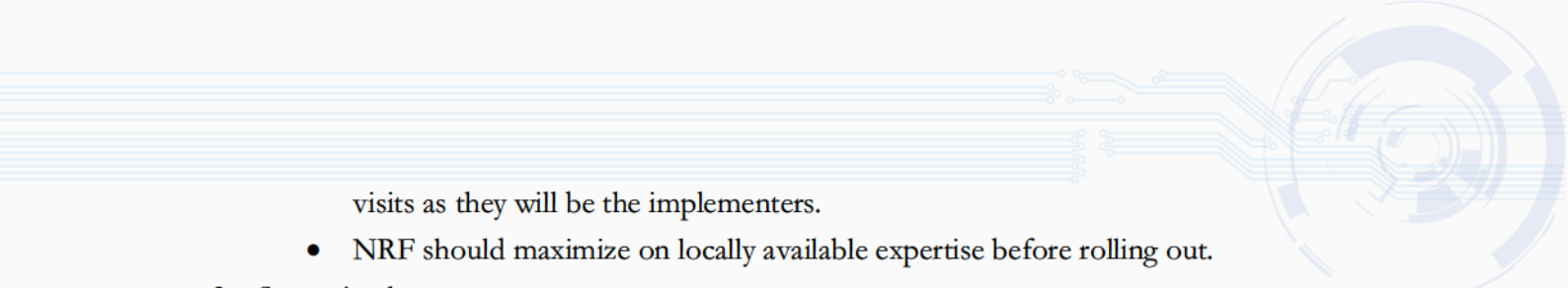
S/No	Activity	Sub- activities	Initiation Timeline*
1.	Categorization as a state corporation	Consultations with State Corporation Advisory Committee	May, 2016
2.	Organizational Structure and staff establishment	Consultations with Directorate of Public Service Management (DPSM)	May, 2016
3.	Review of parent law to address identified gaps	Review of ST&I Act by the Ministry's legal office	May, 2016
4.	Regulations, standards and guidelines to operationalize the parent law, Operating procedures, codes, forms, registers	Stakeholders engagement for validation; approval and launching	March, 2017
5.	Operators of legal entity	Strategic plan; Budget	Jan, 2017
6.	Benchmarking	Local and International model institutions visits	April, 2016
7.	Harmonization of Research Funds in Kenya	Engagement with stakeholders	June, 2016

*:The actual timelines for all activities will depend of the strategic plan and appointment of the CEO hence the dates given are indicative of the initiation of processes

Recommendations:-

The workshop concluded with the following recommendation from the meeting;

1. NRF to implement the suggested activities based on priority and timelines.
 - NRF to approach strategic partners starting with local institutions such as CNHR and international institutions such as Wellcome Trust for funding and technical support to implement some of the prioritized activities including: Development of strategic plan, Development of fund management policy and Benchmarking visits
2. Benchmarking;
 - NRF to have clear objectives, action points and the sum of funds within their reach before initiation of any benchmarking exercise and donor engagement.
 - Prior information about the institutions to be visited should be obtained to enable NRF prepare adequately to maximize the opportunities in its area of interest.
 - Since the system of operation in some Funds is unique, NRF should identify the best linking player and consider booking an appointment before planning the visit.
 - For sustainability purpose, it will be prudent to involve permanent secretariat in such



visits as they will be the implementers.

- NRF should maximize on locally available expertise before rolling out.

3. Strategic plan;

- The NRF secretariat to develop a Strategic Plan and Budget and organize a retreat with the Board for validation. The Board to present to the PS for approval. There is need for prioritization of activities starting with the short term before embarking on those which are long term.

1. INTRODUCTION

The National Research Fund (NRF) sensitization workshop was a two day event held on 25th and 26th February, 2016 at Great Rift Valley Lodge, Naivasha, Kenya. Participants arrived a day earlier in preparation for the meeting. The main objective of the workshop was to familiarize the newly inaugurated NRF Board of Trustees with Science, Technology and Innovation policies as well as review of the Planning Working Group Report on conceptual framework for operationalization of NRF. It was attended by 21 participants drawn from the National Research Fund, the Ministry of Education, Science and Technology, the Ministry of Health, and the Consortium for National Health Research.

2. OFFICIAL OPENING

The workshop formally commenced with members present going through a self-introduction while highlighting their expectations of the workshop that included new ideas, opportunities and roadmap that will enable NRF's take off towards realization of the overall national development agenda. Participants' expectations of what the workshop should help NRF achieve were as summarized below:

- Develop strategies to get the 2% GDP allocation
- Clarify vision and Mission for NRF
- Identify specific teams to deliver NRF Agenda
- Develop the NRF Work Plan and way forward
- Establishment and take off of NRF
- Identify PD challenges in Operationalization of NRF
- Lay down solid foundation to define NRF Destination
- Develop clear powerful theme that unites us all
- Set clear smart goals for NRF
- Develop clear unambiguous implementation plans
- Develop clear roadmap with smart goals
- Gain consensus on effective Research Funding
- Attain harmony in Research funding – well articulated strategy
- Mapping of key stakeholders
- Determine how we'll kick off institutionally
- Sensitization of NRF Board
- Prioritization of activities of NRF

Opening Remarks

Day one commenced with official opening where the Facilitator asked for self introduction of participants and listed their workshop expectations. Prof. Matilu Mwau, the Director for Consortium for National Health Research gave introductory remarks and statement of purpose. In his presentation, he encouraged NRF to embrace excellence in setting up of organizational structure and operations. He also indicated that the stakeholders expect the Fund to come up with a clear road map and prioritized

strategies. He noted that NRF will be one of enablers of Vision 2030. It was observed that there seemed to be a lot of research money in the Country that was not coordinated and as such NRF now operational would be a key institution to address this challenge. He noted Kenyans had high expectations from NRF as a national institution and that NRF would be expected to be excellent in supporting best ideas and efficient in operations. He retaliated that CNHR is fully committed to supporting NRF operationalized. He then welcomed the Chairman of NRF Board to make his remarks.



Prof. Matilu Mwau (Director, CNHR) delivering his remarks

Official Remarks

Mr. Tirop Kosgey, the NRF Board Chairman delivered his welcoming remarks with a core expectation of the Board getting familiarized with the relevant policy environment and also the report of the Planning Working Group on conceptual framework for operationalization of NRF. In his remarks, he appreciated the efforts in policy formulation and eventual enactment of ST&I Act of 2013 that created NRF. He noted that the country was ready for NRF activities and that the NRF Board of Trustees was also ready to embark in the important work of executing its mandate. He thanked the PWG for the work done and agreeing to share the work on the framework to operationalize NRF. He noted that a clear understanding of funding demands and how resource mobilization would be done was crucial. He said the NRF board was open to engage other partners in its operation to ensure sufficient funding of research in the country.



Mr. Tirop Kosgey (Chairman, NRF) giving his remarks

Official Opening Speech by the Ministry of Education, Science and Technology

The official opening speech by Prof. Collette Suda, the Principal Secretary, State Department of Higher Education was delivered by Dr. George Ombakho, Director in the Directorate of Research Management and Development. The PS noted that the establishment of NRF is in line with goals of Vision 2030 and African agenda. The PS stated the Ministry of Education, Science and Technology initiatives for change legal frameworks such as the Science, Technology and Innovation Policy and Strategy; ST&I Act, 2013, and the University Education Act, 2012 intended create conducive environment for Research prosperity in these programs. National Research Fund (NRF), was established to provide research leadership in the country by promoting, supporting and funding research for advancement of ST&I. Other key bodies under ST&I Act, 2013 were NACOSTI and KENIA. The three bodies were expected to work collaboratively towards the realization of National Development Agenda and contribute in creating the desired knowledge based economy. The PS applauded CNHR's support to operationalize NRF as a good example of effective Public Private Partnership collaboration for national development.

The PS noted the Government of Kenya commitment to support research by gradually raising the expenditure on Research and Development (R&D) up from about 0.98% to 2% of the GDP stipulated in the ST&I Act 2013.



Dr. George Ombakho (Director, DRMD and Alt Board member, NRF) giving opening remarks

The workshop adjourned for health break and a group photo that was coordinated by Ms. Ndunge Kiundi of CNHR.

3. PRESENTATIONS

The Role of Science, Technology and Innovation in The Kenya's Development Agenda



Dr. Jonathan Lodompui, Kenya Vision 2030, Secretariat

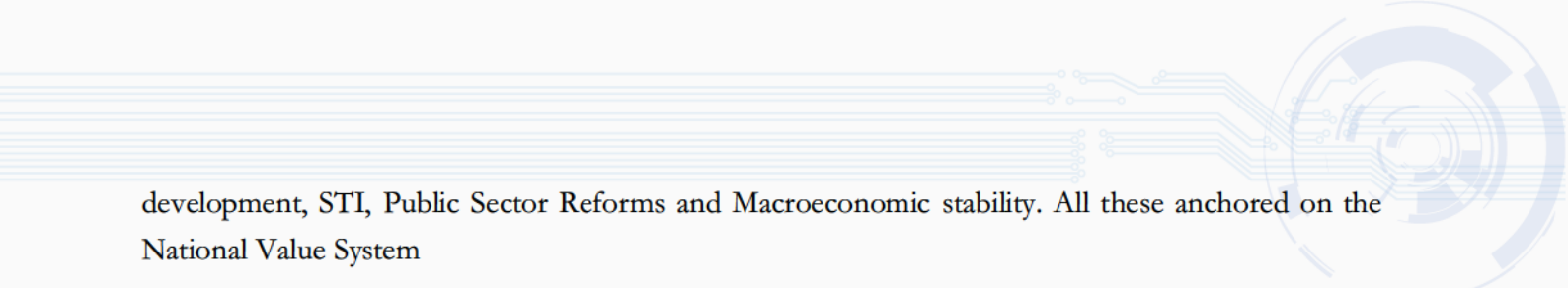
The Director for Enablers & Macro at Kenya Vision 2030 Delivery Secretariat, Dr. Jonathan Lodompui presented on the role of Science, Technology and Innovation in Kenya's development agenda. The highlights of his presentation were as follows:

Background

Dr. Lodompui reported that Vision 2030 aspired for Kenya with a globally competitive, knowledge based economy and a middle level income Nation with high quality of life. The aim of the Vision was to Kenya attain competitiveness, logistic hub and increased savings and investment. He referred also to the Medium Term Plan II- National and County Governments and Jubilee Manifesto - Agenda for Kenya 2013-2017 and beyond

Pillars of Vision 2030:

Overarching Vision to be a globally competitive and prosperous nation with a high quality of life by 2030. Economic pillar- to maintain a sustained economic growth of 10% p.a. for most of the next 20 years. Social pillar- a just and cohesive society enjoying equitable social development in a clean and secure environment. Political pillar- an issue-based, people-centred, result-oriented, and accountable democratic political system. Enablers and Macro Foundations- Cross cutting infrastructural



development, STI, Public Sector Reforms and Macroeconomic stability. All these anchored on the National Value System

Science, Technology & Innovation in the Context of Vision 2030

Science, Technology and Innovation (ST&I) have become one of the most important enabling tools, leading to shifts in comparative advantage and competitiveness of economies worldwide. The Kenya Vision 2030 and the Constitution explicitly place a premium on the generation and management of a knowledge-based economy and the need to raise productivity and efficiency.

The vision recognizes the role of science, technology and innovation in a modern economy, in which new knowledge plays a central role in boosting wealth creation, social welfare and international competitiveness.

Role of STI in the Kenya Vision 2030 Blueprint for Development

To achieve the goals in the second MTP, the sector will adopt various supporting initiatives including; Public Private Partnerships (PPP), linking industry with academia, value chain analysis; synergy and other initiatives for closed-cycle cluster approach for enhanced corporation.

The sector will play a critical role in ensuring that all sectors of economy have access to the necessary technologies that will increase production and quality in a diverse range of products, processes and services. These include establishment of the National Bio Safety Authority, the National Science, Technology and Innovation Fund, an award scheme for recognition of outstanding scientists in Kenya and construction of new laboratories and workshops in all TVET Institutions. For a vision to transform and transcend the intended society the passion of vision must be created, engrained and integrating into every aspect of peoples' lives.

Vision 2030 Flagship Projects under ST&I include:

- Nano-Sciences, Material Science and New Production Technologies Programme
- Science, Technology, Engineering and Mathematics (STEM) Programme
- Coordination of the Technology and Innovation and Commercialization Programme
- County Technology and Innovations Delivery Services Programme

Technology Uptake in Kenya included a key flagship project Konza techno city that is expected to develop world class infrastructure and technology to facilitate research, education and business through Information Technology Enabled Services (ITES) to position Kenya as knowledge based economy and a preferred ICT destination. Others included Upgrading National ICT Infrastructure, National Broadband Strategy, The National Optic Fibre Backbone (Nofbi), Money Transfer Services, Resort Cities and the Laptops Programme

Challenges

Jonathan concluded his presentation by highlighting some of the challenges to these projects as piracy,

inability to control the pertinent contents for innovation, cyber crime, high cost especially the installation of Fibre Optic cable, high illiteracy levels because not many people are knowledgeable on how to operate the devices, cyber bullying especially in the social media, type of information available on i-cloud, acquiring wrong information through technology, lack of qualified teachers to teach ICT in schools and lack of enough computers.

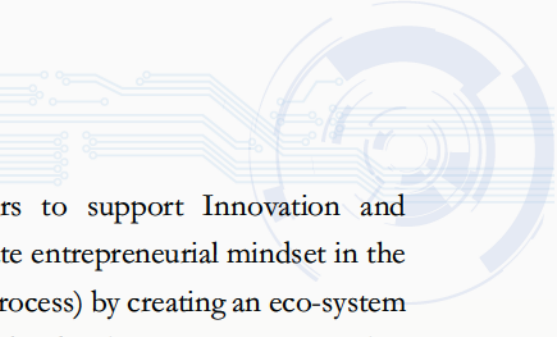
Overview of Science, Technology and Innovation Policy and Act, 2013; Supporting the Legal Framework

The Deputy Director, Directorate of Research Management and Development, MoEST Dr. John Ayisi started his presentation by indicating the endogenous efforts made. He said that after independence in 1963, the country embarked on nation building with Industrialization being at the centre of the development agenda and creation of various organizations like KNTC, KIE, ICDC, NCC/(A) and KFA. However, in Sessional Paper No. 10 of 1965, there was lack of clarity on how to promote STI for national development, with STI often given low priority. Initiatives that followed include: Lagos Plan of Action (LPA) for the Economic Development of Africa (1980–2000), African Ministerial Council on Science and Technology (AMCOST) in 2003, Africa's Science and Technology Consolidated Plan of Action (CPA) by AU/NEPAD in 2005.



Dr John Ayisi, Directorate of Research Management and Development

Dr. Ayisi indicated that despite its vast natural resources and the praiseworthy efforts of many African governments, the continent (excluding South Africa) still faced challenges as the poorest and



economically marginalized. Africa therefore needed the 3 Pillars to support Innovation and Entrepreneurship which he said included investing in People to create entrepreneurial mindset in the society (including education & Researchers), preparing the ground (Process) by creating an eco-system (NIS) for the creation and use of technology and finding a purpose by developing entrepreneurship and social entrepreneurship programs.

Regarding the R&D Funding in Africa, Dr Ayisi said that experience from developed countries, and recently from the Asian Tigers (Singapore, Taiwan, Hong Kong and South Korea), most African countries including Kenya – realized that Returns On Investment in ST&I was a key driver to promote economic development, reduce poverty and realize global competitiveness. 8th AU Summit, 22-30 January 2007, Theme: “Science, Technology and Scientific Research for Development” and “Climate Change in Africa” recommended member states to commit at least 1% of GDP to R&D by 2010. The progress made was presented as well.

Following this, the African Inter-parliamentary Forum on Science, Technology and Innovation (AIPF-STI) at their first-ever meeting was launched in May 2011 by UNECA at a continental meeting in Cairo, Egypt. This platform would look into significant investment in science, technology and innovation was needed to ensure Africa's transformation, engaging policy-makers, parliament legislators, scientists, private sector, the media and representatives of CSOs in an active dialogue to advance science, technology and innovation in Africa, strong advocacy on ST&I funding (implementation 1% GDP), advocacy for the creation of strong institutions (infrastructures and facilities) for R&D and sustainable human capital development and strategies for combating brain drain in order to grow a critical mass of ST&I experts in the continent

ST&I policy

Dr. Ayisi underscored the need for a National Science policy to guide S,T&I actions by way of providing the structures for determining how funding will be allocated to government agencies that support research, how they are to use and distribute funds, and the policies and regulations that will govern research conducted with government money. The policy would also be used for promoting science education and technology transfer, to ensure that science is conducted in a way that enhances the public good and that the national research enterprise is supported and advanced using uniform guidelines for conducting science within the country

The Vision 2030 and its three pillars also anchored on the STI.

National sectors significant to Vision 2030 he said were: agriculture and rural development; health and life sciences; trade and industry; human resource development; physical infrastructure; energy; environment and natural resources management; information communication technology (ICT); and space science technology.



The policy recommendations were highlighted as follows:

- Re-align ST&I programmes to national goals and market needs;
- Improve technical competencies and institutional capacity for ST&I and R&D institutions to make them more effective in addressing national priority needs;
- Establish institutions dedicated to developing key industries that will enable the country attain Newly Industrialized Country (NIC) status;
- Entrench product oriented multi-disciplinary approach to Research and Development (R&D);
- Strengthen governance and management of the ST&I sector and institutions to make them more efficient and effective;
- Develop and implement a mechanism for sustainable financing of ST&I;
- Protect knowledge production by strengthening intellectual property and regulatory regimes at all levels; and
- Promote economic competitiveness through fostering innovation, value addition and entrepreneurship (Commercialization)

Under the Science, Technology and Innovation for Africa (STISA) - 2024 Strategy, there's expected acceleration of Africa's transition to an innovation-led, knowledge based economy, focusing on the sectors of agriculture, health, infrastructure, mining, security, water, energy, and environment. Priority will be given to eradication of hunger and achieving food security, prevention and control of diseases, communication, and protection of our space, building the society and generating wealth. Pillars of the 2024 strategy include: upgrading/building research infrastructure, enhancing professional and technical competencies, innovation and entrepreneurship as well as providing an enabling environment for STI development

Vision, Mission and Philosophy of ST&I Policy

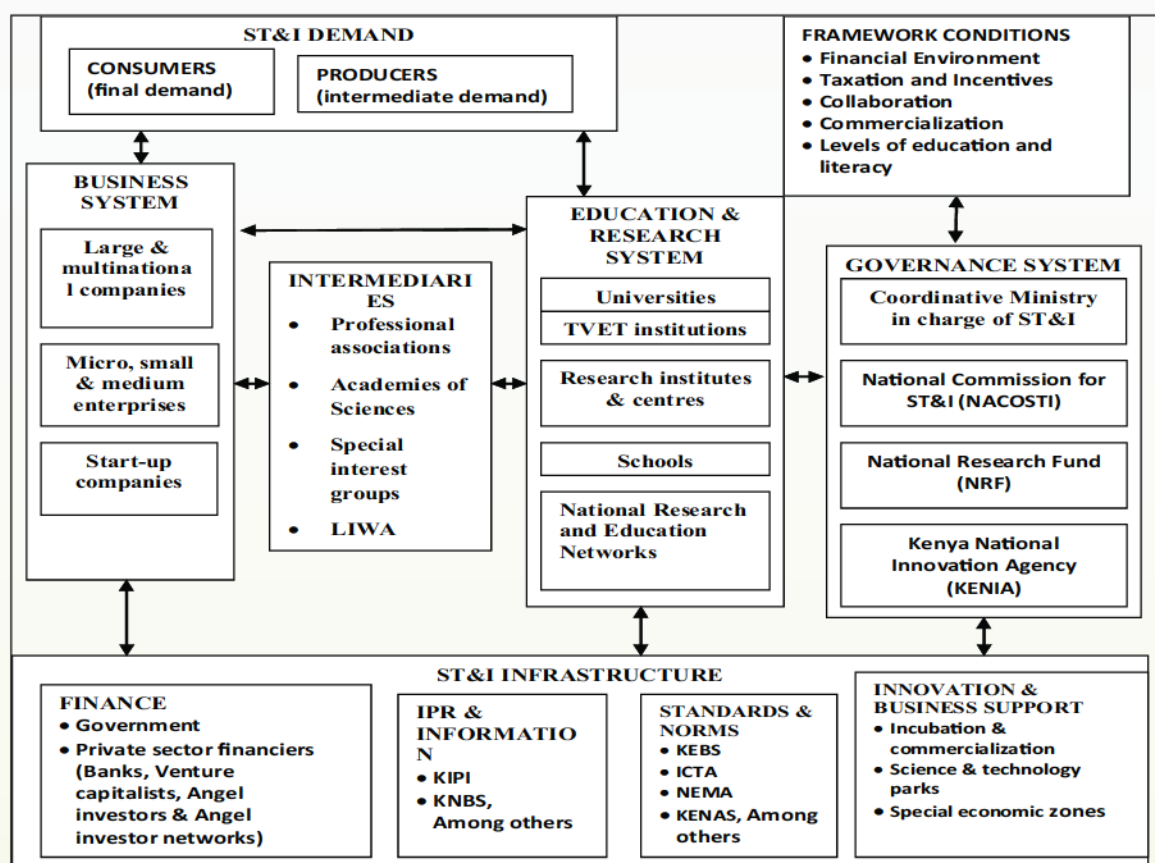
Vision: To be a nation that harnesses science, technology and innovation to foster global competitiveness for wealth creation, national prosperity and a high quality of life for its people

Mission: To mainstream the application of science, technology and innovation in all sectors and processes of the economy to ensure that Kenyans benefit from acquisition and utilisation of available capacities and capabilities to achieve the objectives of Vision 2030

Philosophy: "research for social and economic transformation and development" (knowledge based, innovation driven country)

Guiding Principles of the ST&I Policy were said to be: Relevance, Cost-effectiveness, Realism/pragmatism, Multi-disciplinary and synergy, Partnerships, Environmental protection and conservation, Empowerment and participation, Equity and non-discrimination, Ethical leadership, Reward and recognition, Good governance

National Innovation System was summarised in the figure below



A revamped and re-invigorated National Innovation System would require four strategic thrusts which are:

- institutional re-engineering, through policy formulation and filling any gaps
- resource mobilization (2% of GDP)
- knowledge and technology governance of Intellectual Property
- ST&I linkages and collaboration; gender mainstreaming; integrating environment and natural resources management and application of effective public communication and advocacy for ST&I

Policies and Strategies were highlighted as follows:

- Policy 1: The Government will establish an institutional and regulatory framework to promote, coordinate, mobilise resources and manage ST&I.
- Policy 2: The government through relevant institutions will leverage ST&I to transform the economy through identified national priority areas including:
- Policy 3: The Government will allocate resources, mobilize and motivate stakeholders to participate in the R&D sub-sector funding to at least 2% of GDP annually.
- Policy 4: The Government will facilitate acquisition of Intellectual Property Rights (IPRs) by scientists, researchers and innovators.

- Policy 5: The Government will promote ST&I knowledge sharing and awareness creation
- Policy 6: The government will develop human resource capital in ST&I to meet the demands of the economy.
- Policy 7: The government will develop ST&I infrastructure to support ST&I Programmes in identified priority areas.

ST&I Act, 2013 was then enacted to address weaknesses in the development of ST&I and established three key institutions to make up the governance system as follows:

- National Commission for Science, Technology and Innovation (NACOSTI) – regulate, assure quality, and advise Government
- Kenya National Innovation Agency (KENIA) - to develop and manage the National Innovation System as well as bridge the “innovation chasm”
- National Research Fund (NRF), to mobilize and manage financial resources for the Kenya National Innovation System (2% GDP for R&D), to create knowledge, innovation and development in all fields of science and technology, including indigenous knowledge

Organization of the National Research Fund (NRF)

In response to 8th AU Summit (2007) and first-ever AIPF-STI (2011) – (at least 1%), Kenya’s ST&I Policy and ST&I Act, 2013 (Section 32 (1)) provides for establishment of NRF

Section 32(2) the fund shall consist of:

- a. sum of money of up to 2% GDP, from National Treasury every financial year (~ 20-40 Billion)
- b. such sums of money as designated by parliament
- c. donations, endowments, grants/gifts from whatever sources
- d. other sums of money levied on for licenses for research

Comparatively, economic power houses (Japan, France, USA, Germany, Finland), spend between 2.2-3.5% GDP on R&D while only South Africa is at approximately 1% GDP. Many Government Ministries, Departments and Agencies (MDAs) have some research arms and thus compete for finite government funding and there is a risk of duplication of efforts. Hence the need for consolidation of funding into a single basic research funding agency leading to creation of the National Research Fund (NRF) in 2016 through ST&I Act of 2013.

Dr. Ayisi also highlighted the objectives of NRF as spelt out in Section 33 of the Act as well as functions of the Board of Trustees as spelt out in Section 36 of the Act. From these sections, he indicated that the major task of NRF was to prioritize areas that required urgent funding and the need for Monitoring and Evaluation - difficult task (e.g. when compared with other policies such as workforce, health and education) as tax payers need to know value for their money. (Need for outcome-oriented goals) and timelines (roadmaps) for their evaluations. Considering that Government

budget was increasingly becoming extremely competitive, there was need to prove that investment in science had value relative for example to education, health or workforce. There must be a link between investment and outcome.

He concluded his presentation with Kwame Nkrumah's (1963) Message: dream & ambition

"We shall accumulate machinery and establish steel works, iron foundries and factories; we shall link the various states of our Continent with communications; we shall astound the world with our hydroelectric power; we shall drain marshes and swamps, clear infested areas, feed the undernourished, and rid our people of parasites and disease. It is within the possibility of Science and Technology to make even the Sahara bloom into a vast field with verdant vegetation for agricultural and industrial developments". President Kwame Nkrumah, first speech at the foundation summit of the Organization of African Unity, Addis Ababa, 24 May 1963

The National Research Agenda

The Science Secretary for NACOSTI, Mr. Julius K. Mwangi gave an overview of priority areas in the national research and development agenda for 2014-2018 which he said was still a draft. The highlights of his presentation were:



Mr. Julius K. Mwangi, NACOSTI

Introduction

The NACOSTI predecessor NCST had been disbursing money for research and innovation since 2008 and this was continued by NACOSTI. In consideration of the National Research & Development agenda, the stake holders after looking at themes indicated in the Kenya Vision 2030, Jubilee manifesto and Medium Term Plan 2013-2017 compiled research topics into nine domains: Agricultural sciences and technology; Energy; Engineering and technology; Environment and natural resources; Health sciences; Physical and biological sciences; Social sciences; Information and communication; and Cross-cutting issues.

Objectives of NRDA

- To prioritize, promote and harness research and innovation so as to provide research-based solutions in support of the knowledge-based economy.
- To advice the Government, policy / decision makers, researchers, and other financial collaborators on research priority areas in Kenya.
- To promote collaborative solution based scientific research;
- To identify and fund research that generates tangible products and services to increase the country's competitiveness.
- To create opportunities for generation new technologies, transfer and adoption.
- To increase application of research findings and innovations for employment creation.
- To improve the quality of life and poverty eradication by utilization of local resources, value addition and innovation.

Proposed Priority Areas on the NRDA: Agricultural Sciences & Technology, Energy, Engineering and Technology, Environment & Natural Resources

Mr. Mwangi concluded his presentation by observing that the proposed priority areas were very many and needed to be reduced to a manageable level in order to focus on utilization of available local resources, value addition and innovation. There was need to have a more focused prioritized RDA, having identified and prioritized the key RDA under the given domains, identified research gaps and further outline research priorities for the various sub-sectors for the coming five years. He said that the NRDA would provide a general guide on research priority areas for the R & D related institutions (e.g. universities, research institutes) in the country hence regular updates to this agenda would be required to achieve continuous improvements in research and development.

Health Research Capacity Strengthening

The Head of International Operations and Partnerships for Wellcome Trust, Mr. Simon Kay presented on the health capacity strengthening agenda for Africa. He introduced Wellcome Trust as an independent global charitable foundation dedicated to improving health, because good health makes life better. Wellcome Trust he said was the UK's largest non-government funder of scientific research and the World's second largest private funder of medical research, supporting over 3000 researchers in more than 57 countries with £886 million total annual spend having been established in 1936 to administer the endowment of pharmaceutical businessman and philanthropist Sir Henry Wellcome.

Mr. Kay gave statistics of Trust funding in Kenya as: Active grants of £285m in sub-Saharan Africa with over £200m committed to Kenya since 1970, £32m to KEMRI-Wellcome Trust Research Programme (KWTRP), £7m Strategic Award to train local researchers at KWTRP, £8m to Initiative to Develop African Research Leaders (IDeAL) through DELTAS, £4m to Africa Population and

Health Research Centre through Africa Institutions Initiative (AII) and £8m to the Consortium for National Health Research (CNHR).

Trust future strategy portrayed a shift in the centre of gravity of research funding to Africa



Dr. Simon Kay, Wellcome Trust

The African Academy of Sciences (AESA)

Mr. Kay shared about AESA and how it would operate, and Wellcome Trust relationship with it. He explained that the Wellcome Trust, the Gates Foundation and the UK Department for International Development (DFID) were funding the development of AESA and shared their vision of supporting the next generation of outstanding African researchers, who would help solve some of the continent's greatest health and development challenges.

In terms of measuring success, the initiative expected a World class and robust platform for funding research in Africa, a Go to partner for funders and governments and a buy in and investment from donors in Africa in the coming 5 years. In the long term (20 years) the initiative expected to achieve Retention of scientists: Career pathways, internationally competitive African context research produced, African generated research being used in policy making and improvements in animal and human health.

AESA tenets were presented as:

- Scientific research leadership, excellence and innovation, impact on global health & development and focus on youth
- Think tank for developing pan-African strategy for building science excellence
- Implementing partner for large funding strategies with major funders (international, regional, national)

- Excellence in program strategy, scientific management, evaluation and transparency in merit-based grant making for Africa

The coverage of DELTAS Africa Programme was also presented including Mali, Senegal, Ivory Coast, Ghana, South Africa, Zimbabwe, Kenya and Uganda

Strategic focus on research excellence in Africa and Asia

Wellcome Trust strategic approach was launched in 2015 with a focus on driving reform and a goal of creating strong, internationally competitive scientific communities and research leaders. This was a platform across Wellcome Trust programmes in Asia and Africa enabling sharing of best practice and researchers to learn from and support each other. The platform worked with colleagues across the Trust and with regional partners three strands of work were indicated as follows:

- Delivery of programmes e.g. DELTAS Africa, India Alliance
- Establishment and consolidation of hubs working within and between regions
- Trust catalysed activities to transform research ecosystems

Mr. Kay shared some thoughts and provocation as follows:

- How will the NRF ensure that grant-making will be transparent and reward internationally competitive funding? How will it set the bar high and only fund excellent researchers?
- How will it decide how to fund? (He shared experience of the Wellcome Trust/Department of Biotechnology India Alliance).
- How can international collaboration drive excellence?
- Balance between response mode versus agenda setting funding.
- Debates and issues at Wellcome Trust – careers; decision making; scientific integrity.

He concluded his presentation by highlighting the partnership between Wellcome Trust and CNHR with regards to shared goals as follows:

CNHR: “Our goal is to make a difference in research for health. This implies purposefulness, commitment, innovation and ethical conduct”

Strategic Goal 1: Strengthened research for health capacity

Strategic Goal 2: Entrenched culture of evidence-driven health policy and practice

Strategic Goal 3: Improved sustainability of the Health Research Capacity Strengthening Initiative

Plenary Session

The following comments and discussions ensued during plenary sessions:

- There is needed to start well for NRF to achieve the expectations. Measure of outcomes need to be very clear. There is need to have a well-defined outcome measures. Implementation process and measure, if you can measure the processes, then you can evaluate, and if you evaluate then you can value.

- All MDAs have research aspects in their programmes. The Control of M&E has to be from an independent body. The experience can be borrowed from Wellcome Trust.
- The Government will have a huge role to play in financing NRF, KENIA and NACOSTI; the funding model could take tripartite also involving influencing interest and setting priorities.
- There is need to have short term, mid-term and long term objectives for NRF
- There could also be non-supporting aspects of legal framework that can affect an institution. A need for SWOT analysis, since money alone may not be the problem. Like do we have the right culture?
- Stakeholder identification and engagement is very important. Identify key ones particularly the government budget making processes, parliamentary committees, CNHR and welcome trust.
- Investing just funding number of researchers may not be enough, it's important to consider building capacity and infrastructures.
- There are some inconsistencies with ST&I Act with provisions of Health bill. In composition of Advisory committees, will they be appointed by CS Education, Science & Technology or CS Health? NACOSTI to listen to stakeholders views during the review of the Act and policy.

Questions	Answers
1% of MDA budgets set aside for research; can it be channelled through NRF?	The negotiations are on-going with performance contracting secretariat to in-built 1% of MDA for their internal research process. This will be within MDA's budgets.
Issues of performance of evaluation? Wellcome Trust model is private driven while NRF model will be public funding. Can the two models be mixed?	Wellcome Trust is one of the models for bench marking. It's important first for NRF to consider how and what it will fund. The funding model adopted will define people's behaviour to grants. NRF to identify which model to choose or combine both. It's envisaged a mix model (private and public funds).
It's about one year remaining but most programmes under MTP II have not started so far. Where is the problem?	It takes time to build consensus, but they will be implemented.
Priority setting in Research Agenda, how far is the process? Has it been subjected to stakeholders and approved by the Ministry?	The Research Agenda presented is a draft. County governments are yet to have their inputs. It is scheduled to be tabled to Senate committee. NRF will support programmes in the areas that will be identified under the research agenda



National Research Funding History, Vision, Mission and Strategic Focus

The NRF Board Chairman Mr. Tirop Kosgey started his presentation by giving background information of the Fund. He indicated that investment in research and development in Kenya was limited and one of Strategic policy issue to address this challenge was to secure adequate and sustainable funding of ST&I components. Therefore in his view, an enabling ST&I policy framework was key. He gave a brief over view on how NRF originated from the ST&I Policy and Strategy of 1998 that culminated into the ST&I Act No 28 of 2013. He stated that the Act clearly states the mandate and the functions of NRF that the board of trustees together with the secretariat is expected to deliver to the citizens and specifically to the research community of Kenya. He emphasized that the bottom line should be ensuring that there is adequate sustainable funding for research in the country. According to the presentation, this will involve developing mechanisms to mobilize and lobby for continued increment and sustainability of research funding to speed up the contributions of ST&I to the achievement of Vision 2030.

He informed the meeting that despite the foreseen challenges, NRF is now a fully constituted organization that has to know how to go about its functions but also appreciated the continued support that it has been getting from the already established organizations such as NACOSTI and CNRH which has even assisted in developing a roadmap for the operationalization of NRF. He further confirmed that the issue of developing a strategic plan was already raised in the first full board meeting and will be initiated as appropriate before the end of the financial year.

In conclusion, he stated that the workshop should aim at ensuring that strategies and mechanisms put in place are effective enough in ensuring that the mandates and the functions of NFR are met to the expectation of the stakeholders. This would be the only way to attract goodwill and excellence to allow for both National and International lobbying for more research funds to the national research basket.

Proposed Model for the National Research Fund

The Director and CEO for CNHR, Prof. Matilu Mwau shared on the basic elements of a model, models considered by the PWG, the CNHR model, the South African NRF model and congruencies/discussion points. In his presentation, the CEO highlighted some of the desirable characteristics of a good model as one with: World Class Governance Structures, lean and efficient systems, meritocracy, excellence and peer review, balance between strategy and demand, cross fertilization of talent, effective, goal-oriented resource allocation, fairness, transparency and accountability as well as transformation and excellence. He mentioned that some of the models considered by the PWG during their desk review and which he also recommended included: Wellcome Trust/DBT India Alliance, The Newton Fund, Kenya Agricultural Research Fund, African Foundation for Research and Development, Consortium of National Health Research, National

Research Foundation-South Africa.

He explained that CNHR supported the brightest minds in research for health. The organization invests in scientific thought leaders, emerging research pioneers, and students who aspire to be scientific innovators. A healthy Kenya required health services delivered by systems that result from policies which are based on profound, precise, specific, tested knowledge: scientific evidence.

Prof. Mwau highlighted the Objectives of their Health Research Capacity Strengthening Programme (HRCS 1) and its impact and then gave highlights on the National Research Foundation of South Africa model.

He concluded his presentation by emphasizing characteristics of successful funding bodies and encouraged the NRF board to learn from such cases. He reiterated that leanness of the organization cannot be ignored if it has to work from the word go. This would allow the NRF to concentrate on core activities including monitoring and evaluation and that any extra activities could be handled by consultants and technical advisory committees.



Director for CNHR Prof. Matilu Mwau emphasizing a point during his presentation

Comments

- CNHR is supporting the institution because of its importance to the country in building research capacities that is required for knowledge based decision making processes.

- The board should start looking into possible funding strategies from donors and the private sector to jump start the processes. Sustainability of the funds should be addressed from the beginning in the funding strategies

Understanding Trends in Research and Funding Opportunities Using Web of Science

The Officer in Charge of Research Capacity at Thomson Reuters, Ms. Joy Owango presented on research and funding opportunities using the web of science. She started by showing the data of publications in Africa at regional level, institutional and individual levels. The data indicated that Rwanda was doing well in terms of number of publications and influential research outputs. The researchers therefore need to understand the trends in research i.e. triple helix. In Kenya it was shown that most of the publications were from universities with University of Nairobi taking the lead among the 25 best publishing institutions in Kenya. The observation made was that most of the publications in Kenya are from the collaborative programs between Kenya and development partners.



Ms. Joy Owango, Thomson Reuters

Therefore, the concern was that these projects are driving the agenda of the development partners. Bill and Melinda Gates is the top funder for Kenya. Madam Joy said concluded by stressing that:

- Young academicians should be in the list of top authors in East Africa.
- Researchers to find the right people to work with.
- There was need for Kenya to invest in the infrastructure.
- Good funding has a correlation with trends in research and high impact output.

Comments:

- Rwanda had invested heavily in innovations and hence the impact is being felt now. The country does not target only the educated for the research but everyone who can provide data is given an opportunity.
- People should be given opportunity to ask questions and this will provide data for research
- When a country invests in infrastructure then one can bid and get a lion's share from World Bank. This is what has happened in Ethiopia.
- There is need to finalize National Research Agenda to guide research in Kenya
- NRF should put aside some funds say Ksh 100,000,000 for publishing in high impact factor journals

Positioning the National Research Fund for Success

The NRF Board Member, Dr. J.P.R. Ochieng'-Odero presented on how NRF could develop a well-designed, innovative and responsive policy framework for the management and investment of NRF Funds. The highlights of this discussion were: Existing environment for building the NRF, Key targets for the Fund, A case study of Investment principles & priority areas, defining a management destination for the Fund, The research management cycle, Cardinal principles of operationalizing the Fund and Performance evaluation of the NRF.



Dr. Ochieng Odero, NRF Board Director

Defining management parameters, Dr. Ochieng'-Odero looked at the pluses in the existing environment and observed some 5 key elements as follows:

- Established institutions that have a culture of applying for grants

- Established researchers (natural sciences, engineering, social sciences, arts and humanities)
- Reasonable interaction between public and private sector
- Sensitized Citizenry to the use of R&D resources
- Tightening of controls over public spending

He encouraged that as a new institution, NRF can gain from these lessons learnt. He presented some of the key strategic considerations: Engagement and interface with policy organs of government, beneficiary/implementing institutions and research community by develop a regular dialogue and consensus-building forum for all national stakeholders. Another strategy he proposed overarching policy framework that identifies the broad research principles and investment areas by establishing consulting mechanisms for regularly reviews and publishing periodic criteria for funding allocation

Dr. Ochieng'- Odero shared a Case study on investment principles of the South Africa's NRF e.g.:

- Awarding funding on competitive basis
- A healthy balance between strategy (push) and demand (pull) funding
- PhD as a benchmark for research
- Cross fertilization of talent with the national System of Innovation (NSI)
- Effective goal-oriented resource allocation
- Fairness, transparency and accountability
- Transformation and excellence

He said that investment areas of SA's NRF included: Next generation of researchers, Emerging researchers, Established researchers, Strategic Investments and infrastructure and wondered whether could consider allocation of funding across these as well.

Dr. Ochieng'- Odero, explaining a point during his presentation

Comments:

- The NRF Board can deliberate further on the presentation since some of its contents can be incorporated in the NRF Strategic Plan.
- NRF can initiate matching grant just like NACOSTI
- NRF to have program to strengthen institutions which do research

Framework for Operationalization of National Research Fund

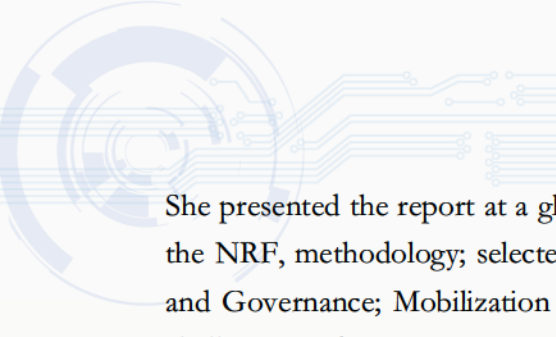
The Workshop Facilitator and the Chair of PWG, Mrs. Millicent Omukaga gave an overview of the proposed framework for operationalizing NRF.



Mrs. Millicent Omukaga, Consultant

On the background she explained that the process of documenting the framework started when the Cabinet Secretary for Education Science and Technology (Prof. Jacob Kaimenyi) mandated NACOSTI with financial support from CNHR kick start the Fund as provided in the ST&I Act of 2013. The first stakeholder's consensus-building workshop had been held in August, 2014 where the workshop recommended that a PWG be formed to develop a conceptual framework paper to guide operationalization of NRF. In October 2014, MoEST/NACOSTI appointed PWG (12 members and a secretariat) with the specific TORs.

Mrs. Omukaga explained the PWG Methodology that entailed discussion and adoption of ToRs, formation of three working committees to deliberate and provide recommendations on three critical aspects of Resource Mobilization, Grant Management and Legal and Institutional framework. The team reviewed relevant documents and selected case studies of research funding Mechanisms. Several brainstorming, consultations and working meetings were held that produced a draft report, presented to the Cabinet Secretary and senior officials of MoEST. The report was subjected to stakeholders validation at a forum organized in March 2015, later finalized and presented back to the MoEST. The same report was eventually handed over to the Board of NRF upon inauguration at Jogoo House. A copy of the report was availed to each participant during this workshop as well.



She presented the report at a glance covering: Background- analysis of current practice, rationale for the NRF, methodology; selected case studies- TZ, India, S.A, UK, Kenya (ARF); Legal Framework and Governance; Mobilization of resources; Funding and Grant award mechanism and anticipated challenges and transition. More detailed presentations were made afterwards.

She highlighted that NRF Framework had to adopt cost-effective operational structure that includes:

- Competitive mechanisms for funding research
- Cost effective Institutional structure
- Governance and Management of the NRF
- Strategies for growing the fund
- Sourcing from the exchequer
- Resource mobilization
- Policy on investment of the capital funds

Legal Framework and Governance Structures

Mrs. Omukaga presented the legal framework for NRF covering the Constitution of Kenya 2010, the Science, Technology and Innovation Act 2013, Public Financial Management Act, Other Relevant Legislations e.g. State Corporations Act, Regulations, standards and guidelines, Operating procedures, codes, forms, registers. She requested the NRF to put timelines within which to develop the relevant regulations, standards and guidelines so as to operationalize the parent law. She stressed that NRF was a state corporation and should be guided by all the relevant laws and legal frameworks that are at play at any given time. She gave the example of the ST&I 2013 and the State Corporations Act as two major Acts which cannot be ignored in the process of operationalization of NRF.


However, she noted that other than the laws already in use, the operationalization process may also require regulations and guidelines that would support the process. She noted that this comes with huge financial implications that may require some commitment by willing partners such as CNHR and Welcome Trust among others and may also require some timelines that must be planned for. She further took notice of the fact that the ST&I Act which is the main law that would be guiding the mandate and functions of NRF may also have some clauses that may be curtailing the implementation processes and hence may need to be reviewed. This she said requires the involvement of policy makers and the legal arms of the system to get any impeding clauses corrected. She also pointed the Board to possible gaps in the legal framework that required the Board attention for instance the Mandate to coordinate research funding, Strategic linkages with policy makers and development partners and Stakeholder participation

Participants' Comments

1. Suggestions to make alterations in the legal framework may not be easy because the best way to do it is to involve all the stakeholders that were involved in putting the document together. This may have financial and time implications.
2. Rerouting the funds that are already going to the specific sectors may not be an easy task but can be seen from the fact that the NRF fund will be supplementing what they have and will be sourced competitively by all research institutions based on their research priority areas.
3. The changes cannot be avoided but can be done strategically in relation to the growth of the fund and the level of public participation. Meanwhile, strategies should be developed on how to consolidate funding sources into one basket. This may also involve legislation reviews that would come over time.
4. Members noted that there were some small but important activities that should not be ignored because they are the ones which are expected to make the systems run. These include the categorization of the organization, induction on the running of state corporations by SCAC and development of corporate identity.
5. More representation may also be needed especially from the financial sector.
6. Research fund has been spread too thin by putting small monies in different government agencies. There is need to consolidate the sources if there is any major impact that is expected. This was agreed as a justification that could be taken to higher levels of negotiations.
7. Activities such as research infrastructure development should be taken through all the required approvals and must put in place, mechanisms for awareness creation as well as monitoring and evaluation.

Questions and Responses

Question	Response
How will NRF handle resistance from institutions that are already in the business of sourcing for research funds from sources such as the exchequer and donors? Is the board on the lookout on the interested bodies that may be out to make NRF a still born?	The law is clear on what NRF is supposed to do with all the justifications but anything that comes will be handled on its own merit as per the laws and regulations.
What explanation exists that NRF is not in the state corporations report?	At the time the report was prepared; the NRF board was not yet gazetted which is an important requirement. However, the body has now been entered into the budgeting cycle through the Ministry of Education, Science and Technology.



On Governance, Millicent indicated that the STI Act of 2013 provided for Board of Trustees and a Secretariat while the PWG report proposed two Committees: Technical and Advisory Committee and Resource Mobilization and Investment Committee. She highlighted to the Board to very keenly look at the issues of Representation at the Board of Trustees, Size and expertise of the Secretariat staff, Co-opting members into the proposed committees, Coordination of other sector specific funds and Involvement of County Governments on developing research priorities and meeting research demands.

Comments from Members

- i. The concern about the board composition should not arise because it is clearly guided by the laws which guide representation from the interest groups. However, cooption can be made at the committees level when need arises.
- ii. The need for a lean structure is important and should be considered in setting up the fund because most of the review activities will be outsourced to experts outside the organization. In this regard, there is a lot that NRF can borrow from CNHR as they try to establish their structures.
- iii. The Newton Fund is already in the process of being looped in the Country through MOUs that will mainly fund capacity building for researchers and scientists.
- iv. The planning working group has received a lot of goodwill from CNHR and Wellcome Trust, NRF should take advantage of the existing goodwill and the resources that they are ready to provide to establish itself.
- v. There may be need to launch the organization with stakeholders as part of awareness creation to create more interest and goodwill.
- vi. Benchmarking visits will be important for the organization to come into close contact with what is already working elsewhere. It may also involve a brief attachment for the key secretariat and board members.
- vii. The expectation is that even if some of the sectoral research funds will be going to different institutions such as KALRO and KEMRI, the main funding organization will still remain NRF and should have a database and information on all research funds that go into different institutions for coordination purposes.

Resource Mobilization for National Research

Millicent indicated that resource mobilization was critical for sustainability of NRF, moving from 0.98% in 2010 to 2% of GDP. Some of the key considerations highlighted were: Purpose of mobilizing funds, Public Funding, Donor Funding, Private Sector Funding, Commercialization of Technology, Intellectual Property Rights, Strengthening Revenue Generation and Management and Establishment

of Endowment Fund. She explained that other than the provision of Section 32 of STI Act, the NRF would pursue resource mobilization strategies including sourcing for Seed money, Fundraising, Bankable proposals to development partners, Commercialization of research output, technology and innovation and Endowment fund. There was hence a need for Asset management plan. The Board was therefore encouraged to consider conducting a Baseline Survey at the beginning of their operations. Other highlights included the need for a communication strategy, Trust deed and rules and proper private sector involvement

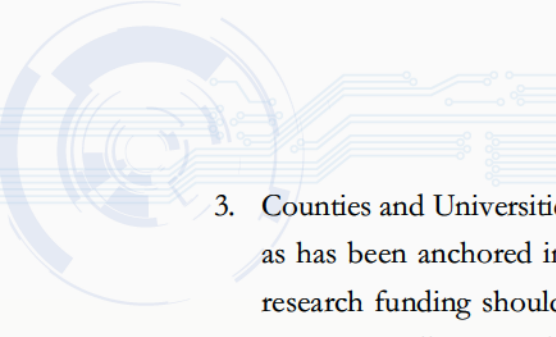
Comments and Questions

Question/Comment	Response
What is 2% GDP to research, Science, Technology and Innovation as stated in the ST&I act, 2013	Government will provide revenue and the other monies will be obtained through other sources such as fund raising, donations etc. This will make up 2% of GDP which is approx. 120 Billion for research, ST&I.
Several departments, universities get money for their research programs from the government. How will this be handled?	There is difference in what NRF does and what the other Government departments do. The NACOSTI will give priority research in Kenya and this will be funded by NRF. The government will therefore put money aside for research in priority areas.
Ministry of Health does a lot of research through some funding from by development partners. This may not be available for instance when there is an outbreak. In such cases Rapid Response team should go to the ground and check on the status. Will NRF provide resources for this?	MoH will have its own budget to run its programmes and activities and therefore such response such not be funded by NRF

PLENARY SESSION

Participants' comments and discussion were as follows:

1. The model adopted should take into consideration the difference between grant making and decision making to reduce bureaucracies and over use of resources on operations. The can be done by dedicating grant making work to technical advisory committees consisting of experts or consultants.
2. The structures should also take into consideration the fact that the organization will be investing at some point and hence give some thought on the need for a fund management and investment committee and policy.

- 
3. Counties and Universities are very relevant stakeholders but need to be involved progressively as has been anchored in law. However the criteria for involving universities and counties in research funding should remain minimal in order to take care of upcoming universities and university colleges. In the case of both counties and universities, all the relevant factors at play should be considered while giving monies for research.
 4. The National Research Fund as an organization should be branded well enough to reflect its objectives and mandate.
 5. There is need to have a clear strategy on how to audit sector specific funds which will not be easy to bring to the NRF basket and if and when it is done, will need legislation discussions, lobbying and goodwill from the political powers.
 6. Strategies should be developed on how to make use of the county governments to raise funds for research. This may involve practical engagements with the County Governors and Senators to make them commit to fund research. Some goodwill is already coming from some of the counties.

Funding and Grant Award Mechanisms

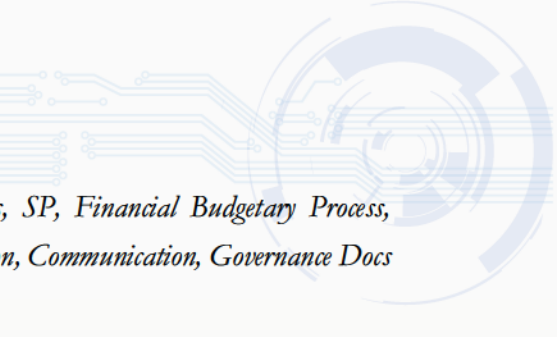
Mrs. Omukaga presented that for NRF to operate effectively, the Board would need to set Funding Objectives, Funding Priorities, Competitive Grant Awarding Schemes and Strategic Funding. Some of the proposed Funding Mechanisms included: Competitive Funding, Matching Grants and Institutional Support Grants. The grants could be used for Development, Project Initiation/Proof of Concept, Project Support, Capacity Development and Fellowships Awards

The proposed Grant Process entailed: Publication of National Request for Applications; Merit Review; Procedures for Grant Management; Performance Reporting, Monitoring and Evaluation; Contractual Obligations; Publication and Dissemination

The Board was encouraged to position NRF Strategic role in national development, create awareness on what NRF is and is not and determine balancing of competing interests, public demands and accountability.

Millicent concluded her presentation by reminding the Board that as anticipated at the beginning of the workshop, the next step was to develop NRF Action Plan. She guided members to look into the critical issues that would enable NRF to take off smoothly, particularly in the areas of:

- Proper foundation for NRF from parent law (*Regulations, Law review, National Research Agenda e.t.c.*)
- Positioning NRF as a national outfit (*Stakeholder management, TNT, SCAC, Parliament, Launch, Campaigns, Brand, Benchmarking e.t.c.*)

- 
- Internal processes for takeoff (*Secretariat, Technical Committees, SP, Financial Budgetary Process, Strategy Docs in Fund management and Investment, Resource mobilization, Communication, Governance Docs of TD and rules, e.t.c.*)
 - Sustainability of the Fund (*Strategic partner relations, Fundraising, Endowment, Performance Management, Annual report e.t.c*)

Members then broke into two groups to separately look into: Resource Mobilization Modalities (Group 1) and Development of One Year Road Map for 2016-2017 (Group 2)

4. GROUP WORK

The participants were distributed into two groups as below and moderation was done by Millicent Omukaga.

S/No	Group One	S/No	Group Two
1.	Dr. JPR Ochieng Odero	1.	Mr. Tirop Kosgey
2.	Mr. Habil Olaka	2.	Dr. Vincent Gaitho
3.	Prof. Matilu Mwau	3.	Dr. George Ombakho
4.	Prof. Walter Mwanda	4.	Dr. Moses Rugutt
5.	Mr. David Ngigi	5.	Dr. Charles Nzioka
6.	Dr. Jemimah Onsare	6.	Ms. Roselida Owuor
7.	Mr. Julius Mwangi	7.	Ms. Joy Owango
8.	Dr. John Ayisi	8.	Mr. Michael Kahiti
		9.	Ms. Rose Nyanga

Group One Report for Modalities on Resource Mobilization

The group structured its report in three sections based on;

- Where to get the Funds
- What will be required to get the funds
- How to get the funds

Where to get the funds;

1. Government -by July, 2016

- This involves the endowment fund being disbursed by NACOSTI
- The research funds being administered by other government institutions
- The Research licensing fees – some percentage of it can be committed to the fund
- Negotiate with Treasury for a one line budget

2. Donors – by April, 2016, NRF to consider mapping and engaging the donors.

3. Private sector – by January, 2017, NRF should have developed strategies and engaged these potential funders.

4. Investment of the fund – This can be done through Treasury Bills, Trust Fund – as soon as NRF raises enough funds.

5. Fund raising – this can be done by either hiring a consultant or constituting a fund raising technical committee. The committee should develop a fund raising strategy.

Way forward:

- NRF and NACOSTI to dialogue on transitional modalities of endowment fund
- NRF to be ready with their strategic plan and consider engaging donors at the earliest time possible through MoUs

- The overlapping activities be streamlined through review of ST &I Act, 2013
- Considering the **incubation phase** which most donors prefer when dealing with new entities, NRF to consider using the existing organizations that have already won the confidence of the funding agencies.

What will be required to get the funds?

1. The NRF members be inducted on the code of governance (Mwongozo) by 23rd March, 2016.
2. Categorization of NRF be effected by May, 2016.
3. Smooth operationalization of NRF requires a Director and hence this should be done by 30th June, 2016.
4. NRF to have an agreement with NACOSTI regarding the office space by 1st July, 2016.
5. Recruitment of NRF Secretariat be effected by 30th December, 2016.
6. NRF to consider using consultancy research if the cost implications will not be exorbitant.

How to get the funds;

1. The fund to consider opening the bank accounts preferably by end of March, 2016.
2. The benchmarking exercise be initiated by April, 2016 by commencing with the local institutions e.g. CNHR before going out to overseas.
3. NRF to develop a strategic plan by December, 2016 using the external expertise such as CNHR.
4. NRF to be aggressive in branding itself and the event can be effected preferably by a pomp and fanfare launch.
5. NRF to have proper mechanisms of settling IP matters accruing from the fund.

S/No	Activities	Proposed Timeline
1.	Source of funds	
	Government	July, 2016
	Donors	April, 2016
	Private sector	January, 2017
	Investment	As soon as NRF raises enough funds
2	Requirements for funds	
	Induction of Board members on code of	March, 2016
	Categorization	May, 2016
	NRF Director	June, 2016
	Office space agreement	July, 2016
3	Getting funds	
	Opening of bank accounts	End of March, 2016
	Benchmarking	April, 2016
	Strategic plan	April, 2016
	Branding of NRF	Continuous

Comments

1. NRF to start the benchmarking exercise locally before rolling out to overseas.
2. Political commitment is of essence for NRF's success; hence, enhancement of political will was emphasized.
3. NRF to develop the programmes to be implemented in the next financial year using the requested budget of KES 2.5B.
4. NRF Secretariat to prepare strategic documents to be used in initiation of collaborations and fund raising activities.
5. Other than Mwongozo induction, the Board members should be sensitized on the government procedures including the budget cycle.



Part of group one members during group work

Group Two Report on One Year Roadmap (2016/2017)

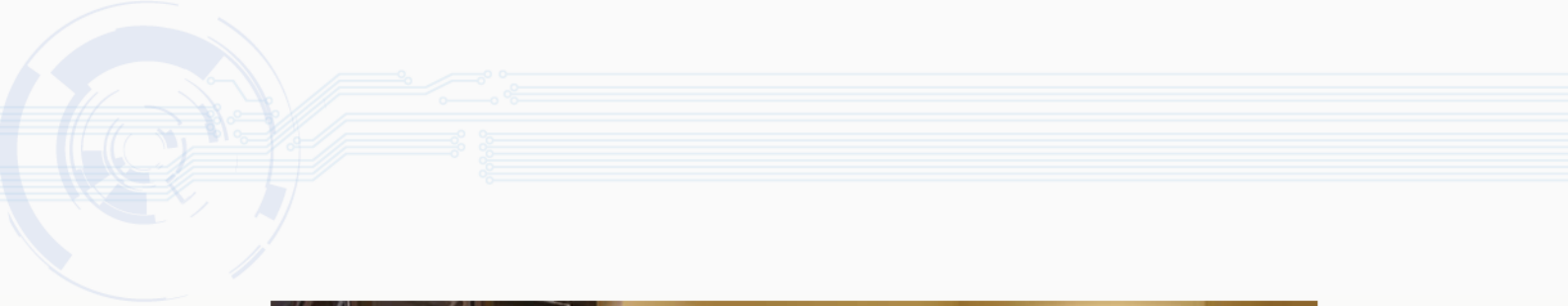
The participants developed a roadmap comprising of activities that are to be implemented in both short as well as long term as given in the table below.

Table 5: National Research Fund 2016/2017 Roadmap

S/No	Activity	Sub- activities	Time line
1.	Categorization	Consultations with State Corporation Advisory Committee	May, 2016
2.	NRF Organizational Structure	Consultations with State Directorate of Personnel Management (SDPM)	May, 2016
3.	Review of law	Review of ST&I Act by the Ministry's legal office	May, 2016
4.	Operational structure and guidelines	Stakeholders engagement for validation; approval and launching	March, 2017
5.	Operators of legal entity	Strategic plan; Budget	31 st Jan, 2017
6.	Benchmarking and personnel	Overseas Trips,	August, 2016
7.	Harmonization of Research Funds in Kenya	Engagement with stakeholders,	June, 2016

Comments

1. The NRF Secretariat to incorporate the activities that are not already in the work plan for this financial year which was recently approved by the board.
2. Since some of the activities will be actualized with adequate funds, priority be given to easily achievable with the available resources e.g. development of institutional identity (Logo).
3. Due to identified overlapping activities between the three institutions (NACOSTI, KENIA and NRF) created by the ST&I Act, 2013, review of the Act be done as soon as possible by involving the key stakeholders as a constitutional requirement.
4. Due to procedures involved in development of organizational structure, the activity might spillover to next financial. Therefore, before inception of the activity, NRF Secretariat should consult SDPM for guidance.

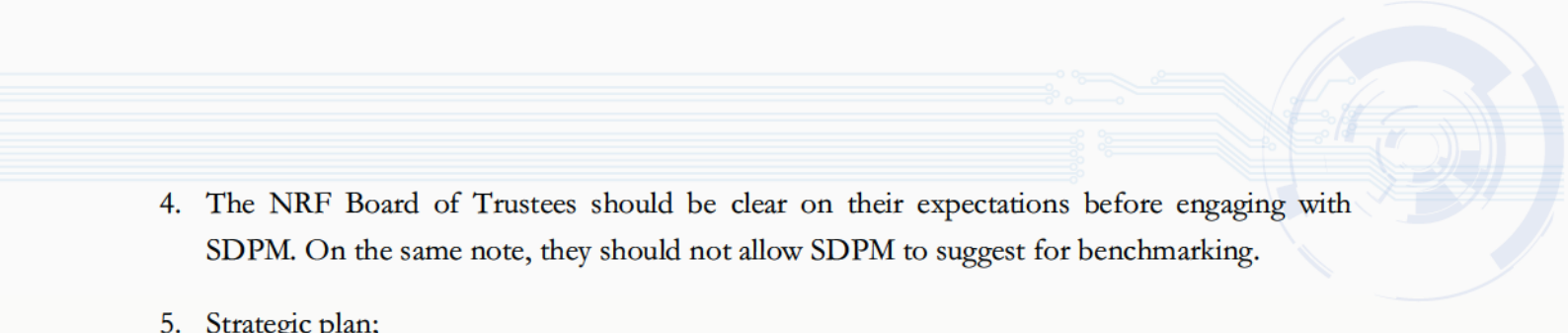


Dr. Gaitho, Dr. Rugutt and Ms. Owuor during group two discussion

Recommendations out of the workshop

Proceeded by group presentations and plenary discussions, the following conclusions were drawn:

1. NRF Secretariat to implement the suggested activities base on priority and timeline by starting with easily achievable.
2. Benchmarking;
 - NRF to have clear objectives, action points and the sum of funds within their reach before initiation of any benchmarking exercise and donor engagement.
 - Prior information about the institutions to be visited should be obtained to enable NRF prepare adequately to maximize the opportunities in its area of interest.
 - Since the system of operation in some Funds is unique, NRF should identify the best linking player and consider booking an appointment before planning the visit.
 - For sustainability purpose, it will be prudent to involve permanent secretariat in such visits as they will be the implementers.
3. NRF should maximize on locally available expertise before rolling out.

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4. The NRF Board of Trustees should be clear on their expectations before engaging with SDPM. On the same note, they should not allow SDPM to suggest for benchmarking.
 5. Strategic plan;
 - Based on the various activities suggested by the two groups, there is need for NRF Board to retreat and come up with consolidated action plan document and budget to be presented to the PS for approval. An approved work plan will be useful when requesting for fund from the Ministry.
 - There is need for prioritization of activities starting with the easily achievable before embarking on long term.
 6. As an outcome of Naivasha retreat, there is need for NRF to approach Wellcome Trust for funding through CNHR to implement some of the suggested activities such as benchmarking and development of the strategic plan.
 7. The workshop report be submitted to CNHR as it funded the event as this will help guide the future engagements.
 8. A clear fund management policy is mandatory for NRF's success in winning confidence of donors.

Closing Remarks

The Chairman, Council of Members for CNHR Prof. Walter Mwanda recognized with appreciation the role of CNHR in supporting NRF and expressed the need for NRF to move with speed to get the things going. He emphasized that the suggested benchmarking exercise should involve players with no vested interests such CNHR which has already expressed good intension by supporting this event. Prof. Mwanda encouraged the Secretariat to work efficiently and coordinative by borrowing good practices from the locally existing organizations with similar mandate such as CNHR, Triangle International and others. He reiterated that accountability will come about if the NRF Board members are assigned clearly defined roles.

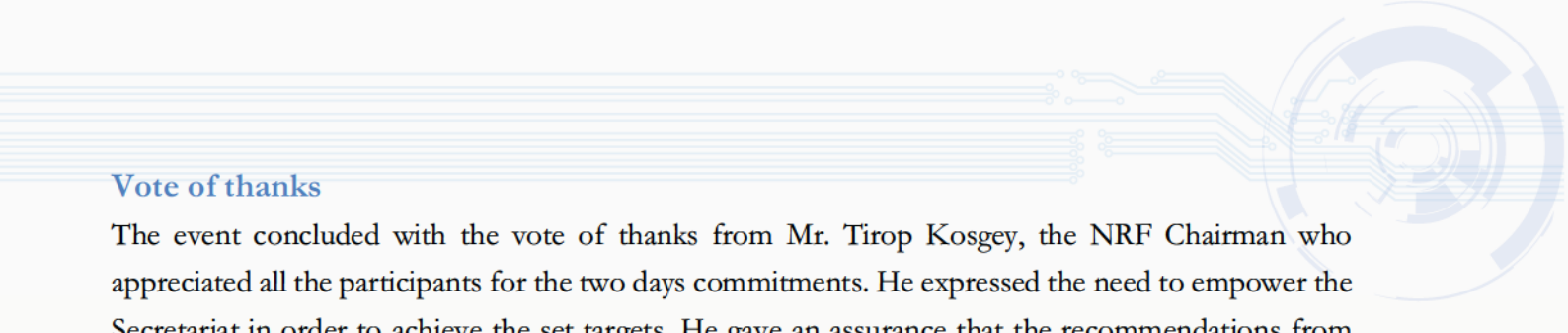


Prof. Walter Mwanda

Prof. Mwanda indicated the need for people to change the mindset that research is only done by PhD holders but rather, consider other active players outside this category. He advocated NRF to prioritize the research agenda and avoid areas of focus that are imaginable, particularly when approaching the funders. Finally, Prof. Mwanda advised NRF to incorporate in the strategic plan the number of new researches that will be generated in a particular time frame and also that funding mechanism will be merit based.



A section of the participants during closing remarks



Vote of thanks

The event concluded with the vote of thanks from Mr. Tirop Kosgey, the NRF Chairman who appreciated all the participants for the two days commitments. He expressed the need to empower the Secretariat in order to achieve the set targets. He gave an assurance that the recommendations from this workshop will be worked on to a consolidated work plan and followed through. Mr. Tirop was excited and optimistic that there were many players willing to assist NRF achieve its objectives. He complimented the efforts by the PWG team and promised that the recommendations from this workshop would be taken seriously and indicated that continuous consultations where necessary would be done regularly. Mr. Tirop appreciated with gratitude all the partners including CNHR which is ready to support NRF until it's fully operational. Not forgetting the quality hospitality rendered during the workshop. He extended appreciation to the management of Great Rift Valley Lodge, Naivasha. The Chairman could not forget to thank the Parent Ministry for the support rendered in realization of the event. The efforts by the PWG chairperson and the entire team were also appreciated. Mr. Tirop assured the participants that NRF comprised of a dynamic team which was committed towards realization of NRF ultimate goal.

ANNEXURES

Annexure I: Programme



REPUBLIC OF KENYA



Consortium for
National Health Research

NATIONAL RESEARCH FUND

Programme

BOARD OF TRUSTEES WORKSHOP

February 24th - 27th 2016

Great Rift Valley Lodge - Naivasha

SCHEDULE OF EVENTS

Day 1: Wednesday, 24th February 2016

4:00 – 6:00 p.m. Arrival and registration of workshop participants

6:00 – 8:00 p.m. Dinner and housekeeping

Day 2: Thursday 25th February 2016

Moderator: Mr. Michael Kahiti

Rapporteur: Mr. David Ngigi

Official Opening of the Workshop

9:30am – 9:45am Prof. Matilu Mwau, Director, CNHR – Introductory remarks and
Statement of Purpose

9:45am - 10:00am Mr. Tirop Kosgey, Chair, NRF – Welcoming Remarks and Introductions

10:00am – 10:15am Guest of Honour, PS, State Department of Higher Education

10:15 am – 10:45 am Group Photo – Tea Break, Ms. Ndunge Kiundi, CNHR

10:45am – 11:00am The Role of Science, Technology and Innovation in Kenya's Development
Agenda – Prof. Gituro Wainaina, Vision 2030, Secretariat

11:00am – 11:30am Overview of Science, Technology and Innovation Policy and Act, 2013;
Supporting Legal Framework – Dr. John Ayisi, MoEST

11:30am – 11:45am National Research Agenda – Mr. Julius Mwangi, NACOSTI

11:45am – 12:15pm Health Research Capacity Strengthening Agenda for Africa – Dr. Simon Kay,
Wellcome Trust

12:15pm – 1:00 pm Plenary Session – Mrs. Millicent Omukaga

1:00pm – 2:00 pm Lunch Break

Moderator: Mr. Boniface Wanyama

Rapporteur: Ms. Rose Nyanga

2:00pm – 2:30pm NRF history, Vision, Mission and Strategic Focus– Mr. Tirop Kosgey,
Chairperson,

2:30pm – 3:00pm Legal Framework and Governance Structures – Mrs. Millicent Omukaga

3:00pm – 3:15pm Tea Break

3:15pm – 3:45pm Proposed NRF Model – Prof. Matilu Mwau, Director, CNHR

3:45pm – 4:15pm Conceptual Framework of Operationalization of NRF– Mrs Millicent
Omukaga,

4:15pm – 5:00pm

Plenary Session – Mrs. Millicent Omukaga

7:00pm -

Official Dinner – Mr. Tirop Kosgey/ Prof. Matilu Mwau

Day 3: Friday, 26th February 2016

Moderator: Mr. Michael Kahiti

Rapporteur: Ms. Roselida Owuor

9:00am – 9:15am Resource Mobilization for the NRF– Mrs. Millicent Omukaga

9:15am – 9:45am Funding Opportunities for Research – Ms. Joy Owango, Thompson Reuters

9:45am – 10:15am Managing Research Funds– Dr. J.P.R Ochieng

10:15am – 10:30am Tea Break

10:30am- 11:00am Funding and grant award mechanisms - Mrs. Millicent Omukaga,

11:00am-11:30am NRF program of action (2016) - Mrs. Millicent Omukaga

11:30am -1:00pm Group Work –Mrs. Millicent Omukaga, Dr. Jemimah Onsare

Group One : Modalities on Resource Mobilization

Group Two: One Year Roadmap (2016-2017)

1:00pm – 2:00pm Lunch Break

Moderator: Mr. Boniface Wanyama

Rapporteur: Ms. Mercy Machiya

2:00pm – 2:30pm Group Presentations

2:30pm – 3:30pm Plenary- Mrs. Millicent Omukaga

3:30 pm -4:00 pm Recommendations coming out of the meeting - Mrs. Millicent Omukaga

4:00pm – 4:15pm Closing Remarks, PS, State Department of Higher Education

Day 4: Saturday, 27th February 2016

10:00am: **DEPARTURE**

Annexure II: LIST OF PARTICIPANTS

	Name	Institution
1	Mr. Tirop Kosgey	NRF Board, Chairman
2	Dr. J.P.R. Ochieng Odera	NRF Board
3	Dr. Vincent Gaitho	NRF Board
4	Mr. Habil Olaka	NRF Board
5	Dr. George Ombakho	NRF Board
6	Dr. Moses K. Rugutt	NRF Board
7	Dr. Charles Nzioka	Ministry of Health
8	Prof. Matilu Mwau	CNHR, Director
9	Prof. Walter Mwanda	CNHR, Chair of Council of Members
10	Mrs. Millicent Omukaga	Facilitator
11	Ms. Ndunge Kiundi	CNHR
12	Mr. David Ngigi	NRF Secretariat
13	Ms. Roselida Owuor	NRF Secretariat
14	Dr. Jemimah Onsare	NRF Secretariat
15	Ms Joy Owango	Thomson Reuters
16	Dr. Jonathan Lodompui	Vision 2030 Secretariat
17	Mr. Michael Kahiti	MoEST
18	Mr. Julius Mwangi	NACOSTI
19	Ms. Rose Nyanga	KENIA
20	Dr. John Ayisi	MoEST/DRMD
21	Dr. Simon Kay	Wellcome Trust
22	Ms Emma Ndirangu -	MOEST, Support Staff
23	Ms Catherine Wairimu	MOEST, Support Staff
24	Mr. Eustace Njeru	MOEST, Support Staff
25	Mr. Karani	MOEST, Support Staff

