FORMULATION & IMPLEMENTATION OF

NATIONAL RESEARCH & INNOVATION FRAMEWORK PROGRAM (UGANDA COUNTRY EXPERIENCE)

Dr. Dick M. Kamugasha Intellectual Property Consultant

TOPIC 4: FINANCING OF RESEARCH & OTHER INCENTIVES FOR PORMOTING INNOVATION

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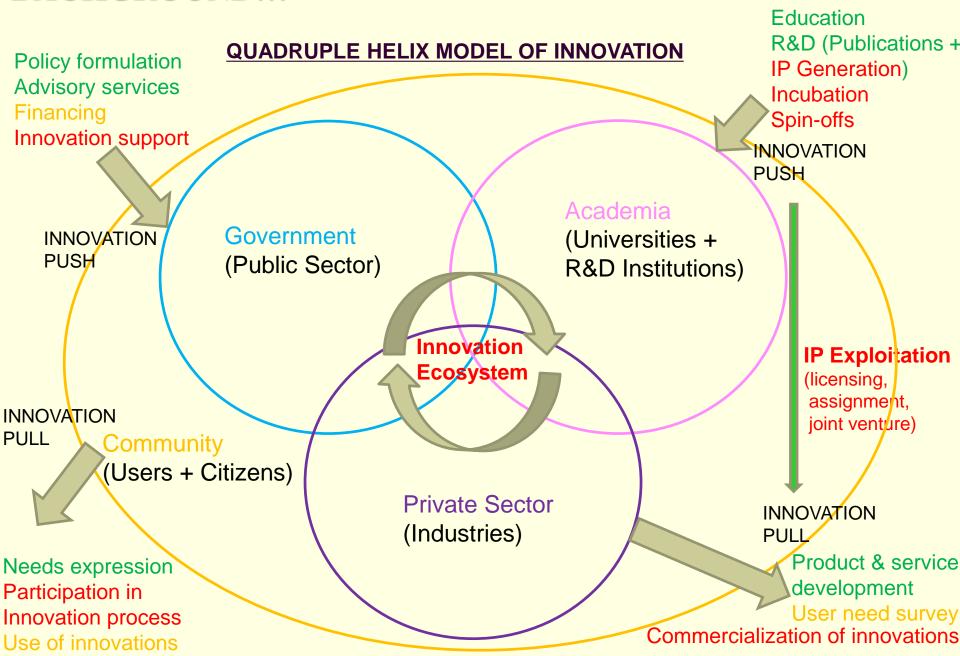
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BACKGROUND

- The conventional approach to effective commercialization of IP relies on actualization of the quadruple helix model of innovation.
- The key actors in this model are <u>government</u> (public sector), <u>academia</u> (universities + R&D institutions), <u>private sector</u> (industries) and <u>communities</u>.
- In this model:
 - <u>academia & government</u> are expected to exert a push effect in the innovation ecosystem with creation, protection and exploitation of R&D results, innovations and creative outputs.
 - private sector & communities are expected to exert a pull effect in the innovation ecosystem with translation of R&D results, innovations and creative outputs into commercialized outcomes.

BACKGROUND...



BACKGROUND...

Reality for most African countries?

- ➤ Government support to innovation remains inadequate.
- ➤ Most Universities and R&D institutions have no capacity to incubate innovations and start spin-offs.
- ➤ Communities rarely participate in the development/use of innovations.
- ➤ Private sector is nascent with low capacity for uptake and commercialization of innovations.
- The above challenges are compounded by weak IP systems.
- As a result the quadruple helix model of innovation is not working as it should in most African countries.
- There is urgent need for interventions that can fill the innovations commercialization gap.
- It is in recognition of this strategic bottleneck that the Government of Uganda has formulated a National Research and Innovation Programme (NRIP).

OBJECTIVES OF UGANDA'S NATIONAL RESEARCH & INNOVATION PROGRAMME (NRIP)

- Support technology development, transfer and diffusion activities in areas of strategic importance to Uganda.
- Enhance Science, Technology and Innovation (ST&I) capacity through strategic partnerships within and among institutions, sectors and disciplines for effective and sustainable commercialization.
- Support the development of key ST&I infrastructure and requisite human capital for its efficient utilization.

LINKAGES TO NATIONAL, REGIONAL & INTERNATIONAL DEVELOPMENT FRAMEWORKS

National, Regional & International Development Frameworks that prescribe relevant domestic technology development, research, innovation and value addition aimed at developing native knowledge based industries and local content include:

- Uganda Vision 2040 and National Development Plan (NDP II)
- ...on re-orienting the country to make STEI main driver of economic growth and competitiveness.
- East African Community Vision 2050
- ...on protocol for integration of ST&I into a range of policy frameworks.
- Science, Technology and Innovation Strategy for Africa 2024
- ...on placing ST&I at epicenter of Africa's socio-economic development and growth.

LINKAGES TO NATIONAL, REGIONAL & INTERNATIONAL DEVELOPMENT FRAMEWORKS...

African Union Agenda 2063

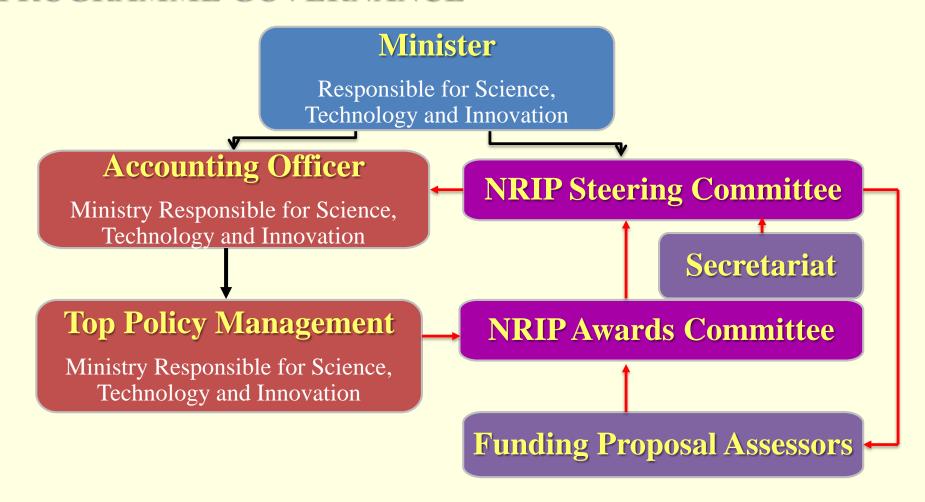
...on recognition of science and innovation as enablers for achieving Africa Union development goals.

Sustainable Development Goals 2030

...under <u>Goal 9: Build resilient infrastructure</u>, <u>promote inclusive and</u> sustainable industrialization and foster innovation

...under <u>Goal 17: Strengthen the means of implementation and revitalize the Global Partnership for Sustainable Development</u> which targets among other things promotion of the development, transfer, dissemination and diffusion of environmentally sound technologies to developing countries on favorable terms.

PROGRAMME GOVERNANCE



PROGRAMME GOVERNANCE...

Role of Minister

- Promoting & protecting ST&I Sector interests
- > Proving political stewardship & guidance on Programme management
- Securing Programme budget
- > Appointing Chairperson & Members of Programme Steering Committee

Role of Accounting Officer (Permanent Secretary, MoSTI)

- Responsibility for overall Programme management
- Accountability for Programme Funds under powers conferred by Accountant General, in accordance with the *Public Finance Management Act* (2015)
- Ensuring regular/transparent disbursement & efficient use of funds, in line Programme objectives
- Authorizing award of funds to entities approved by Programme Awards Committee
- Approving accountability presented by Awardees

PROGRAMME GOVERNANCE...

Role of Top Policy Management (Ministry decision-making Board)

- Providing guidance on priority areas for funding
- Nominating Programme Awards Committee Members
- Approving Programme annual work plans
- Establishing procedures for release & utilization of funds
- Approving Programme management policies & regulations
- Approving Awardees selected by Programme Awards Committee
- Reviewing & endorsing Programme Performance Reports

Role of Steering Committee

- Managing NRIP business in accordance with established principles, rules and regulations
- Ensuring effective, efficient & transparent Programme operations
- Identifying priority Programme beneficiaries on an annual basis
- Establishing criteria for assessing eligibility of Awardees
- Coordinating activities of a Programme Secretariat set up at Ministry HQ

PROGRAMME GOVERNANCE...

- Establishing Programme funding application procedures
- Specifying Award financial limits
- Selecting and appointing Funding Proposal Assessors
- Approving projects recommended for Funding by Awards Committee

Role of Awards Committee

- Preparing standardized proposal templates in collaboration with Steering Committee
- Considering proposals and recommendations submitted by Funding Proposal Assessors
- Selecting & recommending proposals to Steering Committee for funding

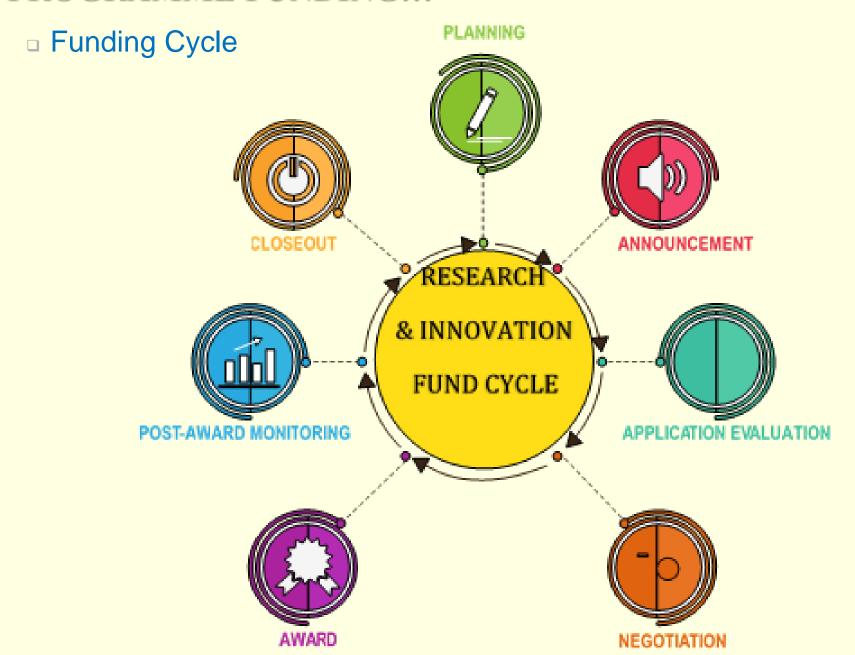
Role of Funding Proposal Assessors

- Assessing projects based on set-criteria for both strength of written proposals and interview of innovators/inventor
- Evaluating & scoring project proposals for; technological soundness, innovativeness, IP strength, impact and commercialization prospects
- Recommending eligible proposals for consideration to Programme Awards Committee

PROGRAMME FUNDING

- Government of Uganda mainstream budget (National Innovation Fund annually capitalized @ UGX 500bn, ca. USD 137m)
- Development Partners (Grant financing)
- Development Partners (Loan Financing)
- Private Sector (Public Private Partnerships)
- Private Sector (IP licensing, assignments & joint ventures)
- There will be three (3) <u>Funding Windows</u>:
 - Research & Development (R&D)
 - Incubation
 - Commercialization (includes support for IP registration)

PROGRAMME FUNDING...



NON-MONETARY SUPPORT

- Non-Monetary support is crucial for enabling Awardees increase their societal impact, organizational resilience and financial sustainability.
- Support to Awardees will include:
 - Coaching & mentoring in financial management & enterprise development
 - Helping researchers & innovators get investment ready
 - Assistance with development of long-term (beyond funding closure) resource mobilization & revenue strategies
 - Governance & human capital development
 - Legal advice in areas such as negotiation & contracting
 - Access to networks & platforms of like-minded researchers & innovators to catalyze collaboration

APPLICATION PROCESS/SELECTION OF BENEFICIARIES

- Announcement of funding opportunities by Programme Secretariat (advertisement of calls for proposals)
- Competitive selection of eligible applicants
- Eligibility criteria for applicants include:
 - > Full compliance with incorporation requirements under laws of Uganda
 - Carrying out proposed activities/business in Uganda
 - Demonstrable capacity to support/conduct research
 - Proven track record in conducting research
 - Availability of facilities & services required to enable quality research
 - No institutional constraints on publication of research results
 - Willingness & ability to administer funds in accordance with Programme requirements
 - Not be insolvent, in receivership, bankrupt or under administration
 - > Should have fulfilled all Tax and Social Security Contribution obligations

APPLICATION PROCESS/SELECTION OF BENEFICIARIES..

- Initial Evaluation criteria-based screening process in which applicants may be contacted by Funding Proposal Assessors, resulting in shortlists of applicants under different funding windows.
- Final Evaluation undertaken by consensus following validation of results by Steering Committee for outputs of Proposal Assessors and recommendations of Awards Committee.
- Selection based on final evaluation results for top rated innovative project proposals, which will be forwarded to Top Policy Management (TPM) for consideration. TPM will make ultimate decisions on amount of funds allocated to selected projects.
- Award Notification Programme Secretariat will formally communicate results to applicants, with short clarification to unsuccessful applicants as to why their project were not accepted.

APPLICATION PROCESS/SELECTION OF BENEFICIARIES..

- Contract Signing will follow grant approval by the Top Policy Management (TPM). Awardees will sign Contracts before disbursement of funds.
 - Contracts will stipulate responsibilities of the Ministry responsible for Science, Technology and Innovation and Awardees, including reporting, disbursement modalities and consequences of inappropriate Contract execution.
 - Contracts will be prepared by the Programme Committee and approved by TPM.
 - Awardees will receive all relevant information prior to Contract signing and will be given adequate time to either accept or reject grant offers.

PERFORMANCE MONITORING & EVALUATION

- Effective Monitoring & Evaluation (M&E) will be an important component of the National Research & Innovation Programme.
- M&E will be conducted to track progress towards attainment of project objectives, based on agreed milestones.
- Mechanisms will include review of progress & financial reports, as well as <u>visits to beneficiary sites</u>.
- Grant Awardees will be required to submit comprehensive progress
 & financial reports pertaining to implementation of their projects.

OWNERSHIP & USE OF ASSETS PURCHASED WITH PROGRAMME FUNDS

- Assets procured under the NRIP shall be public assets and will be recorded and tagged with the project number for monitoring and verification purposes.
- Maintenance of assets will be a contractual responsibility of Awardees.
- Some assets will not be for the sole use of beneficiary Awardees and will be made available to other researchers/institutions as and when need arises.

INTELLECTURAL PROPERTY RIGHTS (IPRs)

- Implementation of the NRIP will generate Intellectual Property (IP) assets for researchers, innovators & inventors.
- Ownership of IPRs derived from Programme funds will be guided by the special Terms and Conditions negotiated in the agreement with each Awardee, where each agreement shall have an IP clause.
- The particulars of each IP clause will in turn be guided by prevailing National and Institutional IP policies and strategies.
- IP assets generated will include <u>Copyright</u>, <u>Neighboring Rights</u>, <u>Trademarks</u>, <u>Patents</u>, <u>Utility Models</u>, <u>Industrial Designs</u>, <u>Trade Secrets</u> and protection against Unfair Competition.

IMPLEMENTATION ARRANGEMENTS

- Implementation of the NRIP will involves a number of key stakeholders, including:
 - MoSTI for policy guidance & oversight of NRIP governance and management
 - MoFPED for mobilization & disbursement of funds, formulation of fiscal & macroeconomic incentives to promote innovation, monitoring & evaluation of programme fund utilization & promoting NRIP to potential investors/co-funders
 - Steering Committee managing NRIP the business in accordance with established principles
 - Parliament of Uganda approval of allocated funds & monitoring impact, in national interest
 - Cabinet of Uganda approval of NRIP framework and guidelines
 - Auditor General auditing of implemented projects
 - MoJCA providing legal advisory perspective during implementation
 - MoGLSD ensuring compliance with the employment & labour laws
 - MoES aligning academic policies towards promoting innovation
 - > Private Sector adoption and commercialization of innovations

EXPECTED OUTPUTS & OUTCOMES

- Enhanced investment in R&D and innovation
- Improved R&D infrastructure
- Generation & commercialization of IP assets
- Attraction of innovation-centric Foreign Direct Investments (FDIs),
 with new technologies & products
- Expansion of industrial cluster base
- Improved human capital quality
- Stimulation of private sector towards innovation of novel/improved products, processes & business models that attract consumers & expand their market share

THANK YOU FOR YOUR KIND ATTENTION

Contacts

Address: Plot 42A Mukabya Road, Nakawa Industrial Area, P.O. Box 7086, Kampala, Uganda

Email: <u>d.kamugasha@gmail.com</u>

Tel.: +256-757766001