

THE 21ST CENTURY RESEARCH UNIVERSITY: TRENDS AND EXPERIENCES

VICE CHANCELLOR'S KEY NOTE:
INAUGURAL DEANS' FORUM WORKSHOP
14TH JUNE 2019, HOTEL AFRICANA

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INTRODUCTION



- Universities the world over exist for 3 purposes:
 - Generation of knowledge;
 - Dissemination of knowledge, through teaching and learning;
 - Community outreach
- From this workshop we should be able to:
 - Appreciate the major trends impacting universities' research environment,
 - Critically evaluate Makerere's research capacity, opportunities and identify priority areas for improvement
 - Develop a framework of observing and interrogating issues affecting research @Mak
 - Appreciate the Role of Academic leaders (Deans) in fostering research in a 21st
 Century

21st Century University Landscape

- A globalized world with international competition, international mobility and opportunities for international collaboration
- A competitive world where research funding is consolidated around themes and tends towards large strategic and highly bureaucratic projects
- An impact-focused world where universities are expected to contribute to their economies and communities and maximize the reach, visibility and socio-economic impact of their research

Higher Education Research Trends



- Globalization, international collaboration and mobility
- Consolidation around themes
- Rise of competitive project funding
- Rise of the 'Third Stream'
- The Open Movement

Research Funding Trends



- Shift from institutional core funding to competitive project funding
- Strategic approach to project selection aligned to 'Wicked Problems' and 'Grand Challenges'
- Performance-based funding that rewards success in raising third-party funds
- Identification/establishment of centers of excellence

Alignment to Wicked Problems

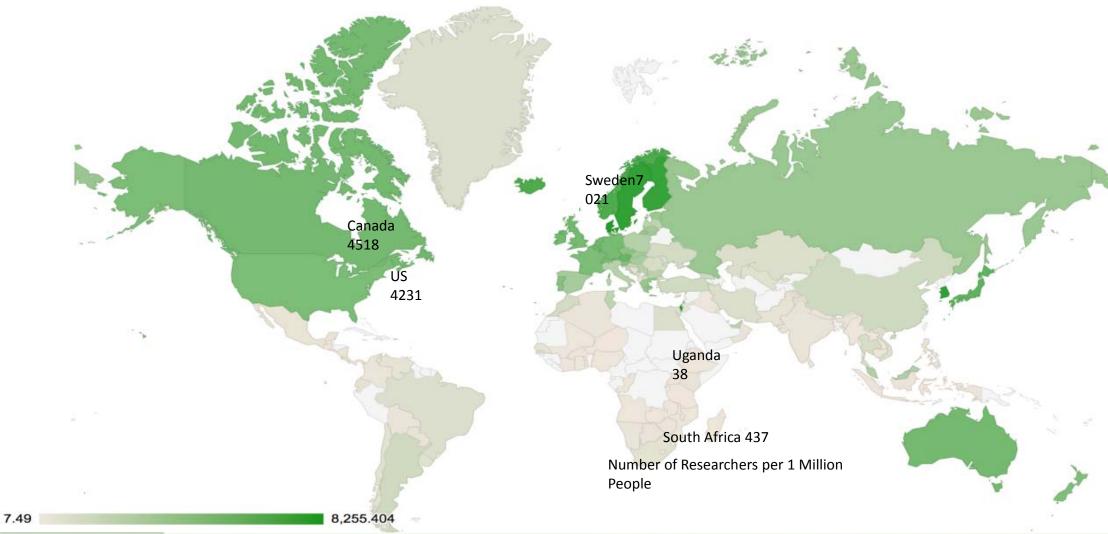


Research funding consolidating around global problems

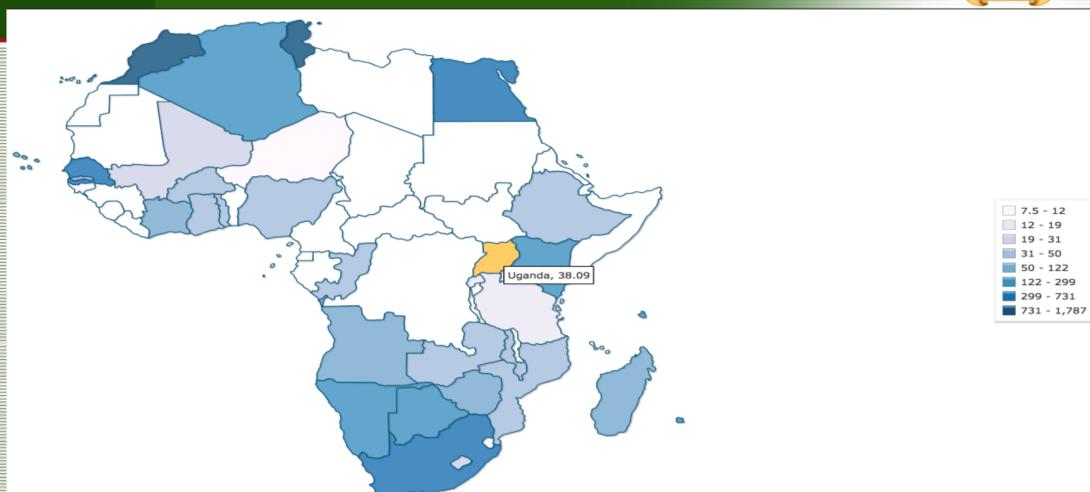
Horizon 2020, EU	National Science Foundation, US	UK Research, Technology and Innovation
 Health, demographic change and wellbeing Food security, sustainable agriculture and forestry Secure, clean and efficient energy Smart, green and integrated transport Climate action, environment and resource efficiency Inclusive, innovative and reflective societies Secure societies - protecting freedom and security 	 Innovative manufacturing Improving data storage and analysis Securing critical infrastructure Promoting innovation and economic growth. 	 Secure resilient food systems, sustainable agriculture Sustainable health & well being Inclusive equitable quality education Clean air, water and sanitation Renewable energy & materials Sustainable livelihoods Environmental Resilience Sustainable cities and communities

SELECTED COUNTRIES' RESEARCH OUTPUT



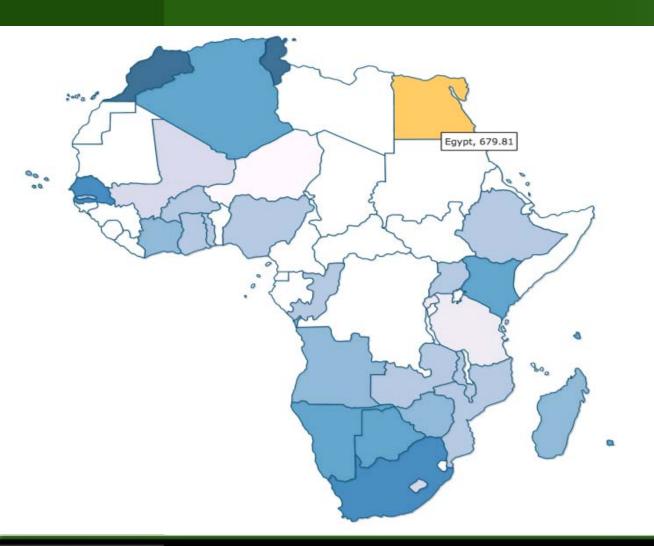


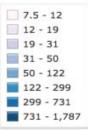




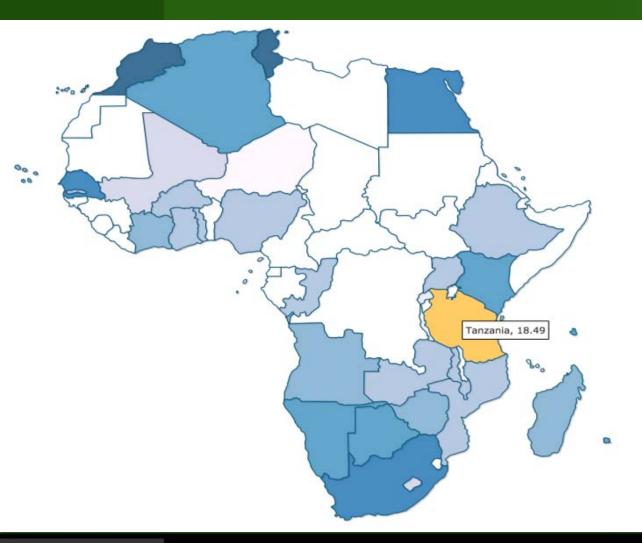


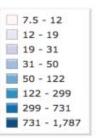




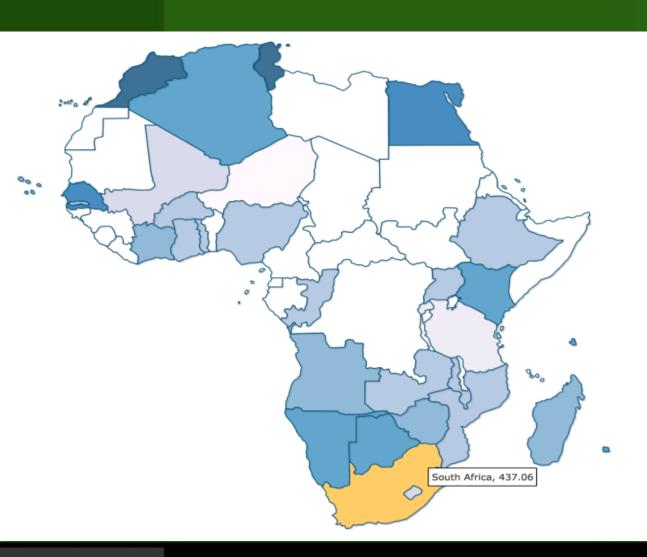


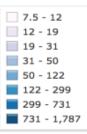






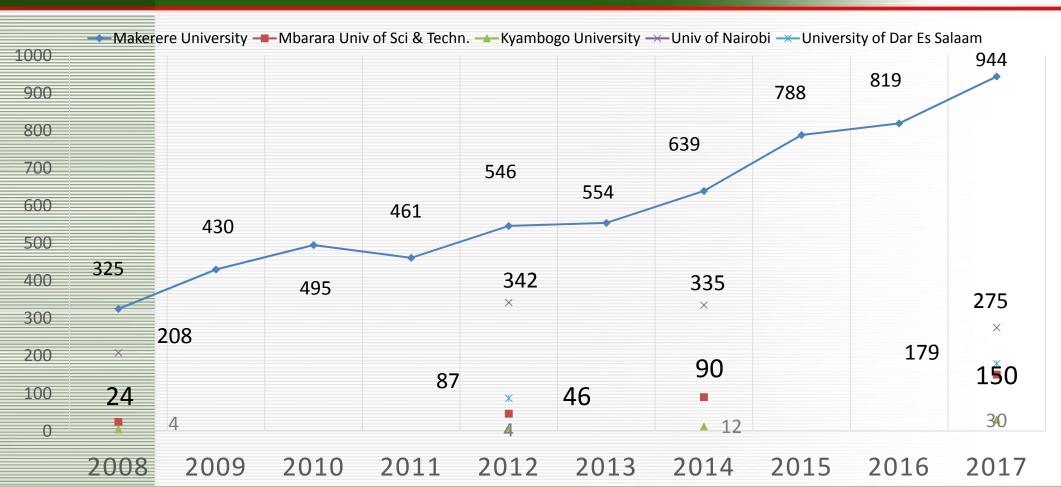






Mak Research 2008-2017: Publication Rate: 0.64





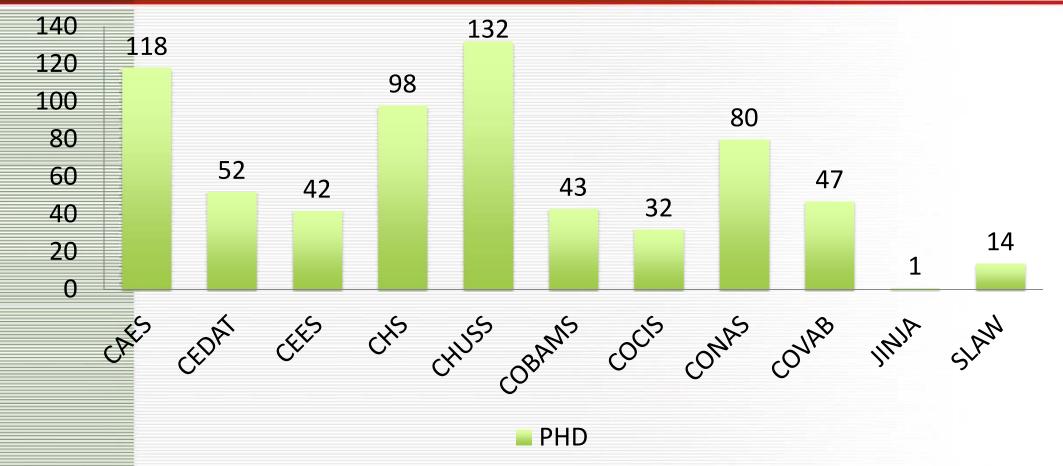
Mak can leverage its research potential on:



- History, the name and the brand premier University in the region, ranking;
- World-wide collaborations and partnerships with reputable institutions;
- Mak does over 90% of the country's research output;
- Mak has a lot more Science and Technology courses that cost more;
- Mak has human resource proportion (60%; higher ranks professors, etc);
- Mak spends over 70% of financial resources on Human Resources;
- Mak has a very wide academic disciplinary specialities and coverage; 37% Science
- Mak has a lot more outreach centers and Centers of Excellence;
- Mak has more graduate students enrolment across disciplines;
- Alumni of high calibre and stature spread around the globe

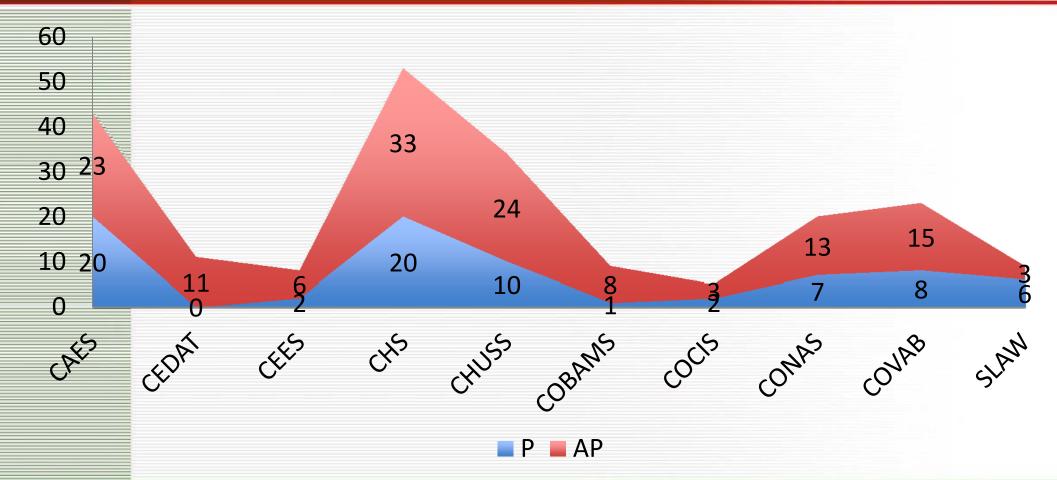
PHD COUNT





PROFESSORS (96) ASSOCIATES (149)





Reflections on Trends for 21st Century:



- 1. Viable Research Policies to support advancement and innovations
- 2. Robust Central Research Coordination for overarching research support
- 3. Strong Central research fund/ research endowment
- 4. Resourceful College/ School research grants offices to incentivise research
- 5. Mentorship programmes for young researchers; training in grants writing and management.
- 6. High graduate enrolment and Post-docs, compared to undergraduate.

Trends Cont'd



- 1. Linkage of research to national and regional developmental agenda
- 2. Formalised strategic linkages (MoUs) with Government agencies, industry and other community stakeholders.
- 3. Framework to establish, support, and build momentum for centres of excellence (CoEs).
- 4. Well established and coordinated research centres.
- 5. Solid University press for research publishing.
- 6. Flagship research innovation projects in each School/department
- 7. Proper documentation and protection of intellectual property rights.



"As We Build For the Future"

THANK YOU VERY MUCH!!!