

The Dynamics of Higher Education Policy Evolution and Implications for the Reform Agenda in Kenya

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Presentation Layout

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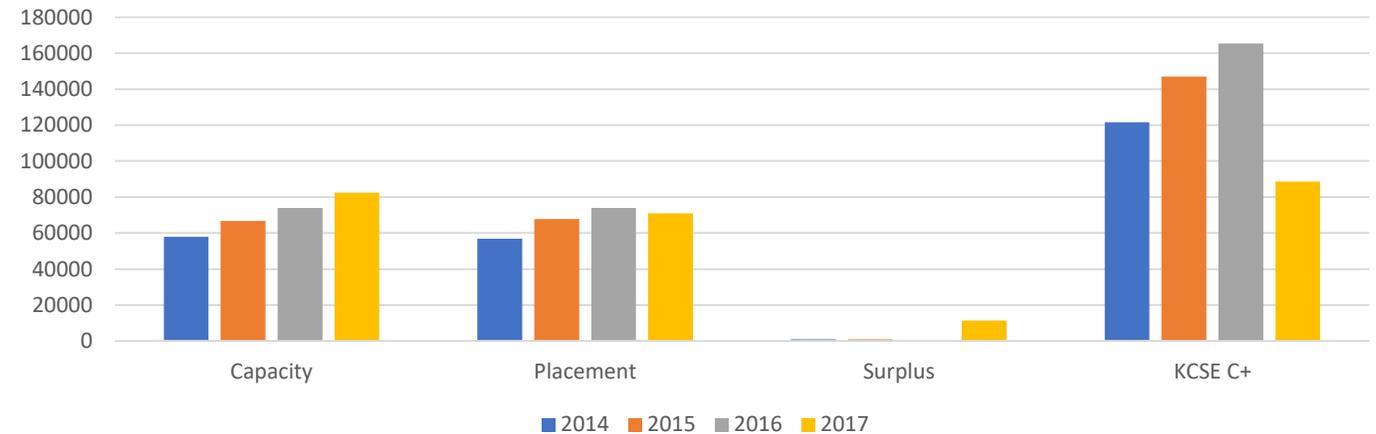
Description of higher education in Kenya

- Constitution of Kenya 2010
- Universities Act 2012
- Science and Technology Act 2008
- Public Private Partnerships Act 2013
- CESA 2025
- Agenda 63
- SDG 2030

Issues in higher education

- **Idle capacity and rising overhead costs**

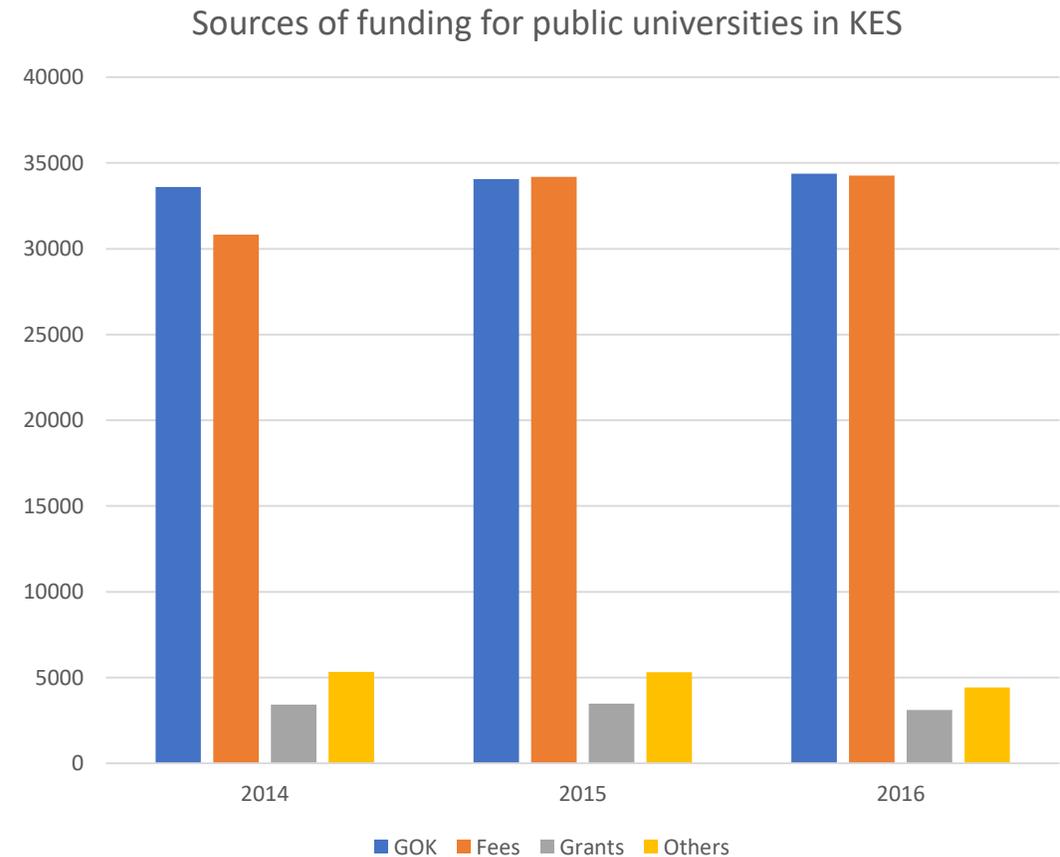
Trends in student placement in public universities



	Capacity	Placement	Surplus	KCSE C+
2014	57926	56936	990	121654
2015	66823	67790	967	147073
2016	74002	74046	44	165332
2017	82419	71018	11401	88620

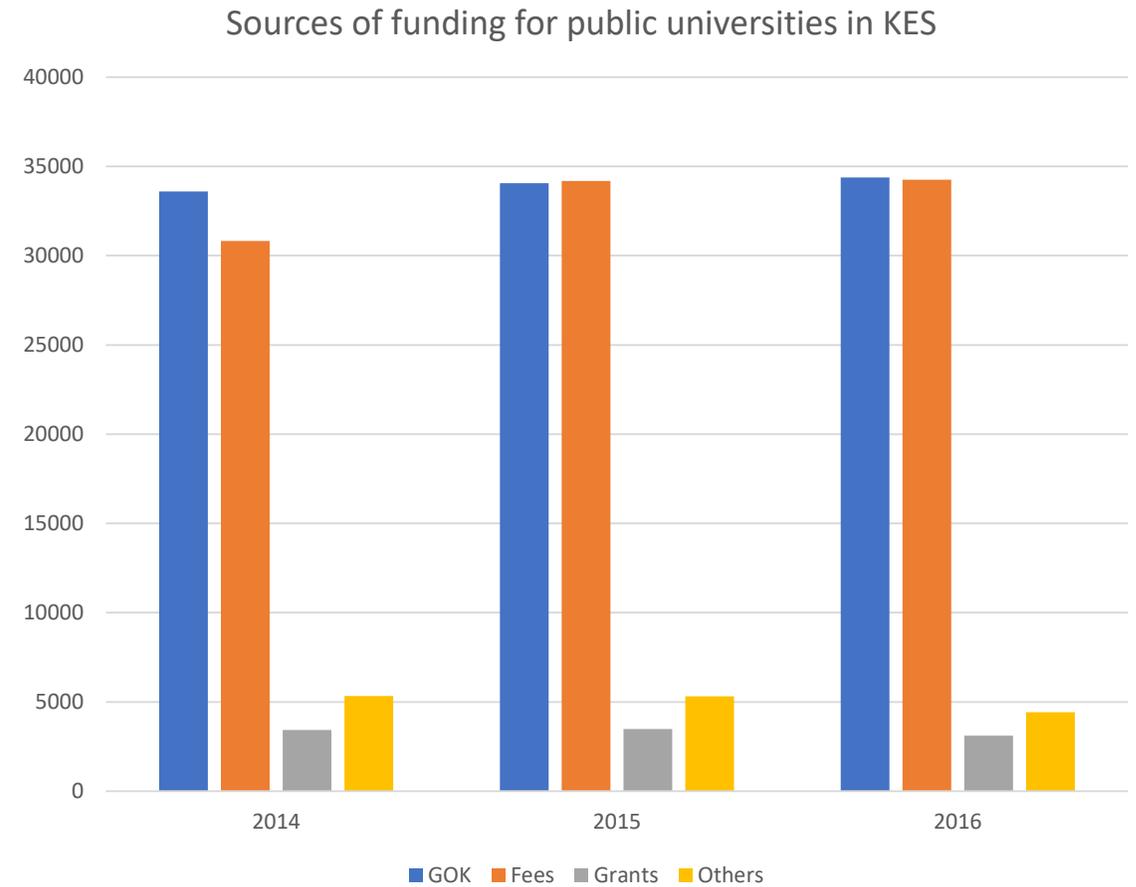
Issues in higher education contd.

- Universities have shifted focus away from Science, technology, engineering, and mathematics (STEM)-based courses that are touted as key drivers of growth in industries, engineering and innovation.
- Faculty staff components and the qualifications of faculty have not kept pace with expanded post-secondary enrolment, undermining the quality of education delivered
- As expected, the distribution of academic staff in the respective programs is influenced by enrolments in the programs
- Universities are highly dependent on government funding and fees from students



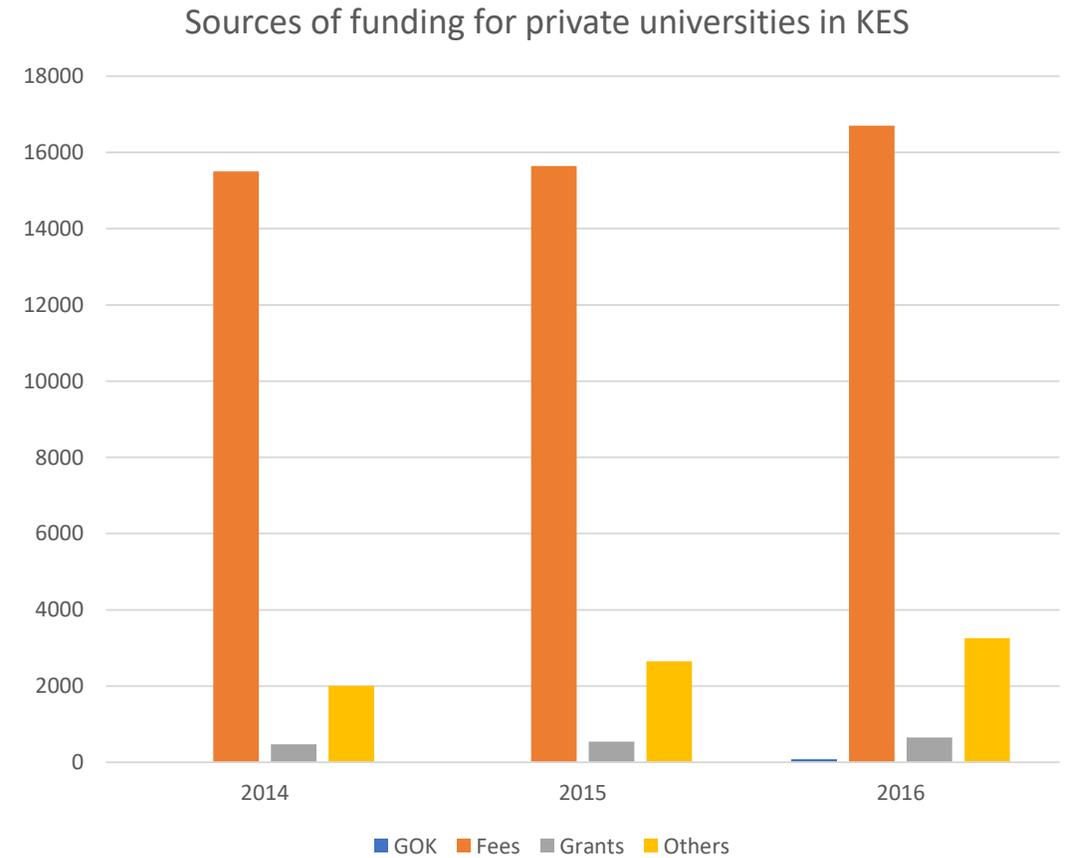
Financing

	2014	2015	2016
GOK	33592	34070	34385
Fees	30820	34195	34263
Grants	3435	3482	3115
Others	5323	5320	4432



Financing

	2014	2015	2016
GOK	0	0	78
Fees	15502	15645	16700
Grants	479	546	654
Others	2011	2648	3259



Trends in expenditure in Public Universities

Type of Grant	2013/2014	2014/2015	2015/2016	2016/2017
Recurrent expenditure	52,233	52,856	55,840	56,392
of which:				
Recurrent grants	35,556	36,174	39,157	40,392
AIA	16,677	16,683	16,683	16,000
Capital Grants	5,009	8,412	7,136	11,479
of which:				
NET capital	3,509	5,201	4,175	8,504
Loans/ Grants	1,500	3,210	2,961	2,975
Total expenditure	57,241	61,268	62,976	67,871
Recurrent grants (percent)	91	86	89	83
Capital Grants (percent)	9	14	11	17

Higher Education at Crossroads

Crisis or Opportunity???

Higher education and Employment

- “Higher education not only changes the lives of individuals who receive degrees and diplomas, but also the lives of those around them. Improved economic opportunities and incomes for individuals with higher education can support entire families. A critical mass of higher education opportunities can also act as a “pull factor” for students in lower grades, encouraging them to stay in school.” (Lowe, 2019)
- Of Africa’s nearly 420 million youth aged 15-35,
 - 1/3 are unemployed,
 - 1/3 are vulnerably employed, and
 - only one in six are in wage employment (AfDB, 2016).
 - 61% of employed men and 74% of employed women work in the informal sector (WB, 2016).
 - 23% of the working poor in sub-Saharan Africa = Young people (Lowe, 2019)

Education Reforms?

- Human Resource Audit - Right-sizing and down-sizing of staff to ensure proper staffing norms
- Rationalization, Specialization, Collaboration, dual degree programmes
- Freeze on the establishment of new universities
- Innovative Financing of higher education
- Triple Helix Approach; partnerships with Academia, Industry, Government - (Citizens, CSO, NGOs, Corporates, Philanthropy, Private sector) *Co-creation of knowledge for Impact!*
- Governance and Accountability
- Collaborations; Alumnae, Diaspora, Professors Emeritus,

Nobel Prize Winners 2019



Abhijit Banerjee (MIT)



Esther Duflo (MIT)



Michael Kremer (Harvard)

“for their experimental approach to alleviating global poverty”

The Abdul Latif Jameel Poverty Action Lab is a global research center working to reduce poverty by ensuring that policy is informed by scientific evidence

Scenario in Some Kenyan Universities

- African Centers of Excellence ; JOUST, Moi, Egerton (WB)
- Strathmore University & @iLabAfrica – Data and AI
- JKUAT & PAUSTI, JICA
- UoN & KEMRI/CDC
- Higher Education Science and Technology to enhance quality-(HEST) Project (AfDB)
- KAIST & South Korea KAIST
- KAIST Model

KAIST MODEL:

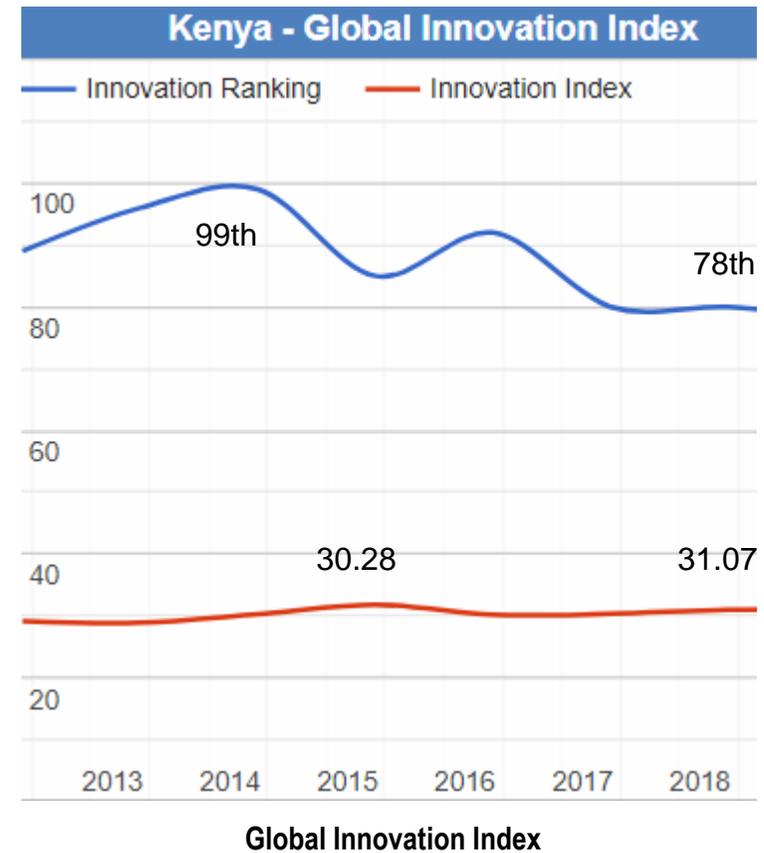
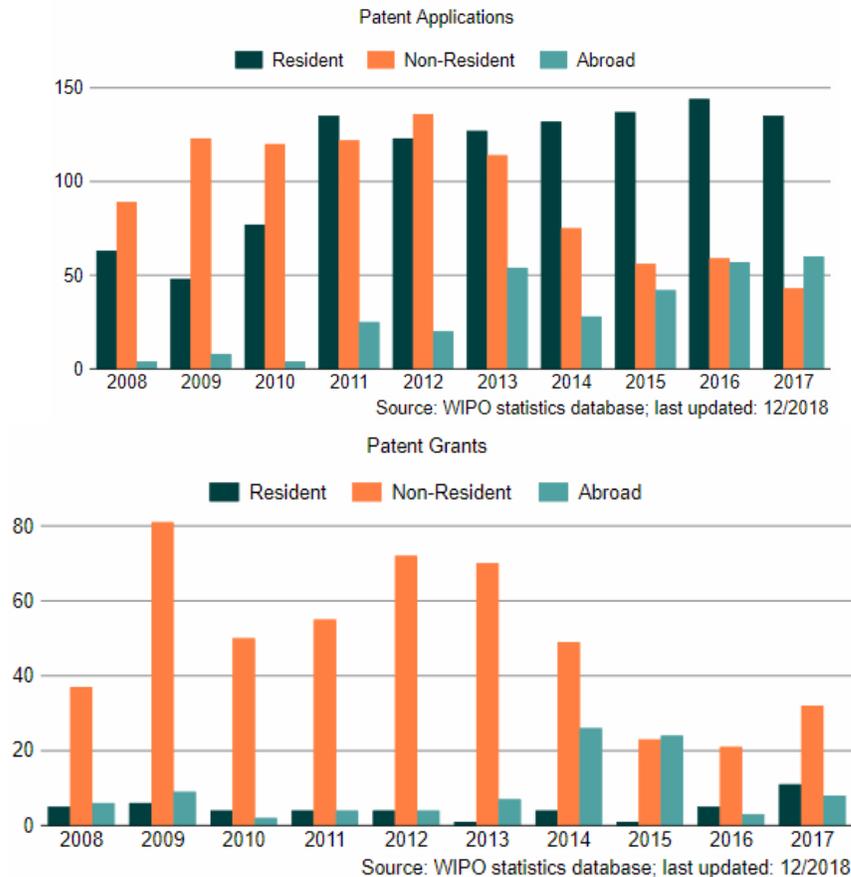
Research Planning: Three Key Considerations

1. Having to build **basic** knowledge bases while focusing on **applied** research for industrial applications
2. Having to address **current** demands while preparing for **future** needs
3. Having to generate **economic** prosperity while meeting **social** needs and ensuring sustainability

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Current Conditions Science/Technology/Innovation

- Significant progress in technological innovations in Kenya
 - Patents applications by residents and grants for residents increasing recently!
 - Innovation ranking going up from the 99th to the 78th just over five years



Major Components Curriculum Design

Six programs identified with qualitative and quantitative analyses and discussions with Kenyan side in F/S

Electrical/Electronics Engineering

To train experts, professionals and scholars of solid understanding and skills contributing to industrial growth with advances in the electrical/electronics fields

Civil Engineering

To equip future civil engineers with excellent problem solving skills and the understanding of design/construction/ maintenance of human-made structures

ICT Engineering

To produce innovators and entrepreneurs with advanced skills and knowledge of ICT in the utilization ICT to generate prosperity and solve local/global problems

Chemical Engineering

To educate future chemical engineers with fundamental understanding of chemicals and materials able to handle large-scale processes for productivity increases

Mechanical Engineering

To generate leaders in mechanical engineering and related industries with advanced knowledge of mechanical systems and capacity for collaborative innovations

Agricultural Biotechnology

To nurture future leaders of bio-industry for sustainable rural development by providing advanced education in agriculture and life sciences

Ranking in terms of publications

Rank	Country	Documents	Citable Documents	Citations
1	United States	12070144	10701848	297655815
2	China	5901404	5785424	48833849
3	United Kingdom	3449243	2935537	77355297
4	Germany	3019959	2787096	61262766
5	Japan	2750108	2630141	42767077
6	France	2120161	1969558	42219660
7	Canada	1744508	1569064	39431612
8	Italy	1744314	1587823	32252528
9	India	1670099	1551015	15035059
10	Spain	1376358	1262302	23570723

Rank	Country	Documents	Citable Documents	Citations
35	South Africa	272886	247039	3677627
39	Egypt	203952	195777	1933453
53	Nigeria	90031	84718	645110
54	Tunisia	86600	81933	678610
56	Algeria	65714	63705	444666
57	Morocco	62636	58839	507921
67	Kenya	35120	31548	652942
77	Ethiopia	22934	21479	251468
79	Ghana	20052	18232	236627
86	Tanzania	17484	16072	298625

Conclusion!

References

- <https://www.povertyactionlab.org/blog/11-1-19/how-can-nobel-winning-experimental-approach-alleviating-global-poverty-contribute>
- <https://www.nobelprize.org/all-2019-nobel-prizes/>
- <http://www.ilabafrica.ac.ke/>
- <https://www.scimagojr.com/countryrank.php>
- Education, Ministry of. (2018). *Education Sector Analysis*. Nairobi: GOK.
- KAIST Report (2019)
- Lowe, S. (2019). *A Bridge to the Future: From Higher Education to Employment for Displaced Youth in Africa*. World University Service of Canada for MasterCard Foundation.
- Shah, R. (2019). *White Paper, Transforming Systems in Times of Adversity: Education and Resilience*. USAID/ Education Development Center, Inc.

Thank you

