UNISA RESEARCH AND INNOVATION STRATEGY

2016 - 2020

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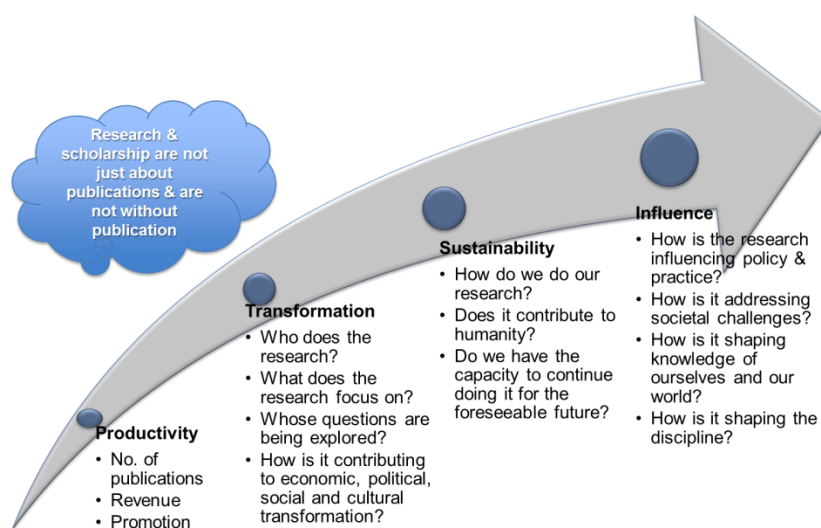Vice Principal: Research and Innovation, UNISA
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1. OUR CONTEXT

The University of South Africa (UNISA) is a comprehensive open and distance learning (ODL) institution. Through its research and innovation initiatives, UNISA strives to attain its vision of being the African university shaping futures in the service of humanity. The unique nature of this service derives from a strong commitment to basic, strategic and applied research as well as innovation and commercialisation, in keeping with the university's identity both as a comprehensive institution and as a leader in certain niche research areas.

Unisa has an important role to play in enhancing research, innovation and the production of postgraduate students. The Research and Innovation portfolio at Unisa is thus focussed on strengthening Unisa as the leading provider of postgraduate programs in Africa and a leading research institution where innovative thinkers can flourish and innovative ideas are rewarded. Given its geographical reach nationally and on the continent, as well as its high public visibility, Unisa's success in research, innovation and post graduate studies has a high potential to influence the future of research in South Africa and on the continent. It is for this reason that the portfolio invests in and supports post graduate studies, research, innovation and commercialisation projects and partnerships across the institution, collaborations within and across Unisa colleges, institutes and centres of excellence, research councils, other universities, private sector entities and government departments.

This strategy is an important step towards advancing research and innovation at Unisa. Success lies in our collective efforts to support research, development and to invest in people and innovative ideas.

2. R&I FRAMEWORK

The R&I Strategy 2016 – 2030 is based on the following framework.

3. OUR VISION

VISION STATEMENT: Excellence, Innovation, Leadership

Excellent Researchers

Innovative Solutions

Leading African university in the service of humanity

4. OUR MISSION

With regards to Research and Innovation, UNISA strives to:

- undertake research and knowledge development guided by integrity, quality, rigour and ethics;

- develop and retain high quality research capacities among its staff members

- cultivate and promote an institutional ethos, intellectual culture and research experiences that are conducive to critical discourse, intellectual curiosity, tolerance, and a diversity of views;

- contribute to society by producing Master's and Doctoral graduates of sound character, versatile ability and knowledge; and

- meet the research needs of the global competitive society by nurturing collaborative relationships with its stakeholders and other partners.

5. OUR COMPETITIVE ADVANTAGE

The main aim for setting out a strategic and co-ordinated approach to research and innovation is to ensure an increase in the production of postgraduates, excellent research activity, outputs and innovation at Unisa. The Strategy builds on Unisa's considerable research strengths including:

- Unisa's collaborative approach that attracts top researchers;

- Unisa's focused approach on human capital development;

- Unisa's commitment to investing in quality research facilities and equipment;

- Unisa's emphasis on multi-disciplinary, interdisciplinary and transdisciplinary research that solves problems for society and industry;

- Unisa's reputation as the highest producer of Masters and Doctoral graduates in South Africa;

- Unisa's library is one of the most modern and well-equipped research libraries in Africa;

- Unisa Press which publishes at least 20 books and 50 journals per year.

6. OUR RESEARCH NICHE AREAS

In light of the strength and potential of the institution as well as the grand challenges identified by the Department of Science and Technology, the following five broad research niche areas were identified in 2009 and are still relevant:

a) Knowledge generation and human capital development in response to the needs of South Africa and the African continent

b) The promotion of democracy, human rights and responsible citizenship

c) Innovation and capacity building in science and technology

d) Economic and environmental sustainability

e) Open Distance Learning,

7. GOALS AND OBJECTIVES

The R&I Strategy support the Unisa Strategy 2016 – 2030 by focusing specifically on:

STRATEGIC FOCUS AREA 1 - Towards becoming a leading ODeL, comprehensive university in teaching and learning, research, innovation and community engagement based on scholarship

- STRATEGIC TARGET 3:
    - A leading participant in and producer of research and innovative solutions in identified niche areas, with particular focus on identifying African solutions and global responses to African/ continental strategic focus areas and concerns
- SIGNIFICANT METRICS
    - Given the resource constraints, Unisa will focus primarily on those research projects which are in line with the university's priorities and strategic thrusts, and research will be tested against the university's mandate and the national/continental objectives.

- Unisa emphatically acknowledges the African context of its research and innovation trajectory, but this will not limit the niche focus areas of knowledge production.
- The key focus will be on
  a) increasing the number of research outputs produced in the identified research focus areas (e.g. accredited articles, conference papers, and postgraduate students); and (
  b) improving research outputs produced in the research focus areas as a percentage of all Unisa outputs.

8. KEY PLAYERS

The University of South Africa has placed responsibility for research and innovation with the office of the Vice Principal: Research and Innovation. The office of the Vice Principal works closely with the following Unisa entities to ensure a coordinated and focused approach to meet the university's goals and priorities:

- Unisa's colleges

    i. CAES
    ii. CAS
    iii. CEDU
    iv. CEMS
    v. CGS
    vi. CHS
    vii. CLAW
    viii. CSET

- Graduate School of Business Leadership (SBL)

- Professional and Administrative Research Committee (PARC)

- African intellectuals, knowledge systems and Africa's Futures Program in the office of the Principal

- Department of Research – responsible for advancing research, innovation and commercialisation

- Department of Library Services – provides support for Unisa researchers (students and staff)

- Corporate Communications and Marketing (CC&M) – will actively promote Unisa's excellent, engaged research and innovation projects in order to maximise the reputational benefits to individual researchers and the university.

- Unisa ICT

The 2016 – 2020 plan

Strategic Target	Activities	Objective Nr	Objective	Baseline	2016	2017	2018	2019	2020
3.1	Advancing niche area research on the African continent and internationally	3.1.1	Number of research output units for publications in the ISI, IBSS, Scopus ~~and Norwegian listed~~ journals in each niche area						
			NA1 - Knowledge generation and human capital development in response to the needs of South Africa and the African continent						
			NA2 - The promotion of democracy, human rights and responsible citizenship						
			NA3 - Innovation and capacity building in science and technology						
			NA4 - Economic and environmental sustainability						
			NA5 - Open Distance Learning	166	175	180	195	200	205
			SUB-TOTAL	385 (26%)	500 (30%)	543 (35%)	640 (40%)	743 (45%)	850 (50%)
			Other	1065 (74%)	1000 (70%)	1007 (65%)	960 (60%)	907 (55%)	850 (50%)
			TOTAL	1450	1500	1550	1600	1650	1700
		3.1.2	Number of research master's degrees conferred in each niche area						
			NA1 - Knowledge generation and human capital development in response to the needs of South Africa and the African continent						
			NA2 - The promotion of democracy, human rights and responsible citizenship						
			NA3 - Innovation and capacity building in science and technology						
			NA4 - Economic and environmental sustainability						
			NA5 - Open Distance Learning	10	10	10	10	10	10
			SUB-TOTAL						

			Other						
			TOTAL	432 (2014)					
			Number of doctoral degrees conferred in each niche area						
			NA1 - Knowledge generation and human capital development in response to the needs of South Africa and the African continent						
			NA2 - The promotion of democracy, human rights and responsible citizenship						
			NA3 - Innovation and capacity building in science and technology						
			NA4 - Economic and environmental sustainability						
			NA5 - Open Distance Learning	5	5	5	5	5	5
			SUB-TOTAL						
			Other						
			TOTAL	205 (2014)					
		3.1.3	Number of NRF-rated researchers in each niche area						
			NA1 - Knowledge generation and human capital development in response to the needs of South Africa and the African continent						
			NA2 - The promotion of democracy, human rights and responsible citizenship						
			NA3 - Innovation and capacity building in science and technology						
			NA4 - Economic and environmental sustainability						
			NA5 - Open Distance Learning	2	3	4	5	6	6
			SUB-TOTAL						
			Other						

				160 (2015)	170	180	190	200	210
			TOTAL	160 (2015)	170	180	190	200	210
		3.1.4	Number of national, institutional and international research projects that are internally or/and externally funded in each niche area	4	5	5	5	5	10 (30 Total)
			NA1 - Knowledge generation and human capital development in response to the needs of South Africa and the African continent		1	1	1	1	2
			NA2 - The promotion of democracy, human rights and responsible citizenship		1	1	1	1	2
			NA3 - Innovation and capacity building in science and technology		1	1	1	1	2
			NA4 - Economic and environmental sustainability		1	1	1	1	2
			NA5 - Open Distance Learning		1	1	1	1	2
3.2	Increase the staff research capacity development and NRF-rating of staff	3.2.1	Number of permanent academic staff trained in ethical practices of research and community engagement		200	200	200	200	200 (1000 total)
		3.2.2	Number of staff with doctoral degrees	735	750	760	775	800	825
3.3	Increased number and quality of research outputs and patents	3.3.1	Number of permanent academic staff with doctoral degrees generating research outputs (see 3.2.2)	761	775	785	800	825	850
		3.3.3	Number of accredited research outputs from community engagement projects	57	65	90	95	115	130
		3.3.4	Number of young (<40) researchers producing accredited research outputs	173(?) (240)	250	265	285	305	325
			Number of black South African researchers producing accredited research outputs	335(?) (286)	300	315	330	345	250 360
			Number of women researchers producing accredited research outputs	322(?) 358	370	380	400	415	430
			Number of black South African women researchers producing accredited research outputs						

		3.3.5	Number of Patents registered in Unisa's name	0 (2014)	1	1	1	1	1 (5 total)
			Number of IP disclosures submitted	15 (2014)	18	21	24	27	30
		3.3.6	Per capita weighted research output to be aligned with the Ministerial Statement 2015	1.19 (2013)	1.1 (2014)	1.2 (2015)	1.3 (2016)	1.4 (2017)	1.4 (2018)
			Total research output units submitted to DHET	1450 (2014)	1500	1550	1600	1650	1700
3.4	Increased number of international student exchanges	3.4.1	Number of international student exchange programmes to promote scholarship of engagement	1	2	2	3	3	3
7.1	Increasing the number and value of externally funded research grants		Number of permanent academic staff with externally funded research grants	259 (2014)					
			Value of externally funded research grants	R31m (2014)					