



“RESEARCH AND INNOVATION WEEK”

Vice Chancellor/Principal, Prof. Makhanya

Opening Welcome

Welcome and Opening Address

2 March 2015

Programme Director

Distinguished members of Unisa Council

Members of Unisa’s executive and extended management

Our distinguished panelists, guest speakers and presenters

Colleagues from sister institutions

Unisa academic and non-academic staff

Students

Distinguished guests, ladies and gentlemen

I am happy to join you this morning to mark the commencement of an important flagship event in our academic calendar. I welcome you all to this event and hope that it will foster a culture and spirit of research, creative intellectual curiosity and innovation, and further reinforce the significant gains we have made as Unisa in the area of research output which by implication ought to have a healthy dose of innovation embedded in it. I just want to make a few critical observations on the subject of research and innovation in the sociology and political economy of knowledge in this current 21st century epoch of human history and civilization. These remarks are meant to challenge us to

reflect on the very basic and yet profoundly important intellectual architecture and infrastructure of research and innovation. Some of the issues I am raising are not necessarily new to the community of scholars but the context is forever changing thus making some of the assumptions we make and answers we provide to be obsolete.

The key operative words of this week's programme are research and innovation. Albert Szent-Gyorgyi makes the following observation about research, *"Research is to see what everybody else has seen, and to think what nobody else has thought."* Zora Neale Hurston makes a simple observation that *"Research is formalized curiosity. It is poking and prying with purpose."* George Kneller has this insightful articulation of creativity and innovation when he asserts that *"Creativity, as has been said, consists largely of rearranging what we know at what in order to find out what we do not know. Hence, to think creatively, we must be able to look afresh at what we normally take for granted."*

Research, in essence, is the DNA of any knowledge producing, processing and transmitting institution like a university, research institution, think tank and or policy institute. Furthermore, innovation is the genetic coding of any knowledge institution as it gives it a competitive edge as well as assures its continued relevance in the era of smart knowledge economies that define the information age we live in. In crafting its strategy, in its vision and mission as well as defining the pillars of the strategy, and its research agenda, Unisa is acutely aware of this reality even as it seeks to fine-tune the delicate balance between teaching and learning, on the one hand, and research on the other.

The history of the evolution of human civilization through different epochs, from the Stone Age through the Iron Age, the Industrial Age and Information Age has been informed and shaped by the nature and

quality of research and innovation. Human relentless quest for better life, security and intellectual curiosity and consciousness about the universe within which they are located has been the driving engine of most of innovations and research. Research and innovation has been responsible for major scientific and technological advances as well as principles, laws and values as well as systems that shaped societies through the ages.

We should, as scholars and aspiring scholars, not have an **uncritical embrace of some of broad sweeping assumptions about the virtues of research without also amplifying its vices**. Both natural science and social science research has been used and manipulated to rationalize and justify some forms of domination and conquest as well as the far-reaching damage to our environment resulting from some of the research and innovations. It is 70 years since atomic bombs came raining down on the Japanese cities of Nagasaki and Hiroshima, and

that too was the result of science and technological innovation in modern warfare. This, if anything raises the question of the “conscience”, the ethical dimension, the “soul” and impact. It boils down to that normative question that each and every researcher and innovator should ask in their moment of critical introspection; what are the consequences of my actions? How are my choices hurting or helping the society and humanity? What legacy and footprints do I want to leave? You’ll realize that I lifted the other dimension of research ethics than the one that just focus on plagiarism and conduct in the field work. I worked on the assumption that this dimension is often covered and is well-regulated than the deeper philosophical and normative aspects of research.

South Africa’s fledgling democracy is faced with a number of deep structural socio-economic and political challenges. It is, therefore, crucial to enquire about the **relevance of research to the society and**

the world it is located within. Our task as knowledge institutions is to locate our research within the broader policy programmes and make high-impact contribution in the public, private and civil society sector of our society. What is the country's research agenda to assist in this manner? Does the country have a coherent and comprehensive research agenda that seek to address these challenges and give the country a competitive edge in the global environment? How do knowledge institutions and academics relate to the National Development Plan?

South Africa is located within the African continent and its agenda is also within the context of the continental development agenda which is currently articulated in the Africa Agenda 2063. Unisa, having signed a historic MoU with the African Union Commission, and having an extensive track record of being involved in the continental development agenda, is poised to play an even greater role. How will

our research and innovation programmes respond to these opportunities? South Africa is also a member of BRICS thus extending our scope of strategic opportunities for collaborative research partnerships. Whilst blue sky research will always be an integral part of scholarship and intellectual enterprise, we must begin to ask difficult questions about the application and impact of our research in a practical sense and the balance to maintain between the search for knowledge for knowledge sake and those areas which may have immediate application to the challenges of today. **Innovation cannot and must not be the sole preserve of innovation hubs and entities such as the CSIR, this must be infused into the mainstream work of academic and research institutions.** Equally so, universities have always been branded as ivory towers entire to themselves and sometimes removed from the societal realities and challenges. What must researchers and innovators do to remove this stigma and yoke? Innovation concept and programmes must be demystified to allow for broader participation. Knowledge institutions must take bold concrete

steps to influence the developmental and policy agenda for the good of the society and the world.

During our early years of transition the understandable effort to mainstream natural sciences and engineering studies and research was done sometimes to the exclusion of the social sciences and this had serious ramifications as departments and programmes in social sciences and humanities were closed, funding evaporated for others.

This crippling effect on the social sciences also created confidence and funding crisis to a point of existential crisis. Social sciences begun to lag behind in research and innovations compared to their natural science counterparts. Social sciences and humanities have a wide scope of areas where they can make a contribution in research and innovations towards addressing societal problems, and there is an even wider scope of collaborative work between the natural and social sciences.

The scale of the global financial and economic crisis as well as geopolitical conflicts will certainly have a **negative impact on research funding**. We ought to be looking at creative means of mobilizing resources and using them efficiently in face of this reality. History informs us that each historical moment of economic and financial difficulties research funding has always suffered.

Democratization of research and innovation participation also depends on our nuanced understanding of **the ecology and sociology of knowledge**. The dominant hegemonic paradigms have led to the exclusion and marginalization of other knowledge systems thus precluding plurality of epistemology and cognitive justice. Given **Unisa's strategic intent to be a truly African University** that places African experience and knowledge at the core of reaffirmation and development, the issue of developing and revitalizing the African

knowledge systems for them to co-exist and have meaningful dialogue with existing body of knowledge, the landscape of paradigms is vitally important to analyses.

Research, innovation and technological advances have **serious Implications for indigenous African languages** which do not only have to establish scientific terms in their lexicology but also keep up with new inventions that need creation of new names. The current policy debate on the need to introduce African languages in higher education must assume a sense of urgency given this background and context.

As we teach, train and produce students with qualifications from our universities we often talk of **preparing students for the market** and yet a university, as Salim Vally and Enver Motala argue in their book, *Education, Economy, and Society*,” that university should be understood as doing more than just a mechanical processes of

producing for the market. **University ought to produce critical thinkers, innovators and pioneers** in their diverse fields with the aim of improving human and environmental life.

The very last point and a challenge I want to toss to this distinguished audience is the quest for original concepts and theories as well as inventions in your various fields. We ought to ask ourselves how scholars and public intellectuals like Leonardo Da Vinci, Charles Darwin, Karl Marx, Max Weber, Sigmund Freud, Karl Jung, John Keynes, Rosalind Franklin, Barbara McClintock, Archie Mafeje, Sheikh Anta Diop, Ali Mazrui, Andrei Sakharov, Albert Einstein, Stephen Hawking and many others could come up with such profoundly seminal original ideas that shaped the thinking, concepts, theories and ideologies of their times. How in the contemporary era the likes of Steve Jobs of Apple and Bill Gates of Microsoft could come up with innovative ideas that virtually changed the way our Information Age operates. How do we rekindle this spirit in our community of scholars, what are the next big

ideas that should inform humanity and nature around us? How do we make real our vision of the African Renaissance by re-creating the Alexandria and the Timbuktu as great centers of world knowledge in the African soil in order to reclaim the 21st century as the African century?

I want to close by presenting figures and statistics showing that Unisa has made strides in the area of research output, enrolment of Masters and Doctoral students and investing in developing the infrastructure for cutting edge research. Unisa set out to achieve ambitious goal, the plan sets out various targets that included;

- positioning the University as one of the top universities in South Africa in terms of research outputs,
- increasing the number of NRF rated researchers,
- increasing enrolments and the pass rates of master's and doctoral students,

- Developing effective practices to recruit and retain quality researchers.

These efforts have yielded results

The total number of NRF rated staff has increased from 95 (2010) to 124 (2012) and 136 (2013). Of these, the proportion of male to female rated staff is on average 60% to 40% over this period. And more important, the majority of ratings are C2 and C3. It needs to be noted that the increase in rated researchers was more than the increase in academic staff. This has significantly improved the national ranking of Unisa in terms of research output of national public funded universities, and it is my objective to continue sustaining this progressive improvement. It is worth noting that income from research grant continues to grow annually as it stood at R9, 170 976 for 2013. The College of Science, Engineering and Technology in our Science Campus received a significant boost or a proverbial shot in the arm when a state-of-the-art science laboratory that primarily focuses on the cutting edge Nano-science research was built. This is beginning to attract top scientist to Unisa as they realize our serious intent to invest in the research infrastructure.

The increase of post-graduate students invariably increases an active research community and consequently an increase of research output and publications. Unisa's post-graduate (Masters and Doctoral) enrolment increased from 29,027 thousand in 2009 to 45,479 thousand in 2013.

I would also like to thank Vice Principal, Research and Innovation, Professor Mammokgethi Phakeng, and her team of leaders in various colleges and institutes who have passionately and imaginatively implemented Unisa's ambitious programmes and targets for research and innovation.

At 142 years, Unisa continues to be **“The African University Shaping Futures in the Service of Humanity.”** It is making its contribution to the cumulative work of universities and knowledge generating institutions in South Africa, in Africa and around the world in the ultimate search for answers and solutions facing humanity in the 21st century.

A historic task of defining the mission and the agenda of this generation of researchers and innovators fall squarely on our shoulders in gatherings of this nature. To paraphrase Franz Fanon in his book “The Wretched of the Earth,” we must define our mission and then decide on whether we fulfill it or betray it.

I wish you a successful, thought provoking and inspiring engagements during this week that focuses on research and innovation.