Annual Young Scientists'
Conference 2018

PR

Proceedings
Report

SAY NO
TO CORRUPTION

**Winning
the Fight Against
Corruption:**
A Trans-Disciplinary Approach

science
& technology
Department:
Science and Technology
REPUBLIC OF SOUTH AFRICA

SAYAS
South African Young Academy of Science

ASSAf
ACADEMY OF SCIENCE OF SOUTH AFRICA

The Academy of Science of South Africa (ASSAf) was inaugurated in May 1996. It was formed in response to the need for an Academy of Science consonant with the dawn of democracy in South Africa: activist in its mission of using science and scholarship for the benefit of society, with a mandate encompassing all scholarly disciplines that use an open-minded and evidence-based approach to build knowledge. ASSAf thus adopted in its name the term 'science' in the singular as reflecting a common way of enquiring rather than an aggregation of different disciplines. Its Members are elected on the basis of a combination of two principal criteria, academic excellence and significant contributions to society.

The Parliament of South Africa passed the Academy of Science of South Africa Act *(No 67 of 2001)*, which came into force on 15 May 2002. This made ASSAf the only academy of science in South Africa officially recognised by government and representing the country in the international community of science academies and elsewhere.

This report reflects the proceedings of the Annual Young Scientists' Conference 2018 – Winning the Fight Against Corruption: A Trans-disciplinary Approach held on 13 & 14 September 2018 at the Protea Hotel, OR Tambo, Gauteng, South Africa, unless otherwise stated.

Views expressed are those of the individuals and not necessarily those of the Academy nor a consensus view of the Academy based on an in-depth evidence-based study.

SAY NO
TO CORRUPTION

Winning
the Fight Against
Corruption:
A Trans-Disciplinary Approach

Table of Contents

Acknowledgements

This report reflects the conference proceedings of the ninth Annual Young Scientists' Conference which took place from 13 to 14 September 2018 at the Protea Hotel, OR Tambo, Gauteng, South Africa. The theme of the conference: Winning the Fight Against Corruption: A Trans-disciplinary Approach was tied in with the African Union (AU) Year Theme: Winning the Fight Against Corruption: A Sustainable Path for Africa's Transformation.

The Academy of Science of South Africa (ASSAf) hosts this annual conference in partnership with the Department of Science and Technology (DST) and the South African Young Academy of Science (SAYAS).

We wish to acknowledge funding received from the South African Medical Research Council (SAMRC) to address the subtheme on Tackling Corruption as a Health Care and Development Imperative, as well as from the Organisation for Women in Science for the Developing World South Africa National Chapter (OWSD SANC) in supporting the discussion on the gendered effects of corruption. Core funding received by ASSAf from the DST is also acknowledged.

We also thank all the conference participants in their different roles, for enriching the discussions and sharing their experiences.

ASSAf recognises the role of its staff, Ms Edith Shikumo, Young Scientist Liaison Officer and SAYAS Secretariat, Ms Marvin Mandiwana, Liaison, Team Assistant and Ms Thato Morokong, Intern: Liaison, in their various roles in organising this conference.

Appreciation is also given to members of the organising committee who gave of their time and expertise and comprised of: Retired Judge Zak Yacoob; Prof Maxi Schoeman, University of Pretoria (UP), Deputy Dean: Postgraduate Studies and Ethics in the Faculty of Humanities and ASSAf Member; Prof Louise Kotze, Research Professor, North-West University (NWU) and SAYAS member; A/Prof Kanshukan Rajaratnam, University of Cape Town (UCT), Associate Professor – Department of Finance and Tax and SAYAS Executive Committee member; Mr Stanley Maphosa, International Liaison Manager, ASSAf and Ms Edith Shikumo.

SESSION 1:
Opening Ceremony

Facilitator:
Mr Stanley Maphosa *(Academy of Science of South Africa (ASSAf))*

Welcome
(Prof Himla Soodyall, National Health Laboratory Service, University of the Witwatersrand (Wits), ASSAf General Secretary[1])

Prof Soodyall extended a warm welcome to the conference attendees on behalf of the President of ASSAf, Prof Jonathan Jansen and the Council, as well as the South African Young Academy of Science (SAYAS) members.

She opened the meeting with a few remarks about ethics, which has featured very strongly in her long-spanning career as a human geneticist. Ethics is a philosophical term derived from the Greek word 'ethos' meaning 'custom' or 'character' and is concerned with describing and prescribing moral requirements and behaviours that suggest that there are acceptable and unacceptable ways of behaving and serve as a function of philosophical principles. Ethical behaviour is morally accepted as good and right in any given situation and is most frequently described in terms of ethical standards of senior leaders and the culture to which they substantially contribute. Good leaders model the highest standard of ethical behaviour.

Young scientists are among those who will hold prestigious positions in the years to come and as such, will be responsible to guide and give direction to future leaders. Their participation in this conference will contribute to a very exciting intellectual discussion and help contextualise what is currently regarded as wrong and bad, and plan a better future for all.

---

[1]   Prof Himla Soodyall was appointed the Executive Director, ASSAf as of 1 November 2018.

Welcome Address:
Ethics and Leadership for Sustainable Development
(*Ms Ntshadi Mofokeng, Chief Operations Officer, Equal Education*)

Equal Education is a mass-based movement of young people, their parents and community members across South Africa. It does advocacy around various education issues, with its loudest campaign being about school infrastructure. Over the past eight years, it has campaigned to have a law passed into regulation that prescribes the basic infrastructure every school should have and accountability mechanisms to ensure that all schools have the necessary safe and adequate infrastructure.

This year marks the 50th anniversary of the publication of the *Pedagogy of the Oppressed* by Paulo Freire, a Brazilian educationalist. Broadly, this seminal work is about reorienting the methodology in educational situations, but much of the impact of the work went far beyond the classroom to provide a language and methodology for imagining how to build movements based on critical consciousness in advancing liberation for oppressed people across the world. He speaks of five indispensable qualities that are necessary for collectively working towards liberation and for revolutionary leadership.

The concept of revolutionary leadership has strong resonance within the education activism space for its utility in outlining a methodology for transforming the learner-teacher relationship and validating lived experience as being the core to foundational knowledge within classroom settings. The greater impact of his ideas is in designing a web orienting on self in relation to others to achieve this collective liberation project. The tenant of Ubuntu is explained and given more practical means of realisation.

The qualities necessary for collectively working towards liberation and understanding revolutionary leadership are love, humility, faith, trust and hope. Each of these qualities can be related to in the experience of seeking a just approach to the education system through the campaigns that Equal Education has engaged in, primarily the one around infrastructure.

Love: In the revolutionary setting there is nothing sentimental about love. It is about a deep commitment to our collective liberation and a value that must inherently be seen in our leaders as they take forth the mandate to

3

achieve freedom. It makes it clear that one can only engage in struggle with and for others from a place of love. The experience of fighting for quality education has all but revealed the lack of love for our people held by the Minister of Basic Education and provincial officials and the lack of rigour and diligence in their pursuit of meaningful and substantial solutions to the challenges in education.

Humility: **The nature of vertical relationships is a power dynamic** demonstrated through arrogance and paternalism – a lack of humility. There has been no recognition that government officials have a part to play in tragic incidences of learners dying in pit latrines on school properties.

Faith: Having faith in the capacity of people to be actively involved in creating solutions to their problems as thoughtful and critical actors. Government officials bring expertise but fail to engage meaningfully with people and allow communities to advocate for themselves. Civil society is being shunned. Equal Education's over 3 000 members across the country are engaged in designing campaigns and building critical consciousness around an analysis of what the systemic issues are. This requires a process involving local evidence-based research, which is often dismissed by education officials as though learners and teachers are not capable of identifying the issues they face and articulating the appropriate solutions.

Trust: Trust is the product of having engaged with each other over time in an open manner. There is a trust deficit because this has not happened.

Hope: Corruption is rife in the education system and at times lengthy campaigns have felt fruitless. It becomes easy to demobilise, but mass organisation provides the hope and the strength needed to continue when things seem most hopeless.

A key aspect in seeking an orientation towards revolutionary leadership is that leaders are not expected to act in a vacuum and that collectively we are able to contribute to the building of a critical consciousness that allows a future that all can subscribe to, to be designed. Accountability is inherent in the system.

The many assaults on the rights of citizens, felt through tangible means such as the wastage of money and the vacuum of leadership, point to the need to return to the principles of mass organisation in order to ensure

that liberation becomes a reality and that a society is created that meets everyone's aspirations and ability to self-determination.

Keynote Address:
Doing Accountability Differently: Connecting Anti-Corruption Efforts to Active Citizenry and Civic Engagement
(Mr Lucky Menoe, Deputy Director, Corruption Watch)

We all need to fight corruption.

The International Day of Democracy is celebrated on 15 September each year in commemoration of the universal declaration on democracy adopted by the Inter-Parliamentary Union in 1997. Democracy is under greater strain today than it has been in previous decades. This is evidenced through the deepening poverty, inequality and unemployment, as well as other contributors, such as corruption, which undermines sustainable development. When there is corruption, the people who depend on the State for their well-being suffer the most. Only a few, mostly the politically connected and those who occupy positions of power, benefit from corruption. The cost of corruption is not only monetary but also in terms of the trust deficit between the State and its citizens.

Social accountability can save democracy, but the process is complex. The way public consultation processes are conducted makes them mere tick-box exercises instead of being meaningful. In democracy, the principle of accountability holds that government officials are responsible for the citizenry and for their decisions and actions. Without transparency and accountability, democracy is impossible. The country needs to interrogate the challenges of working in the social accountability field and specifically exploring the elements that allow successful social accountability to be practiced, where practitioners are able to enhance the interaction between the State and the public. It is also necessary to explore the way in which social accountability is practiced, where the State is obligated to justify and explain its use of public resources and the right to demand corrective action is protected by context, power and actors within and outside the ecosystem. Social accountability ecosystems refer to the way in which practitioners negotiate their relationship with other stakeholders and ensure that engagement leads to better practice in a reflective and deliberate way. Social accountability is loosely defined as a bridge for building relations between citizens and the State, to help

link the supply and demand side of governance developing a new kind of constructive engagement between State and civil society. After almost two decades there are some important contextual challenges. In the 1990s, the agenda was about strengthening the citizen voice at the front end of policy processes and now the focus is on downstream accountability focusing on how to give teeth to these voices through holding policies and their makers to account.

As a 'bridge', social accountability must have strong foundations in order to survive, requires careful investment over time and must be carefully monitored to avoid collapse. 'Bridges' are as strong as their anchors and each 'bridge' must be designed according to the context and needs of the terrain.

The media is regarded as a tool for highlighting social accountability practices or weaknesses in transparent accountable governance. Different tools and tactics used by pro-accountability actors to strengthen accountability could include media exposure, litigation, citizen monitoring, freedom of information requests and non-violent corrective action. It is sad that in South Africa, non-governmental organisations (NGOs) have to go to court to hold government accountable when public funds intended for provision of basic services end up in the wrong hands. It is also necessary to examine the political space in which social accountability takes place and the factors that enable enhanced practice within those spaces.

Building strategic partnerships with like-minded NGOs, as well as government and the private sector, is important as Corruption Watch cannot address these issues alone. The organisation challenges government about corrupt activity reported by the public, but is also expected to bring corrupt officials and service providers to book.

When Corruption Watch opened its doors in January 2012, it encouraged the public to report their experiences of corruption through a mass communication campaign. The overwhelming responses highlighted the need for a mechanism to report and deal with corrupt activities at a time when people were beginning to see corruption as part of the culture. Since 2012, Corruption Watch has received over 23 000 reports of corruption, which are captured on sophisticated software that allows the reports to be analysed, allowing the organisation to strategically identify focus areas for campaigns and cases for investigation. Ideally, its

primary role is not investigating corruption, but educating the public on issues of accountability, responsibility and transparency. The majority of reports pertains to matters that affect people's daily lives. Structures such as school governing bodies and community policing forums can be used to educate the public on how to hold those in power accountable. Weak and badly managed structures lead to a trust deficit between government and the public and people become frustrated and disempowered.

More and more people are being victimised and even murdered for reporting corruption, making the work of Corruption Watch more dangerous. All government departments and private organisations have whistle-blowing policies. Young scientists are encouraged to inform themselves of these policies, not to get involved in any form of corruption and to report instances of corruption as this will help Corruption Watch to identify the trends and gaps, and enable it to engage meaningfully and hold government accountable.

There have been numerous commissions of inquiry, but none have satisfied the public's expectation for perpetrators of corruption to be punished. It is anticipated that the Commission of Inquiry into State Capture (currently being conducted) will be legitimised if it leads to the strengthening of the investigative capacity of the Hawks, the National Prosecuting Authority (NPA), the South Africa Police Services and the Asset Forfeiture Unit, and punitive measures are taken against the perpetrators of corruption.

Corruption Watch is a Chapter of Transparency International, which opens doors for it to work with other African chapters, the AU and advocates at the global level. It is very important for all citizens of this country to participate in the fight against corruption and assist the organisations that fight corruption at local and national levels on their behalf.

SESSION 2: Corruption, Inequality and Fairness: The End Point of Responsibility

Facilitator:
Dr Sithembile Mbete (UP and Board Member, Corruption Watch)

Panellists

- Ms Janet Love[2]
- Prof Olubukola Babalola (Faculty of Agriculture, Science and Technology, NWU, Vice-President of OWSD Africa Region)
- Ms Lauren Tracey-Temba (Researcher, Justice and Violence Prevention Programme, Institute for Security Studies (ISS), Pretoria)
- Ms Shireen Said (Human Rights Lawyer)

Panel Discussion

Ms Janet Love

The notion that sustainable development and human rights are intertwined took a long time to realise through campaigns within the international arena, but this has now been adopted. Development today interlinks with research activities of various descriptions which are also linked to ethics and human rights. The Sustainable Development Goal

---

[2]   At the time of the Conference, Ms Love had just stepped down as the National Director, Legal Resources Centre (LRC).

(SDG) #16 talks about corruption, transparency, access to information, including issues concerning illicit financial flows, such as tax evasion, tax avoidance. Corruption and State capture cannot be divorced from transparency and access to information. But information access links to surveillance and security clearances and so cannot be divorced from our concerns about privacy and who watches the watchers. In other words, this landscape is complex and requires on-going navigation. Corruption also is not State corruption alone as private actors play a major role. The framing of how corruption is looked at must recognise the horizontal obligations in the Constitution as well as the law that places the burden not only on the State, but also on private companies in positions of power and responsibility. SDG#16 probably fails to adequately address this horizontal obligation of the private sector.

One of the most important vehicles to secure accountability is civil society. Civil society and its opportunity to flourish within any country is a test of that country's democracy. It is important to recognise that the threat to civil society can happen very rapidly. Vigilance is essential in order to protect civil society within this continent. There are additional independent institutions (the Judiciary, the Human Rights Commission, the Commission for Gender Equality, the Public Protector, the Attorney General, the Information Regulator, the Competition Commission, the Independent Police Investigative Directorate (IPID), the Inspectorate of Intelligence and the NPA) that support and protect democracy in a range of different ways and play a strong role in anti-corruption. They are very important vehicles that reinforce the vigilance of civil society. The robustness of these institutions is not uniform and the hollowing out of the institutions has been part and parcel of the concerns which have led to people coming before the Commission of Inquiry into State Capture.

A number of pieces of legislation exist specifically to deal with combatting corruption, but implementation is key and questions can be asked about how the laws speak to each other, how they address the practical realities and how easily their enforcement can be ensured. Some of the pieces of legislation include:

- The Promotion of Access to Information Act (PAIA), which in practice has not enabled such access instead leading to delays and obfuscation. This needs urgent review.

- The Promotion of Administrative Justice Act (PAJA).

- The Protected Disclosures Act, which is intended to protect whistle-blowers who are in the employ of the institution they are blowing the whistle on. But often such people are forced to leave these institutions and therefore the law does not offer the sort of protection it should.

- The Prevention and Combatting of Corruption and Corrupt Practices Act was passed in 2004 and evidence of its effectiveness is lacking.

Combatting corruption is thread through other legislation such as the Companies Act, the Witness Protection Act, the National Environmental Management Act (NEMA), the Public Finance Management Act (PFMA), the Preferential Procurement Policy Framework and Broad-based Black Economic Empowerment Act, the Prevention of Organised Crime Act, as well as various clauses in other pieces of legislation.

A lot of legislation, in particular, human resources and labour legislation, was never intended to muzzle people but is used and abused to do so. People who do to have resources have had to take extreme measures in order to pay for lawyers while corrupt people use tax money to pay for endless representation by legal firms. Ways must be found to support whistle-blowers in accessing justice. It is clear that whistle-blowers from the public, as well as the private sector, have faced extraordinary challenges, hostilities, difficulties, intimidation and threats. Their road is a very lonely one and the Legal Resources Centre (LRC) has dealt with several cases before the courts. As important as the media is – and it needs to be safeguarded – it has not been always as responsible as it should have been in terms of verifying facts.

Prof Olubukola Babalola

No religion supports corruption. Corruption is more prevalent in some countries than in others. These points are food for thought.

Gender equality has an effect on the precariousness of people's lives. From the gender perspective, it is evident that women are more affected by corrupt activities than men. This is partly because females are regarded as the weaker gender. Women are affected by all forms of corruption and corruption at all levels of society, not only in government. Child-trafficking and sexual extortion have their roots in corruption and affect mostly women and young girls. A woman's immigration status is linked to

the man they are with. When a community focuses on inflated lifestyles, is entrenched in negative ways and vices, and there is a depreciation of ethical standards, a context is created for corruption to take place. The abuse of office, practiced by people in positions of power and authority, is faced in day to day activities of people, even in the home. Women are affected more as they are emotionally vulnerable.

Corruption is ingrained in society and has become the new norm. Doing the right thing means that one is an outcast.

Ms Lauren Tracey-Temba

A broad overview of research done in the lead up to the 2014 national and 2016 local government elections provides insight into youth and their experiences regarding corruption.

Young people are often cited as politically apathetic and uninterested in voting. The research tried to understand whether this is the case in South Africa. In the lead up to these elections, ISS conducted research to try to understand the factors that influence voting behaviour of young South Africa by getting the views of people between the ages of 18 and 24 in 34 educational institutions across the country. The research findings suggest that young people are not as apathetic as conventional wisdom would have one believe. The likelihood of their participation in democratic process such as elections is often dependent on their satisfaction with democracy, on the performance of both local and national government, as well as political elites, in particular the ruling party. They were also keenly interested in what political leaders were doing to address the challenges that continue to be faced. Young people are growing increasingly angry and frustrated at the social economic challenges that they face (including unemployment, inequality and education). Indications of the #FeesMustFall protests were already evident in discussions with young people around the 2014 elections. Young South Africans are increasingly conscious of corruption, particularly among the political elite, and illustrated an awareness of the current issues facing the country at that time. They were critical about the lack of accountability among senior officials and the political elite and cynical of political leadership, often seen as power hungry, manipulative and corrupt. Corruption was flagged as one of the reasons why many young people choose not to participate in politics and elections. They often mentioned how the positive role that

elections could play is being eroded by corruption. It was a concern that a few of the participants approved of corruption and identified crime as bringing an easy life. The important role and impact of leadership in South Africa needs to be considered. A further finding was that young people are turning to informal democratic processes, such as protest action, as opposed to voting. They saw this as a more effective way to address the problems they faced in local communities.

As a follow-up to this research, ISS conducted a study to look at the gendered nature of young people's political participation in the lead up to the 2019 national elections and understand the factors that influence their participation in protests. The narrative of young people in six communities that are considered protest hotspots were collected. Early indications of the study are:

- Young people's involvement in protests (as well as those that turn violent) has some of its origins in the participants' exposure to what they witness in their communities. Some of them has become desensitised to violence.

- The role of community leaders and community leadership structures needs to be questioned. Communities distrust their leaders and institutions of authority, which are often perceived as incompetent, corrupt and incapable of controlling crime and resolving conflicts.

- Government failures at local and national level continue to play a large role in the anger and hatred depicted in young people's involvement in protests.

- High youth unemployment, poor education, corruption, poor leadership, lack of trust in the authorities and the lack of accountability of the political elite play a pivotal role in further aggravating the already dire situation among young people in South Africa.

- Young people feel neglected by government and have little confidence in opposition parties. They believe that they are only heard when they loot and burn property, and use violent protests as a political tool and effective mechanism to get local and national government to address socio-economic and other grievances.

It is evident from the research that this generation is enticed by action and not words. They do not feel included in formal democratic processes and that the challenges they continue to face are being addressed. It is necessary to understand that for young people to become engaged in democratic processes they need to be inspired by what they see. Education, employment opportunities and good leadership play important roles in nurturing the next generation of young people. Tensions mount and violence is normalised when these factors are absent.

Ms Shireen Said

Ms Said has worked at the United Nations Development Programme (UNDP) and had the honour of being with the UN when it was closing on the SDGs, and led the process on the governance thematic area called the Post-2015 Development Agenda that informed the global goal on governance.

Countries that rank among the poorest countries in the world (such as Angola and the Democratic Republic of the Congo (DRC)) have the most natural mineral resources. In 2017, it was said that of the USD 75 billion of overseas development assistance (ODA), USD 45 billion came to Africa. In Africa alone, USD 50 billion was lost through illicit financial flows, including looting of mineral resources. Remittances (monies that those working abroad send) to Africa during the year 2016/17 were in the region of USD 37.8 billion. When the UNDP did a series of studies that looked at ODA and remittances, it was surprised to find that remittances were twice more than the ODA to Africa. However, the costs of remittance are not factored in and there appears to be some subjugation in the way that these measurements are managed at this point in time. In 2016, about two million people offered support in kind to the value of USD 2.5 billion for research in biodiversity. The question raised by these figures is about who truly has the power, how it is used and understood, and how much power is given away.

At the time that the UN was closing the Millennium Development Goals (MDGs) and informing the sustainable development agenda in an intergovernmental process, the question was about whether the representatives at the UN who would inform and decide about the SDGs represented the people and their perspectives on the matters at hand. There was awareness that the entire process forgot about people and

many were querying the legitimacy of their governments. The challenge was to bring people into the process that would inform the SDGs, but the legitimacy of this was questioned and ways had to be found to feed into the reports. Every opportunity was used to influence this process including ensuring that citizens from every country involved got to speak at the UN. This was an arduous task and important lessons were learnt from the experience, the most important of which was the need to measure what is treasured and what is needed to change the world. Research statistics were found to be very problematic and there is a need to create people-centric research data.

UNDP in its recent global vision statement said that its target is to have one million people engaged in citizen science by 2020. It is hoped that some of the lessons from the post-2015 agenda would feed into this process. In order to inform processes and research that advises on policy and affects lives, it is necessary be part of it.

Discussion

1) In reality, the people in communities cannot be expected to take responsibility for corruption because justice does not matter when there is poverty and inequality.

Response, Prof Babalola: We need to take personal responsibility or else we will be inclined to maximise any opportunity for corrupt activities. We need to look inward, dwell on our moral standards and levels of integrity and principles for life. I cannot accept that a poor economic situation pushes people to poor moral and ethical standards of living. The level of our individual integrity is that which sustains us in living a life that is not corrupt.

2) How do we frame corruption as all-encompassing and omnipresent in all spheres of society?

Response, Ms Love: It is about recognising the omnipresence of the potential for corruption in our lives. We constantly have to interrogate the way in which we manage our lives. For example, people often talk about conflict of interests as if it is a 'thing'. However, conflict of interest in something we should be managing all the time given all sorts of different circumstances. This management is about managing our own integrity

and honesty in a situation. Anyone that can claim to have no doubt about the way we conduct ourselves at all times is someone who does not interrogate conflict of interest. We must doubt ourselves before we start pointing fingers at others. The pervasiveness is more about the framing and less about the definition. We draw very artificial distinctions, such as the idea that collusion is not corruption, and that blowing the whistle on someone is somehow different from holding people accountable and ensuring there is proper enforcement and implementation.

3) In terms of the statistics around remittances *versus* ODA, do you think that a ground-up approach is more effective and where the focus should be if we are to undermine corruption?

Response, Ms Said: This needs to be looked at from the imbalanced power dynamic that exists. We have seen that ODA has shaped the agenda involving multiple frameworks of the economic agendas, policy frameworks on finances and how and who shapes the development framework. There is no simplistic answer about the developmental systems' frameworks. We cannot get away from the fact that those countries that are at the bottom of the scale of the development index, for example, depend of development aid. However, it is necessary to find a balance in respect of who and how the agenda is shaped. As communities reorganise and mobilise, the processes, finance and policies they allow themselves to be shaped by assists them to navigate through governance structures. The frameworks need to be challenged because development assistance cannot come into a country without a government signing off. Looking at our own national development framework, human rights, for example, is so embedded that it is difficult to see the points of the discussions one has with government officials who engage with the National Development Plan (NDP) as they claim to have the Constitution. How does the average citizen make that link? This is where we start to shape that agenda and this has a ripple effect. The hope is in the fact that when we start measuring the global goals, we will inform how those goals must be organised. One misnomer is that these are only top-down approaches.

4) The big question is who is being held responsible for corruption. The tendency is to place all responsibility on government. NGOs are often involved in the fight against corruption and take that fight to the courts. NGOs, especially those led by the youth, are constantly seeking funding. In order to get funding, these NGOs are required

to satisfy the needs of funders. Sometimes this involves bypassing formal processes that may make the NGOs susceptible to corruption. How do young people who are leading organisations prevent being sucked into a system that forces them to projects that go against their integrity and do whatever it takes just to get funding?

Response, Prof Babalola: Ending corruption should start with the family structure.

Response, Ms Tracey-Temba:

- The youth agenda tends to be tokenistic. Fundamentally, there needs to be a shift in mindset and government, NGOs and civil society need to start regarding people as serious actors in the discussions they have or host, and not undermine them or use them as tokens. There is a role in this for young people in NGOs. Some donors drive and fund a certain agenda, but NGOs need to be selective about who they get involved with.

- Everybody has a responsibility regarding corruption. Although some young people in communities have opted out of democratic processes, at some point they have to take responsibility and hold government accountable by using these processes. There is a real need for young people, as citizens, to actively engage their leaders and hold them accountable for corruption, and not only in protest action. Young people hold the bulk of the demographic dividend in South Africa and in Africa in its entirety. They need to recognise the power they hold to actively change communities and countries.

Response, Ms Said: In the policy space, getting the financial support needed happens when communities are well organised on the issue at hand and when they lobby each other (grassroots lobbying), the issue will always get support. It is not helpful when we become divisive and are fragmented. This digital age provides the opportunity to shake the dynamics of the social contract between government and its citizens. Young people's energy in protesting against leadership should be channelled into changing the narrative by starting to shape what leadership should look like. Responsibility is a collective one.

5) I agree with Prof Babalola that morals and integrity are important to do away with corruption. How do we teach 30 and 40-year-old people about morals and integrity?

Response, Prof Babalola: A 40-year old might be difficult to teach, but a person with self-worth will find it easy to reflect on what they want to be remembered for. This attitude can influence behaviour.

6) In order to make strides against corruption, women should stop seeing themselves as victims of corruption. It is important to use the institutions (such as religious institutions) within communities to empower women and teach about morals and integrity as a way of life.

Response, Prof Babalola: I do not agree with self-defeat. Corruption has a deeper effect on women. They are caught up in all kinds of corrupt activities, but they are competent and resilient, and have what it takes to not be corrupt.

7) What is the LRC doing to bring perpetrators to book?

Response, Ms Love: It has been a privilege to be part of the centre for many years. It represents people who cannot afford representation in various matters, some of which go to court. The kind of issues that the LRC takes up that deal with transparency and accountability are multi-fold. There are very many examples that could be shared. The important thing is that the centre tries to take up cases on behalf of clients that approach it. In doing this, the centre attempts to address those cases in a manner that will have a wider impact, either because it develops the law or because there are many more people than those who have approached the centre, who need to get the benefits.

8) Should lifestyle audits be limited to ministers in government alone or to the private sector as well?

Response, Ms Love: I agree that lifestyle audits should not be confined to people in the public sector only, but I think that the way in which the private sector would need to be audited should not be the burden of the State alone. Companies and various institutions, and even voluntary associations of private sector institutions need to interrogate how, for

example, people in certain companies land up with licensing and land opportunities without apparent explanation.

9) In a lot of African countries, leaders tend to be revered, but in most cases they bring with them many other problems. The people at the bottom of the economic chain suffer the most. We need to start addressing the root of corruption. The youth do not see the need to vote because government does not involve them in the policies that affect them.

Response, Ms Love: I believe that it would be important to engage more about the detail of this bringing in those who are most affected by corruption to be part of the conversation. I say this because it links to securing accountability and this needs ordinary people to be involved. We need to look within our communities for solutions on how to change a person's ways. Within each community, even the most vulnerable and poorest people have assets that are inherent in themselves. We need to find ways to give value to that in our own minds so that when we work in communities, we impart the ability of communities to look within, and not only outside, for assistance.

SESSION 3: Research Showing Evidence Gaps in Tracking Corruption and Comparative Studies across Countries and Regions

Facilitator:
Mr Anton Michael Pillay *(Vaal University of Technology)*

State Capture and the Economics of Corruption: The Case of Transnet
(Ms Amy Thorton and Ms Caitlin Allen, University of Cape Town (UCT))

While corruption can be defined as "an act in which the power of a public office is used for personal gain in a manner that contravenes the rules of the game" (Jain, 2001), State capture is a much more sophisticated, organised, high-level approach to looting the State. It focuses less on breaking the rules than on changing them to allow for the benefit or a small elite and involves much more lucrative amounts of money and repeated organised interactions over time. It is about repurposing the State institutions to redirect rents away from development and into the hands of a small elite. State capture is not unique to South Africa and commonly found in economies in transition. South Africa is transitioning from an apartheid economy with large monopolies in most sectors.

In South Africa, state-owned enterprises (SOEs) have the dual purpose of efficiently providing a public good and of advancing political and developmental aims. Institutions in transitional economies are vulnerable to the influence of captor firms as they are still in the process of being set up and the State is still busy with State building. State capture manifests in South Africa as the hijacking of SOE apparatus and their developmental task for the purposes of private enrichment and political survival.

Aidt (2003) states that there are three pre-conditions for corruption to arise and persist: discretionary power, economic rents and weak institutions. This theory was applied to a case study of Transnet that is in progress using data compiled from various sources.

Much of the SOEs' operations rely on procurement and a large procurement budget provides scope for corrupt contracts. Transnet instituted a market-demand strategy in 2013 – a R300 billion procurement strategy of which R50 billion was to go towards procuring locomotives. By 2018, R153 billion has been spent and a further R164 billion will be spent by 2023. This aggressive policy has provided grounds for corrupt contractors. Since 2010, some Gupta-linked entities have been placed in positions of power in Transnet and an Acquisition and Disposal Committee was created in order to approve procurement, violating the PFMA processes for procurement. Connections between company directors and several tainted companies involved in the locomotive deals were a clear conflict of interest for an independent company managing State funds. #GuptaLeaks revealed that Transnet was being taken advantage of by the Gupta family. Suspicious conversations about tainted deals peaked during the period that capital expenditure on infrastructure by Transnet was at its highest. The deal with China South Rail, a R24 billion contract, provided R5.5 billion in kickbacks to Gupta-linked companies, equivalent to the tuition cost of 119 000 first-year BCom students or 8% of Transnet's total capital expenditure budget.

Visual Archetypes of Corruption in South Africa: The *Bra Tjotjo* Animated Series from Corruption Watch (*Mr Pfunzo Sidogi, Tshwane University of Technology (TUT)*)

The establishment of Corruption Watch in 2012 was a timely yet overdue civic-based attempt at unsettling the normalisation of corruption within a post-apartheid society.

The organisation undertook a campaign to encourage and enable active public participation in combatting corruption and collaborated with cartoonist Mdu Ntuli to create a series of educative animated videos as part of its inaugural anti-corruption campaign. Ntuli's short stories were aptly titled *Bra Tjotjo*. The lead character of the narratives, "the world's least successful tenderpreneur", together with his sidekick, Mr Van der Merwe, is presented in various situations where he incites and partakes in multiple corrupt activities. The Corruption Watch campaign and the resultant *Bra Tjotjo* animations were modelled along the bribery and fraud scandals within the tiers and units of South Africa's government that have headlined the public imaginary over the past decade.

In the animations, *Bra Tjotjo*, a black man who is fluent in English and IsiZulu, is illustrated as the *de facto*, archetypal embodiment of public sector corruption in South Africa. To date, the highly comedic animations have received over 900 000 views.

Mr Sidogi's paper provided an introductory, symbiotic evaluation of these animations. Extracts from the animations served as an introduction to *Bra Tjotjo's* world of infinite corrupt activities enacted across a variety of public institutions.

Whilst acknowledging the artistic and storytelling novelty of the *Bra Tjotjo* series, the limitations of creating one-dimensional archetypal representations of corruption and the unintended drawbacks of such reproductions are highlighted. The type of corruption depicted in the *Bra Tjotjo* series is a simplistic and slightly misleading exemplification of corruption, which in many respects trivialises the enormity of the problem. Forms of corruption other than those in government and politics are completely ignored. By overlooking the more subtle forms of corruption that manifest in the public, private and individual spheres, the *Bra Tjotjo* project has created a skewed visual architype of corruption, undoing the noble intentions of Corruption Watch. It was argued that monocentric symbols of corruption should be replaced by diversified and nuanced visualisations of corruption and its context within the public and private sectors. It was contended that the fashioning of wide-ranging and sophisticated symbolic imaging of corruption is a critical first step in tackling the all-consuming tyranny of corruption that plagues Africa.

Deployment of Unskilled Politicians in Government Sectors: A South African Situational Analysis of Kleptocracy *(Mr Azola Mmangaliso, University of Fort Hare (UFH))*

In the contemporary South African government, kleptocracy is evident and rife. This phenomenon may result from the construct 'deployment', instead of hiring well-qualified personnel in certain positions of power. The onus for this crisis lies on the political parties that use their power to exploit the ordinary citizens and natural resources of their own country in order to extend their personal wealth and political powers (Devenish, 2014). South Africa is likely to see less investment, higher inflation, weakening of our currency and reduced ability of the poor to buy food and other necessities of life. This in turn will lead to social strife and unrest (Correspondent, 2017). Despite international and regional conventions against corruption, kleptocracy remains evident throughout the world.

The study sought to explore the deployment of unskilled politicians in government sectors as leading to kleptocracy and was underpinned by the Economic Theory of Political Corruption. Its objectives were to review the nature of deployment in the South African government sector and the effects of deploying unskilled politicians in the government sector, and investigate how South Africa became a kleptocratic State and identify strategies to curb kleptocracy. The method used involved a narrative overview of the literature and synthesising the findings.

The research findings comprised extracts from literature on the topic of each of the study objectives having been identified in the narrative overview. Recommendations of the study were:

- There should be respect for law and order by individuals in both the municipalities and local communities in terms of following through with legislation and compliance.

- In dealing with the *status quo*, deployment of cadres must come to an end. Ministers and other officials in government in high-profile positions must be hired based on academic credentials and merit, not on political credentials.

- Both public and private sector auditing must be an ongoing process, not only to be conducted when wrongdoing is suspected.

- Automated technological devices that can detect any form of corruption need to be invented.

- State corruption fighting bodies must perform their duties thoroughly and avoid bribery.

- If anyone is found guilty of misusing State funds, harsh punishment has to be imposed as a means of general deterrence.

Discussion

1) These presentations have alerted us to the fact that government is not alone and that there are other players in corruption, which could be calling the shots.

2) Deploying government officials based on academic qualifications will not necessarily guarantee that corruption will decrease. What makes someone with an academic qualification any better than a party deployment? Kleptocracy has resulted in many careless decisions being made. How do we ensure that government employs people with the necessary skills?

Response, Mr Mmangaliso: Educated people are professional and they know their duties and are well-trained.

3) What source was used to come up with information used in the study on corruption in Transnet? Much of the information could be speculation and not necessarily factual.

Response, Ms Caitlin Allen: The paper is currently in progress and will be available during 2019. Details of all the sources will be provided in the paper. A few references are given in the meanwhile: Various reports, amaBhungane (evidence dockets), *The Betrayal of the Promise* report[3], and curated emails that made the information publicly available.

4) If ethics are not infused in an individual, education will fail to make the individual one with integrity. Did you look at instances where

---

[3]   This report was produced through the efforts of the State Capacity Research Project is an academic research partnership between leading researchers from four South African universities and their respective research teams. Access: http://www0.sun. ac.za/cst/publication/betrayal-of-the-promise-how-south-africa-is-being-stolen/

academic qualification has made a difference and the lessons that can be drawn from that?

Response, Mr Mmangaliso: Taking from the Economic Theory of Political Corruption, people get into power in order to have access to State resources. The study did not look at taking lessons from instances where academic qualification has made a difference.

5) How do we make sense of what has happened with regard to corruption at the SOEs, especially within the Brazil, Russia, India, China and South Africa (BRICS) context and the fact that South Africa has entered into agreements with these countries that will lead to more business deals on the whole?

Response, Ms Amy Thorton: There is a lot of information about State capture in the public sphere and a lot of it is narrative information. It is overwhelming. The purpose of the framework is to cut through all the information to impose regularity on the information so that we can think clearly about the important questions and help us work out the answers. In terms of State capture in the context of BRICS, it is very important for South Africa to understand its State capture so that it is less vulnerable when dealing with other countries. Unlike other BRICS countries, the media in South Africa is not weak, together with civil society and the courts. The media and courts must be strongly commended for their work on State capture and civil society must continue to flex its muscles.

SESSION 4: Multi-Disciplinary Approaches to an Understanding of Solutions to and Best Practice Measures in Addressing Corruption

Facilitator:
Mr Andrew Enaifoghe (University of Zululand)

Use of Automated Systems in Combating Manufacturing Corruption
(Dr Ilesanmi Afolabi Daniyan and Ms Esther Oluwatoyin, TUT)

The study examines the various forms of corrupt practices in the manufacturing processes and their effect. Recommendations are made for the use of technology to combat these corrupt practices. A variety of automatic systems can complement human involvement in manufacturing processes by ensuring strict adherence to standard practices.

Manufacturing corruption compromises the quality, quantity or conformity of a product or service, and a deviation from standard practices and procedures, resulting in sub-standard products that fail to perform satisfactorily in service. It also has to do with misuse or misappropriation

of manufacturing resources for personal or organisational gains. Some of the technology considered was:

- *Manufacturing Automation:* Using robots to automate tedious, dangerous or repetitive manufacturing tasks.

- *Process Automation:* Techniques for continuous monitoring and controlling of measurements from process industries.

- *Automatic Product Packing:* Ideal for consumable foods to prevent contamination.

- *Tool/Equipment Monitoring System:* Predicts wear and tear and ineffective operations in order to prevent time wastage, machine damage and fatalities.

- *Advanced Inspection System:* Testing of the integrity, quality, uniformity and conformability of a product before release into the market.

Manufacturing corruption is already assuming a greater dimension and if not curbed, this could lead to customer dissatisfaction, decreased product reliability, as well as the development of poor-quality products that cannot perform satisfactorily. The use of the technologies, if well explored, can help reduce manufacturing corruption.

Information technology- (IT) based forensic accounting helps to identify, detect and investigate suspected fraud cases using the following techniques:

- *ACL:* A data analysis technology which is used to uncover a range of fraudulent activities and lapses in financial control.

- *IDEA:* A data analysis software and file interrogation solution used for compiling information from numerous sources and in wide array of formats.

- *Data Mining:* The process of extracting useful information and patterns from enormous data. It includes collection, extraction, analysis and statistics of data.

- *Digital Evidence Recovery:* The application of computer science and investigative procedures for legal purposes.

Cost Benefit Analysis of Corruption in the South African Business Environment: A Literature Review *(Ms Charlene Muswaka, UFH)*

Corruption is not sector-specific. It goes beyond occupational classifications, is collective rather than individual and is a symptom of wider governance dynamics. Levels in the definition of corruption are:

- The misuse of money or reward for personal benefit.

- Improper exchange of money or reward for influence or power.

- The violation of public interest or behaviours.

Various studies have been conducted with the aim of understanding corruption and how it affects the nation's growth. Past studies have failed to provide an evaluation of the cost and benefits resulting from the prevalence of corruption in the business realm. The aim of the study is to fill this gap by analysing the disruptive nature of corruption in the South African business environment.

The costs of corruption identified in the study reveal that corruption deters investment, undermines growth and erodes competition. The study identified one benefit of corruption paradoxically: it accelerates business operations through undercutting excessive government regulations that complicate business activity and out-passing competitors seeking approval for the same business activity. However, the costs outweigh the benefits of corruption. Corruption is a source of evolutionary hazards, leads to organisational deficiencies and is an unworthy liability as it exposes businesses to the risk of penalties, blacklisting and reputational costs. Corruption, as an undercover business practice, therefore has the ability to affect the operations taking place in the business environment.

The following recommendations are made with the aim of reducing the number of cases of corruption in the South African business environment and motivating ethical business practices by all players in the business environment:

- Education and awareness about the negative ramifications of corruption and the value of engaging in ethical practices.

- Strategic intent should be used as a framework to encourage ethical conduct.

27

- Advanced monitoring mechanisms that prevent undue interaction between government officials and business owners help maintain accountability and aid in reducing corruption.

Fostering Good Governance as a Catalyst for Socio-Economic Transformation in South Africa *(Dr Elvin Shava, NWU)*

Cases of corruption, especially at the level of procurement, have been widespread across local government in South Africa. The study approaches the issue of corruption from the perspective of good governance.

Good governance is defined as "the presence of rule of law, safeguard of human rights, and existence of honest and efficient government, accountability, transparency, predictability and openness".

Governance is a complex and multi-faceted concept that is difficult to define in precise ways. The academic approach or generic understanding of governance is the management of resources and policymaking by means of exercising authority. It assures that when corruption is minimised, the citizens are protected, and their voices heard in decision-making and future needs addressed in communities. Local government in South Africa is still grappling with the challenges of mismanagement, corruption and poor service delivery. Raga and Taylor (2007) argue that the dynamic nature of the public sector requires a huge transformation in ethical leadership as the technological, environmental and socio-political development is fast changing.

Corruption is widening the economic gap between the rich and the poor which reverses the attainment of SDG#10 that addresses the reduction of inequalities. Government policies such as black economic empowerment (BEE) exacerbated corruption since procurement systems are used as stepping stones to get rich quickly at the expense of taxpayers. Achieving socio-economic transformation through good governance and good governance at local government level in South Africa are failing. Fostering good governance for socio-economic transformation in South Africa requires ethical and visionary leadership, new technologies to curb corruption, and social accountability. Good governance is a prerequisite for development as it attracts investment and creates jobs for people.

Citizens have no real power or capacity to effectively hold public officials accountable for corrupt activities that affect service delivery.

There is persistent corruption at the three tiers of government, and a lack of stakeholder intervention to hold public officials to account. Good governance is hindered by the lack of monitoring and evaluation of government development programmes, which in turn delays socio-economic transformation.

Public awareness programmes should be conducted to increase the flow of information on the use of good governance principles. A conducive environment needs to be created at local government level to enable citizens to participate in local government affairs, which is an imperative for socio-economic transformation. Non-state actors should take a leading role in pressurising government to account to the citizens in respect of service delivery. Capable people with proper qualifications must be employed in government to formulate and implement strategic plans to achieve sound economic and social governance. Last, there is a need to use digital innovations and social media platforms to increase accountability of State departments.

Discussion

1) Government positions seemingly go hand in hand with cadre deployment. Certain groups of people are 'empowered' by being handed certain positions in government, yet they lack the quality of education that is necessary to be able to do their work. This raises the issue of ethical conduct.

Response: Higher education institutions (HEIs) should question their role in providing quality education that sufficiently prepares students for the workplace. The performance of people that are employed, particularly political appointments, is not monitored as it should be. Poor education affects all sectors, not only government, and is becoming very common.

2) Is it ethical business behaviour or a form of corruption when companies sell people's personal information (taken from the Internet)?

Response, Dr Daniyan: Technology is a double-edged sword. It can build, and it can destroy, and certainly can be used for corrupt activities.

Response, Ms Oluwatoyin: It is difficult to stop criminals from perpetrating online fraud. Just as companies are trying to protect customer information, criminals are finding new ways of taking advantage of customer information. Companies have to develop their management control systems in line with changes in IT.

3) What about the use of artificial intelligence (AI) and the human factor?

Response, Dr Daniyan: AI will not replace people, but will be used to complement them. Machines are programmed and carry out instructions that people give them.

4) The corporate world in South Africa is well legislated and there are checks and balances to prevent corruption. However, in many cases profit overrides ethics. An organisation would rather pay a penalty than implement a specific policy. How can we ensure that policies are implemented, even if there is a price to pay?

Response, Ms Muswaka: As this paper is based on an ongoing study, such issues are still under investigation. However, for now the recommendations presented, (based on the material obtained so far in this study) have listed the use of advanced monitoring mechanisms to reduce corruption, as a possible remedy to this problem. Another suggestion might be to stiffen the penalties, for example, maybe prevent a business from operating for a year if caught on the wrong side of the law. This, coupled by the advanced monitoring mechanisms, might aid in combating the situation you have presented.

5) How can good governance be enforced?

Response, Dr Shiva: Corruption is difficult to end, no matter what is put in place to prevent it. It requires a change of mindset, starting with each person. Likewise, good governance requires the right mindset. It cannot be enforced.

SESSION 5: Capacity Building 1: Integrity and Ethics in Science and Open Science

Facilitator:
Ms Edith Shikumo *(ASSAf)*

Integrity and Ethics in Scholarly Publishing *(Mrs Desré Stead, Scholarly Publishing Unit, ASSAf)*

The Department of Higher Education and Training (DHET) released a revised research outputs policy in 2015. Its purpose was to encourage research productivity by rewarding quality research output at universities. Scholarly publishing is heavily influenced by the DHET system of paying subsidies to universities for research publications. Peer review supports and embodies the scientific method and only peer-reviewed articles in journals qualify for the subsidy. The policy emphasises the importance of research integrity and the quality of the work of authors and the institutions supporting them. Expected ethical behaviour in publishing on the part of the author, reviewer, editor and publisher is part of the policy. The pressure to publish is not only because of this policy and the subsidy system, but also because of promotions, the importance of raising one's profile and boosting one's CV and the competition that exists in the academic environment. However, quality output cannot be guaranteed, and people may inadvertently publish in predatory journals, which exploit and mislead scholars and whose sole purpose is profit.

ASSAf commissioned the Centre for Research on Evaluation, Science and Technology (CREST) to do a study on scholarly publishing in South Africa, which was completed recently. The focus of the study was to address

issues around quality and ethics of scholarly publishing in South Africa. The report will be published soon. A total number of 3.4% of the total article production in South Africa over the past ten years was found to be predatory, and on the increase, and several publication practices were identified as questionable.

The Directory of Open Access Journals (DOAJ) uses a system of identifying questionable journals that looks at low publishing quality, low scientific quality and malpractice. In addition, there is misconduct of researchers or authors. ASSAf was taking steps to counteract this misconduct. The strategic goal of the SPP is to enhance the national capacity to produce and publish research, and to increase the quality and visibility of South African research publications.

The SPP was mandated by the DHET and the DST to conduct an external independent peer review of all South African research journals in five-year cycles, looking at editorial policies and practices, editorial boards, open scholarship and frequency of publishing.

The Scholarly Publishing Programme raised awareness about quality assurance and has assisted DHET to set up criteria and methodology for book and conference proceedings evaluation for accreditation. It also hosts the National Scholarly Editors Forum that has produced the *Code of Best Practice in Scholarly Journal Publishing, Editing and Peer Review* (2018), as well as the National Scholarly Book Publishers' Forum that has produced the Best Practice for Peer Review of Scholarly Books, endorsed by scholarly publishers in South Africa. ASSAf hosts the Scientific Electronic Library Online – South Africa (SciELO SA), an open access platform that features quality open access journals.

Young and emerging researchers need to be aware of the dangers so that they avoid falling prey to predator journals. They need to protect their research by referring to the DHET list of accredited journals, consult their institution's library and consult with resources, such as DOAJ.

Integrity and Ethics in Science and Open Science: 'Predatory' Publishing
(Dr Riaan F Rifkin, UP)

As part of the academic process of 'publishing or perishing', scientists have to negotiate the difficulties of scientific publication. Emerging young

scientists are encouraged to submit manuscripts to the 'best' journals possible, revise manuscripts using reviewers' comments and re-submit, publish larger data sets/analyses/studies and make their publications available via appropriate web portals. Proper academic conduct dictates that emerging young scientists should not publish several papers using one data set (i.e., 'salami slicing'), and publish in 'weak', online 'predatory' journals, non-Institute for Scientific Information (ISI) accredited journals, DHET non-accredited journals and minor national journals (unless there is a good strategic reason to do so).

Predatory journals typically tend to use bad grammar and offer scientists significant academic opportunities and support with publishing and travelling. These promises however hardly materialise. Scientists who fall prey to this profit-driven predatory process pay exorbitant amounts for 'insignificant' publications. Their reputation and National Research Foundation-(NRF) rating can be tarnished and their career advancement can be adversely affected. A list of low-ranked publications does not enhance their CVs. Publishing in predatory journals costs South Africa between R100 million and R300 million in subsidies.

The take home message is: If it is not a journal with which you are familiar, treat with caution. If it is an online journal advertised via e-mail, treat with caution. Due diligence is essential, and suspicion is appropriate.

Discussion

1) Where can we find a list of accredited journals?

Response, Mrs Stead: The DHET releases their list of accredited journals early every year to all the institutions in South Africa, and it is available from the institutions' research offices. It should be noted that some predatory journals slip through the cracks. The DHET is aware of this and looks out for them and ASSAf assists where possible. The DHET, the Council for Higher Education (CHE) and the NRF have a role to play in assisting scholars to identify these journals. There is a reluctance to produce a Black List of journals. It is the scholars' responsibility to report them if they come across predatory journals.

2) The universities get a lot of money from their scholars' publications and therefore ought to pay the publication fees.

3) There is a story that Beall's List[4] discredited many African journals and tries to promote the strong publishers. What is your take on this?

Response, Dr Rifkin: Beall's list is shut down repeatedly because of the reluctance to blacklist predatory journals.

4) Some South African journals that are not accepted by some universities still appear on the DHET's list. Please clarify these matters.

Response, Mrs Stead: The DHET retracted some of the lists of predatory journals because some of those were wrongfully accused of being predatory. *The South African Journal of Science (SAJS)* is open access and does not charge any fees to publish.

Response, Dr Rifkin: One should not be too concerned about publishing in minor, local journals. It is important to disseminate research as widely as possible. The impact will be overtaken by citations. Google Scholar will indicate the impact factor of any journal.

5) Universities encourage scholars to publish in international journals, but many of these have a profit-making agenda. Scholars are both the product and the consumer of academic journal articles. Many academics feel that we are, frequently, being taken advantage of as we do this (write and publish scientific articles) for free and review articles for free while university libraries pay massive subscription costs in US Dollars to buy back our articles. African research for African scholars dealing with Africa-specific issues (particularly given the calls for the Africanisation of the curriculum) do not always speak to the large international journals. The market is huge and this impacts on text books, which are not produced in South Africa for a local audience. There is a reliance on temporary teaching staff who are under-skilled and rely on text books that are globalised versions. This means that the relevant matter of Africanisation cannot be dealt with. Open access is similarly problematic. The system is broken. Another problem is that

---

4 *Beall's List* was a list of predatory open-access publishers maintained by University of Colorado librarian, Jeffrey Beall.

tax payers' funds that go to research are being siphoned out of the country to publishing giants. Research for the people by the people is being given away. This is formalised corruption.

Response, Mrs Stead: There are many international publishers that are entering South Africa and taking over our journals. They are not entirely open access and one must pay to view. The book publishing sector in South Africa has very few book publishers and institutional book publishers are not supported by their institutions. It is a money-making issue that has to be resolved.

Response, Dr Rifkin: This is why pre-print journals are becoming increasingly popular. The problem is that these articles are not peer-reviewed. Many scholars feel that they are stuck in a system that does not work for them.

Master Class Lecture: Checks on Corruption – Judicial, Civic Engagement and Academia *(Judge Zak Yacoob, Retired Judge)*

An independent, impartial judiciary that acts fairly without bias is obviously necessary otherwise the judiciary becomes easily corrupt. Corruption in the judiciary is not really an issue in South Africa although we have had one or two cases of allegedly corrupt judges. As a rule, people have to bring a case before the court and the court adjudicates only on cases that are brought to it. However, things are changing and in some parts of the world there is the thinking that it is sometimes necessary for judges not to wait for cases to come to them because by the time a case is brought to them, the damage is already done to a considerable extent. Society might try and agitate for the judiciary in South Africa to adopt this approach where there are serious cases of corruption.

Quite often, judges participate in commissions of inquiry. The problem with this kind of judicial inquiry is that judges are usually appointed by politicians for purposes of delay. These commissions take a very long time and the sharp edge of corruption cases are blunted before a commission has delivered its report, diminishing the urgency of implementing its recommendations. Criminal prosecutions and not commissions are the right route to go to ensure appropriate judicial intervention. Criminal cases brought before the judiciary can be properly interrogated. However, there are some challenges for proper criminal prosecutions – there is the problem of not having an honest prosecutor or a 'bad' appointment to

the position of National Director of Public Prosecutions (NDPP). It should be noted that the decision to appoint the NDPP is not a decision of the President alone but a decision of the President in Cabinet and therefore one must bear in mind that every member of the Cabinet at the time the decision was taken is responsible for the decision to appoint a weak NDPP. This is also the position insofar as the appointment of the Head of Police. In order to ensure the correct judicial intervention, it is necessary to give publicity to the fact that Cabinet must take these decisions so that more people understand this and hold the President and the Cabinet accountable for not applying the correct process. There is an argument that to render corruption properly prosecuted, it is important for the NDPP to be appointed by the Judicial Services Commission, which appoints judges, because it is wrong to suggest that these are mere political appointments.

A further problem about the judiciary and how it works is that determining of court cases usually takes a long time. As far as criminal law is concerned, a person is presumed innocent until proven guilty. It is only in relation to conviction and punishment that the person is innocent until proven guilty and a case has to be proven beyond reasonable doubt. This rule is also relevant in corruption prosecutions that a person should not be punished if there is reasonable doubt about whether or not he or she is guilty. This is a very important rule because although the judicial system can be used to prevent corruption, care has to be taken that that innocent people are not convicted.

Another weakness in the judicial system and its operation in relation to corruption is that the judiciary is not geared for appropriate restorative justice kind of sentences in relation to corruption. This calls for a more imaginative approach to how people who are corrupt apologise to the public by their action. More imaginative sentencing can be adopted by the judiciary in order to ensure that corruption does not take place and that the sentence that is imposed acts as a deterrent. The major problem is that the judiciary cannot play a meaningful role in social programmes to ensure that all dimensions of corruption are addressed. Prevention is better than cure and doing something after the act cannot contribute to making things right. The judiciary must be sensitised a great deal more than it is to corruption, must provide assurance that there is a proper approach to sentencing and be able to act by itself in matters of corruption. The more the judicial capacity to get things right is expanded,

the better. It follows that it is essential to have a justice system that works.

Then there are civil remedies for corruption. The State can claim the money back but the problem here is that if the State itself is corrupt and nobody brings cases, then the State will not ask for the money back because it has been responsible for corrupt practices itself. Generally, people do not choose to commit crime because the punishment is too low and as in other acts of criminality, most people who engage in corruption these days justifiably believe that they will not be caught in the light of the nature of the policing system and the prosecution system, and what the police concentrate on. The police pay too much attention to the conviction and jailing of sex workers, for example, instead of prioritising corruption cases. The judicial route, although important, is not enough on its own to deal with corruption. A culture of non-corruption must be created in society, but this is a very difficult and complex issue. Social scientists and professionals have got a lot of work to do to understand where corruption comes from, what sort of community work needs to be done to stave off corruption and determine community programmes to help create a non-corrupt society.

Lecturing to people about not committing corruption, and punishment alone is not helpful. At the moment the law of the jungle is entrenched in society. The strong trample upon the weak, men trample upon women, people with disabilities are trampled upon all the time, gay and lesbian people are not appreciated for their humanity, and human dignity and true equality are not respected and protected.

Every person has a duty to create the kind of society contemplated by the Constitution. The way to go about this is not by court cases, but by internalising the values of the Constitution, reading the Bill of Rights and understanding what is meant by dignity, equality and freedom and the balance between them, and understanding what is meant by freedom of expression and association, and how the Constitution moves away from the law of the jungle of which corruption is part and begins to value the weak and vulnerable. The more people in society begin to value the various precepts of the Constitution and live in accordance with its values, the less corruption there will be. Ultimately, to change the quality of society, courts are only the last resort. What is needed more is a social revolution in which as many people as possible participate to persuade and educate people to think correctly.

A further important way to end corruption is to improve health and education services and pay proper pensions and social grants. Stopping corruption will certainly diminish and hopefully eventually put an end to 'empty stomachs' and gross inequality in our society. The prosecution must ensure that the 'big fish' are caught and adopt an appropriate approach to prosecuting those who have gone out of their way to steal from programmes and projects aimed at improving people's lives. The Constitution provides for social and economic rights of people. The State must take reasonable legislative and other measures in terms of Sections 26 and 27 of the Constitution to ensure the progressive realisation of these rights. The State has failed in these duties because of increased levels of corruption over the past 20-odd years.

Academics have a contribution to make in terms of researching the causes of corruption and developing community programmes to create a culture of non-corruption. Academia as a whole (students, lecturers and researchers) ought to do some work towards taking the Constitutional dream forward and by doing so, engage in preventive measures to put an end to the reign of the law of the jungle. Academia must also be concerned with moral issues. Students should be taught to study the Bill of Rights as part of the university orientation programme. All universities should clearly state that they accept excellence in relation to the Constitutional values and not just academic excellence. They have an obligation to produce students who will live the values of the Constitution, are not interested in the law of the jungle, and will take the social revolution forward.

Government, academia and society need to work together to fight the scourge of corruption and everyone has to learn not to take advantage of corrupt deeds because small corrupt deeds lead to bigger ones. A change in judicial conduct, police conduct, prosecution conduct, people conduct, the conduct of academia and that of students to create a society that fulfils a vision of the Constitution will slowly contribute to a situation where there is less and less corruption as time progresses. Judges, lecturers, students and lawyers alike must put their shoulders to the wheel and contribute to this very important struggle against corruption to create a society in which corruption will not thrive, ensuring that the vision and values of the Constitution are developed. Failure in this struggle could well result in the destruction of society because corruption is cancerous and kills society. We want a government that will comply with its Constitutional

mandate, and to ensure this the degree of corruption within a political party should be a very important factor in deciding the vote for voters.

Questions

1) How does a young black lesbian woman start to discuss issues of patriarchy with older, religious women who believe women must be submissive to men, and fail to teach the young men to care for their families because they believe this is the role of the mother? The gender battle has been fought for a long time, but nothing has changed, and tribal councils perpetuate patriarchy.

Response, Judge Yacoob: The facts need to be faced and there must be programmes to help bring problems out into the open and to resolve the gender issues. The discriminatory attitude towards gay and lesbian people in society must be eliminated. This is one of the pathways to the elimination of corruption and creating an anti-corruption culture.

2) Statistics provided by Transparency International in relation to the level of corruption around the world is based on perceptions because corruption cannot be measured. How can corruption be scientifically measured?

Response, Judge Yacoob: I am not a statistician and do not have the expertise to respond to this question. It is evident that much of the corruption is undiscovered. This is why surveys are essential. One cannot rely only on convictions and work on the assumption that all corrupt people are caught. The appropriate statistical scientists should devote their energy to determining how reliable rates or figures on the incidence of corruption can be determined. The problem is that race plays an important role and assumptions are made that the African continent is worse than others.

SESSION 6:
Conference Dinner

Host:
A/Prof Kanshukan Rajaratnam (*Acting Dean, Faculty of Commerce*, *UCT, SAYAS Executive Committee Member*)

Welcome
(Prof Roseanne Diab, Executive Officer, ASSAf)

Prof Diab welcomed everyone to the conference dinner and acknowledged the distinguished guests present, including Judge Yacoob and his wife, Mr Muchena, the guest of honour, and all the young scientists.

ASSAf has a role to foster the development of the next generation of distinguished scientists. The establishment of SAYAS and hosting the Annual Young Scientist Conference formed part of that role.

Corruption and Social Interaction: Who Bears the Cost? *(Guest Speaker: Mr Deprose Muchena, Regional Director, Amnesty International)*

Amnesty International is a global human rights organisation and a movement of eight million people across the world who take injustice personally. Mr Muchena runs the Southern Africa Regional Office that is an initiative to disperse the organisation's presence in London to the Global South and Global East where human rights matter.

Around 1964, Nelson Mandela wrote to the Secretary-General of Amnesty International at the time thanking him for having sent a trial observation team that exposed the miscarriage of justice called the Rivonia Trial. Across the continent in the time of colonial rule, including apartheid rule in South Africa, Amnesty International worked very closely with many 'prisoners of conscience', campaigning for their release. The release of several people including the current Presidents of Zimbabwe and South Africa, as well as about 250 ANC leaders arrested during the 1980 and 1990s was supported by Amnesty International through campaigns.

Fighting corruption and promoting human rights are two sides of the same coin. Resources from the national fiscus that are intended to provide social protection programmes, academic research, development programmes, infrastructure and so on are depleted through corrupt activities, whether in South Africa or elsewhere in the world. The figures are dramatic. The developing world has lost USD 1 trillion to illicit outflows. Africa is losing USD 69 billion a year to illicit outflows and curbing these would allow adaptation to climate change, as well as the energy gap that exists on the continent to be financed and economic development given a boost.

It is not helpful that the world is currently experiencing a toxic mix of populism represented by people like Donald Trump, which results in a politics of fear and social exclusion and disbelief in international institutions and the global human rights protection system. The threat to render global institutions defunct creates with it a continued problem of insufficient resources to fund development. There is a crisis of global leadership to fight corruption. Emerging powers have failed to fill the gap in global leadership left by the retreat of the United States, the United Kingdom and Europe from the global stage as a result of internal, inward-looking politics. The global collapse on development questions across the world creates fertile ground for resource looting in the absence of global collective action and global leadership. What is being seen is 'perspirational' leadership rather than inspirational leadership at a global level. Institutions that are designed to tackle this question are failing. It is necessary to examine what is happening on the continent, the region and in South Africa to begin to inject some ideas that are multi-disciplinary in order to fight against corruption.

Corruption is essentially the abuse of public power for private gain. It is used as a tactic and tool for accumulation of economic resources and political power for personal gain. The Southern Africa region is one of worst performing regions for running clean governance.

Those on the front line of this fight face death, smear campaigns, surveillance and intimidation. In different parts of the world a combination of government and private sector organisations exploiting natural resources are known to unleash a reign of terror on those who speak against the looting of natural resources. In Madagascar a young man who is an environmental activist was campaigning for the ending of

the illegal trafficking of rosewood when he was arrested on trumped-up charges. Amnesty International campaigned for his release after he had spent nine months on pre-trial detention. In Botswana, two journalists of the INK Centre for Investigative Journalism were threatened with death when they were seen taking pictures of what was believed to be the house of the now-former President. A journalist from Zodiac Radio in Malawi was threatened by people believed to be from the President's office for reporting on a corruption case relating to the national procurement body. In Lesotho, a very courageous young female journalist wrote an article about corruption in the army and was forced to leave the country and spend a year in exile in South Africa. Her editor, who agreed to publish the story, was shot dead when leaving his home one night. In Zambia, *The Post* newspaper was shut down and its assets forcibly sold because it reported massive cases of government corruption. In Zimbabwe, a young man who started a movement called 'This Flag', campaigning against corruption in the city of Harare, as well as the government of Harare in relation to service delivery, was arrested on trumped-up charges and faced lengthy 'prosecution through persecution'. In the DRC, a judge was told by a leader in government that he was required to find an opposition leader guilty and sentence him to two years in prison, during which time an election was to take place. The judge argued that he would make a judgement based on the merits of the case and soon afterwards was confronted by eight armed men and shot numerous times. His wife and daughter were raped. He miraculously survived the ordeal with the intervention of Amnesty International. These stories constitute the regional context in which South Africa exists and in which the war against corruption is proving to be very difficult because those who are courageous enough to stand up do so at a heavy cost and often lose their lives.

The science community cannot stand on the side-lines while corrupt activities pervade society. It needs to be at the centre of the fight against corruption. More often than not, the war against corruption is left to ordinary people who neither have the sophistication or methodology to do research nor the resilience to support institutions to carry the fight through. Many of the struggles are being led by community people and in the process, they die. Institutions of governance and of government (at executive and parliamentary level, and in the judiciary) need to be strengthened in order to fight corruption effectively. Mining companies are having a killing in this country because the oversight capacity of the State ranges between zero to non-existent. As long as this is the case,

looting of resources for countries that rely on natural resources for their development path will remain a lucrative enterprise.

It is also important in the era of technology that the science community should lead the way in harnessing technology for purposes of fighting corruption. One of the biggest contestations presently has to do with Big Data. The social science movement should be helping political strategists, social movements and civil society groups to mine Big Data for use in media campaigning and political advocacy, and propose a series of policies to harness resources into human development. It is also important that social science questions the trajectory of the policy mechanisms in this region. There is an obsession with economic growth and with transforming developing countries into middle-income countries. Economic growth is necessary but not sufficient as a condition for human development. Specific policy measures are needed to direct the process of growth into human development so that the reliance of people on the State is reduced and with it, their tendency to be corrupted. Until the science community begins to challenge the growth models in Southern Africa, the parasitic accumulation of resources and extractive industries, which do not contribute to equitable distribution of human development, will continue.

There is an invitation to the science community to think about new forms of research that challenge economic and social policy (even if it is popular and promoted by the Organisation for Economic Co-operation and Development). A series of forensic tools in the form of mobile apps are needed to investigate the manner in which resources are being accumulated by a few. If this is not done, there will be a war of the poor on the rich as is being seen in many countries, and a rise of populism around resources.

Southern Africa is run by nationalist governments and there is a tendency for the democratic culture of these governments to be challenged after about 20 years of rule, by which time 'freedom of expression' is not accompanied by freedom after expression and the 'rule of law' has become 'rule by law'. There is a convolution of credentials of democracy in countries that insist on calling themselves 'democratic'. It is necessary to challenge the ideals of nationalism that are about the transfer of power from white to black instead of democratic governance and about changing the structure of the driver instead of the citadel and software

of how power is distributed in the creation of a new society with rights for women, and harnessing the demographic dividend of young people.

It is important that institutional independence of institutions of government in South Africa is protected and defended. This cannot be taken for granted. Young scientists, in particular, have a responsibility to:

- Defend this institutional independence and ensure they are coherent and responsive.
- Support academic freedom and the autonomy of universities so that ideas that come out of these institutions are able to influence public policy.
- Reject political appointments in universities.
- Enhance scientific inquiry.
- Not be afraid to work with human rights organisations and environmental protection groups and get involved in the causes they support, instead of offering uninformed criticism from a distance.

Young scientists and the young scientist academy are urged to become involved in the fight against corruption, on the frontline of the action.

Questions

1) Why is it that developing countries bearing the brunt of corruption to a greater extent than developed countries?

Response, Mr Muchena: There are many reasons for this complex question. One is that developing countries are victims of colonialism and therefore there is a colonial legacy of inequality, poverty and employment creation only in the areas of the privileged classes. Across the region, there is a legacy of colonialism. One country's legislation inspired similar legislation in a neighbouring country and so on. This legacy has undermined our ability to progress. Another reason is that independent states of the South have not developed their institutions to make them independent. When somebody commits a crime they are on their own. This has led to increased incidences of corruption. We should not engage in anti-corruption or corruption prevalence as a contest, but rather clean our

own governments and societies. We need a values revolution. A country like Zimbabwe has not only experienced a collapse of institutions but also a collapse of values. There is also a values challenge in South Africa. The institutions such as family, education and church need to come together to rethink what sort of value system to put in place ourselves so that we develop our societies differently. One should never think that there is no corruption in the North, where there is massive corruption with bigger resources.

2) Many universities face a challenge of multi-lingualism and Africanisation but there is a pushback from many academics. How would you advise young scientists to accept the decolonisation and Africanisation of education?

Response, Mr Muchena: It is necessary to understand the policy behind the slogans, such as Africanisation and indigenisation. Without a policy blueprint about what the slogans mean, there is a risk of leaving the debate to be contested by people without giving proper guidance. It is so important that academic institutions invest in indigenous languages as a site of enterprise and knowledge discovery. Language is the embodiment of thought. Tanzania has improved and radically developed Swahili as a language of instruction. Even mathematics is taught in Swahili. We need to have conviction so that it is not just a political slogan but show that there is thought and action behind the slogan.

3) To what extent can the regional bodies (such as the Southern African Development Community (SADC)) play a role in fighting corruption?

Response, Mr Muchena: SADC is the weakest (worst performing) regional body on the continent. It was in the pocket of former President Mugabe for a very long time. Part of the problem with African regional institutions is that they are set up designed to produce certain worthy outcomes, such as regional development. After setting them up they are contained in a space of non-effectiveness. Isomorphic mimicry is embarked on. This means that an institution is created that has a seductive appearance to fight corruption, people are appointed but they are not allowed to do their work. The first thing to do would be for citizens in Southern Africa to reclaim SADC away from head of states. The summits are all about heads of states self-congratulating each other about their achievements and nothing to do with developing a region that is competitive, harmonises

exports and fights corruption. SADC side-events are appropriate forums to be used to reclaim SADC so that it plays a role in improving the region's circumstances.

Vote of Thanks *(Prof Roseanne Diab, Executive Officer, ASSAf)*

Prof Diab thanked Mr Muchena for his inspiring, interesting and challenging talk.

SESSION 7: The Gender Effects of Corruption

Facilitator:
Mr Stanley Maphosa (ASSAf)

Panellists:

- Dr Angela James (Academic Leader: Community Engagement, Senior Lecturer: Science Education, University of KwaZulu-Natal (UKZN) and OWSD SANC)

- Dr Mapotso Kena (Senior Lecturer/Plant Pathologist in the Department of Plant Production, Soil Science and Agricultural Engineering, University of Limpopo (UL) and OWSD SANC)

- Dr Edwinah Apunda (OWSD SANC)

- Ms Rejoyce Phetha (UKZN)

Panel Discussion

Dr Angela James
Dr James asked delegates to write down something about who they are and their role in their institution, and then to note how they described themselves. Normally, people give their gender, age and areas of interests to describe themselves, but a better description in the context of South Africa is as change agents in the various spaces in which they (people) finds themselves. Student teachers at UKZN are challenged to understand who they are in relation to the context in which they find themselves, particularly the communities they work in and the corruption and ethics aspects relevant to that context.

Corruption is a process and it must be recognised that this process has a chain of repercussions that affect many people, at many different levels. An example of corruption in schools is the purchase of a large quantity of sanitary pads for a primary school in KwaZulu-Natal. None of the learners at the school require them and therefore they are not distributed to learners. The money spent on the sanitary pads could have been used to employ more teachers and improve the quality of teaching and learning, within the particular district. There is a similar scenario with text books.

Corruption at schools also has to do with a teacher not being in a classroom and teaching. All this while much is being said about how poor the learners are in terms of reading, science and mathematics, etc. Any change within a school has to be systemic, but the face-to-face encounters begin with a teacher. Pre-service teachers at UKZN are taught how to deal with these and other possible illustrations of corruption in a school environment. Teachers who are silenced in the face of corrupt activities around them become non-functional. The system itself silences people who want to take action. It is the responsibility of the collective to look at what calls and actions need to be taken within education departments to make changes and improve the quality of teaching and learning.

Dr Mapotso Kena
Corruption in HEIs affects young, emerging female scientists. The questions that need to be asked in this regard are:

- What is the role of HEIs in enabling corruption in society?

- How does corruption in HEIs affect female scientists and academics?

- Are government policies (such as BEE and Gender Equity policies) being abused to enable corruption in HEIs? If so, how does this affect female academics?

A UNDP report[5] comparing corruption between the genders within government institutions indicates that males are more corrupt than females. This raises a question about whether female academics are less corrupt than their male counterparts, and their role in promoting corruption in HEIs. HEIs compete for resources and in this competition, the weaker HEIs tend to take approaches that perpetuate corruption in order to be on par with the stronger HEIs. This behaviour invades the entire university system to the point where corruption becomes the core function of the weaker HEIs and threatens the credibility of their research outputs and lowers the standards.

The corruption primarily affects female academics as they are more vulnerable than the males. For example, it is not uncommon for females to be promised promotion in return for sexual favours. Some of the terms used to describe corruption (such as dishonesty, illicit benefits, and misuse of entrusted power for private gain) can be ascribed to the behaviour by male academics towards their female counterparts, mostly in the context of promotion. Gender equity targets, for example, play a role in promoting corrupt activities in that HEIs may be willing to compromise standards in order to achieve gender equity targets. The same applies to institutions where promotions and employment are based on the races/gender ratios. It is important to mention that these practices are prevalent in most HEIs in South Africa including those termed as historically disadvantaged.

Dr Edwinah Apunda
Many are of the view that governments need to create employment, but an alternative job creation mechanism is the informal sector, which offers many more opportunities to earn a living than the formal sector. The informal sector provides employment opportunities mostly to women because they tend to live in poverty and be illiterate. These women need to be equipped and empowered through skills development in a way that allows them to be economically productive, earn a living, and

---

5   Access: UN Economic Commission for Africa: African Governance Report 4. 2016: Measuring Corruption in Africa: The international Dimension Matters.

contribute to economic development. Women in the informal sector are often unaware of their rights and entitlements and are disproportionately affected by corruption.

In sub-Saharan Africa, informal employment makes up about 72% of non-agricultural economic activity, and up to 90% of agricultural activities are taken into account. There is a need for greater focus on the contribution of the informal sector in economic growth and development. Lack of governance and regulation of the informal sector exposes those in informal employment to bribery, exploitation and physical abuse thereby perpetuating poverty. Economic empowerment and violence against women are usually linked, and vulnerable groups are subjected to greater gender inequality. When socio-economic inequality is compounded, the result is the inter-generational transmission of vulnerability and poverty. It is therefore important to reverse this situation by empowering women.

Dr Apunda's research study looked at alternative training pathways for skills development for women in the informal sector. Governments, developmental agencies, HEIs and communities should ensure that sufficient skills are available in the informal sector in order for women to have alternative pathways to becoming economically productive.

Ms Rejoyce Phetha
Ms Phetha has written a paper on deconstructing the gender effects of corruption in public institutions.

The way women in public institutions are treated may invariably lead to corruption and abuse by public officials. Other forms of corruption affecting women include bribery, favouritism and nepotism. The widening gap between the rich and the poor creates many problems in society. It has reached a point where extreme inequality threatens to cause social disorder and instability. Corruption in the provision of basic services such as health and education has taken a gender dimension, particularly as women are the primary users of these services, but lack a voice and participation, which make them vulnerable to corruption.

Historically, men hold positions of privilege and influence, and women are marginalised from decision-making. Women are easily exploited because they lack resources and knowledge of their rights, and have unequal access to opportunities and services. Sexual favours are commonly used

as a currency for public service provision, particularly when women are unable to pay bribes. Women who live in poverty cannot be expected to conform to the idealised notions of a finer moral nature when they have families to feed.

Corruption needs to be eradicated and strategic interventions need to be developed to ensure that women are not victims of corruption. Corruption is a symptom of poverty and perpetuates it, but is not the original cause of it.

Questions

1) What moral, ethical foundation can be provided to educators to address and avoid corruption?

Response, Dr James: One of the essential elements of the teaching profession is care. Our students are taught this, and to look at a holistic view of how education takes place. The foundation is about understanding yourself as a teacher, your goals and values in relation to being a citizen of the country. Teaching is not just a job and a way to earn money.

2) Dr Kena mentioned the competitive dimension of HEIs. What are the solutions to this and how can quality be assured and corruption avoided?

Response, Dr Kena: HEIs' ethical codes of conduct need to be enforced.

3) In terms of the 'gender pay gap' it is said that the gap is not between males and females but between who cares for children and who does not. What is the application of this in the African context in general?

Response, Dr James: The aspect of care needs to be addressed more closely. Children learn about care from how they are cared for by adults. The way in which we express care is crucial to the socialisation of children.

4) There is a tendency to look down on township', or informal economies but the reality is that they contribute a lot and corporates could take skills from these environments. However, the role of the informal sector in growing the economy is not acknowledged by

government. How do we move forward to get those informal traders and entrepreneurs up-skilled?

Response, Dr Apunda: People do precarious jobs in order to survive. Governments are called upon to recognise the informal sector and the activities that people engage in, and work with communities to find ways to support them by providing the appropriate skills to enhance productivity. To a certain extent, skills are handed down, mainly informally through traditional apprenticeships, but enhancement of these skills is what is needed.

5) Should we start from the classroom or the teachers?

Response, Dr James: It goes beyond the classroom and teachers to the community. The types of communities and the values embedded within those communities need to be considered. Individuals generally understand what is good and right. We should be creators of what needs to be done instead of followers.

6) There are also cases of women abusing men sexually. I do not understand why females are seen to be more vulnerable to corruption.

Response, Dr Apunda: In the African context, families have always preferred to educate boys. This is why more women in Africa generally have a low education and skills. Moreover, girls tend to drop out school of because of pregnancy and too many roles they have to perform in the family, which ultimately leaves them with no option rather than working in the informal sector, but lacking the essential skills. This makes them more vulnerable than the males who always have time on their hands to perfect their education and skills training.

7) In Limpopo province, females have been given land and farming implements, but have a problem to convince the elders and tribal councils that they are capable of farming. The tribal councils rather choose to lease our land to white farmers and give us very little money for that.

Response, Dr Kena: This is a typical example of how those with power (males) abuse those who are less powerful (females). Certain systems are

discriminatory against women. This disempowers women.

Response, Dr James: The traditional leaders have a particular perception of how things need to be done. Perhaps you need to talk about these issues in your community.

SESSION 8:
Counting the Human Cost of Corruption

Facilitator:
Mrs Matshidisha Mathebula (UL)

Impact of Oil Sector Corruption on Nigeria *(Mr Ekanade Israel Kehinde, University of Venda)*

Nigeria is ranked sixth on the global scale of crude oil exports by the Organisation of the Petroleum Exporting Countries (OPEC). Despite the amount of Petro-Dollars earned over the years, Nigeria still finds itself enmeshed in the quagmire of corruption. Mr Kehinde's paper examines oil sector corruption which has negatively affected other sectors of the economy of Africa's most populous nation, and tries to unveil new modes of corruption in this sector, which despite the establishment of anti-graft agencies, still thrives in the oil and gas industry in Nigeria where 96% if its total foreign earnings is generated from the export of crude oil. Corruption in this sector has given rise to corruption in other sectors as perpetrators have not been brought to book and the 'lootist culture' and tax evasion by multinational oil companies persists.

The recommendations are that:

• The Buhari administration needs to address the issue of corruption urgently.

- The anti-graft agencies should be empowered and be free from government interference.

- Preferential treatment should not be accorded to corrupt officials.

- Lifestyle audits should be compulsory for all government officials, politicians and those involved in the oil business.

- The petroleum information bill needs to be passed by the National Assembly and implemented without delay.

The study concluded that:

- Corruption has impeded economic growth in Nigeria and damaged the country's image globally.

- Legalisation of bandits in the Niger Delta region has resulted in the loss of lives and revenue, and if this trend is allowed to continue, the State may become a pariah state like many others in Africa.

- Government officials and elected political representatives should be held accountable.

- Civil society and advocacy groups should be allowed to challenge corruption at all levels.

- Corruption should be seen as a threat to human security and be criminalised instead of normalised.

The Effect of Corruption on Land Accessibility by Women: Evidence from Developing Countries *(Dr Mzuyanda Christian, TUT)*

Land is often viewed as a sensitive and even emotional issue. As an economic asset, it is a major source of employment and livelihood, especially in dominantly agrarian societies. It is also a social asset, a source of socio-cultural identity and the basis for the construction of families and ethnic groups.

Despite its importance, the land arena is characterised by competing and contesting interests in the context of imbalanced power relations. A 2011 study titled *Corruption in the Land Sector*[6] shows that there is a very strong correlation between levels of corruption in the land sector and

---

6   Access link: http://www.fao.org/docrep/014/am943e/am943e00.pdf

overall public sector corruption in a country, and that in Africa, paying bribes to access land is a common occurrence.

Corruption exacerbates gender inequalities in society. The links between land corruption and women's well-being and prosperity are evident across Africa. Women's strong dependency on land as a resource means that land corruption disadvantages them more than men. Land corruption increases gender disparities which undermines livelihoods and ultimately perpetuates poverty. Corruption in respect of land is seen in the form of land administration, customary land tenure and the management of state-owned land, and there is empirical evidence of corrupt activities in the land sector in numerous countries.

Dr Christian's work concluded that corruption in any form is bad for development and that land-related corruption in agrarian countries has far-reaching implications for inclusive development and shared prosperity, as women are disproportionately affected. He recommended that the SDGs should provide an opportunity to address gendered land corruption, that transparency and accountability in land governance needs to be promoted and free prior-informed consent needs to be encouraged. In addition, land commissions need to be capacitated and more research linking and land corruption needs to be done.

How one Word can Change the Game: A Case Study of State Capture and the South African Social Security Agency (SASSA) *(Miss Robyn Foley, Stellenbosch University)*

State capture entered the lexicon of the South African political arena after the release of the Public Protector's *State of Capture*[7] report in 2016. The turning point in the Zuma administration came in March 2017 when the then-President fired the Finance Minister and Deputy Minister but kept the then-Minister of Social Development, Bathabile Dlamini, even though she had been reprimanded by the Constitutional Court for what became known as 'SASSA-Gate'. The outrage sparked by this Cabinet reshuffle sparked some of the most widespread protests seen since 1994. A group of academics formed the State Capacity Research Project (SCRP) and published a document called, Betrayal of the Promise: How South Africa

---

[7] Access: https://cdn.24.co.za/files/Cms/General/d/4666/3f63a8b78d2b495d88f10ed060 997f76.pdf (Accessed on 29 January, 2019).

is Being Stolen[8], in May 2017. A case study of state capture and SASSA was released in July 2018 as a follow on to the previous document and looked at a single instance of State capture and how it manifested within the institution itself, using qualitative research.

The research did not directly involve the Guptas or any of their known associates. It provided a rare detailed example of the mechanics and *modus operandi* of State capture in the capturing of SASSA, and illustrated that State capture is not just a form of 'grand corruption' resulting in a financial loss to the State and taxpayer, but is a political project that has a direct negative impact on the poorest and most vulnerable in our society.

Although it was not possible to provide a comprehensive, all-encompassing estimation of the cost which could be attributed to the State capture of SASSA, costs in the form of the 2012 irregular contract, opportunity cost to the State, irregular expenditure, the 'regressiveness' to value of grants themselves, and most importantly costs to beneficiaries, were identified.

The study concluded that, due to interventions by the private sector, the judiciary, civil society and the media, it is possible that grand-scale looting was actually prevented. This case study highlighted that State capture extended beyond the narrow objective of extracting monetary wealth and showed that repurposing of a State institution served a political objective. The constitutional obligation of the State, the administration of social grants, was handed to a private company knowing that this function would be repurposed to enable that company to profit off the poor.

Discussion

1) Africans learn corruption from Europeans. If corruption is in the system and institutionalised it is difficult to fight.

2) I am very disappointed in Mr Kehinde's presentation. For one, the title is Oil Sector Corruption in Nigeria, but he fails to mention the Western hegemons, such as Shell and Total in the exploitation and subjugation of the people of Nigeria, let alone the role of Shell in the execution of Ken Saro-Wiwa.

---

8 Access: https://pari.org.za/wp-content/uploads/2017/05/Betrayal-of-the-Promise-25052017.pdf (Accessed on 29 January, 2019).

SESSION 9: Corruption in Health Care/ Medicine

Facilitator:
Ms Sindiswa Mnwana (UFH)

Corruption – Inevitable or Learnt? *(Mr Vuyolwethu Mbombela, Walter Sisulu University (WSU))*

Mr Mbombela explained that he was not doing research on corruption but had come to realise that corruption does not only affect a selected few and was so intertwined in society that it affects aspect of life: students who have been overlooked without being given the tools necessary to impact the world, corporations that put the bottom line above their moral standing, or physicians who base their practice morals on pharmaceutical sales with benefits. All of this is corruption.

It is important to understand the demon of corruption is not only powered by people who commit crimes of corruption but also by the many silent bystanders of corrupt activities as they are responsible for the perpetuation of this demon. Corruption has become a culture that erodes society. It has been normalised. Whistle-blowers are more likely to be persecuted by the silent bystanders than by those committing the crimes. Has society been eroded to the extent that it fails to recognise integrity? Can society fight against corruption?

It has been said that integrity, transparency and the fight against corruption have to be part of the culture and be regarded as fundamental values. For corruption to be removed from society, it requires each and every individual to adopt a culture, a way of life and a responsibility of integrity and transparency, and an unrelenting and outspoken attitude to corruption.

Medico-Litigation Costs: A Cancer in the Medical System
(Mr Garfield Ndlovu, UFH)

Mr Ndlovu addressed the problems of litigation related to the health sector, proposed solutions and recommendations, and presented these as part of an experience of medico-litigation from the Eastern Cape. He also looked at National Health Insurance (NHI) as the future of health care in South Africa.

Health is a social response to ensure the physical, mental and social well-being of citizens. Health is a regulated environment and is determined by specific social determinants, such as environment, lifestyle, security, love and belonging. Health is also addressed in the SDGs, particularly SDG#3, as well as this country's Constitution, in terms of which everyone has a right to access to health care and the State is responsible to ensure reasonable legislative provision is made in this regard. In addition, no citizen can be refused emergency medical services. These provisions are also addressed in the NDP and other national strategic approaches.

Global challenges with regard to the health care sector include hospi-centrism, fragmentation and uncontrolled commercialism. Challenges faced by the national public health sector, relevant to this presentation, include:

* Decentralisation *versus* centralisation
* Equity, budget and resource adequacy
* Linking the budget to performance objectives
* Medico-litigation, fraud and corruption.

The South African public health sector needs to address the quadruple burden of disease (human immunodeficiency virus (HIV) and tuberculosis (TB), maternal, newborn and child health care, non-communicable diseases, and violence and injury), but the country cannot afford to provide the necessary services to the entire population. The World Health Organisation (WHO) provides guidance to countries, such as South Africa, on moving towards universal health coverage through the NHI.

The 2018/19 budget allocated to Eastern Cape hospitals is R22,71 billion, but medico-legal costs are expected to reach in the area of R330

million during that period, almost equal to one hospital's annual budget. The money could have been put to better use. In addition, there is an inequitable distribution of human resources in the sector. Litigation is focused in certain areas of specialisation, one of which is obstetrics and gynaecology, and leads to the shutdown of services in those areas due to the high cost of medico-litigation to the State. Administrative, budgetary and clinical solutions were proposed to the various legal aspects of medico-litigation. Sustainability barriers that need to be overcome in health in order to prevent money being lost through medico-litigation are paralysis analysis, inertia of initiation, fraud and corruption, resistance to change, and less talking and more money.

The Minister of Health has published two health Bills (Medical Schemes Amendment Bill and the NHI Bill) that will, if passed by Parliament, radically change the way in which health care in South Africa is funded. The NHI is a financing system that will make sure that all citizens of South Africa (and legal long-term residents) are provided with essential health care, regardless of their employment status and ability to make a direct monetary contribution to the NHI Fund. Universal health coverage is a policy-driven by the WHO and is to be called NHI in South Africa.

The Perceptions of Professional Nurses about the Introduction of the NHI in a Private Hospital in Gauteng *(Ms Victoria Molokomme, UFH)*

Ms Molokomme's study was prompted by concerns regarding the introduction of the NHI and its implications on the South African health system, and sought to determine professional nurses' concerns about the introduction of the NHI in a private hospital in Gauteng and to make recommendations based on these perceptions. A qualitative, exploratory and descriptive design methodology was used and the sample was made up of 18 professional nurses from one private hospital in Gauteng.

Findings indicated that the participants acknowledge the principles of the NHI, but were concerned about the Department of Health's ability to ensure adequate human resources, adequate equipment, safe infrastructure and meeting the national core standards, which remained hampered by challenges experienced in public hospitals. Concerns were raised about the viability of the private sector in the event of successful take-off of the NHI implementation, and about its dependence on effective management of health institutions. Further

concerns related to professional nurses' non-involvement in policymaking, poor communication, a lack of transparency, strategic planning and risk management, and governance and management of health institutions. Participants indicated that, based on the perceived non-transparency on outcomes from NHI pilot sites, the government was not ready for the implementation of the NHI.

Recommendations focused on the importance of embracing ethical principles and leaders earning trust by doing what is right. Specific recommendations pertained to nursing education, practice and research. A strong public health system was dependent on effective coordination of health services, collaboration with the private sector and other stakeholders, improved human resources and education, empowering health professionals, efficient application of technology and communication.

These questions still need to be addressed:

- Are there ethical leaders who maintain professionalism and are willing to disclose any conflict of interest to ensure the integrity of the profession and the success of the NHI implementation?
- How strong willed are they to fight rampant corruption in the sector?
- Do the young professionals have reputable role models?

Discussion

1) What is Mr Ndlovu's perspective on the recent case of a psychologist at a hospital in the Eastern Cape who blew the whistle on the deplorable conditions in the hospital and was intimidated by the health professional society?

Response, Mr Ndlovu: There are two such cases. In the case referred to, the Ombudsman's investigation showed that the doctor concerned was unethical in that he tried to cover up his lack of performance. The allegations he made were unfounded. He has been reported to the authorities and an outcome is awaited.

2) Corruption in the health sector is when doctors leave their stations at hospitals to run their private practices. They need to be held

accountable, also in terms of the litigation cases against them. This is currently not the case, so how will it change under the NHI? The Minister of Health should be asked to explain this.

Response, Mr Ndlovu: Doctors are allowed to do private work outside of the public sector, but have to formally request permission to do so and it is regulated. From time to time, there are cases of doctors taking advantage of the system. Control mechanisms are being incorporated in the NHI.

SESSION 10: Governance and Government Structures Used in Aiding and Abetting or Defeating Corruption

Facilitator:
Mr Milton Milaris (University of South Africa (Unisa))

Perceptions of Corruption to the South African Economy *(Mr Zolani Sita, UFH)*

No-one can dispute the fact that corruption is a crime, but it is necessary to understand who commits corruption and the extent to which the public perceives corrupt individuals as criminals.

The Corruption Perceptions Index 2017 found that more than two-thirds of countries score below 50, with an average score of 43. South Africa's score went from 45 to 43 on perceived levels of public sector corruption. Identifying the problem would contribute to achieving some of the country's economic targets.

Recommended ways to address corruption are:

- Law enforcement: Government must promote and enable independent institutions to fight corruption.
- Accountability: Creating transparency and openness in government spending.
- Use of technology to aid and defeat corruption.
- Political cohesion.
- Individual responsibility.

The Hidden Hand of Capitalism in Endorsing and Safeguarding Corruption in South Africa: An Afrocentric Critique *(Mr Vongani Nkuna, UL)*

This study is motivated by the primary objective to find out whether capitalism can be linked as one of the root causes of corruption in South Africa. It seeks to investigate how profit maximisation is endorsing corruption in South Africa and focuses on the gap between the haves and the have nots in post-apartheid South Africa. It takes a theoretical approach based on the scenario approach.

The data for this paper are obtained from an extensive review of the relevant literature taken from scholarly research, books, popular articles, and writings published by the alternative press that deals with specific areas in the field of Public Administration and Political Science. To enable a successful execution of the study, secondary data were used because of its effectiveness and ability to add to the debate on whether corruption will ever be eradicated or prevented. The concepts of corruption and capitalism were defined, and the key proponents of South Africa's capitalism were said to be 'laissez-faire capitalism', monopoly capitalism, corporatism and financial capitalism.

South African corruption was contextualised in terms of the role played by monopoly companies and the mainstream media, colonial legacies, government officials and electorates. Corruption affects a country politically, socially and economically.

Recommendations pertain to the role of the youth in fighting corruption, the need to iron out racial differences and the relevance of decolonising the curriculum.

Discussion

1) I think that corruption is the result of poverty and inequality and that it is necessary to deal with these in order to get rid of corruption.

Response, Mr Sita: I don't dispute your point. Poverty is driven by our actions that affect our lives. Corruption must be defeated. This will ensure a better standard of living for all.

2) Mr Nkuna's presentation was based on capitalism within the State, but is he saying that capitalism is the reason for corruption in society?

Response, Mr Sita: We cannot glamourise corruption. Capitalism endorses corruption. Everyone wants to be rich. Society is impatient, and education does not meet the needs and aspiration of young people. Government is not playing its role to support people to participate in the economy. No-one is looking at private sector corruption. That sector is controlling our economy. Our economy is monopolised and black people are not active participants. There must be a war against corruption and participation in the economy will go a long way to curb corruption.

3) As young scientists we need to narrow down the problem in order to solve it and focus on coming up with new and innovative ways to address and fight corruption, taking into account the role played by socio-economic factors and cultural issues in corruption.

Response, Mr Sita: The system we can use is to make sure that law enforcement is promoted. The rest will follow.

4) Too many sweeping, unfounded and unsupported statements are made in these presentations. This is not a political conference, but an

academic event, and as such, statements need to be supported by credible evidence.

SESSION 11:
The Use of Technology in Aiding and Abetting Corruption

Facilitator:
Ms Makaziwe Makamba (Council for Scientific and Industrial Research (CSIR))

Assessing the Applicability of Blockchain to SASSA *(Miss Sthembile Mthethwa, CSIR)*

Blockchain was introduced in 2009 by Bitcoin and is a way of storing information and used for digital money or cryptocurrencies. Previously there was a central authority responsible for clearing all financial transactions. Blockchain introduced a way of allowing people to do transactions (not only financial, but also documents) without needing a bank as the middle man, and has evolved to become a mechanism for decentralised contracts and documents. A recent development involves applications adopting this technology for means other than digital currency transactions and document exchange.

One such case is with regard to SASSA and the distribution of social grants, a task which has been outsourced. The main challenge with the involvement of a third party was that SASSA had no credible means to ensure that the rightful beneficiaries were paid their grants, and this paved the way for corrupt activities. The proposed solution to this

problem was the use of Blockchain to allow SASSA to have access to how grants are distributed by providing a decentralised platform that records all transactions as they occur and introducing transparency. A challenge with the proposed solution is that Blockchain requires access to the Internet, which is not necessarily available in rural areas of the country.

Another proposed solution was a secure method of recording data pertaining to beneficiaries' personal information.

The next step would be to implement the proposed solution and test its feasibility. More research on Blockchain is required in order to build on the work that has already been done on the topic, and to find other methods to eliminate corruption and other ways that Blockchain can be used as an alternative to the current system.

Can Artificial Intelligence Combat Corruption? In Search for the Truth
(Ms Valery Louw and Ms Xolile Thani, Unisa)

Public Administration has to do with harnessing public resources to resolve societal needs. South Africa is grappling with fulfilling its mandate and delivering the necessary services to the public in areas such as public health, education, policing, arts and culture and public enterprises. Governments are considered catalysts in providing interventions to address these basic human needs, but corruption undermines good governance. This calls for new interventions in the fight against corruption.

Since the 18th century, human innovations have contributed to the improvement of human lives through the use of technology. Technology has improved the socio-economic and political landscapes of the world.

AI refers to technology deployed for activities that were previously done by humans to enhance efficiency, economy and effectiveness. Some of the benefits of AI include improved decision-making, faster absorption of information, enhancement of accountability, transparency, judgement, responsiveness and citizen knowledge as well as cost saving. AI also brings with it disadvantages such as programming flaws, a lack of judgement, operational challenges and complex ethical issues.

The 4th Industrial Revolution will have implications for Public Administration, because the State plays a role in creating favourable political, legal and

economic environments (Jarbandhan, 2017:64). The critical questions have to be considered, namely:

- Is the South African government ready to adapt to technological advances?
- Can they maintain public trust and safety when devolving new technology?
- Will it be possible for South Africa to ethically use technology especially in the cyber world?
- Is the South African government able to adapt to change?

The Potential of Big Data in the Fight against Corruption in South Africa
(Dr Tendai Chiguware, UFH)

Big Data can be unstructured data like emails, social networks, online news, polls, radio shows and video streams. Big Data has also been used for predictive purposes, for example to predict soccer results, and has been found to have a high accuracy rate. Machine learning has come to the browser where people now involuntarily assist computers in image processing and AI.

Big Data is being used to detect and prosecute speeding motorists. The e-toll project is one of the most prominent Big Data projects in South Africa. Another use of Big Data is through sensors that are used to detect traffic patterns, criminal activity and pedestrian movement, and regulate the traffic lights according to traffic patterns.

Big Data algorithms can be used to combat corruption in the area of traffic regulation by tracking the number of infractions that an officer attends to and calculate incidences in which a citation was made and automatically rank and assess law enforcement performance by calculating the ratio of infractions versus citations. Depending on law enforcement performance, machine learning can assign, re-assign, suspend or recommend for dismissal some law enforcement officers. Sensors can identify different infractions at specific locations and make recommendations to law enforcement. In addition, a combination of cameras and radio-frequency identification (RFID) chips can be used to automate driving tests without the need of a traffic officer.

Big Data-related technology is becoming inexpensive. Some of the technology is already in place and in order to be effectively implemented, the use of Big Data-related technology has to be consistent with legislative frameworks. However, the will and the resolve to optimise the technology as a means to fight corruption were still lacking.

Discussion

1) Are there young scientists who have the knowledge of the technology involved in resolving the problems? Conferences such as these should encourage young scientists to present innovative solutions and discuss them. We cannot just talk about corruption, but we need to be able to use the information presented to find ways to eradicate corruption.

2) Is there a concern about the effect of the technology described by Dr Chiguware on rendering the currently employed, unemployed?

Response, Dr Chiguware: Some jobs will be replaced by machines. There is nothing we can do about it.

3) Doing away with human intervention will destroy the country. Humans will continue to need interaction with other humans and not machines in all case. Machines cannot replace people in all areas. They cannot be programmed to make conscious decisions, only logical decisions. It is people who programme these machines in the first place, and they can be corrupt. How then will using AI mean that there will be less corruption?

Response, Ms Thani: If we are able to implement systems at senior management level, we will be able to do away with aspects such as bias, emotions and mood swings. This would help to get rid of corruption. The use of technology does not necessarily negate human beings. Technology needs humans to feed in the information it needs to do its job.

4) For their study, Ms Louw and Ms Thani will have to identify an area where AI is to be applied. Several database models can be employed for simulation. The learning model defines the uniqueness of each biometric being captured and identifies a human's speech. Technology can also be used to track fund mismanagement, and

to study trends of events. These forms of AI can be used to fight corruption.

Response, Ms Louw and Ms Thani: AI will have a stronger presence in an 'ideal State', where citizens are technology literate. South Africa's illiteracy rate is very high. People will struggle with AI.

5) Ms Louw and Ms Thani's work should include a legislative framework that underpins the AI you use in their study.

6) How can Public Administration contribute to combatting corruption?

Response, Ms Louw and Ms Thani: Scholars in the field of Public Administration have produced substantial numbers of articles on corruption. Perhaps we use a language that does not make sense to public administrators. It is interesting that public officials do not welcome working with public administrators to find solutions. Students struggle to gain access to government departments to do their research.

7) South Africa is always at the receiving end of technology. Is Blockchain not another colonial incubator for corruption and identify theft? How ready is South Africa's cyber security to cope with Blockchain? Will this technology be compatible with South Africans? Would automated systems not create yet another opportunity for corruption?

Response, Ms Mthethwa: Blockchain cannot be applied to resolve all the problems, but is used for a specific purpose only. Hashing something means it cannot be returned to its original state and the information can therefore not be identified. In terms of cyber security readiness, even the developed world is not fully cyber-secure. There are cyber attacks every day, everywhere, but we keep on improving based on the technologies that are being developed.

8) It is important to clarify that corruption is not caused by poverty. Transparency International argues this viewpoint in the context of Africa, but this is not the relevant to elsewhere in the world.
For example, the US is not poor, but it also not without corruption. Actual causes of corruption in any country are greed, entitlement and pride. It is often the rich who perpetuate corruption to become even more wealthy. This is greed.

9) The SASSA case is an example of how technology can be used for corruption. Biometric technology was motivated to defeat beneficiary fraud, but resulted in fraud happening and becoming syndicated. It is important to understand that criminals will find a way to use a system for corrupt purposes. There is no end solution. It will always be necessary to adapt and evolve to keep up with corruption.

10) It is necessary to consider the political and policy motivation for the 4th Industrial Revolution. The deception (corruption) lies in the 'who, how or where' these programmes and policies are implemented. It is about saying one thing and doing another. It is good to understand the politics in technology development (regulations, frameworks and so on) and the politics of technology. For example, is the technology imported and reinforcing bad systems?

11) We use conceptual tracking. There are advantages but tracking people can also have a stigma. At what point does it become a concern for society that privacy is being violated?

Response, Dr Tendai: The issue of privacy is open for discussion. One the one hand we want technology and on the other we want our privacy. Individuals are responsible for the way they control their privacy in areas such as social media.

12) Young scientists can offer much to help eradicate corruption in this country, both in offering practical, technological options and in their enthusiasm and ability to participate in finding solutions to the country's problems. The issue of corruption needs to be narrowed down to specific areas of focus and young scientists need to come up with innovative solutions and be empowered to participate in providing the solutions.

SESSION 12:
Capacity Building 2

Facilitator: Ms Edith Shikumo (ASSAf)

Science Communication and Engaged Research: Communicating Science in a Digital World *(Michael Ellis, Lesego Shakira Masethe and Zamuxolo Matiwana: Science Communication South African Agency for Science and Technology Advancement (SAASTA))*

SAASTA is a business unit of the NRF and assists with developing science communication, engagement and skills across the country, as well as runs programmes in this area.

The Value of Science Communication and Engaged Research
A paper written by the South African Research Chair on Science Communication, Prof Peter Weingart, states that, "Science communication is on the rise. This is good for democracy and puts the scientific community in a position where it has to convince the public of two important things: that it's delivering value for money and that it is responsive to the general public's needs and interests. To achieve both of these aims, scientists must communicate. Communication is a two-way process – it is about talking as well as listening".

In another paper in the *Journal of Science Communication*, the author Broks, P. (2017), states that "Science needs to be democratised such that the public engagement with science shares not only knowledge but the power that goes with it. This is not just acknowledging that power comes as a consequence of sharing knowledge. It is saying that power should be shared as part of the process of science; that power should be shared before the knowledge is created (or even co-created) … The concern now would not be the transfer of information but explicating contexts, mediating between actors, and brokering relationships … this would indeed be a radical change (even a revolutionary one)".

The DST's Science Engagement Strategy defines 'science' as all-encompassing and lays out the following strategic aims for science engagement in South Africa:

- To popularise science, engineering, technology and innovation as attractive, relevant and accessible in order to enhance scientific literacy and awaken interest in relevant careers.

- To develop a critical public that actively engages and participates in the national discourse of science and technology to the benefit of society.

- To promote science communication that will enhance science engagement in South Africa.

- To profile South African science and science achievements domestically and internationally, demonstrating their contribution to national development and global science, and enhancing its public standing.

The DST's Draft White Paper on Science, Technology and Innovation (STI), currently out for public comment, incorporates the strategy for science engagement, proposes instilling a responsible research and innovation approach for introduction into policy, and addresses knowledge diffusion, science literacy and science awareness in society, incentives for researchers, and measuring the reach and effectiveness of science engagement activities.

The Vitae Researcher Development Framework is helpful for young scientists to consider at the start of their careers when they are developing various skills. The four important domains for researcher development are:

- Knowledge and intellectual abilities
- Personal effectiveness
- Research governance and organisation
- Engagement, influence and impact.

Platforms for Science Communication in South Africa
Young scientists can get involved in a diverse set of platforms for science communication, and will have to make key strategic decisions as to which of the platforms warrant their time, effort and attention. One of these platforms is the ASSAf Annual Young Scientists' Conference. Points

to consider in presenting formal academic presentations are:

- Avoid having too much text on a slide. The text should not exceed 25 to 30 words per slide.
- Pictures or diagrams are very important, but there should not be too many or the key messages will be lost.
- In terms of the ideal number of slides in a presentation, one slide per minute works well, and less than that if the slides are text-heavy.
- Be cognisant of distractors in presentations, such as animations.
- The flow of the information should ensure that sufficient time is dedicated to the key messages. Starting with long background information can mean that little time is left for the key messages.
- Keep in mind the context of the broader topic of discussion.

A broad overview of a science communication strategy for young scientists to apply provides the following points to consider before communicating their science:

- Overall objectives: What do you aim to achieve?
- Who are trying to talk to?
- Messages: What messages do you want to relay?
- Methods/Activities: How will you achieve your objectives?
- Evaluation: How will you determined if you were successful?
- Resources and timelines, roles and responsibilities: What do you need?

There is a variety of ways to communicate certain concepts and scientific principles to society. Some examples are art exhibitions, science festivals, drama performances, pub science quizzes, traditional public lectures and science websites, depending on the target audience and its scale.

Other platforms to communicate science are:

- The National Science Festival, a DST initiative, is a countrywide celebration of science involving various stakeholders conducting science-based activities during the week.

- Fame Lab, a skills development initiative and competition to develop oral presentation skills.

- Young Science Communicators' Competition offers prizes in various categories.

- The South African Science Lens Competition is a photographic competition celebrating science.

- The network of science centres across the country, which give access to specific communities.

- Public lectures in various forms, which are opportunities for talking about science in non-typical environments.

- Citizen science projects, which are well used in natural and agricultural sciences in particular.

- Science and Technology Youth Journalism Programme.

- *The Conversation Africa*, a developmental platform with wide dissemination and high impact.

Discussion

Participants provided the following comments on the presentations given at this conference:

- Presenters should engage with their audience on their presentation and not talk to themselves.

- Some presenters gave a high level, general overview of their topics, but provided no technical and practical focus. Participants need to be involved at a technical level.

- The logic needs to be backed up with science.

- Maintaining eye contact makes it easier for the audience to engage with the presentation.

- Avoid reading all the slides.

- It is important to add citations to downloaded pictures and texts. An alternative to this is adding a clause to this effect at the end of the presentation.

- A TEDx talk called 'How to avoid death by PowerPoint'[9] is very helpful. It points out that:

  o The slides should highlight what is being addressed. Do not expect the audience to read the slide and listen while the presenter is talking.

  o Images and bullet points should lead to sentences. Talk to the slides and do not read and explain the slides.

  o Use size as an advantage and contrast is important. Highlight points by using different font sizes. A dark background and light text is recommended.

  o Six is the perfect number of objects per slide.

- Facilitation should not be underestimated. Like presenting, this is also a skill. Facilitators need to give context to the presentations, manage the time and dynamics, and avoid spending too much time on themselves. This helps ensure that the presentations flow.

- Ms Makamba, facilitator for Session 11, was commended for being a good example of a competent facilitator.

Media Landscape and Pitching your Story

The print media is controlled by four major conglomerates and the broadcast media is dominated by the South African Broadcasting Corporation (SABC), which plays a strong role in communicating in indigenous languages through numerous radio, as well as television channels. There are also a number of independent and community radio stations.

Scientists need to choose the most appropriate platforms to communicate their research and know how to pitch their story to a journalist, by addressing the most newsworthy information (such as research findings) at the onset, followed by important details (expand on the findings), and ending with general information and the background to the research.

---

9   Access: https://www.youtube.com/watch?v=Iwpi1Lm6dFo

Practical Exercise

Participants worked in pairs and each had a chance to pitch their story about their research area, taking into cognisance the tips provided, while the other recorded the process.

How to Handle a Radio Interview

Preparing for a radio interview requires:

- Researching the show, its host and the kind of audience it caters to.
- Preparing responses to questions received.
- Providing value to the audience, by sharing your knowledge.
- Being genuine.
- Thinking about the objective of the interview.

Practical Exercise

Two young scientists were interviewed by a science journalist, Lesego Masethe, from Mamelodi FM, Pretoria.

CONFERENCE CLOSURE (Mr Stanley Maphosa, ASSAf)

Mr Maphosa closed the conference by thanking all the speakers and participants, as well as the sponsors and organisers for their valuable contributions to ensuring the success of the event.

REFERENCES

Aidt, T.S. (2003). Economic Analysis of Corruption: A Survey. *Economic Journal*, 113, F633-F652.
http://dx.doi.org/10.1046/j.0013-0133.2003.00171.x

Broks, P. (2017). Science communication: Process, power and politics. *JCOM* 16 (04), C02.

Correspondent. (2017). South Africa in the grip of kleptocracy.

Devenish, G. (2014). Cadre deployment is akin to apartheid. *The Mercury* (Online), Available from http://www.iol.co.za/mercury/cadre-deployment-is-akin-to-apartheid- 1.1710932. (Accessed 11 April 2015).

Jarbandhan, D.B. (2017). Principles for public sector leadership in the Fourth Industrial Revolution: critical considerations. *Administratio Publica* Vol. 25(4): 60-76.

Jain, A.K. (2001) Corruption: A Review. *Journal of Economic Surveys*, 15, 71-121. http://dx.doi.org/10.1111/1467-6419.00133

Raga, K. and Taylor, D. (2007). Impact of accountability and ethics on public service delivery: A South African perspective. http://www.thepublicmanager.org

Annexure A: Acronyms

AI	Artificial intelligence
ASSAf	Academy of Science of South Africa
AU	African Union
BEE	Black economic empowerment
BRICS	Brazil, Russia, India, China and South Africa
CHE	Council for Higher Education
CREST	Centre for Research on Evaluation, Science and Technology
CSIR	Council for Scientific and Industrial Research
DHET	Department of Higher Education and Training
DOAJ	Directory of Open Access Journals
DRC	Democratic Republic of Congo
DST	Department of Science and Technology
HEI	Higher education institution
HIV	Human immunodeficiency virus
IPID	Independent Police Investigative Directorate
ISI	Institute for Scientific Information
ISS	Institute for Security Studies
IT	Information technology
LRC	Legal Resource Centre
MDGs	Millennium Development Goals
NDP	National Development Plan
NDPP	National Director of Public Prosecutions
NEMA	National Environmental Management Act
RFID	Radio-frequency identification

NGO	Non-governmental organisation
NHI	National Health Insurance
NPA	National Prosecuting Authority
NRF	National Research Foundation
NWU	North-West University
ODA	Overseas development assistance
OPEC	Organisation of the Petroleum Exporting Countries
OWSD SANC	Organisation for Women in Science in the Developing World South African National Chapter
PAIA	Promotion of Access to Information Act
PAJA	Promotion of Administrative Justice Act
PFMA	Public Finance Management Act
SAASTA	South African Agency for Science and Technology Advancement
SABC	South African Broadcasting Corporation
SADC	Southern African Development Community
SAJS	South African Journal of Science
SAMRC	South African Medical Research Council
SANC	South African National Chapter
SASSA	South African Social Security Agency
SAYAS	South African Young Academy of Science
SciELO SA	Scientific Electronic Library Online – South Africa
SCRP	State Capacity Research Project
SDG	Sustainable Development Goal
SOE	State-owned enterprise
SPP	Scholarly Publishing Programme
STI	Science, technology and innovation
TB	Tuberculosis
TUT	Tshwane University of Technology
UCT	University of Cape Town
UFH	University of Fort Hare

UKZN	University of KwaZulu-Natal
UL	University of Limpopo
UN	United Nations
UNDP	United Nations Development Programme
Unisa	University of South Africa
UP	University of Pretoria
WHO	World Health Organisation
WSU	Walter Sisulu University

Appendix B:
List of delegates

Title	Name	Institution
Ms	Caitlin Allen	UCT
Dr	Edwinah Apunda	OWSD-SANC
Prof	Olubukola Babalola	NWU & OWSD-SANC
Ms	Sindisiwe Buthelezi	Editor, Isivinini news and Ezakwazu-lu news & OWSD-SANC
Dr	Tendai Chiguware	UFH
Dr	Mzuyanda Christian	TUT
Dr	Ilesanmi Afolabi Daniyan	TUT
Prof	Roseanne Diab	ASSAf
Mr	Bongani Dlamini	University of Johannesburg & World Merit SA
Mr	Israel Ekenade	University of Venda
Mr	Michael Ellis	SAASTA
Miss	Robyn Foley	Stellenbosch University
Ms	Oregolele Gomolemo	UP & World Merit SA
Ms	Alice Ikuzwe	UP & OWSD SANC
Dr	Angela James	UKZN & OWSD SANC
Dr	Mapotso Kena	UL & OWSD SANC
Ms	Valery Nicoline Louw	Unisa
Ms	Janet Love	Legal Resources Centre
Mr	Andrew Enaifoghe	University of Zululand
Ms	Masha Magwale	World Merit SA
Ms	Makaziwe Makamba	CSIR
Mr	Musa Malabela	Chris Hani Institute

Title	Name	Institution
Ms	Marvin Mandiwana	ASSAf
Mr	Stanley Maphosa	ASSAf
Ms	Isabellah Maradzano	Karo Solutions & OWSDSANC
Ms	Lesego Masethe	MamelodiFM/SAASTA
Dr	Mantepu MaseTshaba	Unisa
Ms	Lucia Masilela	University of Johannesburg
Mrs	Matshidisho Mathebula	UL
Mr	Zamuxolo Matiwana	SAASTA
Dr	Sithembile Mbete	UP
Ms	Vuyolwethu Mbombela	WSU
Mr	Lucky Menoe	Corruption Watch
Mr	Milton Milaras	Unisa
Mr	Azola Mmangaliso	UFH
Ms	Sindiswa Mnwana	UFH
Ms	Ntshadi Mofokeng	Equal Education
Ms	Tebogo Moloi	University of the Free State & World Merit SA
Ms	Victoria Molokomme	UFH
Ms	Lerato Monguni	University of Johannesburg & World Merit SA
Ms	Thato Morokong	ASSAf
Mr	Odwa Mtembu	University of the Witwatersrand & World Merit SA
Miss	Sthembile Mthethwa	CSIR
Mr	Deprose Muchena	Amnesty International
Ms	Tatenda Musinahama	UP & World Merit SA
Ms	Charlene Muswaka	UFH
Mr	Garfield Ndlovu	UFH
Mr	Vongani Muhluri Nkuna	UL
Ms	Esther Oluwatoyin	TUT

Title	Name	Institution
Ms	Rejoyce Phetha	UKZN
Mr	Anton Pillay	Vaal University of Technology
A/Prof	Kanshukan Rajaratnam	UCT & SAYAS
Dr	Riaan Rifkin	UP
Ms	Shireen Said	Human Rights Lawyer
Dr	Elvin Shava	NWU
Ms	Edith Shikumo	ASSAf
Ms	Regina Sholeye	NWU
Mr	Pfunzo Sidogi	TUT
Mr	Zolani Sita	UFH
Prof	Himla Soodyall	National Health Laboratory Services & ASSAf
Mrs	Desre Stead	ASSAf
Ms	Elzarie Swanepoel	ASSAf & OWSD SANC
Ms	Xolile Carol Thani	Unisa
Ms	Amy Thornton	UCT
Ms	Lauren Tracey-Themba	ISS
Ms	Henriette Wagener	ASSAf
Judge	Zak Yacoob	Former Judge
Mrs	Anuradha Yacoob	

This Annual Young Scientists' Conference 2018 was supported by the following additional sponsors:
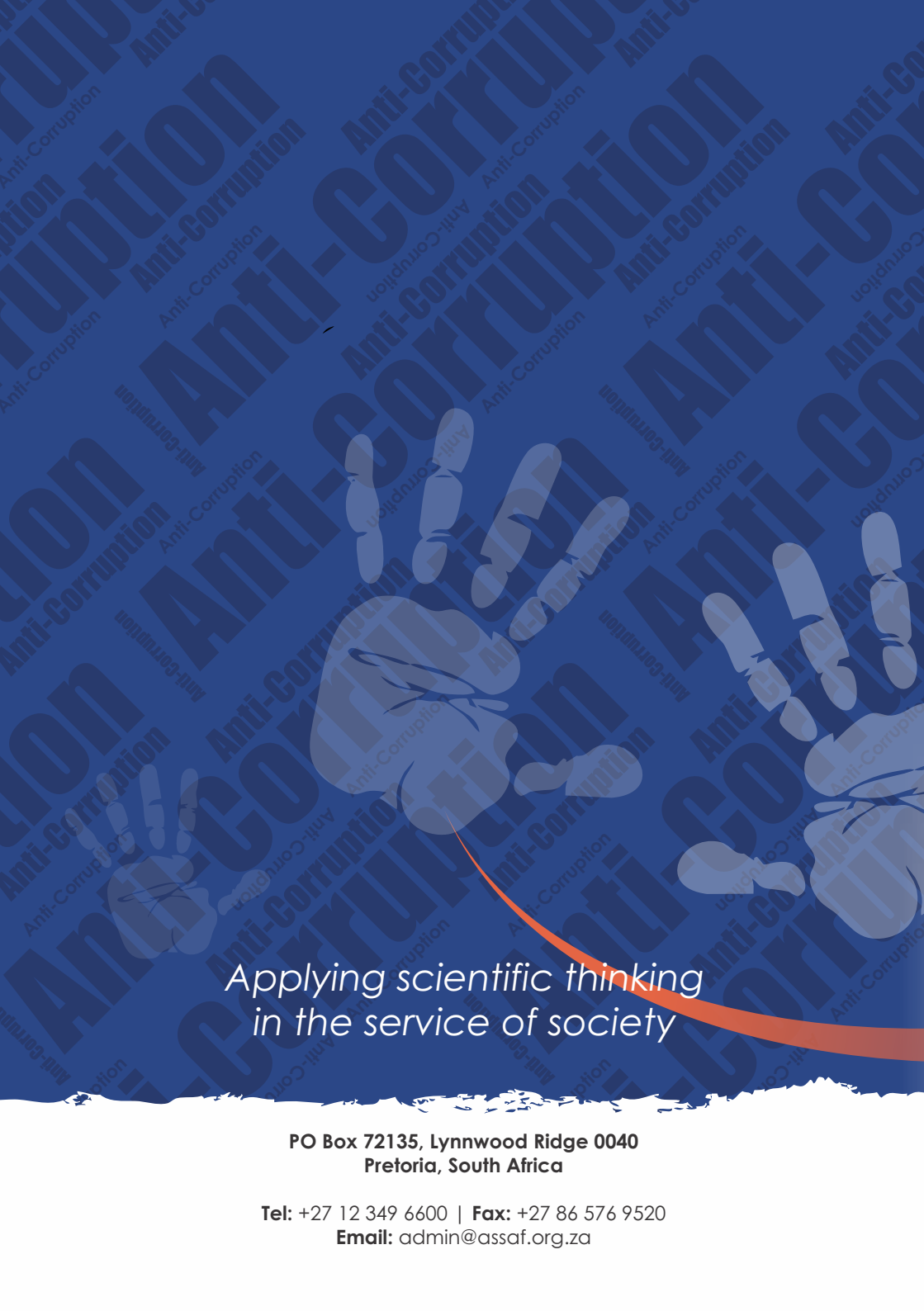
*Applying scientific thinking
in the service of society*

2019

Winning the Fight Against Corruption: A Trans-Disciplinary Approach

Academy of Science of South Africa (ASSAf)

Academy of Science of South Africa (ASSAf)