NATIONAL RESEARCH FOUNDATION
MANAGEMENT RESPONSE
TO THE REVIEW OF THE
DST-NRF Centre for Indigenous Knowledge Systems (CIKS)
As conducted from 11-14 September 2018

9 November 2018
1. **Introduction and Background**

The CIKS was established in 2013 and awarded to the University of KwaZulu-Natal (UKZN) as the host, with the Universities of Limpopo (UL), North West University (NWU), University of Venda (UNIVEN) and University of South Africa (UNISA) as partners, but it became fully functional in 2014. The review panel raised concerns regarding readiness and recommended that CIKS takes a developmental route as it had the potential to develop into a fully-fledged DST-NRF Centre of Excellence (CoE).

The development route (including the recommendations of the panel) was as follows:

- Funding the collaborative group of the five institutions (with identified IKS leadership) for up to five years.
- The Centre would not be known as a Centre of Excellence, but for branding purpose would simply be called the "DST-NRF Centre in IKS".
- The Centre would be managed the same way as the existing cohort of DST-NRF CoEs.
- It would operate and function on the basis of the five key performance areas of the standard CoE, i.e. Research, Education and Training, Information Brokerage, Networking, and Service Rendering.

The support for the CIKS is currently located in the Research Chairs and Centres of Excellence (RCCE) Domain of the NRF. CIKS has been funded at the level of R8 million per annum for the past five (5) years.

As the current term of funding for the CIKS by the DST-NRF comes to an end on the 31 March 2019, the NRF commissioned a review and assessed the performance of the CIKS, looking at the outputs, outcomes and impact of the CIKS over the five year funding period, with the intention of utilising these findings to inform a decision by NRF and DST around the future of the CIKS in terms of a potential upgrade to the CoE status, and to fine tune the future strategic direction and implement relevant recommendations of the review panel.
It has not been possible to conduct the proposed mock review as agreed between CIKS, DST and NRF, of which the latter was intended to assist the CIKS to prepare for the review. A primary challenge in terms of the mock review was the issue of timing between conducting a mock review and the actual review at the end of five years, and the concomitant effort to be invested by all parties concerned. However, a preparatory workshop on the review was conducted with the CIKS collaborating institutions in June 2018 at which representatives from the Centre of Excellence in Invasion Biology (C.I.B) and the Centre of Excellence in Strong Materials (CoE-SM) shared their experiences emanating from undergoing a review. The RCC CoE Team provided ongoing support to the CIKS during the process of preparing for the review.

Specifically, the terms of reference for the review captured the purpose as follows, namely to assess the:

i. Alignment of the proposed CoE with the research strategy of the host university and the co-host where applicable.

ii. Alignment of the proposed CoE with relevant national strategies e.g. the National Research and Development Strategy.

iii. Review the alignment of CIKS with the Indigenous Knowledge Systems Policy of the Republic of South Africa;

iv. Societal context of the proposed research area and relevance to the institutional mission and objectives.

v. Review the alignment of CIKS with the objectives of the CoE funding instrument;

vi. Review the governance of CIKS in terms of the requirements for the CoE funding instrument;

vii. Make recommendations for the future of CIKS in the context of the DST-NRF Centres of Excellence funding instrument. Such a decision will have to be informed and guided by the impact that this programme has in the indigenous knowledge sector and South Africa as a whole.

The evaluation was carried out at the location of the CIKS took place in Durban at the University of KwaZulu Natal from 11 - 14 September 2018 by A Review Panel consisting of four Panel members: Professor Kingo Mchombu – International University of Management, Namibia (Chairperson), Professor Kazhila C. Chinsembu – University of Namibia - Panel Member and Doctor Kay Raseroka, Joint Minds Consult,
Botswana. – Panel Member. In addition the panel was assisted by an Assessor (Professor Monde Ntwasa from University of South Africa) whose responsibility was to ensure that the assessment process is proper and fair, and the criteria are applied correctly and consistently within and across panels, where applicable. The latter addition to the reviews is a recent innovation. The standard secretarial and logistical support was provided through the Reviews and Evaluation Domain (RE) of the NRF before, during and post review and through having personnel accompanying the Review Panel, as well as by a scribe who assisted with the development of the Review Report.

The responsibilities of the reviewers were to:
- Familiarise themselves with the ToR and revise the programme where may be necessary to advance the achievement of the objective of the evaluation;
- Conduct the evaluation which includes:
  - Reading and interpreting the documents listed as “Essential reading” in the ToR;
  - Interviewing the stakeholders to source information that may assist them in their task of addressing the ToR;
  - Draft and finalise the Evaluation Report within two weeks of the completion of the on-site review.

The responsibility of the Chairperson of the Evaluation Panel was to:
- Facilitate the interview sessions in a manner that enables participation by all;
- Manage the activities of the evaluation panel such that they align to the ToR and Programme for the Evaluation;
- Drive the consolidation and production of the evaluation report;
- Deliver the report to RE by the agreed date; and
- Consider any factual inaccuracies in the evaluation report pointed out by RE, if applicable, and possibly amend the report.

The responsibility of CIKS, in the main was to prepare a Self-Evaluation Report (See Annexure B), provide on-site logistical support, checking factual accuracy of the evaluation report by the deadline given by RE; and compile and submit to RE, a management response to the final evaluation report (Annexure C).

The NRF has received and considered the Final Report of the review panel (Annexure D), as well as the Management Response of the CoE, and including the supporting documentation as provided to the Review Panel.
In complying with its responsibility to provide a Management Response to the Review Report, the NRF has focused in its responses on aspects directly relevant to its mandate.

2. Management Response

2.1 NRF comment on the extent to which the Review addressed the detailed requirements as outlined in the Terms of Reference (ToR) document

It is the view of the NRF that the panel comprised of individuals with relevant and adequate skills and expertise needed for this exercise. No conflict of interest was raised by the stakeholders regarding the panel. It is the view of the NRF that aspects of the Review as numerated in the scope of the ToRs were adequately addressed and that there were no factual inaccuracies in the findings presented in the Review Report.

From the findings of this review, it is evident and it is clear that CIKS has played a significant role to emergence of IKS in the last four years as a multi-discipline area of study and research and a potential contributor to the knowledge economies of South Africa and other African countries. The review revealed that CIKS has championed IKS-based research outputs in partner universities in South Africa and other African countries. As a knowledge broker and enabler, the CIKS has helped to create new alternative knowledge paradigm, tools, technologies and research frameworks have emerged as well as new innovations. The NRF acknowledges the finding that CIKS has empowered IKS to become recognized as a knowledge asset, filled with intellectual capital and social capital for IK holders, researchers, students and ordinary citizens to utilize and meaningfully contribute to the sustainable development initiatives indicated in the country’s Development Plan. The review reveal that CIKS is playing a crucial role in the transformation agenda of the country and has played a sterling role towards placing
communities at the centre of the process of commercializing indigenous knowledge, and the NRF acknowledges the finding and commend CIKS for being willing and committed in playing a role towards contributing to the National Agenda on transformation.

2.2 NRF responses and comments on reviewers’ comments and recommendations

The NRF has engaged with the reviewers’ comments and recommendations as captured in the Final Review Report. Where findings or concerns were captured throughout the various parts of the report, but were not listed in the recommendations, but which were considered by the NRF to be critical factors, these were also listed by the NRF in its Management Response.

Presented below are the Review comments, findings, and recommendations followed in each case by the NRF response and/or comments.
<table>
<thead>
<tr>
<th>Review Findings</th>
<th>NRF Response</th>
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<tr>
<td>The CIKS is playing a crucial role in the transformation agenda of the country and has played a sterling role towards placing communities at the centre of the process of commercializing indigenous knowledge.</td>
<td>The NRF acknowledges the finding and commend CIKS for being willing and committed in playing a role towards contributing to the National Agenda on transformation.</td>
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<tr>
<td><strong>3.1.1 Research</strong></td>
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<td>UKZN supports and hosts research activities of the CIKS. The CIKS is a signature project of the university and partner institutions. UKZN believes that IKS can make contributions in transformation of universities and create a new lens through which to view research and knowledge. CIKS is outstanding because it attempts to advance a paradigm shift towards the democratisation of knowledge systems and mitigation against western knowledge dominance in the global knowledge economy. CIKS is advancing IKS in the National Development Plan (NDP). One of its aims is knowledge retention/preservation and knowledge sharing by working closely with IK holders and practitioners.</td>
<td>The finding is noted with appreciation. As much as it is evident that CIKS has been successful in achieving the KPA of Research as it is supported by UKZN. The NRF wishes to emphasize that the CoEs are national entities and not an institutional entity. Therefore CIKS through UKZN as the host has the mandate to build capacity all over the country and build critical masses.</td>
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<td>Most of the research partner institutions are in rural areas where people still depend on indigenous medicine and where biodiversity and IK go hand in hand. CIKS has created a number of research platforms, such as: Sexual and reproductive health, interface of pharmaceutical and traditional medicine, recognition of prior learning, Integration of IK into mental health, food security, and hand-holding several IKS-focused research networks and partnerships.</td>
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<td><strong>3.1.2 Education and Training</strong></td>
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<td>CIKS is involved in IKS curriculum development and research, tackling the problem of a lack of critical mass of people who are conversant with IKS worldviews (ontology), ways of knowing (epistemologies), research methodologies and value systems (axiology). CIKS spearheaded the creation of undergraduate curricula (Bachelor in Indigenous Knowledge Systems, BIKS), Masters in Indigenous Knowledge Systems (MIKS), and doctoral research programmes in IKS. UL does not yet have</td>
<td>The finding is note with appreciation. It is the NRF view that CIKS partner universities are then located in the most strategic places where IKS still plays a significant role. The NRF acknowledges the platforms created by CIKS.</td>
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<tr>
<td></td>
<td>The NRF acknowledges the finding and commend CIKS for its involvement and taking lead on important issues and matters.</td>
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BIKS – has been discussed for more than 10 years but there are lots of political issues – those who should design the programme are not willing. CIKS aims to promote equity of gender, race and nationality in all CIKS mandated activities.

At UKZN, CIKS activities cross-pollinate into the university’s strategic vision and four research flagships, namely: African health, social cohesion, big data and informatics, and African cities for the future. One of the teething problems is the employability of IKS graduates. The teaching of IKS-based entrepreneurship could help solubilize this problem.

At the University of Limpopo (UL), as in many universities in South Africa, IKS is now being linked to the decolonization of the curriculum, anchored on the Afrocentric theory. At the UL, one PhD has successfully completed, looking a communicable diseases in public health; one PhD is currently working in participation of rural woman in climate change; and another completed PhD was on IKS and spirituality, healing practices of Shona people, and published several papers from this work. There have been several Masters students as well.

At UNISA, IKS research is carried out in units such as the Institute for African Renaissance Studies – mainstreaming IKS in research and community engagement, Institute of Academic Management, traditional medicinal plants projects, Institute for Health Sciences Management which studies traditions and masculinity, violence prevention, and community based research; Institute for Alternative Dispute Resolution working with Nama people and trying to codify indigenous dispute resolution mechanisms and traditional plants and how they can be utilised; Institute for S&T Education has worked on indigenous mathematics; and the Academy for African Languages. Research aims to highlight that traditional African knowledge is marginalised and thus must fight to regain its relevance and validity.

The NRF views this as one of the biggest achievements for CIKS. The CoEs are expected to do this and provide support and even take lead and initiate activities that will result in building critical masses. With respect to BIKS, it is the view of the NRF that the University of Limpopo should perhaps request NRF and DST intervention where they deem important for the establishment of this foundational/pipeline degree which in future will feed into a postgraduate degree. The NRF is grateful to be made aware in writing and through credible interviews with all the partner universities including University of Limpopo. However resolving political issues is beyond the mandate of CIKS, resorts with the relevant government departments (Especially DHET and DST) and the NRF.

The NRF acknowledges this finding regarding the problem with the employability of IKS graduates and acknowledges the suggested solution of IKS-based entrepreneurship.

The NRF acknowledges the finding and commends the University of Limpopo for ensuring integration of IKS into the university curriculum and for producing a number of postgraduate students in IKS and in IKS related and relevant degrees.

The finding is acknowledged.
NWU feeds into CIKS in key areas including health, cultural astronomy, law, environment, climate, biodiversity, and food security. At NWU, IKS is a flagship programme with various multidisciplinary research projects that bring together IK holders such as traditional healers, academics and students. Started with 20 students; of the first cohort, 12 of them graduated in the expected time and the other 8 graduated later. Researchers felt that the current NRF rating systems and processes does not adequately and fairly recognize IKS-based research outputs and publications. For example, some IKS publications are not recognised, and IKS researchers are not adequately recognised in NRF ratings. The problem seems to be structural, since the structure for IKS is still evolving, not because the NRF is unwilling or unfair in its ratings.

Notwithstanding the quarterly publication of *Indilinga*, there has been no new IKS journal formed by CIKS partner institutions; specifically dedicated to the publication of IKS research findings. UL is about to launch Calabash Journal of Indigenous Knowledge Systems – started as a spinoff of the activities of the Faculty of Humanities which resulted in output of publication series called Calabash. Noted that some universities are already allowing students to write their Masters’ theses in indigenous languages.

While NRF is pushing IKS as a transformation agenda, the role of IKS in decolonization may not be appealing to established institutions; in fact, such institutions may not be willing to partner with CIKS or a COE in IKS.

The slow uptake of IKS activities by other universities and institutions is a matter of great concern.

Research funding comes from DST, Freedom Park, National Heritage Council, DAFF, etc. It was revealed that new IKS vocabularies started in NWU Mafikeng campus and Prof Kaya brought this to UKZN; students are financed and assisted with their studies; CIKS has generous bursary for IKS studies; there is a rigorous process for the approval of research proposals which are considered by the scientific committee; and researchers have also been allocated funding in certain research themes.

There is an annual workshop with graduate students to present their research proposals to the CIKS Scientific Committee. Noted that CIKS has had tremendous research impact and productivity is high in terms of publications. CIKS has

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| The NRF acknowledges this finding and the concerns raised by the relevant and affected stakeholders and will respond after internal engagements and discussions. The NRF acknowledges that it is important that IKS be given recognition as a credible area of enquiry with credible outputs contributing towards the knowledge economy.  
NRF acknowledges the finding and commend University of Limpopo for such an initiative which eventually will supplement further distribution of the IKS research findings and knowledge generated.  
The NRF acknowledges the concerns raised in the matter and fully agree with the finding as some resistance has already been observed from some of the CoEs who were approached to partner with CIKS. However, the NRF wishes to challenge CIKS to attempt building critical masses also in other universities, especially the HDUs and not limiting to the partner universities.  
The NRF commend CIKS for transparent and rigorous processes to ensure fair and transparent distribution of funds to all involved and qualified. |
managed to get special editions for IKS in several journals including International Journal for African Renaissance Studies and Indilinga Journal. HSRC has also been generous in publishing IKS-based scholarly works. The South African Journal of Botany ethnobotany series is another platform for publication of IK of medicinal plants.

CIKS is working closely with DBE on how to integrate IKS in teaching science and technology at schools.

An important aspect is to make people aware that IKS is holistic (e.g. a person who produces a pot has a knowledge of physics and soil chemistry, a person who makes a basket has a knowledge of botany and environmental science, etc.). Language is essential in conceptualising IKS issues. Teachers of science and technology need to appreciate the importance of mother tongue instruction.

CIKS is engaged in a project to use visual arts to communicate IKS especially among those who do not like to read texts, is working on the concept of urban greening, integrating IKS in organic farming, and conducting research to integrate humanities into food security.

There is need to think in terms of trans-territorial knowledge systems and structures to strengthen epistemology and integration for Africa. During a physical tour of laboratories at UKZN, it was shown that IK-based research samples in the fields of human health including HIV/AIDS can be assayed using state-of-the-art laboratory facilities at the Nelson Mandela School of Medicine.

The evaluation panel conducted physical interviews with some postgraduate students and postdocs at the CIKS. They detailed various aspects of their research projects (intake of yellow maize vitamin A through indigenous chickens, traditional medicine, traditional birth attendants, law of land restitution, and conservation of birds). Some of the students are now using IKS-based afro-sensitivity conceptual frameworks. Others noted that modern systems of research were not working well because they were not quite adaptable, but introduction to IKS caused a paradigm shift, allowing them to think out of the box. It was revealed that there is an urgent need to nurture young researchers in IKS, and to provide feedback to local communities that provide IK. Much like the way movies acknowledge everyone who was involved, acknowledgement of sources of IK data is something CIKS will have to deal with and improve upon. While acknowledging the anonymity of research subjects, it was revealed that if sources of IK disappear when the thesis is completed, then IK is not verifiable; thus making the knowledge

The NRF acknowledges this finding and wishes to emphasise the importance of interacting with the Department of Basic Education especially on newly or developing areas of enquiry in order to build efficient pipeline.

The finding is noted with great appreciation.

The NRF commends CIKS for making effort in ensuring that IKS is visible as the relevant tool to address transformation agenda and receives recognition it deserves.

The finding is noted and CIKS is advised to look closely at the finding and consider it.

The NRF acknowledges the finding. The NRF commends CIKS for establishing and maintaining a good working relationship with traditional healers and knowledge holders and ensuring transfer of knowledge which is very important to transform the lives of people. This demonstrate capacity building to the traditional healers by CIKS. The NRF fully agrees with the finding that there is an urgent need to nurture young researchers in IKS, and to provide feedback to local communities that provide IK as
holders anecdotal when writing a thesis is not a reliable research. Some of IK holders might want to be cited but they have already signed away their rights through informed consent which ensures anonymity. The practice was condemned by the healers. During conversations with traditional healers, it was revealed that there was a good working relationship overall. Working with CIKS has not only increased their visibility but also understanding of the work of traditional healers. However, the lack of remuneration of traditional healers for their services is still a thorny issue.

IKS is a lifestyle: It addresses poverty, unemployment, and entrepreneurship. One of the resolutions of the recent Africa-Asia Conference is the establishment of a committee to review oral data from IK holder so that IK is peer-reviewed and acknowledged – this is now seen as a game-changer for IKS.

IKS is a new field and CIKS is influencing education policy and curriculum development so that IKS can play a broader role in development – this is novel. Making IKS a cross-cutting epistemological discourse not only in academia but also in relation to livelihoods and healthcare. One researcher based in Harare, Zimbabwe is working with CIKS through the Mandela Institute (Johannesburg) to develop a research initiative on African identity and Africanness.

It was disclosed that CIKS should become a separate campus with its own physical space, self-standing – not just in the corner of the UKZN. The role of IKS in local municipalities and local cultural and eco-tourism was highlighted.

some sort of return on investment since research is funded from public funds.

It is very important to decolonise the mind-set of the researchers in IKS who perceive people as some form of resource to collate information from them and use it for their research and publish papers without acknowledging these people as Knowledge Holders.

The NRF fully agree with this finding and suggestion.

The NRF acknowledges this finding and encourages CIKS to continue playing this role to influence the Education Policy and curriculum to incorporate the value of IKS in Education. The NRF sees a need of IKS to be incorporated or considered for incorporation to Basic Education including Healthcare with understanding the value and impact of medicinal plants. This means that the sphere in which CIKS needs to enter with intentions to influence and participate in is Basic Education, Tertiary Education, Health sector/healthcare and Human Development.
CIKS needs a forum to involve government and private sector as a way of spreading the word and strengthening issues around IKS – issues would be discussed and taken back to communities – such a forum would help government, communities and the CIKS itself.

The UN’s University for Peace in Addis Ababa has developed an African doctoral programme with funding to 56 PhD students working in 6 universities in Africa; many of their research projects are IKS-based, for example use of IKS in post-conflict resolution and jurisprudence. CIKS should help address issues of IP and MoUs.

CIKS has helped facilitate IKS workshops and student/staff exchanges between African and Germany universities. The works of Prof. Asante and CIKS are important in promoting IKS and Africology; to place African IK at the top of the global knowledge system.

One researcher at UKZN has successfully graduated three students working on joint projects with CIKS; two are working on preserving meat, based on the premise that in most poor communities there is no electricity yet communities have ways of keeping meat fresh; SPCA prescribes the way animals are slaughtered – they must not feel any pain – but in traditional culture the animal is believed to be communicating with the ancestors when it feels pain – this is an area of IKS research.

3.1.3 Information Brokerage:

The NRF acknowledges this finding, but wishes to express that UKZN is only the Hub for CIKS and is expected to collaborate and extend its work and influence, but locally, nationally, regionally, continentally and internationally. The extent to which CIKS performs the latter should then speak to its success of extending beyond its geographical location. CIKS has capacity and necessary expertise to influence the space of local municipalities and local cultural and eco-tourism.

The NRF fully acknowledge this finding and supports it for the benefit of the public.

The NRF acknowledges this finding and would look to CIKS to identify relevant expertise to address issues of IP and MoUs.

The NRF supports and encourage initiatives and efforts to promote IKS for the benefit of society.

The NRF is in full support of the finding in which the mentioned initiative is important in terms of enhancing approaches, strategies and knowledge to help communities to excel on things which help them and alleviate those issues and matters/problems that are affecting them. However, the NRF wishes to remind the IKS community of the importance and need to consider and even adhering to research ethics and protection of animals from cruelty.
CIKS has become a one-stop shop for knowledge production, innovation, human
capital development, knowledge brokerage, networking and community
engagement.

Establishment of IKS Special Publications to enhance IKS knowledge production
and visibility: published four special issues publications across its research focus
areas.

Development of new CIKS flagship areas: Indigenous Mathematics; IKS-based
Early Childhood Development; IKS-based Sexual and Reproductive Healthcare;
Indigenous Climate Science; IKS-based Mental health; IKS in Bioethics for Public
Healthcare. The Centre is also working on the concept of urban greening by
integrating IKS into organic farming. In addition, the protection of biodiversity is an
important part of the research agenda of the CIKS.

Many plants are used for medicinal practitioners but this knowledge is often orally
transmitted from elders to younger people and the knowledge is often lost when
the elders pass away.

CIKS needs to create awareness among researchers, government departments,
and international agencies that IKS often belongs to a community and hence an
individual cannot get copyright or a patent for such knowledge.

IK is disappearing as most IK holders are elderly and are dying out. IK used to be
shared around the fireplace and transferred to the younger generation by elders,
but with family breakdown and urbanisation this is no longer possible. There is
therefore need to record the knowledge while the IK holders are still alive.

CIKS has managed to develop its own communication strategies and channels
(newsletter, website, twitter, etc.) for sharing knowledge. The Centre is also
engaged in a project to introduce visual arts to communicate IKS especially for
those who do not like to read text. The CIKS is working with partners to establish
an online platform where the public can access documentation on local indigenous
knowledge. It was noted that CIKS has had a big impact when it comes to
information production and brokerage and the Centre has got special editions of

| The NRF acknowledge the finding. |
| The NRF acknowledge the finding. |
| It is the NRF view that the finding and suggestion with enhance CIKS for
  self-sustainability as extra or addition streams of income would be sought. |
| The NRF acknowledges the finding and encourages the documentation of
  indigenous knowledge for sustainability of knowledge. |
| The NRF notes this finding. |
| The NRF is in full support to the recording and documentation of important
  Indigenous Knowledge. |
IKS into various journals (including *Indilinga, International Journal for Renaissance Studies*, and several publications by the HSRC etc.) In some cases individual researchers have had to publish in other journals with more general criteria for journal articles.

The need to publish in local languages was seen as essential to do justice to IKS which is often contained in local languages rather than one of the dominant foreign languages. The conversation identified issues of how the benefits from the IK are to be shared, given that often the IK is communal knowledge where custodians of the knowledge are community leaders.

CIKS is working closely with DBE on integrating IKS in teaching science and technology at schools which creates awareness of the value of IKS from an early age.

In order to strengthen IKS the need for information brokerage and networking was identified as essential and to engage with existing systems.

IKS was viewed as an ancient knowledge system but relatively new in academia hence the need to nurture its growth was seen as important because of the lack of a ready market and system for dissemination of new research outputs through established publications still controlled by individuals who believe only in the dominant knowledge system.

A major complaint was registered from traditional doctors/healers who said most of the time they are treated as volunteers and work for nothing without any compensation for their services. However, one of the IKS practitioners (Me Masuku) was awarded the Vice Chancellor Award during a Conference held at North-West University.

The Khoi San and other Khoi groups (eg. The Nama people) were not represented during the conversations and it would be good to bring them on board because of their rich IKS heritage.

### 3.1.4 Networking

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<tr>
<th><strong>The NRF commends and encourages CIKS to continue with this effort.</strong></th>
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<tr>
<td><strong>The NRF fully supports the finding and encourages knowledge transfer especially to the local language or language understood by the local communities with intentions to promote knowledge transfer for the benefit of the society.</strong></td>
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<tr>
<td><strong>The NRF notes this area which requires attention by CIKS.</strong></td>
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<tr>
<td><strong>There is a need to nurture IKS in the academia as the relatively new aspect to education and basic research. It is important to device strategies and approaches how to market it in the modern system of dissemination of research findings/outputs and knowledge.</strong></td>
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<tr>
<td><strong>It is important to recognise and award the Knowledge Holders and Traditional Healers in one way or the other and few of the ways is to acknowledge and list them as the co-authors. It is important to involve</strong></td>
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The DST-NRF Centre (CIKS) is a partnership of five (5) Universities in South Africa, namely: University of KwaZulu Natal which is the hub, North-West University, UNISA, University of Venda and University of Limpopo. The project inception thus recognized the importance of having a network of institutions working together to achieve the goals of the CIKS. The Centre is expected to actively collaborate with reputable individuals, groups and institutions. Equally, the Centre has negotiated a wide range in a bid to realize national, regional, continental and international partnerships, etc.

The CIKS has since its inception recognized that the multi, inter, trans-disciplinary nature of IKS requires the support of teams of intellectually and professionally capable national and international IKS scholars and researchers to enhance its excellence and involvement of community IK-holders and practitioners for community relevance. These play an active role in CIKS governance, and its mandated activities as research supervisors, examiners, reviewers and editors. These CIKS composite national and international teams have been able to integrate and contribute towards the successful progress of the Centre to its current status.

The CIKS has been involved in conferences in many countries to ensure it is visible and has impact, for example, conference was held in Zambia, Germany, Rwanda, Namibia, Ethiopia, Uganda, Rwanda, France etc. Likewise, it was reported that institutions in Lithuania want to partner with CIKS to bring IKS holders and practitioners into their laboratories to ensure a wider audience in the creation of marketing platforms including online marketing.

Building a Pan-African IKS network of researchers, supervisors, examiners, reviewers through establishment of various research platforms, conferences, workshops, and colloquia.

3.1. Service rendering:

CIKS has become a strategic tool in social transformation within and outside South Africa in its advancement of a paradigm shift in indigenous knowledge production and its management.

them as the partners in the research than to perceive them as some sort of resource.

This suggestion or recommendation is acknowledged as the involvement of all tribes/cultures is important.

The NRF notes the finding.

The finding is acknowledged and CIKS is commended.

Internationalisation of SA initiative through interventions or promotions is very key and is encouraged. Furthermore, introducing Knowledge Holders/Traditional Healers to modern technology is advised and is deemed as an initiative and effort to knowledge transfer and capacity development.
CIKS researchers’ are actively involved in advisory capacity in public and private sector management and editorial boards. This has increased its networks, research productivity and communication channels.

The CIKS should seek to raise its own resources and become a fully-fledged Campus on its own and run its programmes within the University with more autonomy, its own physical space and seek appropriate integration of IKS with the Western system of knowledge.

CIKS has played an active role in the reformulation of policies of health care—specifically primary health care—which is reviewing how to strengthen the health care system which includes use of traditional healers who are often the first point of contact for many poor rural people. One traditional healer has opened a hospital in KZN with his own resources but faces difficulties in his relationship with the Department of Health which is HPCSA which is based on the dominant western knowledge paradigm.

CIKS has worked closely with provincial department of Economic Development to promote economic development eg. Tourism industry in KZN which is one of the few provinces with an IKS strategy. Commercialization of IKS services and products provides business and industry with opportunities to develop unique products that will strategically position national sectors in the global economy. This will lead to improved community livelihood in terms of income generation and employment creation. Examples are: (i) The Department of Pharmacy, University of Limpopo, which has patented a chewable gum composition based on plant extracts as drug delivery systems for the treatment of sores and other oral infectious diseases; (ii) the integration of IKS into urban organic farming value chain for income generation, job creation and urban greening in partnership with the Ethekwini Municipality, Greencamp Gallery and Institute of Organic Agriculture (FiBL) in Switzerland; Dr Mabena who is a traditional healer with extensive

The NRF acknowledges the finding.

The NRF is fully supporting the finding as it is evidently proven through this exercise.

The NRF is acknowledging and commending CIKS to meet this KPA.

CIKS can raise its own resources for its own self sustainability even within the ambit of the host university being UKZN and capitalise on the fact that it is co-hosted by HDIs and use the branding of DST and NRF to leverage extra funding.

It is the NRF view that there is a need to decolonise the mentality that IKS has no significant role, but use the advantage of IKS to influence and assist the people in poor rural areas to have fate and confidence to IKS and capitalise on the existing knowledge to better their lives. CIKS is advised to consider the need to partner with the traditional healer to advance the use of his initiative of the hospital. Department of Health is also advised to intervene and see how fit to assist and enhance the use of this already existing hospital which is believed to be located in the mist of the rural areas. This would benefit the local communities in this area. The panel is requested to identify the location of this hospital and submit its recommendations.

The NRF would like to advise CIKS to assist in the establishment or initiative of the same effort to other provinces to enhance the impact of CIKS nationally and even continentally and internationally. CIKS as the
knowledge of medicinal plants was given 10 ha, to cultivate medicinal plants in Mamelodi, Pretoria. He has received national honours in China, India and Germany. He also has a mini lab which is often used by visiting students to learn from him. Traditional healers work over time and spend a lot of time in meetings for CIKS and have to return home without any form of compensation. They often have to travel and spend their money along the way and only transport and accommodation are paid for so they actually over spend as they often have to eat and by a drink on the way. Some form of subsistence allowance would allow them to cover their basic costs.

The CIKS Professor has proposed the idea of a national IKS Policy and it is under consideration by various organs in the country.

3.1.6 Management of the Centre:

The UKZN has provided a conducive environment for the CIKS to flourish and grow. The UKZN is the only university with an IKS Policy in which all the colleges of the University are required to have an IKS component in their academic and research undertakings. The Strategic Plan of the University also has a robust IKS component.

A reputable Steering Committee serves as an advisory board providing strategic direction and good governance to ensure the Centre’s alignment with its strategic focus areas of research and human capital development. It has a 60% national and 40% international composition. The CIKS has constituted a multi and trans-disciplinary Scientific Committee composed of researchers, IK-holders and practitioners from within and outside South Africa. These assist the CIKS to drive its research and scientific agenda in its thematic areas based on their expertise and knowledge. Some of the members assist the CIKS in postgraduate research supervision and as reviewers of IKS research outputs for research publications.

The management of the CIKS is under the Director, who is assisted by a research manager, a senior administrative officer (finance), a PA to the director and various committees under this structure has managed to provide strong Organisation framework at the Centre and much has been accomplished. There is strong leadership of the Centre under the Director who has international standing reputation in IKS with numerous publications, a strong research record, and

national entity is advised to explore this initiative to other municipalities for the benefit of society.

It is the view of the NRF that is a need to honour and recognise initiative similar to those of Dr Mabena.

Regarding the S&T of traditional healers attending CIKS activities, the centre is advised to look at tapping to funds allocated for travel and conferences.

It is advisable that the SA government consider looking closely to this effort and see how to invest with intentions to benefit the SA public than only private sector.

The finding is noted.

The NRF notes the finding and commends UKZN.

CIKS is advised to consider partnering with other universities outside of the consortium to build research capacity and human resource capacity development to build on institutional capacity especially new Higher Education Universities like Sol Plaatje university and the University of Mpumalanga. The NRF is in full support on this finding.
Teaching at both undergraduate and post graduate level has achieved a tremendous amount almost impossible to contemplate under such a relatively short time of four (4) years. He is highly regarded by all his network partners, stakeholders and steering committee members as well as the UKZN leadership.

Provision of National and International Internship Service Programmes on a fee basis in CIKS focus areas. This initiative has been launched in collaboration with Université Paris-

**Institutional commitment in the model of the CoE**

1. Contribute their institutional financial commitments (2% of NRF baseline funding);

2. Play an active role in the activities related to the CIKS mandated areas. This includes collaborative research project initiation, proposal development, postgraduate student supervision and examination, networking and partnerships, commissioned research, community engagement, knowledge brokerage

Ensure effective financial sustainability through:
- IKS researchers receiving salaries from the respective partner institutions;
- Provision of administrative and infrastructural facilities for the Secretariat, researchers, postgraduate students and visiting scholars;
- Provision of research facilities, including access to research equipment, information communication equipment, and library;
- Leveraging of third stream income through national and international grants awarded to IKS researchers;

The NRF has a designated programme on internship programme and CIKS can benefit from this programme.

It is the view of the NRF that after several attempts and interventions attempting to address this matter, the DST-NRF has to take a drastic decision with all the partner institutions who haven’t honoured their dues but still benefiting on the funding of CIKS. The partner institutions entered into a legal commitment of 2% and this should be adhered to in order to benefit from the total funding of CIKS.

From the number of steering committee meetings and deliberations, it is evident that there are no synergies regarding collaborative research projects between the partner institutions and this is a serious concern for growth and development of the CIKS.
• Commissioned research for public and private organisations;

• Subsidies for IKS research publications and completed Masters and Doctoral postgraduates;

• Conference registration fees;

• Travel and exchange grants through collaborative partnerships with institutions within and outside South Africa; UKZN as the host institution provides financial support towards long term sustainability through international collaborations and multi-stakeholder project development

The CIKS has a robust resource mobilization strategy in place and has been able to raise over 27mi Rand so far from infrastructure (R5 m) commissioned research, national and international conferences (R500,000), publications (R 1.5m), research and human development grants (R20 mi.) as well as institutional commitments (R450,000). The CIKS relies for funding on both the DST and NRF for base funding, but universities make contributions and partner universities also make their contributions but lately because of financial constraints not all they have not been able to honour their commitment. The CIKS operates as a Consortium and each member should make a contribution of R160, 000 annually to the operations of the Centre.

4.1 Status of a CoE

Given the resources at its disposal, the CIKS has performed quite well in the areas of research/knowledge production, education and training, information brokerage and networking and service rendering. Indeed, the Review Panel concludes CIKS has a significant contribution to the emergence of IKS as a niche knowledge enterprise area. CIKS and the collaborating institutions, including DIT and NRF, deserve commendation for this historical accomplishment as they have become the benchmark for other developing countries.

It is the NRF view that the respective institutions should take full responsibilities of their full time employed researchers and not the CIKS.

CIKS can only take care of travel and accommodation of the visiting scholars and exchange students, but the sustainability and sustenance of the people should be taken care of the hosting institution of these visitors.

It is the view of the NRF that the host university and the partnering institutions who are forming CIKS, should make their infrastructure and facilities available to all stakeholders.

This is important especially to those researchers who are receiving salaries from the CIKS. The centre is expected to

The NRF supports this initiative and suggestion as it is one of the means and efforts to leverage funds.

The NRF should raise this with the DHET for the subsidy of all the publications related to IKS.

The NRF commends CIKS for such achievements.

With respect to institutional commitment, the NRF is much concerned with the other institutions that have not honoured their dues.
### Recommendation:

Given the above, the Review Panel therefore recommends that the CIKS be granted the status and recognition of a Centre of Excellence to continue consolidating and building on and broadening the scope of the results achieved so far.

### 4.2 Resource Mobilization

The CIKS has put in place a sound resource mobilization strategy. However given the need to expand the scope of operations in order to address the transformation agenda adequately and shift the dominant paradigm of the western system of knowledge there is a lot more the CIKS is capable of doing. We commend the CIKS and its staff for demonstrating the ability to do so much with limited resources at their disposal.

**Recommendation:**

The Review Panel thus recommends that the provision of resources and funding instruments (human, financial and material) be reviewed and boosted in order for CIKS to be able to meet its mandate and expand its scope to accelerate the developmental agenda of transformation in the country and Africa as a whole and to contribute to the knowledge economy more significantly.

### 4.3 Institutionalization and consolidation of IKS

The Panel noted that CIKS has undertaken tremendous human resource development programmes at undergraduate, postgraduate and postdoctoral levels thereby deepening and broadening research capacity in IKS in in South Africa and Africa as a whole. Also noted were ongoing efforts towards the accreditation and certification of IK-holders and practitioners as co-producers of knowledge through recognition of prior learning. We commend CIKS for this achievement, often accomplished in an environment of resistance and hostility in some of the universities which are dominated by a majority who wish to maintain the dominance of one system of knowledge paradigm over any alternative IKS system as an emergent knowledge system. We further commend the international partnership which has/have been able to validate and demonstrate the value of IKS beyond the borders of South Africa and indeed beyond the borders of the African continent.

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**The NRF takes cognisance of the findings.**

**Based on the findings in this review, it is evident that CIKS has met most of the requirements of the CoE model. The NRF acknowledges the recommendation.**

**The comment is noted and the NRF acknowledges that since inception CIKS has never received and increase in their funding, but have nevertheless achieved many accomplishments.**

**The recommendation is acknowledged.**
**Recommendation:**

The Panel recommends the gradual institutionalization of IKS at all higher education institutions through the introduction of awareness raising modules/programme, curriculum development efforts, and inserting an IKS component into university research agenda across disciplines as a strategy for building a critical mass of human capital to support the transformation agenda and decolonization of education institutions in South Africa.

### 4.4 Making IKS part of the Knowledge Economy

The Review Panel noted how the commercialization of IKS services and products provides opportunities for business and industry with opportunities to develop unique products that will strategically position national sectors in the global economy. Indeed this concept links up well with innovation value chains and creating platforms for community livelihood and sustainable economic development particularly during these times of climate change and global warming. We noted also that steps to involve the youth at all levels are being taken and this is commendable to create opportunities for this demographic group.

**Recommendation:**

The Review Panel recommends that CIKS continue with the commercialization and benefit sharing from IKS based innovation value chains as one way of demonstrating the value and relevance of IKS to society and garnering support from all quarters for the continued development of this emergent Indigenous Knowledge System and also creating platforms for long term sustainable development.

### 4.5 Empowering Research, Education and Training

The CIKS and its partners have generated or helped to generate and develop new knowledge, technologies, tools, paradigms and initiatives that value and use IKS as an important intellectual asset and social capital of local communities; The CIKS has undertaken many educational and training programmes (human resource development) at undergraduate, postgraduate and postdoctoral levels thereby deepening and broadening research capacity in IKS; and

The NRF commend CIKS for such achievements and continuous effort to support IK-holders in building capacity.

The NRF acknowledges the finding.
There is need to enrich and strengthen the mandate and sustainability of the present CIKS.

**Recommendation:**
In order for the CIKS to continue empowering research, education and training in the field of IKS, the CIKS should be elevated to the status of COE.

5. CONCLUSIONS

CIKS has gone beyond what it was originally set up to accomplish when it was only associated with the social sciences and humanities but now it has taken a multidisciplinary approach and has many projects in the natural sciences including health sciences, climate change, mathematics, biological sciences, animal health etc. Given that CIKS has only been in existence for four (4) years, it has done extremely well to consolidate the systematic study of IKS which is paradoxically an ancient knowledge system but also a young academic discipline for study and research. The status of the CIKS as a developmental Centre has achieved its goal and may now act as a constraint if it is not given a broader scope and mandate. Financial, human and material resource mobilization may require to be addressed afresh after demonstrating what can be accomplished in this emergent area of a new knowledge paradigm as part of the transformation and decolonisation agenda. The Key recommendation is 3.1 to upgrade the CIKS to a CoE. However despite the five (5) recommendations, it is important to note the Review Panel acknowledges the high performance of the CIKS commends the support of strategic partners. We note that further progress can be achieved and in order for the momentum not to be lost, the status of the Centre should be upgraded without losing on its uniqueness in terms of location, set up and the unique way it has conducted business which may go beyond a traditional CoE. The Review Panel thanks the DST and NRF for the opportunity be part of this exercise. We have enjoyed the experience and have learnt some useful things along the way to buttress our own experience. We wish the DST, NRF and indeed the CIKS every success in the future.

The NRF receives the recommendation as it would benefit the IKS community and the country as the whole as this demonstrates the value and relevance of IKS to society.

The NRF notes this finding.

The NRF commends the CIKS for its hard work and significant achievements as evidenced through this recommendation.

The NRF acknowledges the overall positive conclusions of the review panel.
3. Conclusion

The NRF first and foremost acknowledges that the review panel has recommended CIKS to be awarded CoE fully fledged status based on the findings on the achievements made by CIKS. The NRF will engage with all the recommendations made by the panel and urges the CIKS to action the concerns raised including the lack of commitment from other partner institutions and honouring the dues. It is the view of the NRF that there is a need for CIKS to consider all the things raised which may strengthen CIKS role in the IKS sector and may provide a platform for CIKS to be the main player in the betterment of IKS as the new area of enquiry. The administration of all the CoEs is very important and needs greater transparency to how funds are allocated and why some proposals are not funded. From this report, it is very evident that there is a somehow a lack of collaboration among some key institutions in the field. Furthermore, the NRF continues to encourage the CoE to leverage funding.

The NRF thanks the DST for having supported the initiative to commission the Review of the Centre in Indigenous Knowledge Systems, and for having appropriately involved the NRF in driving the process. The NRF thanks all participants of the Review for the participation and inputs and for their willingness to contribute their time and effort to facilitate a successful outcome to the CIKS Review.

The NRF would further like to express gratitude to the Universities of KwaZulu-Natal, Limpopo, Venda, North West and South Africa for willingness to participate in the review and being corporate with the review panel to provide them with necessary and critical information needed for the success of this review. The NRF further commends these institutions such sterling work done through the CIKS.

The NRF is generally pleased with the findings and recommendations. The NRF looks forward to working with the DST and other key stakeholders in addressing the weaknesses and gaps, in the context of the decision on the way forward for CIKS.

The NRF wishes to noted that the future of the CIKS as from 2019/20 is depended on the DST and will communicate the outcome of the review with the DST as a matter of urgency given the fact that the 2018 grant year was the final grant year of the five year funding cycle.

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