## Integration of African Indigenous Knowledge Systems into Higher Education in South Africa: Prospects and Challenges

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#### Abstract

The paper uses secondary sources and the experiences of two higher educational institutions in South Africa to interrogate the challenges and prospects of integrating African Indigenous Knowledge Systems (AIKS) into higher education. The community-based nature of AIKS enables graduates to appreciate the role of culture in education and to be sensitive to the developmental challenges of local communities. The interrogation reveals the challenges of inadequate AIKS qualified staff, reference materials and limited institutional management support due to lack of knowledge and awareness on the importance of AIKS in the modern world. There is also lack of a conceptual framework to provide a clear African perspective and understanding of the concept 'knowledge'. This could have provided a guide for developing methodologies of integrating AIKS into higher education. However, in spite of these limitations, there is currently an increasing knowledge and awareness among different stakeholders on the role of AIKS in sustainable livelihood and development. This works in the advantage of IKS graduates in terms of job opportunities and promotion of an Africa-led globalization.

**Keywords**: African Indigenous Knowledge Systems, Higher Education, community engagement, relevance

### Introduction

At a conference on the future development of higher education in postindependence East Africa, held at Makerere University in Kampala in 1966, the late and former President of the United Republic of Tanzania, Mwalimu Julius Nyerere, then Chancellor of the University of Dar es Salaam, Tanzania, advocated two principles to guide the future of higher education in postindependence East Africa, namely; 'relevance and excellence', in that order of priority. According to him, should there be a conflict between the two, he would rather go for relevance. In his opinion, what is excellent is not necessarily good, if it is not relevant. The concern was on the role and relevance of higher education in the developmental goals and national identity of a developing country characterized by poverty and social inequalities. The issue was whether such a country can afford pure academics emphasized by the western philosophy of intellectual concentration, i.e. to be scholarly and scientific involves freedom from external interference, especially from political demands and community engagements. This paper makes a critical interrogation of the role of African indigenous knowledge systems and ways of knowing in promoting the relevance of higher education in Africa and South Africa in particular.

In the context of this discussion, the concept African Indigenous Knowledge Systems (AIKS) refer to the long standing traditions and practices of cultural specific local communities. This encompasses the skills, innovations, wisdom, teachings, experiences, beliefs, language and insights of the people, produced, and accumulated over years and applied to maintain or improve their livelihood. AIKS form the basis of the community's decision-making in agriculture, health, natural resource management, conflict resolution, governance and leadership, and other livelihood activities. These bodies of knowledge are developed and adapted continuously to gradually changing circumstances and orally passed on from generation to generation and closely interwoven with people's cultural values. Some forms of AIKS such as experiences, wisdom, beliefs, etc. are expressed through stories, legends, proverbs, folklores, rituals, songs, etc. (Cuthbert 2007).

The South African National IKS Policy (2004) has identified the promotion of IKS in higher education as a key component of human capital and transformation dimension of higher education to meet the developmental

challenges of the country. The holistic nature of AIKS is recognized by the New Partnership for Africa's Development (NEPAD) Agency as an important strategy for tackling the challenges of sustainable development in Africa. South African academic and research institutions in line with the aspirations of the National IKS Office (2004) and the New Partnership for Africa's Development (NEPAD) are increasingly taking initiatives to integrate AIKS into their core businesses, i.e. research, teaching, learning and community engagement. The objective is to make higher education more relevant to the developmental challenges of the country and contribute to an Africa-led globalization using African ways of knowing and knowledge production. However, the process faces a number of contestations which are discussed in detail in the following sections.

## The Contestations on African Indigenous Knowledge Systems in Higher Education

The need for a critical analysis of the role of AIKS in promoting the relevance of higher education in Africa and South Africa in particular is based on the argument that although the use of what is considered to be indigenous knowledge in Africa goes back to the history of humankind in the continent, its promotion in the formal education system, especially higher education is a recent phenomenon. It has only gained conceptual significance as a subject of discussion in the last past two decade or so (Horschemke 2013). In the context of higher educational transformation inherited from colonialism and apartheid in South Africa, there are certain questions which need to be critically interrogated, i.e. what does African indigenous know-ledge as a concept mean? What are its objectives with regard to making the higher educational system in South Africa and Africa in general more relevant to community and national challenges, especially poverty eradication?

These considerations arise due to a number of factors which need to be clarified to assist the conceptual and methodological integration of AIKS into higher education. These include: First, there has been various definitions of the concept 'indigenous knowledge' as applied to a variety of livelihood situations in South Africa such as i.e. food security, environment conservation, health, natural resource management, conflict transformation, education, governance, etc. Second, in the context of promoting AIKS for sustainable

livelihood, it has generally been propagated to incorporate non-western beliefs, practices, customs, worldviews, including informal forms of education. For instance, in the works of scholars such as Odora-Hoppers (2002); Hountondji (2002); and Semali (1999), it has been contrasted with global dominant knowledge systems produced in research and academic institutions.

However, the critique levelled against the above Afro-centric conceptualization of what constitutes African indigenous knowledge is that there has been limited effort among the African scholars who promote these knowledge systems to provide their own clear definition and understanding of the concept 'knowledge' based on Africa' own history of ideas and intellectual development. This could have provided an indigenous theoretical framework for developing methodologies of incorporating African ways of knowing and knowledge production into the post-colonial education system, especially higher education (Silvester 2007).

The response to this criticism is that it portrays western cultural and intellectual arrogance including a lack of understanding of the holistic nature AIKS. It perceives AIKS as mere repetition of practices without any conceptual framework to explain those practices. For example, an African traditional healer who has over years been able to help her/his local community to cure a particular disease using specific local herbs, must also have the knowledge and theory of the plant species she/he uses (Nkondo 2012).

Moreover, the limitations of western knowledge systems in understanding AIKS and knowledge production are illustrated by Johnston, (2009) who states that there are no better examples of explaining the disjunction between western higher education and public perception of relevant knowledge in African traditional societies than its teaching of psychology. She argues that the teaching of psychology in African higher education has been predominantly Eurocentric, i.e. it derives its insights from a Western, middle class value system that tends to marginalize the concerns of other social groups, especially the poor. Kimwaga (2009) adds that Eurocentricism in psychology has little understanding on the role African indigenous cultures and languages play in the counselling process. Michael, (2008) argues further that if the teaching of psychology in African higher education is wholly North American, the field of social theory is wholly Eurocentric. It is entrenched in the methods, concerns, beliefs and experiences of the 18th and 19th Century Western Europe. This makes it

socially and culturally inappropriate for African conditions and developmental concerns (Sadiki 2009).

The paper also raises the concern that on the basis of the above discussion higher educational institutions in Africa have reduced themselves to copying the intellectual output of the western social and educational thinkers including the approach to selection of research problems, methodologies and research priorities. There is little attention given to African indigenous literary and philosophical traditions. They tend to be neglected and viewed as not proper sources for social and educational thought. This is accompanied by the inability of African scientists to generate their own indigenous theories and methods while working in their research fields. This is attributed to lack of confidence and hence the tendency to adopt and apply western models or theoretical frameworks uncritically in African cultural settings which render them irrelevant. They tend to produce essentialist constructions of African societies, thus 'confirming' that they are the opposite of what Western Europe represented and for this reason can be labeled 'barbaric' and 'irrational' (Muya 2008; Weisheit 2007). This has made African higher education distant from community developmental challenges.

It is on the basis of this concern that the paper interrogates the various western perceptions leveled against the integration of AIKS into African higher education:

(i) It is against the view that AIKS lack universal usage because of their localized and community-based nature. This is a simplistic view of the nature of knowledge production and use because all knowledge systems are initially created and utilized locally, but with a potential to be used universally. Latour (1993) argues that all knowledge is local but becomes universal through processes of conquest and colonialism. Some knowledge systems due to historical power relations have become more dominant than others hence perceived to be universal. Therefore, Africans need to acknowledge that their indigenous processes of knowing and knowledge production may not only enhance and sustain them as a people, but could also contribute to global pool of knowledge in the search for sustainable solutions to global challenges such as climate change, HIV/AIDS, etc.). This

implies that Africa cannot be excluded from global influences; neither should Africa be guided only by her past because no civilization (culturally) can manage to develop and prosper in isolation from the 'others' (Vilakazi 1999).

- (ii) The paper refutes the Eurocentric view that Africa was a *tabula rasa* before colonization, i.e. it is a continent with no history of civilization. Therefore, western cultural systems of knowledge should be regarded as the only means to validate the value of Africa's ideas, beliefs and general way of life. They are considered unscientific, primitive and incompatible with formal education, especially higher education. They are not able to produce a human capital capable of meeting the challenges of modern science and technology associated with globalization (McCarthy 1994).
- (iii) The paper also argues that Eurocentricism in Africa has distorted the real meaning of the concept 'education'. It has created and propagated the belief that 'education' means western formal systems of schooling introduced to Africa by colonialism. However, an examination of the original meaning of the western conceptualization of 'education' shows something quite different from the colonial view. The word 'education' is derived from two Latin words: educare, 'to rear or foster', and educere, 'to draw out or develop'. Thus 'education' according to this original conceptualization incorporates all the processes of raising up young people to adulthood, and drawing out or developing their potential to contribute to society (Mmola 2010).

Therefore, in the African indigenous perspective of education, learning to hunt wild game or herd livestock, prepare food or weave cloth, search for wild honey or distinguish medicinal and food plants from poisonous ones, is arguably closer to the original western meaning of 'education' than its current western limitation to academic and theoretical meaning propagated in African higher education institutions (Walter 2002). Muya (2008) elaborates that in most African traditional societies, children learn in a variety of ways, including free play or interaction with multiple children, immersion in nature, and directly helping adults with work and communal activities. They learn

through practice by experimentation, trial and error, independent observation of nature and human behaviour, and through voluntary community sharing of information, story, proverbs, song, and ritual. This made education more relevant to the needs of the learner and her/his respective community. Whereas, western education puts emphasis on individual success in a broader consumer culture instead of on the learner's or student's ability to survive and contribute to society (Simon 2008).

This view should not be interpreted as meaning that literacy, numeracy and the acquisition of new languages are unnecessary. There is no society or culture that can exist in isolation. This has never been more important than it is today in the era of globalization and increasing interdependence. Nevertheless, what is currently missing, in most modern societies in Africa, is a system of teaching and learning that can combine the two. Raymond (2011) rightly points out that, presently, African children are either kept in their home environments, missing out on the 'modern' aspects of education, or increasingly, forced into full-time formal schooling, missing out on the African 'traditional' education. The western formal education perpetuates the neo-colonial mentality by building aspirations of modern urban life and encouraging the youth to believe that they have no future in rural communities as African indigenous knowledge including indigenous languages are obsolete and incapable of preparing them to meet the challenges of the modern world of science and technology.

Kimwaga (2009) elaborates further that the integration of AIKS into higher education enables African students and educators to re-evaluate the inherent hierarchy of knowledge systems because historically AIKS were denigrated. Therefore, their inclusion in the formal education systems, especially at tertiary level requires an acknowledgement of the existence of multiple forms of knowledge rather than one, standard, benchmark system.

Sanders (2008) states that the arrogance of Eurocentricism has led to its failure to understand the holistic nature of African traditional education which does separate theory from practice. Cuthbert (2008) argues that it is this lack of understanding of the holistic nature of traditional education that has led to the radical shift in the locus of power and control over learning from children, families, and communities to ever more centralized systems of authority. The integration of AIKS at all levels of education in Africa will therefore be beneficial to learners and students because it will enhance the relevance and effectiveness of education by providing them with an education

that adheres to their own inherent perspectives, experiences, language, and customs. In terms of educational content, the inclusion and interfacing of AIKS with other knowledge systems in the curricula, instructional materials, and textbooks will help to prepare African students and learners for their contribution to the global pool of knowledge.

This is important due to the increasing realization that despite decades of self-rule, African scholars have not succeeded in empowering the continent to develop its own educational theoretical and methodological framework for knowledge production and sustainable development. There could be several reasons for this but the paper argues that one of the key factors is that education, especially higher education, in Africa has not been relevant to the needs and concerns of African societies.

This perverse situation is compounded by the fact that links between African institutions themselves are largely neglected in favour of partnerships with the western countries which perpetuate the colonial legacy. Currently, there are more research and academic linkages between African and western institutions than among African institutions themselves and most academic and research activities are still carried out in western languages, especially English, French and Portuguese, thus undermining the development of African indigenous methodological and theoretical framework to guide educational transformation (Simon 2008).

Nevertheless, the paper argues that in spite of this extraversion, there is still great potentiality in the continent for promotion of AIKS in African higher education. The unfortunate history of the continent (slavery, colonization and Apartheid) has not completely destroyed the African intellectual, cultural and spiritual heritage of the continent. Indigenous institutions of knowledge production, conservation and sharing such as initiation schools, indigenous games, agricultural systems, dances and songs, storytelling, proverbs, etc. still remain pillars of indigenous African ways of knowing. The wealth of indigenous knowledge that still exists among the elders and other knowledge holders in local communities demonstrates the vibrant intellectualism to which African researchers and intellectuals should turn. It needs to be documented, affirmed/validated and shared with the African youth for sustainability.

African intellectuals should help Africa close the gap created by over four hundred years of domination and marginalization of AIKS, by rejecting the dominance western knowledge systems in higher education as the only way of knowing and knowledge production. This concern was well articulated by Ngugi wa Thiong'o (1986) in his seminal work on: 'Decolonizing the mind'. African indigenous knowledge should not only be seen as an 'alternative' knowledge but as one domain of knowledge among others. The implications for African higher education are that research in higher education can no longer be conducted with local communities as if their views and personal experiences are of no significance. Taking into consideration the extraversion of African knowledge systems, research should not be taken as an innocent academic exercise but an activity that occurs in a particular set of ideological, political and social framework. This is due to the fact that much of the existing educational and research in African communities is still dominated by Euro-centric prejudices (Hountondji 2002).

It is on the basis of the above discussion that the paper examines the experiences of the North-West University and University of Kwazulu-Natal in South Africa in their effort to integrate AIKS into their core businesses, i.e. research, teaching and community engagement.

## The Indigenous Knowledge Systems Teaching Programme at North-West University (South Africa): Prospects and Challenges

The development and incorporation of the IKS into research, teaching, learning and community engagement at North-West University at both under and post-graduate levels began in 2001. The rationale of integrating IKS into the core business of the institution was motivated by institutional, national, continental and global imperatives. It was in line with the vision and missions of the institution, the aspirations of the National IKS Policy (2004) and New Partnership for Africa's Development (NEPAD) i.e. promote the role of Indigenous Knowledge Systems (IKS) in sustainable development and contribute to Africa-led globalization.

A study conducted by Mmola (2010) on Students' and Lecturers' Perceptions Towards the IKS Programme at the North-West University showed that more than 80% of the respondent students had the opinion that lecturers who incorporated Africa indigenous cultural elements in teaching, especially the use of the local language, i.e. Setswana, were highly

appreciated by students. They also indicated that such lecturers made them experience a feeling of autonomy by getting the opportunity to learn university education in their mother tongue. Interviews with both respondent students and lecturers (the majority of them being Setswana speaking) revealed that the lecturers who used Setswana in their teaching and interaction with students also incorporated local examples and practices into the lectures.

Interview with various heads of departments which incorporated IKS modules in their teaching programmes showed that when AIKS was included into the curriculum, student achievement improved. This was due to the fact that students could relate to what was taught with their own home and community experiences. The respondent heads of departments also indicated that the building of strong relationships between students, researchers, and lecturers with student families and local communities created meaningful and positive learning outcomes for the students. It reinforced the holistic nature of AIKS and exposed the students to diverse knowledge and practical experiences. Respondent students felt that they had benefited from the IKS programme in many ways. The benefits included (in order of most commonly mentioned) gaining new multi- and trans-disciplinary knowledge and skills, especially cultural skills, which could assist them to fit into a wide range of career choices, developing networks for future employment opportunities, and helped them to increase self-esteem or selfworth. It also made them sensitive to the challenges of community livelihood and development.

Interviews with parents and community elders showed that their involvement in the IKS programme and curriculum made them feel needed by the formal educational system as they were actively participating in the higher education of their children. This is due to the fact that the IKS Programme at North-West University often used Indigenous Knowledge Holders and Practitioners from the surrounding local communities and beyond, as resource persons in specific teaching and learning fields such as traditional medicine and healing systems, traditional governance and leadership systems, natural resource management, etc. This provided the students with an opportunity to learn across generations hence making them appreciate and respect the knowledge of these elders and community members.

A study by Raymond (2011) on the use of Multi-media Technology in teaching IKS found that IKS lecturers used this method to encourage

students to integrate Indigenous knowledge into research and learning. Students used multi-media technology in understanding local knowledge and history through interviews with elders and other community knowledge holders and practitioners. For example, a project on Tswana Indigenous Pathways to Health was developed through collaborative efforts between the postgraduate students at the University and the North-West Provincial Department of Health. It enabled the students to use digital video to document a specific area of Indigenous Knowledge, i.e. community health practices, from a community perspective. One IKS postgraduate student stated that the use of digital cameras to document community knowledge holders contributed to a holistic understanding of science from the community perspective. A number of aspects related to the field could be captured and analysed.

An important element in the research project was to assist the students in developing research skills and values that enhanced respect for community knowledge of the community members. The strong cultural focus of the IKS Programme also engaged students in a variety of activities and relationships with local artists including poets, dancers, writers, etc. from the local cultural centre known as Mmabana.

This multi and trans-disciplinary character and strong cultural focus of the IKS Programme attracted an increasing number of students at both under- and postgraduate levels, from different parts of Africa including South Africa, Botswana, Zimbabwe, Zambia, Nigeria, Cameroon, etc. Until April 2012 more than 25 Masters and 3 PhD students have graduated from the Programmes and are employed in various sectors (public and private) within and outside South Africa. These sectors include education, tourism, community development, Arts and Culture, Science and Technology, health, agriculture, rural development, communication, etc.

Moreover, as part of its community engagement the IKS Teaching and Research programme at North-West University has facilitated the establishment of various IKS community projects such as indigenous knowledge - based gardens in schools and local communities in the North-West Province. These IKS projects generated income, and contributed to food security and nutrition for learners and community members. It has also helped the institution to build networks and partnerships for IKS development with various institutions, schools, communities, civic organizations and policy makers.

However, in spite of these successes the development of the IKS Programme at North-West University has over the years encountered a number of challenges. Although the systemic and holistic inclusion of Indigenous knowledge throughout educational practices and curriculum is a recommendation that appears continuously in the literature and policy statements, unfortunately, like in other African institutions of higher learning this recommendation has been difficult to implement in all campuses of the North-West University, especially in the previous historically white campuses. This was attributed to the existing institutional structures and expectations emanating from Eurocentric and colonial educational ideals which have been hostile to the promotion of AIKS . The institution is faced with the challenge of developing a system of education for all students that respects the epistemological and pedagogical foundations provided by both African indigenous as well as western cultural traditions.

Furthermore, IKS as a research, teaching, learning and community engagement programme is a new research and teaching field in South Africa and the continent at large. The North-West University is the only institution in the country and perhaps in the whole of Africa with an accredited IKS Teaching programme at both under- and postgraduate levels. Therefore, the institution is faced with the problem of shortage of IKS qualified staff to teach and supervise IKS research, especially at the postgraduate levels and lack of relevant teaching and learning materials. There is also the challenge of lack of support from some sections of the institutional management due to limited knowledge and awareness on the importance of IKS in meeting the developmental challenges of the 21<sup>st</sup> Century. For instance, most academics at the institution still do not understand the relationship between IKS and other fields of knowledge, especially in areas of Science and Technology.

In order to meet these challenges there was need for more aggressive marketing and awareness campaigns on the programmes. The Programme coordinators in collaboration with the National IKS Office (Department of Science and Technology) and South African Qualification Authority worked together to register a professional four year Bachelor of IKS (BIKS) which integrates both the natural and social sciences. This was meant to ensure that IKS is not limited to the humanities. The existing programme was mostly composed of human and social science modules. Moreover, the SADC Ministerial Conference on IKS Policy which met in the Seychelles in August 2009 adopted the BIKS Programme as a regional programme. This will promote IKS regionally and establish a network of staff and other resources

for promoting the teaching, research and community engagement in the programme.

# The Integration of AIKS into Research and Teaching Programme at University of KwaZulu-Natal (UKZN)

The rationale and motivation to integrate Indigenous African Knowledge Systems (IAKS) at UKZN took into consideration the historical background of the institution and its vision and mission of being a new institution coming out of a merger process involving diverse institutional cultures of the post-apartheid legacy. According to the UKZN Institutional Review Portfolio (2008) Chapter One, the historical context surrounding the merger of the Universities of Durban-Westville and Natal was complex and potentially divisive. It involved bringing together not two, but three institutions, because the former University of Natal operated in two centres more than 80 kilometres apart, i.e. Durban and Pietermaritzburg. The two almost functioned autonomously, each with a different ethos, and independent faculties which were duplicated on both sites.

In terms of organizational culture the merging institutions were quite different. The University of Natal, though having a diverse student body in terms of demographics, was categorized as historically advantaged-white institution. The University of Durban – Westville was one of the institutions set up according to the Extension of University Education Act 45 of 1959 to serve primarily Indian population in terms of the apartheid social engineering. Paradoxically, it later became the site of anti-apartheid struggle with a diverse student body and a legacy of relative disadvantage. The UKZN, therefore, is a diverse five–campus institution that required imaginative and innovative structures and programmes within which to operate effectively and to achieve a unity of purpose in order to overcome the apartheid divide between a historically white and historically black institution.

The promotion of African scholarship, including AIKS, therefore, was identified as one of the strategies to give definition and form needed to the concept of 'a truly South African scholarship'. The centrality of African scholarship for UKZN was demonstrated by its inclusion in the UKZN Strategic Plan as a strategy for the achievement of the goal of Excellence in Teaching and Learning, i.e. to re-design curricula in creative and innovative ways that foreground African scholarship. The importance of AIKS at UKZ

was signaled when the institution commissioned a Review on IKS Capacity at UKZN (2009) to assess the institutional capacity in terms of teaching, research and community engagement resources (physical, human and financial) as they relate to promotion of African scholarship. In 2012 the institution appointed a Research Leader in Indigenous African Knowledge Systems. His responsibility is to provide leadership and coordination in the development of AIKS through research, postgraduate training, and curriculum transformation.

The integration process of AIKS into the core business of the institution involves the following parallel activities: stakeholder consultation with objective of getting a buy-in from the different stakeholders and assist in identification of AIKS champions and potential research and teaching staff; recruitment of AIKS champions from the different teaching and research units of the institution who will constitute a working group for the integration and programmes development process; establishment of an inter-college multi-disciplinary advisory team composed of stakeholders from within and outside the institution to advise and provide leadership in the integration process; create a database of AIKS initiatives, facilities, institutions, personnel, teaching materials, etc. to provide AIKS resources for research, teaching and building networks and partnerships.

This is based on the realization that there are a lot of scattered AIKS scattered programmes, modules, reference materials, etc. at UKZN which need consolidation into institutional programmes to avoid duplication of efforts and for network and partnership building; organize a national workshop on AIKS research and teaching methodologies to create awareness among stakeholders on AIKS research, teaching and community engagement methodologies as a paradigm shift; facilitate the development of an institutional AIKS policy to provide conceptual framework for IKS development and protection; promote AIKS network and partnership building at UKZN so that UKZN can be a hub and able to capacitate other institutions within and outside South Africa in AIKS development; development of AIKS teaching programmes at under and postgraduate in order to build a critical mass of AIKS and African scholarship expertise for research, teaching and community engagement; recruitment of appropriate AIKS teaching staff as the availability of appropriate and qualified staff is one of the major challenges of integrating AIKS into teaching and learning; development and production of IKS teaching and learning reference materials as another major

challenge of integrating AIKS into teaching and learning; conduct institutional wide AIKS awareness campaigns to build a common institutional understanding of AIKS; promoting the use of African indigenous languages into research, teaching and community engagement through their incorporation publications, research reports, markets, reference materials, etc. African Indigenous languages are central to the promotion of African scholarship as they provide relevance to AIKS, African scholarship including Africa led globalization.

The AIKS as signature project of UKZN has managed to register the following achievements since 2012: Establishment of a Coordinating Office (Westville Campus Library) which also hosts the DST/ IKS Documentation Centre; a Multi-disciplinary Advisory Team composed of internal and external members including IK holders and practitioners; a multi- and transdisciplinary Working Group of IKS Champions from the various institutional colleges/schools; development of a Draft Institutional AIKS Policy; a successful Regional Colloquium on: Methodologies and Epistemologies of Integrating IKS into Research, Teaching, Learning and Community Engagement (23 November 2012); recruit 6 Doctorate and 4 Masters IKS Students for the academic year 2013. Their recruitment is in line with the university mission and vision of promoting African scholarship including AIKS institutional research focus areas as their research themes range from African Indigenous Food Security, AIKS and Climate Change; Indigenous Environmental Governance; Traditional Governance and Leadership; and African Indigenous Languages; the students are distributed across the various institutional colleges/ schools;

The formation of a multi-disciplinary team of colleagues from within and outside UKZN to supervise the students; managed to bring the hub of the DST/NRF Centre of Excellence in IKS to UKZN. The Centre will be partnership with other institutions such as North-West University, University of South Africa, Universities of Venda and Limpopo: formation of an institutional research team on Indigenous Food Security Systems and Climate Change; coordination of the UNESCO Worldviews Initiative on: Developing An African Convention On Environmental Ethics For Sustainable Livelihood.

## Conclusion

This paper made a critical analysis of the challenges and prospects of integrating AIKS into higher education in South Africa and Africa at large. Experiences were drawn from the North-West University and University of KwaZulu-Natal. It showed that in spite of the dominance of western perspectives of higher education, there is an increasing realization among different stakeholders on the importance of AIKS in promoting the relevance of higher education for sustainable development. African higher educational institutions are an ideal platform for promoting AIKS due to their vast human resources and experiences in all fields of research and learning. They also command intellectual respect in society and globally. However, the experience of North-West University and University of KwaZulu-Natal revealed that the process of integrating AIKS into higher education has challenges and prospects. The challenges include lack of a conceptual framework to provide a clear African indigenous perspective and definition of the concept 'knowledge'. This could have provided a theoretical and methodological guide for the integration process; there is shortage of qualified AIKS staff to teach and supervise research; inadequate reference materials for both students and lecturers; lack of support from various institutional stakeholders including some sections of the institutional management due to limited knowledge and awareness on the importance of AIKS in a modern society, especially in science and technology.

The prospects include increasing knowledge and awareness among policy makers, developmental agencies, researchers, etc. on the role of AIKS in sustainable livelihood and development. This creates employment opportunities for IKS graduates. This also provides support for integration of AIKS into the formal education system.

This paper suggests that in order to meet the challenges, there is need for more aggressive marketing, knowledge and awareness campaigns on the AIKS programmes and initiatives within and outside South Africa; the SADC Ministerial Conference on IKS Policy which met in the Seychelles in August 2009 adopted the Bachelor of Indigenous Knowledge Systems Programme developed by South Africa as a regional teaching programme. This will help to promote IKS regionally and establish a network of identifying teaching and research expertise and other resources AIKS development.

The SADC Ministerial Conference on IKS Policy also urged South Africa to assist other countries in the region to develop national IKS policies which will provide a conceptual and policy framework for promoting and protecting IKS; the example of UKZN should be followed by other educational institutions of identifying IKS champions in different fields; building institutional databases of IKS initiatives and resources for research, teaching and building networks and partnerships; consolidation of scattered AIKS initiatives and resources into shared programmes to avoid duplication of efforts; promotion of the role African Indigenous languages in higher education because they provide relevance to AIKS, African scholarship and Africa-led globalization. This could be done by giving African Indigenous languages a prominent position in research and publication, teaching, marketing of programmes and other institutional initiatives.

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