Revitalizing African Indigenous Ways of Knowing and Knowledge Production

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The article is based on the following arguments: the history of Africa's Indigenous ways of knowing and knowledge production did not begin with the coming of Western knowledge systems, and neither should their future depend exclusively on Western and other worldviews. Like other human societies across the globe, African indigenous societies have, for centuries, developed their own sets of experiences and explanations relating to the environments they live in (Kimwaga 2010). This is due to the fact that the way learning is perceived and how people actually learn is culturally specific. Different cultures have different ways and experiences of social reality and, hence, learning (Matike 2008). This is influenced by their worldview and belief systems of the natural environment, including the socio-economic and ecological context of their livelihood. These culturally and locally specific ways of knowing and knowledge production are often referred to as traditional, ecological, community, local knowledge systems, and so on. They encompass sophisticated arrays of information, understanding, and interpretation that guide interactions with the natural milieu: in agriculture and animal husbandry, hunting, fishing, natural resource management, conflict transformation, health, the naming and explanation of natural phenomena, and strategies to cope with fluctuating environments (Semali and Kincheloe 1999; Lander 2002; Kante 2004; Horsthemke 2004).

This article is based on experiences from a 2012 study conducted at Lokupung Village in South Africa's North-West Province. The study was conducted by Indigenous Knowledge Systems Programme students at North-West University, in collaboration with the North-West Provincial Department of Agriculture and Environment. The project was initiated by village community members based on their concern and experience with interfacing indigenous and modern knowledge systems. They indicated that, in most situations, the application of technologies from outside (such as extension services, hybrid seeds, fertilizers, chemicals, machinery, and credit systems) were not always appropriate to the local conditions, i.e. the local ecological conditions could be inappropriate for their applications, the inputs required might be unavailable locally, maintenance and follow-up systems might be lacking, or conditions might be socially or culturally (including linguistically) inappropriate.

In considering these factors, the following sections outline the challenges and prospects of interfacing African indigenous knowledge and other knowledge systems.

The Challenges and Prospects of Interfacing African Indigenous Knowledge and Other Knowledge Systems

The foundation of all knowledge systems is local, but due to unbalanced power relations stemming from colonialism and other forms of imperialism, other nations and cultures have universally imposed their knowledge systems, cultures, and languages (wa Thiong'o 1986; Timothy 1998; Schutte 1999; Walter 2002; Smith 2002). However, due to globalization, many problems – such as climate change, poverty, and environmental degradation – are global. This raises important questions about how African Indigenous Knowledge Systems (AIKS) can contribute to the global knowledge economy. It is suggested that the sustainability of AIKS, given these global challenges, necessitates the convergence of African indigenous worldviews – embedded in African social practices through orality in their indigenous languages and knowledge systems – with other ways of knowing and knowledge production embedded through literality (Moodie 2003; McCarthy 2004).

In the context of this discussion on revitalizing African indigenous ways of knowing and knowledge production, the rationale for interfacing knowledge systems is twofold. It facilitates an intra- and intercultural dialogue between ways of knowing, knowledge production, and value systems. It also enables local African communities to better understand the differences and interactions between AIKS and other knowledge systems in order to reconstruct their own knowledge systems and to make better-informed decisions about which knowledge (internal or external) is appropriate for their sustainable future (Ntuli 1999; Seleti 2010).

A founding principle for fostering positive interactions between AIKS and other knowledge systems is that collaboration must be initiated between equal partners. It must be built on mutual respect and understanding, transparent and open dialogue, and informed consent and just returns for the Indigenous Knowledge holders and practitioners through the flow of rewards and benefits. While efforts should be made to combine the best of both AIKS and other knowledge systems, there is an increasing emphasis that intercultural learning should be based on local experiences as a necessary prerequisite and a first step towards intercultural dialogue of knowledge systems for the sustainable development of AIKS and its contribution to the global pool of knowledge (Odoro-Hoppers 2002; Lander 2002).

For example, in his discussion on the symbiosis between modern science and traditional knowledge for enhancing food security and climate change adaptation in Kenya, Mbuku (2013) looks at the use of indigenous knowledge in drought monitoring by pastrolists. He reveals that pastoralists usually derive Indigenous Knowledge-based forecasts just before the beginning of the farming season. He cites that, in northern Kenya, the Rendille pastoralists utilize a number of indicators – like local temperature, humidity, and wind conditions – to the presence or absence of certain types of clouds, rainfall patterns, and rain amounts. These weather indicators are also used in formal climate monitoring. When predicting prolonged drought, the Rendille pastoralists observe the flora and fauna for any unusual behaviour, paying specific attention to the noises made by certain bird species, the appearance of sparrow weavers, bees migrating, emaciated livestock species when there is plenty of pasture, the invasion of certain ants, the making of noise by crickets at night, and unusual flowering of certain trees (e.g. *Lonchocarpus sp. sterile*).

Astrological constellations, like the position of the sun and moon, are also observed in great detail by the Rendille and Gabra pastoralists. Speranza et al. (2009) show that a number of these indicators have also been used for drought monitoring in other communities, such as the Kamba pastoralists of Kenya. Nkondo (2012) states that, in spite of the various contentions on the effectiveness of the indicators used by indigenous communities around the world, Indigenous Knowledge Systems have increasingly attracted the attention of many observers in both developed and developing countries. Practitioners are starting to realize the importance of recognizing and working with Indigenous Knowledge Systems, which builds on generations of experience, to best support the adaptive capacity and strategies of rural communities (Orlove et al. 2010). There is increasing acknowledgement that indigenous forecasting methods are locally relevant and needs-driven, focus on the locality and timing of rains, and are "communicated in local languages and by local experts known and trusted by the people themselves."

Implications for African Educational Systems

The above discussion has implications on the current educational system in Africa – a system that remains predominantly Eurocentric and dominated by European worldviews. This is exemplified by the teaching of social sciences in African higher education institutions, where social theory is still entrenched in the methods, concerns, beliefs, and experiences of Western Europe and North America. Its irrelevance to Africa lies in the fact that it is quite inappropriate to attempt to fit African social history and social thought into the confines of a social and political structure that reflects the organisation of Europe 300 years ago (Schutte 1999). The implication is that African educational institutions, especially in higher education, have reduced themselves to the reproduction of the intellectual outputs of western social thinkers, including their theories and methodologies for prioritizing research. There is little attention given to African indigenous literary and philosophical traditions, as they tend to be viewed as primitive and unscientific, as well as improper sources for social theory and research development (Vilakazi 1999).

Nkondo (2012) reiterates the inability of African social scientists to generate their own indigenous concepts, definitions, theories, and methods which could guide the intellectual development in their research and academic fields. Smith (2002) adds that this leads to a lack of confidence among African scholars, as western research models, theories, and concepts are uncritically adopted and applied in African cultural communities characterised by poverty, rendering them irrelevant to local settings. They tend to be elitist because they focus on the concerns of dominant groups in society, which marginalises the views and concerns of underprivileged social groups.

The integration of AIKS into the educational system in Africa provides the following opportunities for learners and their respective societies: (i) It provides learners with the opportunity to learn appropriate community attitudes and values for sustainable livelihood. This is due to the fact that African indigenous communities have lived in harmony with their environment and utilised natural resources without impairing nature's capacity to regenerate them. AIKS in higher education can help to develop and promote these sensitive and caring values and attitudes for the environment. (ii) Learners will be able to learn through culture because AIKS are stored in various cultural forms – for example, folk stories, songs, folk drama, legends, proverbs, and myths. The use of these cultural resources in formal education can be very effective in bringing AIKS alive for students. It enables them to conceptualise, practically, the theoretical knowledge acquired in the classroom. (iii) Involving community knowledge holders in research, teaching, and learning enables learners to learn across generations, hence making them appreciate and respect the knowledge of elders and other community members. In this context, higher education will be an agency for transferring culture from one generation to the next.

Conclusion and Recommendations

While there are prospects in interfacing African Indigenous Knowledge with other knowledge systems, a generic application of foreign ways of knowing and knowledge production – including technology systems in African cultural conditions – is inappropriate. Knowledge systems should build on locally available resources, primarily the cultural and environmental experiences of the local people for relevance and sustainability. This has implications for African educational systems and sustainable community development: the necessity for direct collaboration between local communities and institutions of learning at all levels; intra- and inter-cultural education and research, which should be a collaborative effort of institutions of learning and local communities; and the dialogue and interface of ways of knowing and knowledge production, which can play an important role in re-indigenisation of educational systems in Africa. This will facilitate an intra- and intercultural dialogue between knowledge systems. However, this process requires reforming the education system in general to accommodate the new paradigm in ways of knowing, knowledge production, and value systems.

References

Horsthemke, K. (2004) "'Indigenous Knowledge' – Conceptions and Misconceptions." *Journal of Education,* 32: 1-15.

Kante, P. (2004) "Indigenous Knowledge and Environmental Concerns in Africa." *Economic and Political Weekly,* 4(22): 31-44.

Kimwaga, S. (2010) *African Indigenous Psychology and Eurocentricism*. Unpublished Manuscript. Dar es Salaam, Tanzania: College of Business Education.

Lander, D. (2002) "Eurocentricism and Colonialism in Africa." *Nepantla,* 1(2): 510-32.

Matike, E. (2008) *Knowledge and Perceptions of Educators and Learners in the Incorporation of IKS into School Curriculum*. Unpublished BA (Honours) thesis. North-West University, South Africa.

Mbuku, S.M. (2013) "The Symbiosis Between Modern Science And Traditional Knowledge For Enhancing Food Security And Climate Change Adaptation in Kenya." In: United Nations Conference On Trade And Development, *Trade and Environment Review (2013). Wake Up Before It is Too Late. Make Agriculture Truly Sustainable for Food Security in a Changing Climate.* Geneva.

McCarthy, S. (2004) "Globalization and Education." In: William, B. ed. *The Book of Virtues*. New York: Simon and Schuster.

Moodie, T. (2003) "Alternative Ways of Knowing – Doing Justice to Non-Western Intellectual Traditions in A Postmodern Era." *Journal of Education (Kenton Special Edition),* 31: 7-24.

Nkondo, M. (2012) "Indigenous African Knowledge Systems In A Polyepistemic World: The Capabilities Approach And The Translatability Of Knowledge Systems," *The Southern African Regional Colloquium On Indigenous African Knowledge Systems: Methodologies And Epistemologies For Research, Teaching, Learning And Community Engagement In Higher Education*. University Of Kwazulu-Natal 23 November 2012. Howard College.

Ntuli, P. (1999) "The Missing Link Between Culture And Education: Are We Still Chasing Gods That Are Not Our Own?" In: Makgoba, M.W. ed. *African Renaissance*. Cape Town, South Africa: Mafube-Tafelberg.

Odora-Hoppers, C.A. ed. (2002) *Indigenous Knowledge and the Integration of Knowledge Systems: Towards a Philosophy of Articulation*. Claremont, South Africa: New Africa Books.

Orlove, B., Roncoli C., Kabugo, M. and Majugu, A. (2010) "Indigenous climate knowledge in southern Uganda: The multiple components of a dynamic regional system." *Climate Change,* 100: 243-65.

Schutte, G. (1999) "Colonialism and Eurocentrism." *Review of Anthropology,* 22(2): 120-34.

Seleti, Y.N. (2010) "Interfacing Indigenous Knowledge with Other Knowledge Systems in the Knowledge Economy: The South African Case," *Library Symposium 2010: Presidential Meeting. Knowing is not enough: Engaging in the knowledge economy*. Stellenbosch University 18-19 February 2010.

Semali, L.M. and Kincheloe, J. L. (1999) "Introduction: What is Indigenous Knowledge and Why Should We Study It?" In: Semali, L.M. and Kincheloe, J.L. eds. *What is Indigenous Knowledge? Voices from the Academy* . New York and London: Falmer Press.

Smith, A. (2002) "Power and Hierarchy of Knowledge." *Geoforum,* 40(1): 230-48.

Speranza C.I., Kiteme B., Ambenje P., Wiesmann, U. and Makali, S. (2009) "Indigenous Knowledge Related To Climate Variability And Change: Insights From Droughts In Semi-Arid Areas Of Former Makueni District, Kenya." *Climate Change,* 100: 295-315.

Timothy, R. (1998) "Views from the South: Intellectual Hegemony and Postmodernism in Developing Societies." *Review of Anthropology,* 20(1): 61-78.

Vilakazi, H.W. (1999) "The Problem of African Universities." In: Makgoba M.W. ed. *African Renaissance*. Cape

Town, South Africa: Mafube-Tafelberg.

wa Thiong'o, N. (1986) *Decolonizing the Mind: The Politics of Language in African Literature*. Nairobi, Kenya: Heinemann.

Walter, D. (2002) "Colonial and Post-Colonial Discourses in Social Sciences: A Cultural Critique of Colonialism." *Latin American Research Review,* 28(3): 120-34.

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