

*Short Communication*

## Evolving trends in the generation, transmission, protection and use of indigenous knowledge systems

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### Abstract

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Although they are disappearing due to globalisation and cultural homogenisation, indigenous knowledge systems (IKS) are the foundation of science. IKS is a unique, cumulative body of knowledge related to the natural environment of a specific geographic area developed by people over generations through experimentation, history of experiences and observations embedded in culture, spirituality and world views . Different words know IKS; indigenous technical knowledge, ethnoscience, local, traditional, people's science, village science . Words function in a field of association., the mental image associated with the word . The images may be positive or negative. Thus the terms indigenous, traditional, folk, village or local tend to have negative connotations like static, conservative or backward. IKS are part of Africa's heritage, have survived the test from Western views. Instead, IKS has renewed interest due to their dignity, potential solutions to challenges and source of pride.

**Keywords:** Generation,Transmission,Indigenous.

### INTRODUCTION

IKS expression is in customary laws, language, proverbs, songs and stories and is shared and passed through generations orally, in cultural practices and rituals. IKS informs agriculture, animal husbandry, fishing, hunting, meteorological and climatic meteorological phenomena interpretation, and the tackling of disease and illnesses decisions. IKS are transdisciplinary knowledge of cultural, socio-economic, and political agendas, although many African countries lack specific legislation for promoting, protecting, and developing . IKS are valuable resources owned by the poor and the marginalised. There is a dearth of development research due to marginalisation and exclusion from mainstream development discourse.

Rurality learning, storing and knowledge transmission contributed to knowledge decimation due to ring-fencing by experts who die without being tapped.

IKS Protection should be through regional, national and international instruments that promote and protect them, use technology for innovation and entrepreneurship, and develop a system of accreditation and certification. Challenges and opportunities for IKS education are many, although they are generated and owned by communities through agriculture, arts and culture, cultural expressions, designs, environmental affairs, food production, medical practices, rural development, songs, trade, industry and traditional affairs. The benefits of cumulative innovation associated with IKS accrue to its holders while enhancing sustainable development in traditional medicines, technologies and cultural expression where there is expropriation and

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exploitation with significant economic effects of such knowledge. Academics, businesses, policymakers and researchers, should have an integrated approach to agriculture, conservation of the environment, cultural and biological diversity, education, food security and sustainable development (Agrawal, 1995; Freire, 1973).

With the erosion of IKS and disappearing cultural traditions, protection accompanied by promotion and development must offer transmission incentives to IKS holders to promote informal innovations. IKS protection by intellectual property law stops exploitation by international companies. IKS generates value that is not recognised and compensated adequately, and its holders do not get rewards when the current system appropriates their knowledge. IKS help to meet the broader objectives of society, e.g. conserving the environment, developing sustainable agriculture and ensuring food security. IKS should be protected against biopiracy and mandates benefit-sharing, as provided for under the Convention on Biodiversity (Berkes, 2009).

The conservation of cultural diversity is a precondition for the conservation of biological diversity. IKS enable communities to exercise their sovereign and inalienable rights, formal and informal, over their IKS and related intellectual and cultural knowledge; rights exercised through indigenous and customary laws, practices and values in agriculture, arts and culture, environmental affairs, health, rural development, trade and industry and traditional affairs. Local, national, regional, and international instruments to promote and protect IKS using entrepreneurship, innovation and technopreneurship and developing a system of accreditation and IKS certification is essential.

IKS are necessary because of the following; preventive; when IKS build on common property rights (CPR) and responsibilities in destructive individualistic consumerism, taboos and substitution by meaningful and rewarding social sanctions relevant to the situation. IKS promotes development-oriented materials for adults and schools based on proverbs' literal and metaphoric meaning. IKS are part of rehabilitative research; they reduce deforestation and build on fruit tree taboos to promote fruit tree growing for nutrition, shade, windbreaks, and other agroforestry programmes. IKS promote communication training by building into extension curriculum language aspects of communication. IKS are part of the human ecosystem. The world and the sociocultural context.

The subsystems are internally dynamic, while interaction between the subsystem exists. The subsystems are essential in the emic and etic analyses of ecological behaviour. The emic perspective provides the internal conceptions and perceptions of the natural environment, while the etic perception provides the framework for determining the effects and significance

of beliefs on human ecological behaviour. Africans view nature as filled with religious significance. Engendered attitudes of almost reverential fear manifest through sacred phenomena like taboos, totems, rituals and myths. Breaking a taboo is a spiritual offence to the Creator with social sanction against the individual, family and community. Thus, Sacred animals and birds protected sacred forests, e.g. Chirinda, Sacred mountains, e.g. Nyangani Range and Sacred trees, e.g. Parinari Curatefolia (Makwara, 2013; Mapara, 2009).

The Shona of Zimbabwe has a totemic clan name system based on wildlife. Each person has a totem animal or part of an animal whose name comes through the father. Totems contribute to conservation through taboos against killing and eating one's totemic animal or part of it, encouraging aesthetic and inspirational values of wildlife and totemic praise poetry show proximity and attachment to nature. IKS is gradually acknowledged and appreciated, although it is also lost. IKS exploitation is due to a lack of equitable sharing, lack of experience and guidance. Secure environmental management and resource use emanate from a pluralistic and interdisciplinary course of action. Knowledge co-production through IKS holders and scientist synergies through new knowledge to address issues such as climate change through collaboration that builds resilience enhances dialogue, and facilitates network building and information sharing.

The transmission recovering, revitalising, and passing on IKS requires language attention, non-linguistic modes of transmission, innovative schooling and curricula, national and international policy frameworks, and network building to encourage the vertical and horizontal transmission of IKS. Formal education and social media have obscured IKS oral transmission. Children can learn from parents, grandparents, environmental education programmes, field sites of rare and endemic species to decolonise the education system. Languages are the vehicle through which IKS is encoded, expressed and transmitted. Safeguarding linguistic diversity is critical to the protection of IKS. The mother tongue should expand access to IKS.

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