

Demystifying Indigenous Knowledge systems as Superstition in Advancing African Agriculture

By Benjamin B. Jabik (Ph.D)

Order of discussion

- Introduction and objectives.
- Approach to the study.
- Definition of local knowledge.
- Characteristics.
- Distinction between local knowledge and superstition.
- Value and Relevance to agricultural development.
- Implication for sustainable agricultural development.

Introduction

- Local knowledge is a social capital that has not been managed properly in the African context.
- It serves as an asset to investment for survival, to produce food, to provide for shelter or to achieve control over lives (Khumalo & Baloyi, 2017).
- Its values cannot be disputed more especially in this era where mainstream science knowledge systems are challenged in the agricultural.
- However, most of the mainstream science approaches to conserving and promoting knowledge systems in agricultural development generally deviates from the knowledge, principles and values of local knowledge systems in Africa.

Definition

It is the traditional and local knowledge that is developed through the experiences of local communities in the process of managing a context condition that challenges the people's wellbeing (Matsika, 2012).

It is a systematic body of traditional knowledge that is unique to a given culture or society, acquired by local people through accumulation of experiences, informal experiences and intimate understanding of the environment in a given culture (Warren, 1995).

- Key words:
 - Systematic body of knowledge.
 - Developed through informal experience over time.
 - Specific time period.
 - Specific Society or Community.
 - Specific culture.
 - Understanding of the environment.

Objectives of the discussion

- Clarify the distinction between Indigenous Knowledge and myths within the context of African agriculture.
- Build awareness on the value of Indigenous Knowledge as a strategic resource for agricultural resilience, innovation and sustainability.
- Encourage more respectful and inclusive knowledge systems that recognise farmers and local communities as knowledge holders.

Approach and methods

- Qualitative in nature with more emphasis on ethnographic approach.
- Reviewed literature from authentic source.
- Gathering data using referral approaches.
- Thematic analysis of the data.

Objective one:

The distinction between Indigenous Knowledge and myths within the context of African agriculture.

Illustration of a myth and local knowledge

- In Germany, prior to modernization, the presence of migratory birds (cattle egret) was used to determine the likelihood of population explosion in a proceeding year.
- In northern Ghana, the movement of those same birds in groups from east to the west or the vice versa was used to determine seasonality.
- Which of these two is a myth and which is a knowledge system and why?

Characteristics of local knowledge systems

- Belief:
 - People have knowledge based on practical learning and belief in that knowledge system and unseen powers in the ecosystem.
- Truth:
 - There is truth in the knowledge and the Knowledge bearers pass them on from generation to generation orally.
- Justification:
 - Local knowledge is generated within societies and communities and are location and culture specific, as such they are justified within that context.

Characteristics cont'd

- Context Dependency:
 - All things in the ecosystem are mutually dependent.
- Interconnectedness:
 - Personal relationships reinforce the bond and connection between society and the ecosystems as well as the other components.

From the above, it is clear that local knowledge systems are:

- Ecological specific and cannot be generalized as compared to mainstream science.
- Local knowledge is a system.
- What constitute knowledge might differ in different geographic context with different cultural practices and beliefs.
- Generalizing local knowledge systems amount to superstition and myth.

Objective two:

Build awareness on the value of Indigenous Knowledge as a strategic resource for agricultural resilience, innovation and sustainability.

Value of local Knowledge as a strategic resource for agricultural resilience, innovation and sustainability

- Agroforestry
- Protected areas (community green space, taboos of abstaining from some farmlands and water bodies).
- Soil Management and crops production
- Intercropping, mixed cropping, crop rotation, Traditional composting and water harvesting techniques that restore fertility without synthetic fertilizers.
- The use of type of soil to determine the crop to grow on it.

Value of local Knowledge as a strategic resource for agricultural resilience, innovation and sustainability

- Biodiversity Conservation
- Climate sensitive actions
- Seasonal Forecasting
- Seed preservation and selecting local crop varieties that are drought-resistant and better suited to unpredictable, changing climates.
- Adapting to changing climatic conditions using knowledge.
- Utilizing biological indicators—such as animal behavior, bird migrations, or the flowering of specific trees—to predict rainfall and guide planting.

Objective 3:

Encourage more respectful and inclusive knowledge systems that recognise farmers and local communities as knowledge holders

Implication for agricultural development

- Research:
 - Local funding of research.
 - African scientist led research designs and implementation.
 - Recognition of local knowledge systems and investing in it.
- Curriculum development:
 - Developing curriculum at the pre-tertiary level on local knowledge.
 - Promoting local knowledge systems in agricultural institutions.
 - Institutionalize practical courses on local knowledge systems generation, e.g IAS at Legon.
- Synergy and knowledge mgt:
 - Integrating local knowledge systems with western knowledge systems.
 - Using community specific knowledge in piloting agricultural initiatives.
 - Documenting the knowledge and its application.

Conclusion

- Local knowledge systems are critical for agricultural development
- New local knowledges are developed, however, they are not being managed, documented and disseminated.
- Investing research and developing local knowledge systems will largely lead to discoveries and solutions that can alleviate problems faced by Africans in the agricultural sector.

References