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University Perspectives In African Indigenous Knowledge Management

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Abstract

The African national government and international Aid efforts to achieve development since political independence in the 1950s and 1960s continue to fail. All the development plans models strongly rely on western development plan structures. The western development models delinked the African indigenous knowledge (AIK) systems approaches from development exposing government plan efforts to a state of stagnation and with little progress. While I.K can be seen in terms of heritage, it should now be interpreted toward helping to achieve sustainable development. Without grassroot participation in development, the mislink between A.I.K and emerging western world development efforts are noticeable proving the latter efforts ineffective. However, the African Universities are seen as think-tanks for their countries development efforts. They are to help provide local solutions to what is commonly called local problems. Local problems have their uniqueness drawn from local experiences ad indigenous knowledge. Managing local or indigenous

knowledge for developmental solutions is imperative. African Universities have a mission to generate, preserve and disseminate knowledge out of their teaching, research and extension activities. They also have a role to play to influence a positive standard of living for the society. Hence addressing the extent Universities can play their roles in influencing utilization of I.K. for national development is a major step forward for developmental partners.

INTRODUCTION

African countries embrace University education as a key element in development sphere. Universities are increasingly seen as part of African solution providers in terms of knowledge and skilled human power to manage and direct the economy at all levels. They have to remain national think-tankers for all purpose of development.

This need was spelt right at independence time of the African government development plan. At stage was the fact that the colonial government had watered down the African perspective of their own local problems of sidelining the indigenous knowledge (IK). If the African development was to be reinvented from the western world point of view, there is great need for debriefing of the African colonized mind, reduce imports on technology, education system, health (medicine) sector, agriculture, knowledge systems and services and lives in political-social-cultural spheres. The whole African development initia will require sustainability with a blend of I.K. and emerging western development approaches. It has to be accepted that I.K. incorporated development will steer the African development in natural models material resources, human resources, agricultural sector, industrial sector to self-reliance in science and technology and therefore poverty reduction. This paper therefore looks at what contribution the African Universities can do in influencing social-economic-cultural developments in I.K. based model approaches. Indigenous knowledge are people centred and therefore crucial in achieving economics-social-cultural developments. Reaching the people is reaching indigenous knowledge.

PROBLEM FOCUS

This paper takes into account the fact that knowledge is the engine of development and focuses at developmental areas in trying to define and reach at the problem:

- seeing I.K in terms of heritage only.
- Indigenous knowledge in forgotten and or distorted with imported technologies.
- That development efforts by African national governments have failed due to lack of understanding of the local issues pertinent in development efforts hence a mismatch between what local people know (I.K) and western development models.
- Education system is western styled in curriculum

- Lack of stakeholders developmental common approach (participatory model).
- The African elites suffer from decolonized minds.

UNDERSTANDING THE AFRICAN UNIVERSITY

NATIONAL DEVELOPMENT

The African Universities have to divorce themselves from the syndrome of Ivory Tower. They must actively influence the quality of life of people. This is possible through the development of science and technology, the pace of industrialization and the direction and pace of social and economic development.

At independence, African government created and funded Universities for certain tasks mainly to create impact on social and economic development. The pace for the University in development has been underlined through conferences of AAU/UNEC including AESAU in the 1980s. Out of the Mbabane Programme of Action, African Universities have to:

- Pursue with vigor the reviews of curricula, course offering and research that reflect the urgency of self-reliant and self-sustaining development.
- Strengthen research efforts in vital sectors.
- Train skilled manpower for transformation.
- Make expertise available for nation development efforts.
- Harmonize approaches and priorities in education and institutions.

THE NATURE OF UNIVERSITY

It is given that the University stands at the apex of the education system as a place for the pursuit and dissemination of knowledge. It enjoys the following traits:

- Local and international dimension, particularly and universality.
- High degree of autonomy and academic freedom.
- Self-motivating and self-perpetuating.

THE UNIVERSITY & THE COMMUNITY

Involvement in the community is a necessary condition for its relevance. It is important that the University sees itself as part of the community to avoid the charge of ivory towering. Through its extension and outreach services, the university continue to establish dialogical relations with the community, the government, rural communities and the corporate world.

THE UNIVERSITY MISSION

Two issues come to mind. That Universities are there to meet the needs of the society and those of the individual people. It echoes the fact that for an economy to be efficient, it needs supply of people with a range of skills and wide understanding for changing societal needs. The University education need therefore to provide all round persons.

In intellectual development, the universities have to promote skills, values, emotional growth and other qualities.

SOCIETY NEEDS

Africa is beset by social-economic problems and disasters. Most of these issues are linked to colonization and current economic mismanagement leading to underdevelopment . The mission of the African University is to take the shape of a commitment to knowledge – where knowledge is to be preserved, disseminated, extended and utilized at all specters of lives. This can be seen through functions such as:

- Research/Public service/social advancement
- Pursuit, promotion and dissemination of knowledge.
- Provision of intellectual leadership
- Human resource development
- Promote service to the community.

STATE OF INDIGENOUS KNOWLEDGE (I.K)

An indication of the African indigenous knowledge is categorized into the following:

1. Artifacts on Indigenous knowledge (print & non print format)
 - Information and Communication(Examples)
 1. Horn:- short horn, long horn, *imbati*, *lutulelo*, *shisiliba*

2. Drum
 3. Fire/smoke
 4. Whistling
 5. wailing
- Medicine (Examples)
1. *Mukombero* – virility, fermenting and preserving porridge, medicine for throat fever, animal feed.
 2. *Muarubaini* – wide spectrum therapy medicine.
 3. *Umusikhu* – malaria treatment and others.
 4. Aloe vera – applying on bites, wounds as medicine.
 5. *Libokho* - massaging swollen limbs.
 6. *Liposhe* – first aid to stop bleeding.
 7. *Shituti/lusiola/indalandalwa/musutsu/shikhuma* – ear/nose/mouth fever treatment.
- Food and nutrition (Examples)
1. *Mushenye*
 2. *Miroo* – rich calcium
 3. *Libokoyi Dodo*
 4. *Lisutsa*
 5. *Tsisaka*
 6. *Indelema*
 - 7.
 8. Wild honey
 9. Mushroom – *shimechero, matere, bukukhuma, busine, bukhusia*
 10. *Shirietso*
 11. *Shikhome* (tail) – marriage faithfulness medicine
 12. *Ibusaa*
- Entertainment/Custome (Examples)
1. *Isukuti/omusala/umremebe*
 2. *Shilili*
 3. *Litungu*
 4. *Umulele*
- Education (Examples)
1. Narratives around bonfire in the evening

2. Story telling in *isimba* by old ladies/men
3. Hunting/Gathering teachings during initiation rites period
4. Publications by African Authors

2. Science and Technology (Examples of Samples)

➤ Blacksmith

1. Knives
2. Pangas
3. Hoes
4. Spear
5. Arrows
6. Bows

➤ Chemistry (Examples)

1. *Mushelekha/musume* – from beans.banana/maize husks remains for potash salt.
2. *Lushelekha*
3. Herbs for arresting culprits
4. Fishing/hunting tranquilizer herbs; pepper and
5. *Linuna* for soap

Agriculture (Examples of samples)

1. Burnt cow dung as a preservative for legumes
2. *Mbonovono* seeds for preserving legumes
3. Manure used as fertilizer with long residue content

➤ Costume

1. *Indubili*: Caps
2. *Shikhonelo* – g-string
3. *Shibungui* – front/back clothe
4. Skin clothing/costume

➤ Physics (Examples of Samples)

- Siphon – *luseshe*

3. African Imprint/Authors (Examples)

- Books by Kenyan authors on topical issues

However, while indigenous knowledge systems are gaining recognition, the very I.K base is being distorted and disappearing courtesy of irrational attitudes. With the many interpretation surrounding African indigenous knowledge, there is need for them to be brought together for thorough research and studies to be carried out.

I.K BASED DEVELOPMENT MODEL

The African region is home to ancient civilizations and cultures. The great ancient Greece philosopher had their education in Alexandria and other parts of Northern Africa. Like Asian countries including India, the role present technology plays in development is dependent on factors such as local history and social structures, traditions of technology and local perceptions of the growth of industry in the West.

The African region had many scientific and technological development before its encounter with the Europeans. The knowledge of iron smelting (blacksmith), algebra and trigonometry, herbal medicine, legal system, communication and writings in papyrus manuscript give an indication of the African science. The gradual development of Europe was due to the initial transfer of African concepts and technologies to Europe.

A blend of I.K and western technologies (technology transfer) would spur economic growth in Africa. Areas of Biotechnology and Information Technology are linked to research. These two are frontline issues as far as scientific advances globally are concerned. The African contribution need therefore be studied and recorded as such. This can be seen in the blending of and absorption of the new technologies and the policy of localization, or logic or emulating to reshape the new technologies into home grown appropriate technologies.

I.K is people centered hence the need for their involvement and call for people's direct participation in development processes. Thus creating a paradigm shift of I.K from ownership heritage to development perspectives.

NEW TECHNOLOGIES & I.K

The key technologies in order of development are: steam, electricity, chemicals, oil-based chemicals, synthetic materials and currently information technology and

biotechnology. It is known that technology change pass through their development with creative wave of destruction. Thus destroying the old order and establishing the new.

Information Technology (IT) will replace human functions on a mental level, both skilled and routine. IT applications have risen rapidly and the leveling-off is not at all visualized in African situations.

The Biotechnology gives rise to array of products including manufacturing processes. It is quite not cleat to determine the extent and scope of penetration within Africa of the two technologies at the time Africa had not industrialized.

This calls for African logic to apply knowledge for national development, whether local or imported technologies. The African logic will imply attaining self-reliance in the ability to apply knowledge for national development faced with local and imported science and technology choices at industrialization. African therefore requires an autonomous knowledge capability to apply technology in the name of, perhaps, generic technology for African development. What then is the contribution of I.K in the development of generic knowledge? Otherwise, what is the role of I.K in African “Green Revolution” in the area of Biotech or medicine in pharmaceutical technologies? What is the African solution to the expensive IT infrastructure?

UNIVERSITY INTERVENTION

The African University intervention is seen in terms of strategic functions that will include involvement in –

- Promotion of indigenous based industry and technology through product development/innovation (incubators).
- Fostering access to indigenous knowledge or technologies.
- Cultural accumulation.
- Local technologies ownership through patents.
- Localized curriculum addressing African relevant issues.
- Human resource production skilled to address African matters.
- Ticker down to the communities domesticated applied technologies through extension services.

- Articulate inclusion of I.K in government national development plans and policies.
- Guide on technology policy that seeks to protect local skills and technologies from imported types.
- Create indigenous technological development centres for direct participation in scientific and technological development and accelerate the pace of local technology generation.
- Act as indigenous consultants in technology, fabrication, design sectors and collaborate with National Research Institutions for utilization of indigenous technologies.
- Carry out research adaptation and indigenization of technologies.
- Carry studies into the experiences of advanced countries to avoid their trials and errors in development.
- Help to smoothen the transition to an information society through education and training and technology development.
- Help to reduce a conflict between traditional cultural values and contemporary values for development.
- Encourage national consensus for development of science and technology for industrialization and testing the technological development based on a grass-roots movements and stakeholders.

WAY FORWARD

- In order to avoid development errors occurring in Africa, governments and development partners must link and interact development with the local knowledge base.
- Universities have a lead role in influencing the living conditions of people. Since their objective and functions targets and recognize I.K as an important ingredient of national development.
- Setting up technology parks for I.K products incubation.
- Setting up cultural heritage centres.
- Actively setting Africana collections in the university library.
- Realigning the curriculum to incorporate I.K studies.
- Influencing official decision in including I.K in national development plans.

CONCLUSION

Indigenous knowledge systems have existed for generations in Africa. Local people have remained the custodians whose participation in designing and shaping development is very essential for achieving development objectives at all levels.

Reaching the grass root people is directly reaching indigenous knowledge. Hence appropriate mechanism have to be devised to reach all at the grass root level and tap the I.K that has existed among them. I.K is prominently seen as a national heritage good but it has to carry a more meaningful function presently in terms of its relevance function for achieving sustainable national development.

I.K need be seen beyond cultural-heritage to a commodity in sustainable development.

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