

Knowledge For Service - Digital Technology Positives & Negatives in African Rural Societies

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Introduction

- COVID-19 has propelled virtual sharing of knowledge to new heights indicating clearly the critical role of digital technology now and in the future for everyone.
- In almost all countries, educational institutions had to undertake virtual teaching and learning, and there has been significant increase in virtual trading (buying and selling).
- Rural areas of many countries have, however, been highly disadvantaged. Many rural children cannot take part in virtual lessons.
- Social justice, and indeed common sense, demands that people who are capable of benefitting from new appropriate technologies, especially ICT, should not be denied.
- It is noteworthy that virtual information sharing (i.e. not face-to-face) is not new in many rural societies, at least in Ghana.
- Information between rural households and communities was commonly shared through “high-pitched voices” and/or loud sounding “talking drums” that gave “coded information”.

Phenomenal growth of digital technology in Africa



- The numerous “positives” of digital technology are well known even in the remotest parts of the world.
- Africa’s growth in mobile telephony between 2007 and 2016 was estimated at over 340% and it has been growing, especially in rural areas.
- Its rapid growth is related to the ease and cost-effectiveness in doing agricultural business and in acquisition of health services by men, women, youth, disadvantaged persons etc without the need to come face-to-face.
- Given Africa’s transportation challenges, especially in rural areas, the agriculture and health sectors and hence the rural economies, are major beneficiaries of appropriate digital technology.
- Mobile money has improved Africa’s rural credit system very significantly .
- The global system, especially its food systems, will benefit very significantly if digital technology is used by everyone everywhere in all parts of the world.

Abuse of technology (1/2)

- Technological development has, however, been prone to abuse.
- Greed, camouflaged as “business acumen”, has resulted in the production of unwholesome foods and medicines, fake fertilizers, killer pesticides, questionable crop varieties etc. and these are often sold to unsuspecting persons, especially rural people, and sometimes sanctioned by national governments, knowingly or unknowingly.
- There is need to guard against similar situations in digital technology.
- Primitive accumulation (greed) has increased in the world as a result of the “worship of wealth and fame” with the support of social media.
- Billionaires and millionaires are talked about as if that should be the main focus of human existence.
- Such unsolicited information, readily available on social media, destroys the culture of hard work, honesty and several important human values.
- Political power in many countries is now for the highest bidder and corruption in the developing world, largely orchestrated by some MNCs of the developed world, is becoming a norm!

Abuse of technology (2/2)

- There is need to counter irresponsible digital technology dissemination and spread to persons not yet tainted.
- We can do that, but only through good understanding of how knowledge systems work and their appropriate integration.
- It is also best done through the formal educational system so that younger persons can, hopefully, grow with it.
- When a particular knowledge system is thought to be “superior” to another, the other tends to adopt both the positives and negatives of the “superior”. Experience is that the negatives easily destroy the values and other aspects of the humanity of the adopters.

Technology replacement has not worked



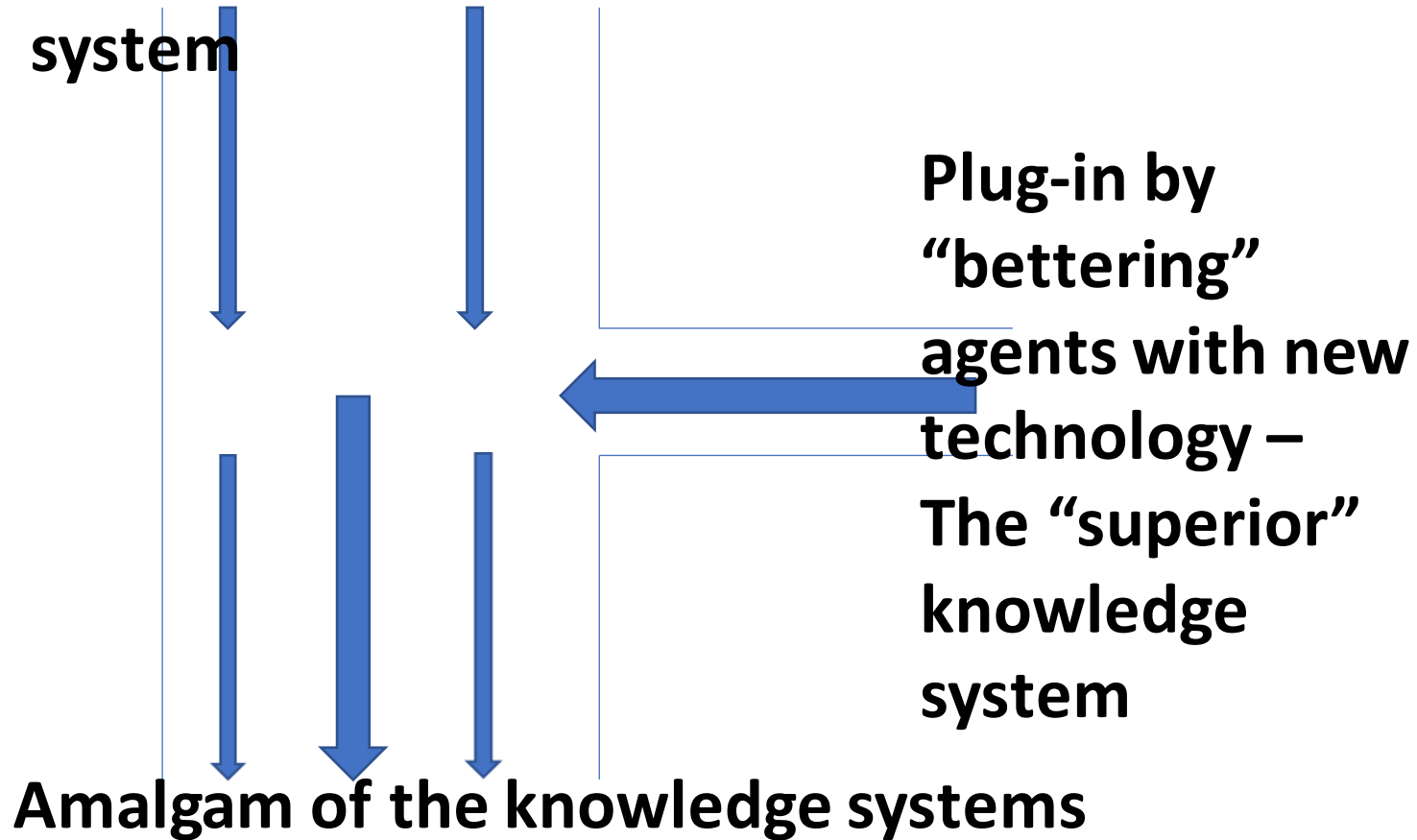
- The usual unfortunate belief is that a “superior” knowledge system should REPLACE an “inferior” one.
- That has failed to happen in many situations. In most of Africa the tractor has not REPLACED the hoe and cutlass.
- Fertilizer has not REPLACED farmyard manure and compost.
- Many “improved” varieties have not REPLACED some local varieties.
- Etc. Etc.
- We are still struggling to REPLACE and it is not working.
- The question is WHY?

Integration of knowledge systems

- Great success is usually achieved when there is “integration” rather than “replacement” of knowledge systems.
- Integration implies that some aspects of both the “inferior” and “superior” knowledge systems have to be dropped, as interactive shared learning takes place and reveals what works.
- That implies that the concept of “technology transfer” is a misnomer.
- The “superior” technology only “betters” the less superior one.
- Development of appropriate technologies must be by a “bettering process” and **not** a replacement or transfer or change process.
- That concept has been the philosophy behind the educational model of the University for Development Studies (UDS), Tamale, Ghana from its inception.
- It is the way to properly obtain **Knowledge for Service** (the motto of UDS). The knowledge of the one to be served, no matter how it seems “inferior”, is important, if he/she is to appreciate the service.

The integration process – The “PLUG-IN” Principle

Knowledge systems of the people (rural farmers, herders, marketers, processors, caretakers, etc.) – The “inferior” knowledge system



- The “pipe” of the “inferior” knowledge system is bigger. That should be the mindset of a “bettering agent”.
- With that mindset he/she will agree to learn and understand the “inferior” knowledge and the mindset of the users.
- With the new knowledge there will often be a re-engineering of the “superior” knowledge to mix well with the “inferior” knowledge to produce an appropriate amalgam (technology).

Appropriate digital technology sensitization and integration

- The UDS Model: Multidisciplinary groups of students spend several semesters in rural communities with close supervision by staff.
- This fits appropriately digital technology sensitization, integration and use by rural people. All disciplines need digital technology, and users of most technologies take holistic views of them.
- It is also a good way to promote the “positives” of digital technology in the rural areas, and to sensitize the people of the “negatives” and damaging aspects that have the potential of threatening their livelihoods, values, and cultures.



Conclusion

- Students and staff of knowledge institutions working closely with rural communities based on “practically-oriented, community-based and problem-solving” pedagogy (the UDS model) is the way to promote inclusive and responsible digital technology development and dissemination for the benefit of the people.
- The future of agricultural, rural health and overall rural development (including non-erosion of valuable ecosystem services) in Africa, critically depends on appropriate digital technology development that ensures that a large majority of the rural people can have appropriate information adequately, securely and timely.

Thank you for
your attention!

