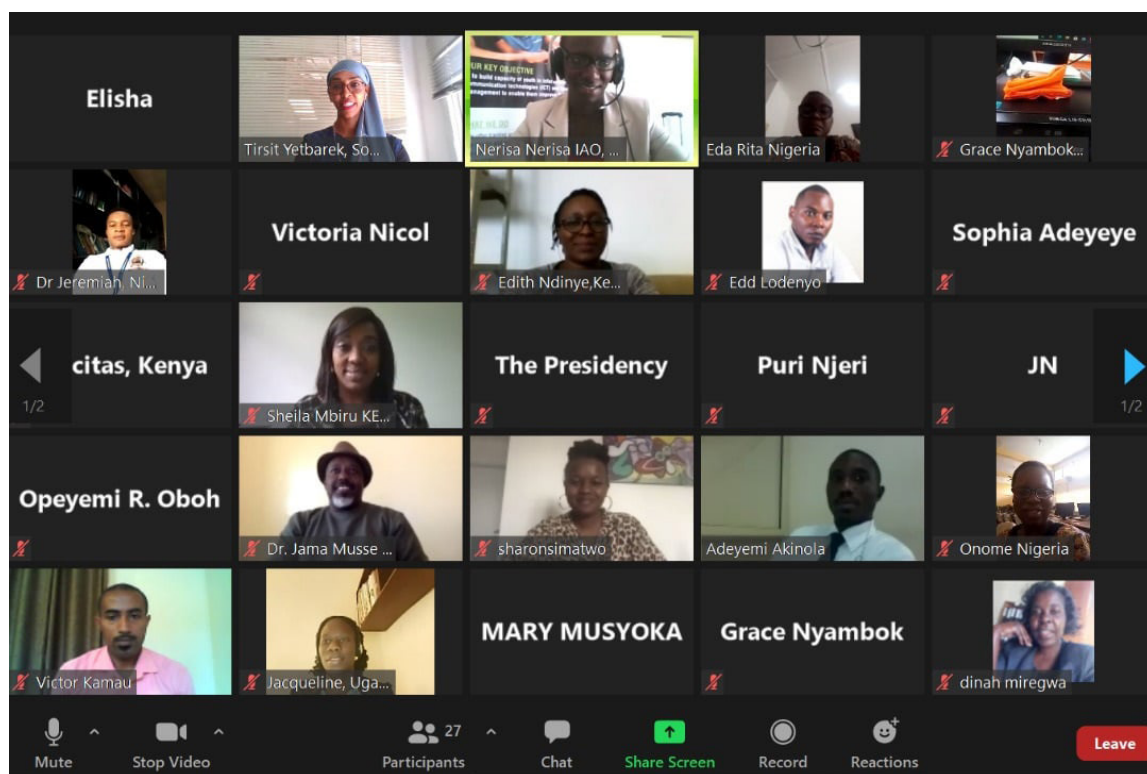


Rebuilding a Continent of Proud People on Africa's Knowledge Base

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The human society and the system birthed by it are ever evolving. The advancement of this duo requires an ever-growing (Elonye, 2013) need for transformation and adaptability. It is anticipated, for example, that by the year 2060, 65% of Africa's population shall move to cities and this pressure shall overstretch the existing infrastructure within towns [Need reference]. To create safe environments for transient populations, transformations including economic, social, and political changes, must take place.

The COVID-19 is a typical catastrophic change that saw the world restricting movements and alternative means of doing business shifting from less and less physical to more and more activities being on virtual platforms. The success of online classrooms and meetings opened a new avenue that showed more transaction between remote places, even across the continents. A case in hand, is the exchange of knowledge and information conducted by Information Africa Organization (IAO), who so far, has held 28 meetings virtually (18 themes), and involving 22 African Countries with more than 150 scholars and information service professionals attended. For over one year, Africa professionals talked about its challenges, in what they called a transformation caravan, drawing on up to the Kenyan Senate and South

Africa political class, to think on how 'develop the Africa We Want' in the face of changes in human institutions. All these are anchored on AU AGENDA 2063:

"An integrated, prosperous and peaceful Africa, driven by its own citizens and representing a dynamic force in the international arena." African Union Commission, 2015

For over one year, the Continent looked at its assets vis a vis its challenges and opportunities and how this can help 'The Africa We Want'. These challenges include poverty, inequality, and climate-change, protecting the environment, peace, and justice. Among the African assets include its biodiversity, its unique cultures. They looked at how these can be exploited to sustainably develop trade, industry and geo-politic. Herbs and indigenous technologies have in the past been shipped out, modified and brought back to Africa by international companies who benefit at the expense of the locals.

Bioprospecting is used by pharmaceutical companies screening plants for bioactive compounds to make marketable drugs. According to Pushpagan, et al (2018), successful screening of plants for bioactive compounds to make marketable drugs is 1 in 10,000 while locating bioactive compounds through selective screening based on traditional knowledge is 1 in 100 and that the discovery of a marketable drug is 1 in 2. Biodiversity can therefore give Africa an edge over the world for it has the richest biodiversity and therefore a rich source of materials necessary for development of medicines and other health options. This remains largely unexploited and but its unexploited biodiversity may not explain the minimal contribution the continent gives to the pharmaceutical industry. Could it be the way African countries protect these biodiversity and intellectual property thereof or its methodologies remain rudimentary? The SWAKOPMUND Protocol, is an example of how this can be done, to ensure benefits flow back to the rightful owners [reference needed].

However, is protecting indigenous knowledge and materials enough to deliver the Africa We Want?

'Biodiversity and traditional knowledge (TK) the most powerful resources which with the interventions of science and technology can generate wealth' (Pushpan-

gadan P, et al, 2018) and the research community play an important role in achieving the 2030 Agenda (Africa Union, 2015). West Africa in Nigeria, Cameroon and Ghana, linen industry is flourishing on traditional dress making and weaving that is now accepted internationally and portrays the African ware as dignifying and making proud those wearing it. Could it be the continent has not developed its other enterprises based on its unique assets, like the linen and medicines addressing the current needs of global societies?

During colonial times, and even at the emergence of new African states, customary institutions have been undermined by the new states who saw them as a threat or in need of modernization (Northern Rangelands Trust, 2019). Traditional medicine practitioners competed with states over natural resources while their methodologies were seen archaic. Herbs and skills in development and administering herbal solutions is slowly disappearing with the passage of the older generation holders of indigenous knowledge, due mainly to lack of support from the states. More threats are from the lack of passage to the later generations and lack of documentation. Intellectual property rights are the rights given to people over the creations of their minds. They usually give the creator an exclusive right over the use of his/her creation for a certain period (World Trade Organization, 2021). The main reason being that most of the knowledge remain tacit and the weak Intellectual Property Rights (IPR) law denying communities benefits from their knowledge and a motivation to preserve neither the gene nor skill.

The indigenous skills (knowledge) disappearance has alarmed many and discussion sponsored by IAO gave Information Communication Technologies ICT as an option. Enablers in this transmission of knowledge are cultures, workflow and integration and institutional support, ac-

cording to one of its pillars, Dr. Elijah Achoch. Modern ICT can enable flow of knowledge. The continent therefore

needs to think of how to move its Indigenous Knowledge (IK) to the cyber space and encourage exploring, researching, and developing traditional pedagogical methods, and information services, and to incorporate them into the modern higher education systems. The continent needs to revise the way of archiving its knowledge.

Most African communities' knowledge and cultures are not on the cyber-space

It is a way to provoke decision makers "to reflect on the meaning of epistemology and redefine ways to study the history of centuries-old mankind-produced wisdom in their own culture, as another way of knowledge production process that needs to be engaged within formal education." [Jama Musse, 2021]

Most African communities' knowledge and cultures are not on the cyber-space, one reason being due to language used (either English, French or Portuguese), where African identity is lost. Placing its knowledge in these platforms ensure wider sharing, preservation and use from remote locations. ICT shall make Africa's knowledge available for improvement of today's lives and those of generations to come.

Sustaining this enterprise may be a factor of genetic resource base management as well as that of skills and knowledge, but also creation of value. Herbal solutions have been literally ingredients dissolved or roasted to be applied on a wound or bruise, and paid for a fixed price. This puts new wine in old wine skins. If the enterprise is to play a role in the pharmaceutical industry and survive in today's highly competitive business environment, whether for profit or social relevance, there must be a mind shift. Mind shift shall see New Product Development (NPD) as a key activity that is undeniably one of the most knowledge-intensive processes and is by itself constantly creating new knowledge.

According to the Africa Agenda 2063, 'revolution have provided unprecedented opportunities for countries and regions with the right policies to make significant advances and lift huge sections of populations out of poverty, improve incomes and catalyze economic and social transformations' (Africa Union Commission, 2015). These frameworks bring in intermediaries in knowledge and information professions who will aid researchers in indigenous medicine to access current trends in the industry, searching through patents, tracing genes in products that may have originated from the continent and give rights to rightful owners, and integrate knowledge from its experiences and those from advanced in the industry and help those working on researching into African indigenous medicines and develop tablets, inject-

able or capsuled ingredients acceptable in the contemporary society. Policy frameworks in the African context must therefore shift and give institutional support and management framework where knowledge workers and managers, product developers take part in the process of developing the industry, products and building a legal framework that can protect and preserve it for today and

tomorrow's generations. Investment in this enterprise need knowledge, which like a gambler, one needs to be tooled with the necessary cards and

a good strategy to play, to increase his chances of winning. Africa has the cards, but is it tooled with strategies to move its population of over 600b hungry to proud citizens who can stand tall and make 'the Africa We Want'?

who can stand tall and make 'the Africa We Want'?

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