

## **Ŝankhu: A Meta-Analysis of Research on Financing Sustainability in Africa from a Diopian Perspective**

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### **Abstract**

*Employing the Africentric Ŝankhu theoretical framework and Meta-Analysis methodology, this paper interrogates the works on financing sustainability in Africa from a Diopian perspective. The major research questions probed are the following: (1) What are the differences and similarities among these works? (2) How relevant are these works in terms of the African notion of sustainability. Appropriately, the central thesis of the paper is that any research that lacks this Africentric perspective will miss what arrangements will promote a lasting mode of financing sustainability in Africa. The substantive findings after the data analysis suggest that the thesis is tenable. In the end, a conclusion is drawn and suggestions are made for how to remedy the shortcoming.*

**Keywords:** *Africa, Africentric, Ŝankhu, Diopian Perspective, Meta-Analysis, Financing Sustainability*

### **Introduction**

While a meticulous search of the literature yielded about 1,030 works that have investigated various aspects pertaining to financing sustainable development initiatives in Africa, only seven works were found to have specifically explored “financing sustainability in Africa.” The variety of aspects interrogated by the first group of works include green/environment/conservation, energy, small- and medium-sized enterprises, family planning, degraded land, debt relief, forestry, urban infrastructure, blue economy (i.e. ocean economy and marine sources), community health workers, municipalities, post-pandemic, sustainable bonds, and foreign assistance. The issues studied by the second group of works, which are the focus of this paper, are immunization (Petu, 2018; World Health Organization, 2018; Chebrot et al., 2018; Academy of Science of South Africa, 2021), health (Republic of Rwanda, 2015), microfinancing (Bayai, 2017), and higher education (Association of African Higher Education Financing Agencies, 2018).

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In light of the aforementioned features of the available studies on financing sustainability in Africa, the following two research questions are probed in this paper: (1) What are the differences and similarities among these works? (2) How relevant are these works in terms of the African notion of sustainability. In order to provide answers to these questions, the Africentric *Ŝankhu* theoretical framework and the Meta-Analysis research methodology (discussed in the following two sections, sequentially) are employed to guide this study. Thus, the central thesis of this paper is that any research that lacks this Africentric perspective will miss what arrangements will promote a lasting mode of financing sustainability in Africa.

### **Ŝankhu: A Diopian Theoretical Framework**

As I have recounted in many of my works, but especially in *Branches of Asanteism* (Bangura, 2019), it was the Pharaoh of Knowledge Cheikh Anta Diop who urged us Africentric or African-centered scholars to get back “the historical and promethean consciousness” encompassed in the achievements of Kemet or Ancient Egypt. Our failure to do so, he said, will leave the history of Black Africans in particular and humanity in general to “remain suspended in air.” Diop went on to insist that “until African historians dare to connect Black Africa with the history of Egypt, Black African history cannot be narrated correctly” (Diop, 1974, pp. xiv-vi; Bangura, 2019, pp. 138-139). He added that even the study of institutions, languages, etc. cannot be investigated properly until this is done: “in a word, it will be impossible to build African humanities, a body of African human sciences, as long as the relationship does not appear legitimate” (Diop, 1974, p. vi; Bangura, 2019, p. 139). It is within this Diopian purview that the Ancient Kemetian idea of *Ŝankhu* is employed to serve as the theoretical framework for this paper. Thus, the immediate question that arises here is the following: What is *Ŝankhu* and why is it Africentric? The rest of this section addresses this question.

*Ŝankhu*—with its synonyms *tcher-t*, *m’kheru*, *Serqu*, *Kau* and *terpu*—means “sustainability,” “sustenance,” “means of subsistence,” “maintenance,” “peasant,” “vivifier,” “provisions,” “supplies,” “nourishment,” “my daily food,” “bread,” “articles of tribute,” “gifts,” “offerings,”

and “visions” (for these translations, see Budge, 1978). From these translations, *Śankhu* can be interpreted to comprise five types of meanings which are elaborated in the paragraphs that ensue.

First, *Śankhu* constitutes conceptual thoughts about the maintaining of someone or something in life or existence. This proposition is supported by the fact that (a) *sustainability* refers to the ability to be maintained at a certain rate or level; (b) *sustenance* means the maintaining of someone or something in life or existence; (c) *means of subsistence* denotes the action or system of maintaining or supporting oneself at a minimum level; and (d) *maintenance* means the process of maintaining or preserving someone or something, or the state of being maintained.

Second, *Śankhu* refers to perceptions of people who make the maintaining of someone or something in life or existence possible. Thus, (a) *peasant* refers to a poor farmer of low social status who owns or rents a small piece of land used to cultivate for his/her and other people’s consumption; and (b) *vivifier* means a person who enlivens or animates an event for other people’s pleasure.

Third, *Śankhu* encompasses ideas of actual sources for the maintaining of someone or something in life or existence. Concomitantly, (a) *provisions* denote supplies of food, drink, or equipment; (b) *supplies* refer to a stock of a resource from which a person or place can be provided with the necessary amount of that resource; (c) *nourishment* is defined as the food or other substances necessary for growth, health, and good condition; *my daily food* is any nutritious substance that a person eats or drinks every day in order to maintain life and growth; and (d) *bread* is food made of flour, water, and yeast or another leavening agent, mixed together and baked.

Fourth, *Śankhu* denotes payments or presents made periodically for the maintaining of someone or something in life or existence possible. This postulation hinges on the fact that (a) *articles of tribute* are particular items of gifts that are intended to show gratitude, respect, or admiration; and (b) *gifts* are described as things given willingly to someone without payment.

And fifth, *Ŝankhu* entails notions of oblation and apparition for the maintaining of someone or something in life or existence. Accordingly, (a) *offerings* refer to gifts or contributions, especially of money, to a place of worship, or things offered as a religious sacrifice or token of devotion; and (b) *visions* denote experiences of seeing someone or something in a dream or trance, or as a ghost or ghostlike image of a person.

Indeed, in Ancient Kemet, as Ellen Cannon points out, “the contrast between chaotic wastelands and orderly, cyclical harvests maintained by careful conservation of resources promoted a sustainability mindset...The Egyptians even had a symbol that represented what mattered to them most: the Djed pillar. Translated, it means ‘stability.’” (2020, p. 1). Nonetheless, Cannon also adds,

Egypt did not simply give the Egyptians all they needed. It was a challenging place to live. Once a year, the Nile would bring rich black mud, jungle dirt from the interior of Africa, flooding almost all the inhabitable land. As the floodwaters receded, the mud was left behind: ripe for tilling, if one caught as much of the water as possible in irrigation canals. One had to husband every drop and every grain. Come harvest time, one had to gather and store grain for food and fodder against the long, dry season...Stability, for the Egyptians, was not stagnation. It was continually reaffirming, refining, and doing what would maintain their civilization long-term. Even their burial practices affirmed and, they hoped, would ensure continuity into the afterlife (Cannon, 2020, p. 1).

Perhaps, no other Pharaoh epitomized this sustainability mindset than the female Pharaoh Hatchepsut (c. 1507—1458 BC) who reigned during the 18<sup>th</sup> Dynasty of Ancient Kemet (1550/1549—1292 BC). Details on Hatchepsut’s sustainability projects can be found in Joyce Tyldesley’s book titled *Hatchepsut: The Female Pharaoh* (1996).

The preceding denotations and evidence clearly support my designation of the concept of *Ŝankhu* as being Africentric for the following reason that makes an idea so, which I have stated elsewhere: “Africentricity simply means that the universe is a collection of relationships, and an individual or a group being in that universe is defined by and dependent upon these

relationships” (Bangura, 2020, p. 5). The multifaceted nature of Africancentricity and *Ŝankhu* therefore makes the two ideas quite appropriate for the analysis of research on the multiplex nature of financing sustainability in Africa.

### **Research Methodology: Meta-Analysis**

Being among the early users of *Meta-Analysis*, I had defined the methodology as the “application of statistical procedures to collections of empirical findings from individual quantitative studies on a phenomenon for the purpose of integrating, synthesizing, and making sense of them. This helps in discovering underlying trends and principles developed from the accumulation and refinement of this body of studies” (Bangura, 1994, p. 100). The methodology has evolved since then to include qualitative and triangulative studies and the utilization of much more sophisticated quantitative techniques.

For instance, as the Himmelfarb Health Sciences Library points out, in the health and medical sciences, *Meta-Analysis* constitutes “A subset of systematic reviews; a method for systematically combining pertinent qualitative and quantitative study data from several selected studies to develop a single conclusion that has greater statistical power. This conclusion is statistically stronger than the analysis of any single study, due to increased numbers of subjects, greater diversity among subjects, or accumulated effects and results” (2019, p. 1). Also, according to Kara Schick-Makaroff, Marjorie MacDonald, Marilyn Plummer, Judy Burgess, and Wendy Neander (2016), when employing the *Enhancement Model*, which requires the utilization of qualitative data to add something to quantitative analysis, *Meta-Analysis* has proven to be quite useful for the analysis of the qualitative data in order to enhance interpretation and explanation. In addition, the *Three-Level Meta-Analytic Model* is employed to examine the following “three different variance components distributed over the three levels of the model: (1) sampling variance of the extracted effect sizes at level 1; (2) variance between effect sizes extracted from the same study at level 2; and (3) variance between studies at level 3” (Assink and Wibbelink, 2016, p. 155).

## **Analysis**

As mentioned in the introduction section of this paper, seven works have specifically broached “financing sustainability in Africa.” Also indicated is that the majority of the works (four) are about immunization (Petu, 2018; World Health Organization, 2018; Chebrot et al., 2018; Academy of Science of South Africa, 2021). The remaining three works deal with health (Republic of Rwanda, 2015), microfinancing (Bayai, 2017), and higher education (Association of African Higher Education Financing Agencies, 2018), respectively. In the rest of this section, these works are examined in terms of their differences and similarities. The objective is to help the reader to understand those relevant factors that may underlie the different and similar findings in these studies. The rest of the analysis is divided into six subsections: (1) types and sources, (2) conceptualizations of financing sustainability, (3) research methodologies, (4) results of the studies, (5) qualitative analysis, and (6) quantitative analysis.

## **Types and Sources**

The majority of the works (four) on financing sustainability in Africa are reports written by three African governmental agencies (Academy of Social Science of South Africa, 2021; Republic of Rwanda, 2015; Association of African Higher Education Financing Agencies, 2018) and one international institution (World Health Organization, 2018). Of the other three works, two are journal articles (Petu, 2018; Chebrot et al., 2018) and one is an unpublished doctoral dissertation (Bayai, 2017).

Also, six of the seven works were written by Africans. The one work written by, most probably, a group of international writers is the one by the World Health Organization (2018). Since all of these works utilized a Eurocentric approach in their analyses, it is not to be expected that their foci of analyses and findings were influenced by their various cultural backgrounds.

## **Conceptualizations of Financing Sustainability**

Given the different foci of analyses of the researchers, even among those who examined the same issues, it makes sense to present each work’s conceptualization of financing sustainability

separately for lucidity. First, the Republic of Rwanda conceptualized financing sustainability as follows:

[A policy that is] aligned...to ensure universal financial access to quality health services in an equitable, efficient and sustainable manner. In respect to the latter, it will contribute to the following areas: (i) economic growth through workforce development, attraction of foreign investments in health and exports of quality health services; and (ii) contribution to poverty reduction through reduction of catastrophic health expenditures. This will enable the Health Sector to be more contributory to GDP rather than being only a consumer (2015, p. 3).

Second, according to Innocent Bayai (2017), financing sustainability involves many aspects. One aspect is an application of the concept to microfinance. Another aspect is its essence to the Life Cycle Theory (an economic theory which gives an account of the spending and saving habits of people over the course of a lifetime) in explaining financial sustainability. The other aspect concerns the nexus between financing structure and financial sustainability. And, still another aspect involves the link between the financing structure and outreach (i.e. depth and breadth).

Third, for Amos Petu (2018), financing sustainability pertains to a required state in the path toward a society's total sustainability. Thus, in order to understand the phenomenon, the major focus must be on the experiences of countries from planning to funding, by drawing upon the interrelationships among (a) adequate planning, (b) ability to mobilize resources, and (c) a better movement toward sustainable funding. Also, attention must be paid to how governments pursue high level order of planning that would place them in a better position to halt overdependence on Gavi (an international organization launched in 2000 to improve access to new and underused vaccines for children living in very poor developing countries.) and other external aid for future sustainability.

Fourth, the World Health Organization (2018) characterized financing sustainability in terms of what hampers it. As such, it sees some governments of countries that have transitioned away

from Gavi but still rely on external aid for 25% or more of their immunization expenditure not being able to achieve the sustainability of their transitions.

Fifth, Isaiah Chebrot, Annet Kisakye, Brendan Kwesiga, Daniel Okello, Diana Kiiza, Eva Kabwongera and Robert Basaza (2018) conceptualized financing sustainability in terms of the planning and financing of routine immunization services, which include those delivered in health facilities (i.e. static services) as well as outreach services provided in homes or separate locations on scheduled days. These researchers add that this is necessary for developing and maintaining a strong Expanded Program on Immunization (EPI).

Sixth, according to the Association of African Higher Education Financing Agencies (2018), financing sustainability requires five strategies. The organization states and describes the strategies as follows:

- (1) “*Capability building*—This involves strategic leadership development, building new linkages and alliances, developing new knowledge and improving the environment within which higher education financing bodies operates. It involves building individuals and institutions that are able to anticipate and manage change and implement the changes with realistic approach” (Association of African Higher Education Financing Agencies, 2018, p. 1).
- (2) “*Evidence-based advocacy*—This involves generating research that is owned by and usable to civil society and non-state actors, policy makers and private sector students, financial sector to make informed decisions in higher education financing” (Association of African Higher Education Financing Agencies, 2018, p. 1).
- (3) “*Policy dialogues*—This involves creating space and platforms for convening within the education sector and between interregional and international organizations and other role-players including the private sector as well as the public sector” (Association of African Higher Education Financing Agencies, 2018, p. 1).
- (4) “*Creating an enabling environment*—This involves providing support to enable meaningful and effective engagement between civil society organizations, governments and policy makers, among others” (Association of African Higher Education Financing Agencies, 2018, p. 1).



- (5) “*Resource Mobilization for Common Goal*—This involves providing financial resources and the related institutional and programme technical support to various higher education financing bodies in Africa for a common goal” (Association of African Higher Education Financing Agencies, 2018, p. 1).

Seventh and finally, for the Academy of Social Science of South Africa (2021), financing sustainability entails these three facets: (1) mobilizing additional resources, (2) increasing the reliability of resources, and (3) improving program efficiency. The organization also states that having a comprehensive multi-year plan enables an EPI to go through a process that ensures priority setting and, on the basis of that, government budget allocation can be done effectively. This is due to the fact that the process will establish a matching of resource with expected cost to determine gaps; and, to the extent that costing and planning are fundamental, subsequent government funding based on the plans and cost will assure sustainability. The organization adds that a better approach to achieving financing sustainability is one of strategic pooled procurement, which includes elements to ensure supply sustainability and to better coordinate matching of supply and demand.

From the preceding conceptualizations of financing sustainability in Africa, it is quite clear that they are decidedly Eurocentric. This shortcoming of not conceptualizing the phenomenon from an African-centered perspective raises a serious question as to whether the researchers provided readers with what the average African actually thinks about the phenomenon.

### **Research Methodologies**

Almost all (six of the seven) of the works on financing sustainability in Africa employed a *qualitative methodology*. This means that the researchers used data mostly in the form of words to generate descriptions of (Bangura et al., 2019) financing sustainability in Africa. The analyses in three of these works (Petu, 2018; World Health Organization, 2018; Chebrot et al., 2018) were augmented with some descriptive statistics that include frequency distributions, averages, and percentages. The remaining study (Bayai, 2017) utilized a mixture of *qualitative* and *quantitative methodologies*, albeit it neither stated so nor discuss the methodologies as such, much less did it attempt to triangulate (i.e. a convergence of both words and numbers) them. *Quantitative*

*methodology* refers to conducting numerical representations and manipulations of observations in order to describe and explain what influence (Bangura et al., 2019) financing sustainability in Africa.

In addition, all six of the qualitative studies utilized the *descriptive case study research design*, which denotes a technique that is focused on answering the question “What?” in order to give an account in words of a phenomenon, including all the relevant characteristics, qualities, or events (Bangura et al., 2019). The study by Bayai (2017) employed a series of research designs, whose discussions is postponed until the next section dealing with the results of the studies in order to reduce redundancy.

### **Results of the Studies**

Again, since the foci of analyses of the researchers on financing sustainability in Africa are different, the results of their studies are also presented here separately. This time, however, the results of the qualitative works are discussed first and then followed by those of the qualitative and quantitative work (Bayai, 2017) for coherence.

First, the Republic of Rwanda (2015) indicates that despite the gains the country has made in improving the health of its citizens, the health sector continues to rely heavily on external funding which has become quite unstable and decreasing. The country depends on external funding for 61 percent of its total spending on health care. Thus, the country’s financing sustainability policy has not worked well in meeting the approved goals of the health sector, which are aimed at strengthening the sector’s financing systems and guiding strategic innovations to maintain and enhance financial access and resources.

Second, Petu (2018) found that African countries have had different experiences in financing sustainability apropos establishing a detailed planning process that would facilitate detailed programming for identifying problems and providing the necessary funds to mobilize efforts to address the problems. Hence, even though African governments have been able to make significant gains to increase funding for immunizations programs, they still have not achieved full financing and national ownership of their immunization programs. Also, although most

African countries use the “Comprehensive Multi-year Planning framework” for planning and can, therefore, put together their resource needs for immunization programs, they are still unable to gain the necessary benefits of high coverage and cover the increased investment requirements needed to guarantee robust funding in a predictable and sustainable way.

Third, the World Health Organization (2018) discovered several challenges to financing sustainability in Africa. One challenge is that the share of routine immunization and vaccines paid by governments decreased an average of 50% in Africa between 2010 and 2014. Another challenge is that there was deteriorating immunization coverage in lower income North African countries where conflicts and political unrest were high. The other challenge is that the projected expected immunization costs and expected financing in many low- and middle-income countries between 2016 and 2020 had a gap of \$7.6 billion over the five years, with 65% of the resources to meet this funding gap required for service delivery.

Fourth, Chebrot et al. (2018) discovered the difficulty of achieving financing sustainability in Africa to hinge on the fact that the average total facility immunization costs were approximately US \$14,415.00, with a range of about \$8,205.00 at private for profit to about \$47,096.00 at public health facilities. They also found that vaccines and supplies were the main cost driver accounting for approximately 64% of the total cost. This was followed by personnel costs at 24%. In addition, they observed that routine facility based immunization had the highest cost, averaging about 48% of the total cost, followed by outreach services at approximately 32%. They further learned that the average cost per dose administered was \$1.40, with a range of \$1.00 in larger health centers to \$1.50 in medium-sized health centers or dispensaries. Moreover, they noted that the average cost per immunized child was \$20.00, with a range of \$12.60 in larger health care centers to \$22.00 in medium-sized health care centers. Overall, their results indicate a significant variance between facility ownership and levels of expenditures for immunization.

Fifth, as of this writing, the Association of African Higher Education Financing Agencies has not reported any results of its initiatives aimed at financing sustainability in Africa’s higher

education that I have found in the public domain. All it has stated is that it has five program areas and five strategies that contribute towards supporting deeper and wider engagement in higher education financing in Africa. The objective is to increase accessibility to higher education for African young men and women who form the center stage of Africa human capital. The organization says that it is committed to regional dialogue on higher education financing and various models that would ensure higher education financing sustainability in Africa. The organization's five program areas are the following: (1) "Enhancing Better Higher Education Funding Policies and Practices in Africa"; (2) "Capacity Building for sustainable higher education financing in Africa"; (3) "Developing best practices, systems and tools for higher education financing in Africa"; (4) "Publication, Consultancy, Research and networking for improvement of higher education financing in Africa"; and (5) "Monitoring and evaluation of Higher Education Financing Indicators" (Association of African Higher Education Financing Agencies, 2018, p. 1).

Sixth, the finding of the Academy of Social Science of South Africa (2021) is that even though there now exist effective and cost-effective vaccines in the world, immunization coverage in Africa South of the Sahara remains less than the highest standard, a result of the ineffective nature of financing sustainability in the region. The organization also found that immunization coverage in the region peaked at 75 percent during the last five years made possible by the Gavi program, with 37 of the 48 countries having introduced the rotavirus vaccine by 2019. It also discovered that the increase of the vaccines administered in the second year of life was dismal in that of the 29 countries that had introduced the vaccine by 2019, only three countries—(1) Rwanda, (2) Eritrea, and (3) Cabo Verde—had achieved 90% coverage. The organization further pointed out that its observations of under-performance are neither uniform across the countries in the region nor are they uniform across time. This is because while certain countries have enjoyed high immunization coverage, some previously poorly performing countries have made significant improvements in the last ten years, while others are still lagging.

Finally, since he utilized different qualitative and quantitative analytical techniques, Bayai (2017) generated a variety of results. To begin with, he used the Life Cycle Theory and the

concept of financial sustainability to ground his analysis of selected Southern Africa Development Community (SADC) microfinance institutions. The following SADC member countries were included because they had reporting microfinance institutions: Angola, Democratic Republic of Congo, Madagascar, Malawi, Mozambique, Namibia, Seychelles, South Africa, Swaziland, Tanzania, Zambia, and Zimbabwe. The SADC member countries Botswana, Lesotho, and Mauritius were excluded because they did not have reporting microfinance institutions. Bayai also utilized panel data (i.e. longitudinal data of cross-sectional elements and time series) to represent a mixture of time series observations of a number of microfinance institutions. In addition, he employed a linear panel regression model with financial sustainability as the dependent variable and microfinance institution age dummies as independent variables. The direction of linear dependency between financial sustainability and age was first assessed by using pair-wise (Spearman's) correlation analysis. Bayai revealed that the analysis was done in a "notched" manner to permit for the testing of a single Life Cycle Theory proposition at a time: i.e. microfinance institutions assume commercial financing structure at maturity. The results indicate that (a) there is a relationship between microfinance institution age and financing options; (b) mature microfinance institutions have a statistically significant, albeit negative, relationship with borrowings whereas young microfinance institutions have a statistically significant and positive relationship with borrowings. Together, these results suggests a contradictory relationship between the theory and financial sustainability, as the theory's expectation was for a positive and significant link between mature microfinance institutions and equity, borrowings, and deposits.

It behooves me to mention here that the aforementioned results were published in a paper coauthored jointly by Bayai and his doctoral dissertation adviser, Innocent Sylvanus Ikhide, and titled "Life Cycle Theory and Financial Sustainability of Selected SADC Microfinance Institutions (MFIs)." The paper appears in the 2016 edition of *The Journal of Developing Areas*.

Next, Bayai (2017) presented the results for the relationship between financing structure and financial sustainability of the selected SADC countries. He used (a) a *random effects probit model*, which is used to generate a series of correlated binary responses; (b) a *cluster robust*

*probit model*, which is employed to delineate groups (clusters) based on similar elements; and (c) a *standard probit model* in which the error term is assumed to have a variance of one. He found that only the *standard probit model* was statistically significant at the 0.05 level. Given that coefficients were not interpreted, Bayai estimated the average marginal effects whose coefficients he interpreted under the *maximum likelihood framework*, which is used to determine the probability distribution and parameters that best explain observed data. He found that the *probit model* yielded marginal effects.

Thereafter, Bayai (2017) provided the results for the link between financing structure and outreach of the selected SADC countries' microfinance institutions. Using unbalanced panel techniques under a fixed and random effects framework, he determined that both outreach depth and breadth are affected by the same financing variables, albeit in a different way. He found that while deposits, equity and new microfinance institutions advanced outreach depth, borrowings had a deleterious effect on outreach depth. Hence, he argued that because outreach depth is affected by huge administrative costs linked to small loans, cheap commercial funding sources advanced outreach depth (i.e. equity and savings). Furthermore, he pointed out, competition, inadequate funding, operational challenges, and unsharpened business models for new microfinance institutions hamper outreach breadth.

### **Qualitative Analysis**

Here, I employ the *Qualitative Content Analysis* approach, which can be generally denoted as a technique that is suitable for the subjective interpretation of the content of text data through the systematic classification process of identifying themes or patterns, of the findings in the preceding studies that have investigated financing sustainability in Africa. Accordingly, for starters, as mentioned earlier, the content of the seven works that examined financing sustainability in Africa specifically are analyzed here.

Next, the main units of analysis of financing in the works investigated, as I have also noted, are four. The first is *immunization*, which is the action of making a person or animal immune to infection, typically by inoculation. The second is *health*, which denotes the state of being free from illness or injury. The third is *microfinance*, which refers to the lending of small amounts of

money at low interest to new businesses in the developing world. And, the fourth is *higher education*, which describes education beyond high school, especially at a college or university. The category of analysis is *financing sustainability in Africa*, which denotes providing funding for ensuring the ability to maintain the units of analysis mentioned at a certain rate or level.

Also, two other units of analysis are prevalent in all of the works studied. One of these units is *external financing*, which includes funding that comes from international organizations and non-African countries. The other unit of analysis is *internal financing*, which includes funding from both private and public sectors in the African countries.

In addition, the systematic classification process of identifying themes leads back to the preceding six units of analysis. It suffices to state that the units are frequently stated in every study.

Finally, it is quite evident in the works examined that both *external financing* and *internal financing* have not been adequate for financing sustainability in Africa. In fact, the works point out that there has been a decline in both funding mechanisms in many of the African countries.

### **Quantitative Analysis**

Ideally, if there were more than one study that quantitatively examined the nexus between a factor as an independent variable and financing sustainability in Africa as the dependent variable using correlation coefficients or other statistics that can be easily converted into correlation coefficients, then Equation 1 could be used to synthesize the correlational results to obtain the average effect size between the two variables: This is typically calculated by averaging the raw Pearson correlation coefficient ( $r$ ) utilizing the following equation:

$$r' = \frac{\Sigma r}{n} \quad [ 1 ]$$

where  $r$  is the Pearson correlation coefficient from each study,  $\Sigma$  is the sum of the correlation coefficients,  $n$  is the number of correlation coefficients combined, and the  $r'$  (or mean  $r$ ) is then used and reported as the effect size indicator. And, if the various studies had different sample sizes, the following Equation 2 would be employed:

$$(ws)r' = \frac{\Sigma(ws)r}{n} \quad [ 2 ]$$

where  $ws$  is the weighted sample size and the other symbols represent the same elements as in Equation 1.

Nonetheless, even though Bayai's study was the only one to provide such coefficients, the results of the various factors (or independent variables) used to determine financing sustainability (dependent variable) can be combined using Equation 1 to generate a *meta-average*: i.e. all of the coefficient estimates of the effects summarized in order to determine what the evidence had established. Accordingly, I make the following calculation based on the five effects for which such estimates were generated by Bayai, respectively: (1) "microfinance institution age versus financing"; (2) "financial options and financial sustainability"; (3) "microfinance age and microfinance institution charter"; (4) "microfinance institution age, efficiency measures and scale"; and (5) "financial sustainability and microfinance institution age categories:

$$r' = \frac{-0.04962 \ 0.08156 \ -0.13095 \ -0.049152 \ -0.24975}{5} = -0.079582$$

The preceding result indicates a negative *meta-average* effect vis-à-vis financing sustainability for the selected SADC countries. Employing the most frequently utilized guideline proffered by Jacob Cohen (1977) for determining the effect size for correlational analysis ( $r = 0.10$  being small;  $r = 0.30$  being medium; and  $r = 0.50$  being large), the negative correlational effect for financing sustainability of the selected SADC countries is quite small.

I must also add here that no attempt is made by Bayai (2017) to employ an African-centered sustainability mathematical model or equation in his work. These and those on African-centered tipping points were available in my study (Bangura, 2015) at the website of the Council for the Development of Social Science Research in Africa (CODESRIA) free of charge.

### **Conclusions and Recommendations**

In sum, the essence of the literature on financing sustainability in Africa can be diagrammatically represented as the framework in Figure 1. The principal proposition is that the need for effective immunization, health, microfinance, and higher education propels the exigency for financing sustainability in Africa. The diagram depicts a relationship to a central idea, which is



*sustainability*, and it emphasizes both information in the center circle and how information in the outer ring of circles contributes to the central idea.

More specifically, based on Figure 1, it can be postulated that the necessity for financing sustainability in Africa from the perspectives of the authors of the works reviewed in this paper hinges upon the desire for, as stated earlier, (a) the action of making a person or animal immune (i.e. resistant to a particular infection or toxin owing to the presence of specific antibodies or sensitized white blood cells) to infection, typically by inoculation; (b) the state of being free from illness or injury; (c) the lending of small amounts of money at low interest to new businesses in the developing world; and (d) education beyond high school, especially at a college or university. Theoretically, then, *sustainability* is evident when there is a representation of a highly valued segment of an epistemological repertoire and less highly valued segments of any degree of epistemological relatedness to the higher valued segment. The suggested framework is, of course, not the final word on this issue. It is my hope that other researchers will build on or modify it.

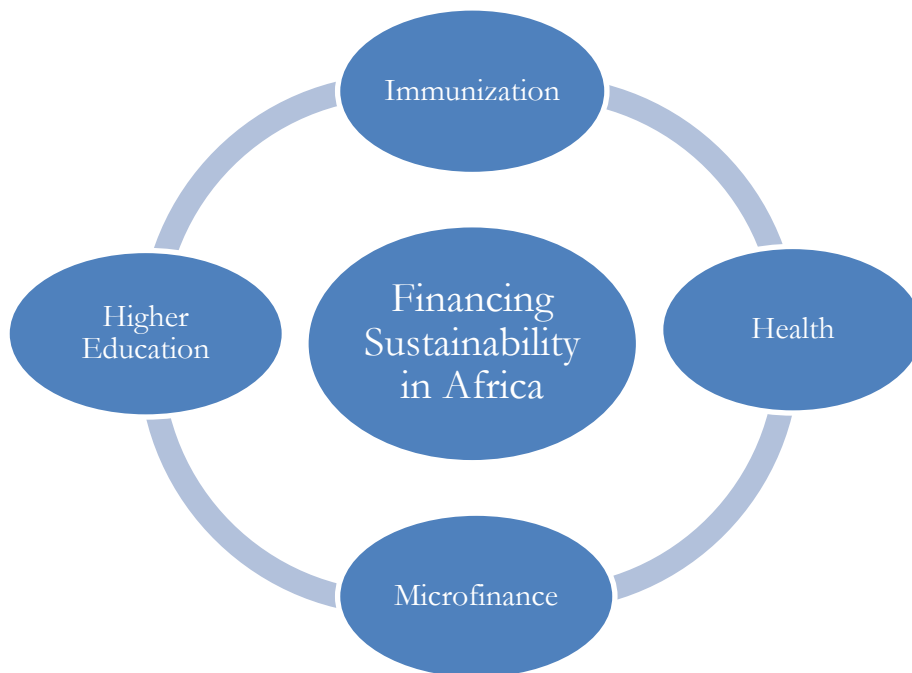


Figure 1: A Framework for the Literature on Financing Sustainability in Africa

Source: Self-generated by the Author

In conclusion, it is evident that the literature on financing sustainability in Africa does not provide cumulative knowledge on the phenomenon and it is also not Africancentric and, hence, inadequate for addressing Africa's indigenous situations and needs regarding the matter. The central thesis of this paper is therefore tenable: i.e. any research that lacks this Africancentric perspective will miss what arrangements will promote a lasting mode of financing sustainability in Africa.

Indeed, the great Kenyan scholar Ngũgĩ wa Thiong'o (1986) had urged us Africans that in order to solve our persistent economic, political and social problems, we must begin by *Decolonising the Mind*, which is accordingly the title of his very famous book in which he made the case. Nonetheless, as Cheryl Hendricks, Sabelo J. Ndlovu-Gatsheni, Francis Onditi and I (2018) have also made the case, we need to transcend "Decolonization" and engage in *Deneocolonizing the Mind* because our problems in Africa are not only the manifestations of external actors but also self-inflicted by our own leaders and knowledge producers. Thus, we must learn from the Ancient Kemetians/Egyptians that knowledge, *Rekh* (which also denotes science, to know, to be wise, to be acquainted with, and to be skilled in an art or craft), involves both *ren* and sometimes *ka* (to diagnose, to name) and *âr* or *âri* (to prescribe, to do). In essence, knowledge involves both naming and action → abstract and concrete → competence and performance = logic. Consequently, an *âru* or *âriu* (a doer) is more preferable to an *âkhem* (a do nothing, to be ignorant, to have nothing, inert, weak, or feeble). We find the same word, *Rekh*, with its attendant attributes in the Serer language of Senegal and The Gambia and similar manifestations in Yoruba epistemological discourse as *Imo* (knowledge) and *Igbagbo* (belief).

While we contemporary African intellectuals are very good at and do a humongous amount of diagnosis of the problems confronting the continent and its people, we offer pitifully very few prescriptions and, even more, the latter are mostly not Rekhthically grounded. In fact, most of the time, symptoms are conflated for causes. Indeed, diagnosis and prescription just as theory and praxis are never separate. Moreover, the challenges facing Africa are never constant across time and space. Thus, while we need to continuously diagnose our problems, we must also pay

significant attention to developing well-grounded solutions. We do not even have in this age of Internet technology an African Intellectual Architecture (AIA) platform through which we can catalyze our thoughts around major issues. These verities call for a serious symposium that would bring together some of our best minds with the requisite expertise to address this shortcoming of offering well-grounded solutions to our problems.

The rationale for the proposed methodology is well captured by the analogy of the pot, anchor, and fire which encompasses four steps. The first step in a deep analysis of issues/problems in the African context is to subject them to the Heat/Council, commonly known as *Joto/Baraza* in the Swahili language. The purpose of subjecting a hypothesis/assumption to the heat is to allow the smoke to come out and inform the audience about the signs, symptoms, and issues. The second step is the Cooling, known in Swahili as *Baridi*. The significance of this step is to allow actors to reason, adopt logic, and avoid being led by emotions. After cooling, the next/third step is the Calibration, referred to in Swahili as *Kumakinika*. In order to diagnose a problem effectively, the environment should be absolutely free from heat or excessive cold. The fourth/final step is to assign Responsibility, referred to in Swahili as *toa Majukumu*, to each actor so that the problem can be reached at its deepest point to allow for the delineation of a well-grounded solution.

Correspondingly, I make two recommendations. The first recommendation is that Africentric conceptualizations (and contextualization) must undergird the discourse on financing sustainability in Africa. This is due to the fact that as I have argued in many of my works (especially in Bangura, 2012 & 2021), such conceptualizations are imperative because many of the concepts used in works dealing with Africa and its Diaspora employ Eurocentric concepts that often do not capture the essence of the phenomena being discussed. I added: “to call a thing by its precise name is the beginning of understanding, because it is the key to the procedure that allows the mind to grasp reality and its many relationships” (Bangura, 2012, p. 103).

Second, except for the works by the World Health Organization (2018) and the Association of African Higher Education Financing Agencies (2018) which cited Petu (2018), none of the other works cited one another. This negligence means that readers do not get a cumulative knowledge

on financing sustainability in Africa. In order to remedy this shortcoming, it is therefore recommended that later works consult and build upon earlier works.

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