

A Systems Thinking Approach to Overcome Setbacks in African Socio-Economic Development “What every politician must know.”

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ABSTRACT: Africa recorded high economic growth of 6-7% after independence; however, the current socio-economic conditions are characterized by unemployment, weak educational systems, and dependency. This paper adopts a systemic approach to identify factors that setback Africa in its economic development. The combination of historical data, interviews and literature provided an overview of the current structures that affect African development. From the results, the Western world's exploitation through policies and false data, external dependency, brain drain, unfair market rules, poor policies, and high taxation are key factors that take away economic freedom as well as inhibit African socio-economic development. The results illustrated that to gain economic freedom, African countries must embrace unity through inward investment from primary commodities, oil, gas, and mineral resources through integration and implementation of regional free trade to spur economic transformation. Until Africa unites to set forth its development agenda other than Sustainable Development Goals, targeted to eliminate the root cause of domestic challenges to sustainable development they will fail to develop. It is therefore being recommended that trading among African countries will assist them to be immune to agricultural prices in line with the Prebisch-Singer thesis. These will unlock significant opportunities for job creation, value addition, and investments in human development making Africa the “Promised Land” the Africans seek. Systems thinking to intervention can make Africa realize all unintended consequences of her decisions and help it find new ways to improve efficiency and development.

KEYWORDS: Africa | economic growth | independence | minerals | socio-economic development | systems thinking | taxes

Introduction

The socio-economic conditions of the African society are characterized by unemployment, weak educational systems, poor health care systems and external dependency [1]. In the early days after independence there were regional development plans which helped Africa to record economic growth of 6-7%. In those early days, Africa began to grow in terms of education, Africans through agriculture began to feed themselves, and agricultural products were receiving the right price [2]. In East and West Africa, there was a time when they all had a common currency, airline, and university such as the University of Education, the University of Ghana, the University of Nigeria, the Makerere of Uganda etc. [3]. Africa was rising but something happened. There were countries such as Ghana, and Kenya that were doing better than South Korea [4]. Ghana, Tanzania and Kenya had a higher GDP than China and Singapore [5]. However, Singapore had transformed itself from a third-world economy in the 1960s to a middle-income country in a brief time. Whereas the International Monetary Fund (IMF) lists Singapore as the third-richest country per capita on the planet, Ghana is languishing at number 126. Some thought it was externally induced while others assumed it was through poor leadership [6]. So, there is a sense in the adage that Africans are the co-authors of their misfortunes. Even what we call peace in many African countries is not peace, it is just silence. The GDP of all 54 African countries in 2018 when combined (1.4 billion population) is not more than 2 trillion US dollars [7]. And to give a perspective, the state of California in the United States with a population of slightly above 39 million had a GDP of three trillion US dollars [8]. In Burundi, the GDP was not more than 2.3 billion US dollars in 2018 and that is the same amount the state of New York collects in one day [8].

Africa has never been left to rest after independence, it has been subjugated by the so-called advocates [9]. The colonial masters still think their colonizers must be guided occasionally if they are out of line and perniciously influence policies for their interest [10]. After independence, a commonwealth of independence and equal state was created, however, the US which is a former colony of the British cannot get into it and is not a member because it is too powerful to be superintended by a former colonizer. Africa is a troubled nation because some of its challenges were engineered from outside in addition to those within, poverty is a multi-billion-dollar industry. If Africa will work, Africa has to unite and write its own story. The neo-colonial project was once made to ensure that Africa appeared to be independent and those who spoke to make Africa great were eliminated, killed or removed from power through coup d'état [11]. Example of leaders with their countries who fell casualty due to their outspokenness includes Osagyefo Dr Kwame Nkrumah, Ghana, Nnamdi Azikiwe, Nigeria, Ibrahim Boubacar Keita, Mali, Ahmadou Babatoura Ahidjo, Cameroon, David Dacko, Central African Republic, etc. [12].

Africans are never at ease but the beauty of it amidst all Africans, whether they are of the political class or in a different sector, even when they are engaged in activities that seem to undermine Africans, they have always been conscious of the fact that this continent needs to move in some useful directions. In 1980, in Lagos, Nigeria, the African countries came together under the Lagos plan of action to channel African resources for African benefits to make Africa work but this failed to work as it was intended to [13]. There have been many initiatives to make sure that Africa works, some of them are homegrown, and others were engineered from outside [14]. Other nations of vested interest prescribe for Africa what she needs to do through subjugated policies. The Lomé convention of 1975 signed in Togo [15], the African Caribbean and Pacific [16] tells us how we should cooperate with Europe as a way of immunizing Africans from poverty and improving their lots. After the Lomé convention had died, they coined another one in the year 2000, called the Cotonou Agreement to take off from the Lomé convention. There is an old English saying: 'he who plays the piper, calls the tunes;' and for his benefits are the tunes called. They did not stop there, then came the structural adjustment

program in the 1980s [17], the Millennium Development Goals [18], they were eight when they came about, now renamed sustainable development goals and there are 17 of them [19]. There is also the African Growth Opportunity Act, created by the parliament of the United States of America to open space for their textile industries to dump their second-hand clothing into the African markets [20]. Killing the textile industries in Africa: Kaduna in Nigeria died [21], and Rivetex textile factory, Kikoni, and Montex Fabrics Ltd in Kenya all died because Africa is a dumping place for what the Europeans have rejected. When the Rwandese and the Ugandans said that they were going to stop the importation of second-hand clothes, they were threatened with sanctions [22]. There have been many initiatives to make Africa great. The New Partnership for Africa's Development (NEPAD) was instituted to help Africa to grow together [23].

Africa has been a jungle in which you can hunt without consequence. The African Union said in 2020 the gun will be silent, we are already in 2023 and the guns are not silent [24]. For Africa to develop, the guns must be silent to enable the farmers to grow their crops, if the guns are not silent, our women will not go to the market, and our resources will not be channeled in the right direction. Africa has been attractive to many other nations. Every two years, our African leaders are invited to Japan to discuss how Japan can work with Africans for the benefit of Africans [25] but must be more for the benefit of Japan. It is so attractive that the Chinese call African leaders to Beijing for the benefit of Africa, but this is not true because the Chinese will trade with Africans for the best interest of the Chinese and not for Africans. The Arabs, Germans, and Russians want to work with Africa for their benefit than that of Africans.

The Challenges of the African Continent

Africa is home to 1.216 billion people and is the world's second-largest and second-most-populous continent, after Asia [26]. The continent consists of low, lower-middle, upper-middle, and high-income countries of which twenty-two are fragile or conflict-affected [27]. In 2022, economic growth in Africa slowed to 3.6% from 4.1% in 2021; and economic activity is anticipated to further slow down to 3.1% in 2023 [28]. The persistent lethargy of the global economy, high inflation rates, amid high levels of debt explain the down trend. The GDP growth of both central and West Africa is projected to decline to 3.4% in 2023, from 3.7% in 2022, while that of Eastern and South Africa is estimated to decline to 3.0% in 2023, from 3.5% in 2022 [28]. African economic performance is still dragged down by lower long-term growth in the largest countries on the continent. Economic activity in South Africa is postulated to weaken further in 2023 (0.5%) as the energy crisis excavates, while the growth regaining in Nigeria for 2023 (2.8%) is still friable as oil production remains restrained [28]. Higher inflation driven by rising energy and food prices in addition to weaker currencies and low investment growth continues to limit African economies, creating insecurity for investors and consumers [29]. The current crisis in Africa according to literature is agricultural insecurity and the need to safeguard the calorie and nutrition needs of Africa's one billion people [30]. According to the 2022 Global Report on Food Crises 2022 Mid-Year Update, at least one in five Africans goes to bed hungry and an estimated 140 million people in Africa face acute food insecurity, [31]. African governments do not commit enough budget to research and development [32]. Some farming innovations in Africa are still out of date [33]. Agricultural extension officers only visit fields where they have a vested interest or can attain their per dem [34]. 70% of the African people claim that they are farmers, but they cannot feed 50% of the population [35] while in the USA, perhaps not more than 1% claim that they are farmers but that feed 99% of the population [36].

African agriculture is in a sore state. Africa produces what it does not consume and consumes what it does not produce [37]. Agriculture and mining are the backbone of African economies, but our education systems do not support this backbone [38]. Most people have become obsessed with a degree without considering the content of it. Graduates of agriculture can hardly be agriculture innovators inventors, or manufacturers. For example, in most African airlines, the butter is from Denmark. The butter and beef could not come from Botswana, the cocoa from Ghana, coffee, Kenya, etc. Any made-in-African product consumed creates employment in Africa. Intra-African trade constitutes only 4% [39]. There is food in other African countries that cannot be transported to other African countries where there is a market. Transport systems are not well developed between African nations. Most African nations are still waiting for God to send rain before they can cultivate their land. Poor investment in irrigation systems [40]. God Himself said, go ye and subdue the earth, but most people allowed the earth to subdue them. The other challenge is a source of energy, Africa's combined energy production is less than that of Japan [41]. Poor enhancement of extension service [42]; scientist must cascade their ideas to the ground so that men and women can begin to appreciate science and make scientists relevant.

Justification for the Research

African governments and politicians currently have neither adequate historical information nor the necessary tools required to analyse the factors or policies that setback socio-economic development in the countries they govern [43]. They are under pressure in continually changing political and socioeconomic landscape to make the right decisions. The local and global challenges facing economic development in Africa are overly complex. History advises that these challenges cannot be solved in isolation and with single-dimensional tools and mindsets. Overcoming these setbacks against development may benefit from a systemic approach to interventions and capacity-building based on systems thinking and complexity management to solve problems holistically and convey the desired outcomes sustainably. In this research, systems models are developed to provide an understanding of the dynamics, interconnectedness and relationships present within the African socio-economic setup. The research is conducted using a system thinking approach and tools such as causal loop diagrams (CLDs) to demonstrate its application in effectively addressing complex sustainability issues affecting the socio-economic development of the African continent. Therefore, this paper adopts a systemic approach to intervention to identify the factors that setbacks socio-economic development in Africa using historical data obtained from some African countries, interviews in Ghana and the literature review.

Novelty and contribution of this study

This research aims to bridge the gap between dealing with problems in isolation and an integrated approach. In this light, the results (CLD) of this study seek to reveal and foster integrated planning for sustainable economic development, which is necessary in Africa, and to avoid disjointed government policies coupled with a lack of unity in fixing challenges among African countries. The methodology will provide deep dialogue and consensus building with a common language for diverse stakeholders. Systems thinking tools provide a conceptual framework and a methodical process that can be used to achieve outcomes that may contribute to the development of sustainable systems. The use of a systems thinking approach in applied economics in the context of a social, economic, environment or business has significantly increased in modern times [70]. The increasingly complex nature of government and business has led to increased use of a systemic research approach to solve operational problems. This assumes a significant role in the formulation of economic policy for both the government and business. This approach is a new concept in sustainable management, and its application to

overcome setbacks in African socio-economic development and management is yet to be exploited by many researchers, managers and policymakers in Africa. Other generalist thinking or traditional approaches have been attempted to solve problems in isolation in sustainability management but with little success. However, this approach highlights and addresses problems in integrated or systemic approaches and demonstrates how to translate hitherto difficult ideas into potent management tools for change. The theory of this approach uses thoughtful, realistic examples to build policymakers' and/or managers' understanding of not only when a more systemic solution is possible, but also how to uncover that solution.

The results can be applied to a wide range of situations because the approach is adaptable to different contexts and can deal with complexity, as in Africa's economic sector. This research will benefit not only Ghana and several other countries in Africa but also the world at large. First, the study will benefit governments, managers, policymakers in agricultural sectors, the World Bank, the Food and Agriculture Organisation of the United Nations (FAO), non-government organisations (NGOs) and other development agencies, as the model can reveal the root cause of challenges and identify key leverage points. It could also serve as the basis of an economic system for all governments and proponents of good policies for sustainable economic development. The approach of this research can serve as a platform to work with the complexity of the challenges in natural resource management in addition to social, economic and environmental development in African countries. This research aims to bridge the gap between dealing with problems in isolation and an integrated approach.

In this light, the results (CLD) of this study seek to reveal and foster integrated planning for sustainable development, which is necessary in Africa, and to avoid disjointed government policies coupled with a lack of unity in fixing challenges among international agencies. The model will also help decision-makers anticipate the long-term consequences of their decisions and actions, as well as avoid significant unintended consequences of policies and strategies, and avoid the danger of 'silo mentality' and 'organizational myopia.' The methodology will provide deep dialogue and consensus building with a common language for diverse stakeholders.

Literature Review

Africa that is not yet known

Africa is the richest continent of life, light and rich in resources [44]. Africa has a total area space (30,370,000 km² (11,730,000 sq mi)) larger than all of Europe (10,180,000 km² (3,930,000 sq mi)), China (9,596,961 km² (3,705,407 sq mi)) and the United States of America (3,796,742 sq mi (9,833,520 km²)) combined [45].



Figure 1: the world in Africa (source/; Think Africa).

Africa is three times the area of China, three times, the area of Europe and three times the area of America. In other words, you can transplant all of Europe, China, and the United States of America and several other countries on the African continent and they will fit neatly as demonstrated in Figure 1. Africa is 30.5 million square kilometres, and has a youthful population of 1.3 billion inhabitants [46]. China is 9.6 million square kilometres, and 1.4 billion inhabitants [47]. India is 3.3 million square kilometres, and youthful population of 1.4 billion inhabitants [48], yet Africa is projected as overpopulated and pressure mounts on Africans and their leaders to depopulate [49].

Africa is home to 60% of the world's arable land [50]. 90% of raw materials reserves, 40% of gold reserves, 33% of diamond reserves, 95% of platinum reserves and holds the largest bauxite reserves in the world, in addition to manganese, woods, uranium, crude oil, and others [51].

Africa known as the poverty capital of the world has been looted of its raw materials by the Western world [52]. Through propaganda, destroyed some of the culture, and brainwashed Africans through miseducation to prevent them from enacting black retribution against the Western world. For over four centuries, Africa has not been in control of its resources. A 2016 study of Africa by an NGO on war reveals that 101 companies mostly from Europe control 305 billion dollars' worth of platinum, 276 billion dollars' worth of oil, and 216 billion dollars' worth of coals in 2016 market prices in 37 African countries [53]. Africa subsidises the rest of the world by 32 billion dollars annually [53]. A 2017 report by Global Justice Now and other group estimate that 161.6 billion dollars enter Africa, while 203 billion dollars leave Africa almost every year [54]. For example, in 2017, Africa received a total of 19.7 billion dollars in aid but paid back 18 billion dollars in debt repayments [54]. Debt burdens are weighing Africans down, African governments have borrowed between 25 – 75% of their GDP with little or nothing to show forth [55]. Africans in the diaspora remit not less than 32 billion dollars annually but multinational companies siphon 32.4 billion dollars in profit and elicit financial outflows[56]. An illicit 29 billion dollars are stolen through illegal logging, fishing, and poaching annually[57]. And Africans are cheated and bullied with the agricultural export prices to the Prebisch Singer thesis. Can Africa develop with such looting?

Africa has opportunities amidst its problems. To see those opportunities and re-orient, Africa must go back to the basics since Africans tend to create logical meaning through illogical things. Also, until Africans refrain from using the conventional methods of doing things and take the needed steps required to embrace systemic interventions to liberate themselves from laboratory and analysis (breaking things apart), the African continent will not develop.

Past Interventions to Help Develop Africa

Since 1960, there have been numerous and encouraging modernisation efforts to help Africa to develop. In 2000, leaders of 189 countries gathered at the United Nations headquarters and signed the historic Millennium Declaration, in which they committed to achieving a set of eight measurable goals that range from halving extreme poverty and hunger to promoting gender equality and reducing child mortality, by the target date of 2015 [58]. As the Millennium Development Goals (MDG) failed to achieve its objectives, Sustainable development Goal (SDGs) was built upon the lessons learned from the MDG, providing concrete experiences on how to achieve a sustainable and inclusive world post-2015 through its integrated and multidimensional joint programs [59]. Traditional approaches of the Western world through collaborative efforts with African governments and other development partners have attempted to address many of the constraints facing Africa. However, Africa's development and productivity continue to decline [60]. Agricultural performance and growth are among the lowest in the world [61]. Growth has been mostly based on area expansion, but land is scarce, and many countries are facing limits to further expansion. According to Kalibata [62] and Clark, MacLachlan [63] issues and challenges facing African countries cannot be addressed and solved with the same thinking that created them, as in the past. They argue that the traditional and linear approach to sustainable development is one of the major impediments to sustainable development. This explains the slow, negative or lack of progress in Africa and Ghana, as the industry's multidimensional, complex and dynamic makeup makes it difficult to solve problems in isolation. Systems thinking can help set priorities for actions on the SDGs by showing interactions, both synergies

and trade-offs between the Goals. Seeing the whole and understanding relationships, rather than breaking systems down into separate parts, is basic systems thinking.

Using a systems thinking approach, Africa can be great again. It will take African combined effort. African view that it could grow regionally, thus the establishment of CEN-SAD (Community of Sahel-Saharan States), COMESA (Common Market for Eastern and Southern Africa), EAC (East African Community), ECCAS (Economic Community of Central African States), ECOWAS will cause African to punch below her weight [64].

The Need for a Systems Thinking Approach to Make Africa Great Again

Most Africans have lost faith in themselves [65]. It is high time Africans asked critical questions as to what has led to that and revert to development. To prescribe the right medications, we must understand the melodies that afflict Africa [66]. According to Dr. Kwame Nkrumah, attaining political independence through liberation would only be realized if Africa could feed itself [67]. After the attainment of political independence by many African countries, the realization that Africa has a single backbone through agriculture and mining was not lost by all leaders of the day. How come over 70 years of independence, Africa cannot feed itself [68]? Currently, as a result of drought, the Ethiopians are unable to feed themselves [69], there is talk about the South Sudanese's inability to feed themselves [70], the Central African republicans cannot feed themselves [71], the Nigerians cannot produce enough tomatoes [72], the Kenyans cannot produce enough maize [73], the Malawians are grouting with drought [74], the same story as the Mozambique, Ghana, and many other African countries [75].

Any time problems of Africans are diagnosed and an antidote is administered, a new wound or unintended consequences appear [43]. These raise questions that can only be overcome by adopting a systemic approach to intervention. Most of the agricultural seeds used by African farmers are imported or produced by Monsanto or Syngenta [76]. Africa continues to punch below her weight in terms of agriculture [77]. Africa has not been able to produce at its optimal level. After the attainment of political independence by many African countries in the '60s, the leaders of the day were very clear about their five-year development plan and agriculture and education were given a primal place and received the highest budget share [78]. Land tenure systems were examined to release land for mechanized agriculture. Many of these plans did not realize their full potential. Initiatives such as the African Union ought to provide leadership in the area of agriculture, and it cannot be denied that it has not tried over the years to leverage some of the issues in agriculture [43]. Most farmers in rural Africa are not aware of the African Union. In other words, the African Union is not felt by the people that they intend to help. Many African agricultural lands are underutilized and concentrated on producing what they do not consume for export [79]. These interventions will not make Africa realize her potential. According to Prof. PLO Lumumba, Africans must find out what they are doing wrong. Monsanto has not been able to meaningfully transfer its knowledge and technologies to institutions in those African countries it is servicing. The umbilical cord remains firm, alive, and uncut even when the baby is ex-utero. Africans continue to look for fertilizers outside their continent. For a nation to be able to stand, it must be able to produce its food and medicine. Interventions in areas such as agriculture must be accompanied by local people's expertise. The problem of Africa is that those with ideas have no power and those with power have no ideas.

Research Approach

The combination of data obtained from some African countries through literature review, interviews of some key leaders who witness independence (retired directors of institutions, individual citizens, the media, and heads of civil service society or organisations in Ghana, and the four levels of thinking model, as well as the evolutionary learning laboratory (ELLab) (see Figure 2), was used to identify the factors that setback socio-economic development in the Africa region. The ELLab boosts the bottom-up approach in solving management challenges instead of engaging an outside expert to do so [80]. Systems thinking helps in the identification of the root causes of challenges and identifies the potential implications of policy decisions that may affect an outcome and the causal relationships between them. This research focuses on the first five steps of the ELLab framework, which are detailed as follows.

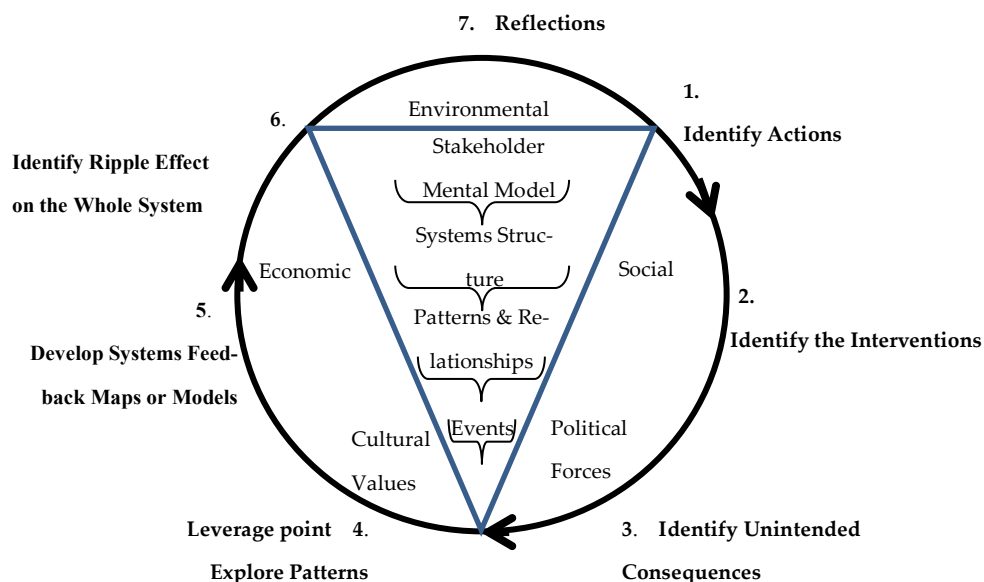


Figure 2: Feedback learning laboratory (adopted from Bosch et al. 2013).

The model starts at the 'first level of thinking', which involves a series of literature reviews and interviews with experts in the field (e.g., research scientists retired directors of institutions, individual citizens, the media, and heads of civil service societies or organisations) to obtain the mental models of the policymakers behind the solutions provided to solve the challenges about economic developmental systems under deliberation. The "mental model" of individuals and organizations influences why things work the way they do, and it reflects the beliefs, values, and assumptions that are personally held. This was done by reflecting on the outcomes of the actions and decisions that have been implemented to determine their effect and identify significant unintended consequences and new barriers generated. Sources of information such as the media, newspapers, radio, T. V., and the Internet generally report events – what happened, where, when, how, who was involved, etc. This level of information is very shallow as it represents a snapshot of reality that only touches the surface of what happened.

Once the unintended consequences and new barriers have been identified, the 'second level of thinking' is used to interpret and explore patterns and their interconnected components, and to analyse the kind of feedback loops, reinforcing loops and balancing loops that were generated. Commentaries about a news item or an issue allow one to examine trends and patterns of events and data. This provides a richer picture of reality and gives more insight into a "story" – for example, news of a quarterly economic report, or a political scandal. However, it is not common to read reports on how such trends and patterns relate to and affect one another. This approach represents a much deeper level of thinking that can show how the interplay of different factors brings about the outcomes that we observe.

This is followed by step three, which is the 'third level of thinking', in which the literature review was used to identify what pre-existing system archetypes were influencing the African economic developmental system. The Vensim software program (Ventana Systems UK) was used for the development of the systems archetypes of the issues under consideration. A Causal Loop Diagram (CLD) is the first step to modelling and simply converting the complex elements into a simple, easy-to-understand structure. Causal Loop Diagrams are variables connected by key causal relationships to display the behaviour of cause and effect from the system's standpoint [81]. Nguyen and Bosch (2013) declared that systems thinking is a way for professionals to conceptualise and shift towards the integration of social, environmental, and economic dimensions of sustainability. This helps societies to address problems and improve the well-being of both humans and their ecosystem. Bosch et al. (2013) agree that the systemic way of doing things supports the management of complexity more effectively than other approaches. The challenges of sustainable development are complex and ever-changing, and they require the development of effective mental models in the face of rapid social, political, economic, and technological changes that support an adaptive transition to sustainable development. According to Senge (1997), mental models are deep-rooted generalizations or images that affect how we understand the world and act [82]. CLDs are a useful tool for integrating and interpreting stakeholders' mental models. CLDs contain variables that are related by key causal relationships to represent reality, and they are used to display cause-and-effect behaviour from a systems viewpoint [81]. CLDs translate complex elements into an easy-to-understand and simple format. The relationships between variables are represented by the arrows which can be labelled positive or negative. In a system, everything starts with a cause, which leads to an effect, then another cause, and then another effect, thereby forming a web of interactions or a model. The symbol '+' or 'S' is used if the cause and effect change in the same direction. In contrast, if the cause and effect change in the opposite direction, the symbol '-' or 'O' is used. Feedback loops describe the cause-and-effect relationships between the parts of a system [83]. Reinforcing (R) feedback loops are exponential, not linear. They lead to exponential increases or decreases, and a Balancing (B) feedback loop is a mechanism that resists further changes in one direction. It counters change in one direction with a change in the opposite direction. It seeks to stabilize the system.

Finally, the 'fourth level of thinking' highlights the strategies needed to overcome the issues and challenges facing the entire complex developmental system. Archetypes are useful for gaining insights into the 'nature' of the underlying problem and for offering a basic structure or foundation upon which a model can be further developed and be constructed. The four levels of thinking described above are shown in "Four Levels of Thinking." This figure uses the analogy of an iceberg, where the event level of thinking is only the tip and yet most of us are satisfied with this level. This is because events are the most visible part and often require immediate attention.

Results and Discussions

Diverse types of feedback loops are identified when we examine the characteristics of African socio-economic development in Figure 3. As Africa's population increases and its economy continues to expand, the opportunities for businesses to trade with the Western world increase leading to the growth of the Western world. As the Western world grows, they exploit Africans the more leading to low economic growth rates with extreme poverty rates. For example, the insistent of the International Monetary Fund (IMF) on removing fuel and agricultural subsidies in most African countries led to the price of food, medicine, and transport rising steeply which led to currency devaluation in most African countries as shown in Figure 3. These types of loops are called balancing feedback loops (marked with a B10 and B11) since more dependency on the Western world will lead to less growth in Africa – the original change is balanced by a change in the opposite direction. Subsidies influence world prices since they encourage farmers in the Western world to export more agricultural products than their African counterparts. World Bank studies indicated that United States subsidies alone reduce Africa's annual revenue from cotton exports by \$250 million annually [84, 85]. Africa with all the resources such as gold, diamond, bauxite, etc. has devalued currencies with one unit of the US dollar worth 5000, 10,000 and even more of some African currencies [86, 87]. Developed rich countries' donations of 0.7% of their gross national income to support African socio-economic development have not yielded their intended benefits yet since the 70s [88].

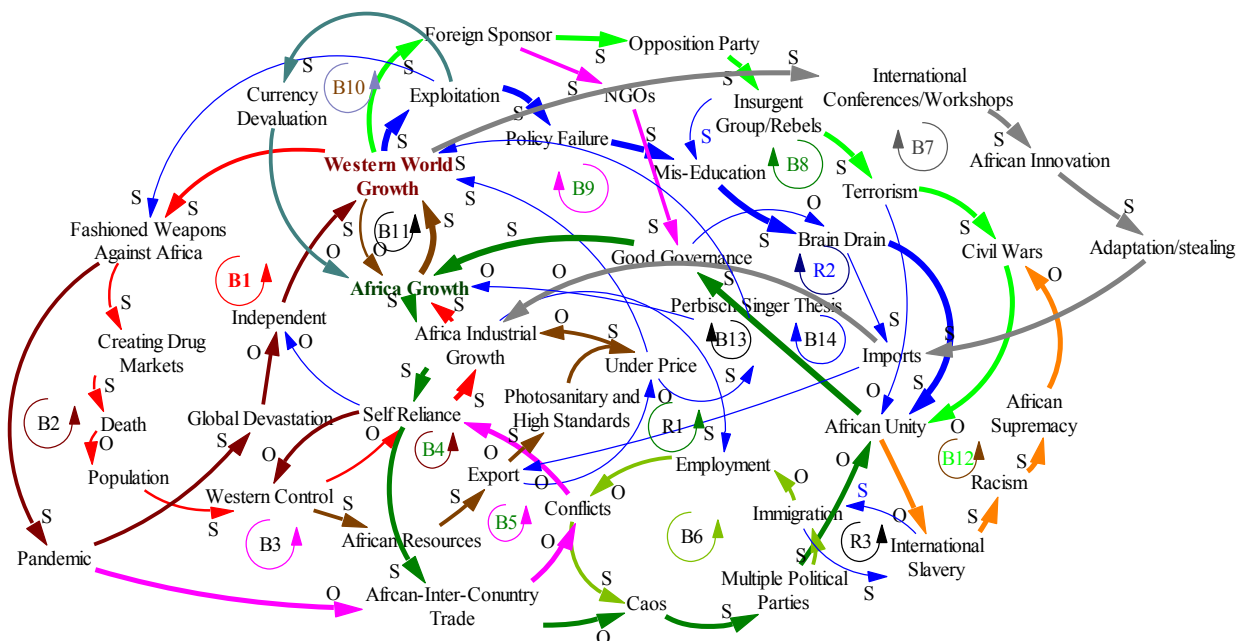


Figure 3: Characteristics of African Socio-Economic Development.

Aid is not coming to Africa but from Africa to the Western world. The Western world depends on Africa in every possible way since alternative resources are scarce out there [89]. For the West to ensure that the free aid kept coming, they systematically destabilized the wealthiest African nations and their systems [90]. They (UNICEF, Red Cross, Life Aid, Oxfam etc) create the impression that Africa is poor and dying and Africa is at the mercy of the West in addition to all the other organisations that continuously run multimillion-dollar advertisement campaigns depicting charity pouring to sustain the image of Africa globally [91]. These ad campaigns are paid for by innocent people with the motive of

helping Africa. But one hand gives under the flashing lights of cameras and the other takes in the shadows. We all know the dollar and the euro are worthless compared to gold, diamonds, platinum, etc of Africa. African countries must embrace unity through inward investment of primary commodities including oil, gas, and mineral resources through integration and implementation of regional free trade to spur economic transformation across Africa[28]. This will lead to good policies and governance.

which will intend to spur African growth and unlock significant opportunities for job creation, value addition, and investments in human development. This will also boost industrial growth within Africa making it self-dependent which is in the same direction as the growth of the terms of trade which opposes the Prebisch-Singer thesis of trade deterioration with the Western world's [92] The Prebisch-Singer thesis postulates that the relative decline in the prices of primary commodities has negative consequences for African countries, which tend to be major exporters of primary goods and depend on them for their foreign exchange earnings. This intertrading among African countries will intend to eliminate conflict and chaos which will reinforce (R1) African unity, making Africa the Promised Land the world seeks. Thereby minimizing emigration and slavery and inducing African supremacy which will oppose civil wars and terrorism (Figure 3).

The perception is that a healthy and striving Africa will not disperse its resources as freely and cheaply which is logical. Of course, it will instead sell its resources at world market prices, which in turn would destabilize and weaken Western economies established on the post-colonial free meal system. The IMF reported that six out of the ten world's fastest-growing economies of the world are in Africa, measured by their GDP growth[93]. The French treasury for example is receiving about five hundred (500) billion dollars every year from foreign exchange reserves from African countries based on colonial debt they force them to pay. Former French president, Jacques Chirac stated in an interview recently that we have to be honest and acknowledge that a big part of the money in our banks comes precisely from the exploitation of the African continent [90]. In 2008, he stated that without Africa, France would slide down in the rank of a third-world power [94].

This is what happens in the human world. The world we have created. In nature, one will assume that in evolution the fittest survives, however, in nature, for any species that are overhunted, or over-exploited for nourishment, natural selection will sooner or later take the predator out because it off-sets the balance [95].

Impact of Exploitation on Economic Development

From the Figure 4 archetype, import substitution for domestic products promotes local industrialisation which leads to skills and socio-economic development as well as employment. The growth of local industries will eliminate or reduce importation and cash repatriation which inhibits socio-economic development (Figure 4). Globalization is not new to Africans, Africans were once globalized as commodities on the slave market, and they were sold everywhere in the world [96]. Africans were globalized again through colonization, then they were globalized again through neo-colonization [97]. Now Africans are globalized in the contest of opening their markets, under the same trade rules[98]: just like a boxing match, the rules are the same, but you don't put a heavy-weight boxer and a light-weight boxer and say the rules are the same, it is a murder. E.g., imagine the United States of America with a GDP of anything between 14 trillion and 15 trillion entering into a bilateral agreement with Lesotho whose GDP is 2 billion under the same rule[99, 100].

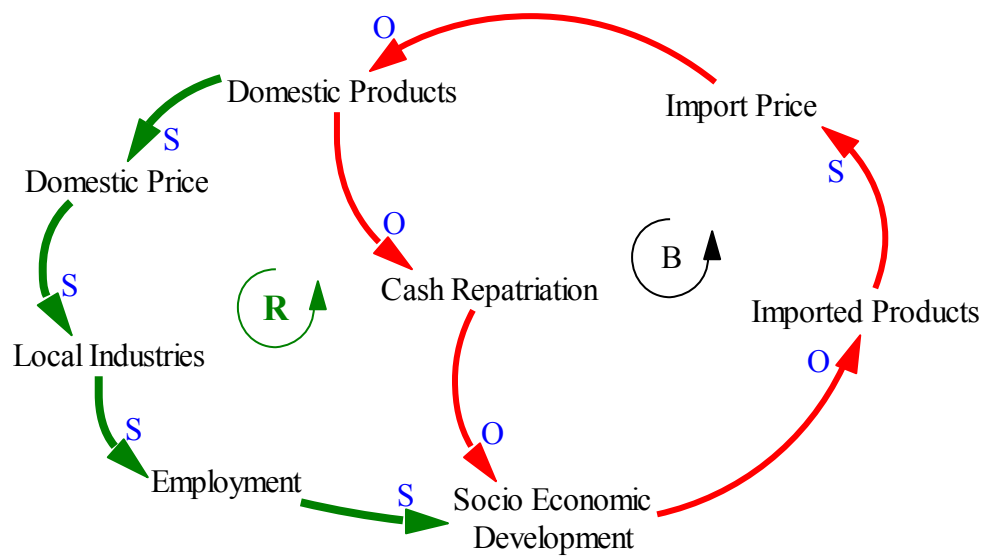


Figure 4: Archetype of Import Against Local Industries.

It is a murder because the revenue that is generated by the city of Los Angeles alone in one day is more than the GDP of Lesotho [101]. So Africans were being told to open their markets and what happened: the textile and cotton industries died, the sugar industries died, and even Coca-Cola gave Africans water. Most of the hotels have imported water determining what the middle-class drink [102]. This results in slow or no economic development since most of the monies are repatriated out of the African economy as shown in Figure 4. Bad governance is not only harmful to the well-being of the current generation of Africans but generation yet to be born. Most African leaders have consistently demonstrated that they are not working in the interest of their people[103]. Africa has been victimized by systems of government which is hard to understand. The government in power must remain eternally vigilant because the forces of reactions are very persistent through international influence [104].

Influencing the Psyche of Africans to Instill Fear

Africa exports more of its agro-produce to the world and is well poised to become the global breadbasket and emerge as a major supplier of food, yet still, it is threatened with food insecurity and poverty [105] to influence the psyche of Africans as shown in Figure 5. Distraction from self-realization prevents Africans from discovering and understanding their natural aptitude, which in turn prevents the attainment of the highest level of heroic discoveries to satisfy the rational desires of the African people.

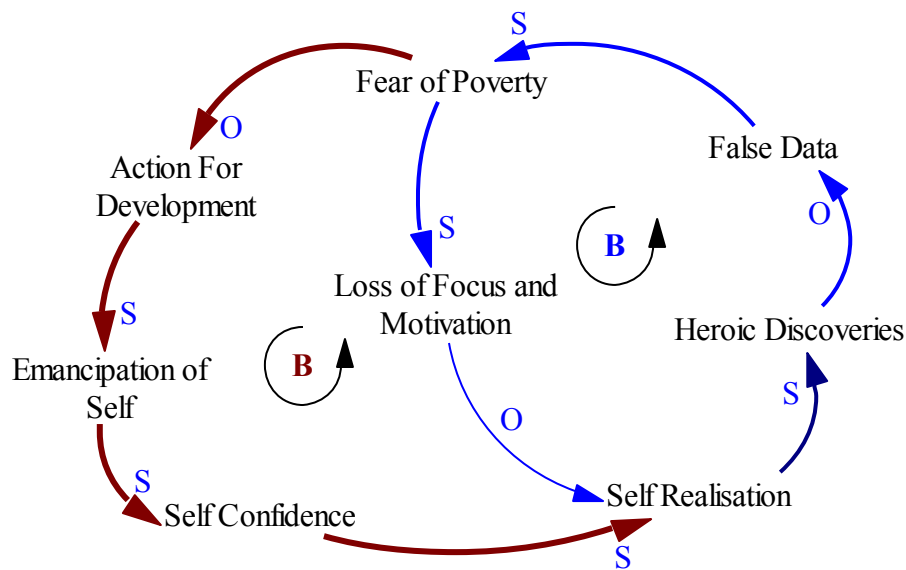


Figure 5: Archetype of Influencing the Psyche of Africans.

This makes Africa vulnerable to organisations which are against her development and keep it dependent on aids [106] as shown in Figure 6. Figure 6 indicates that policies are strategically designed by some organisations to keep African countries who seek aid from employment, increased taxations and currency devaluations as a means to increase economic crises which could incite coup de tat and rebellion against the ruling government making it more vulnerable to aid dependency [107].

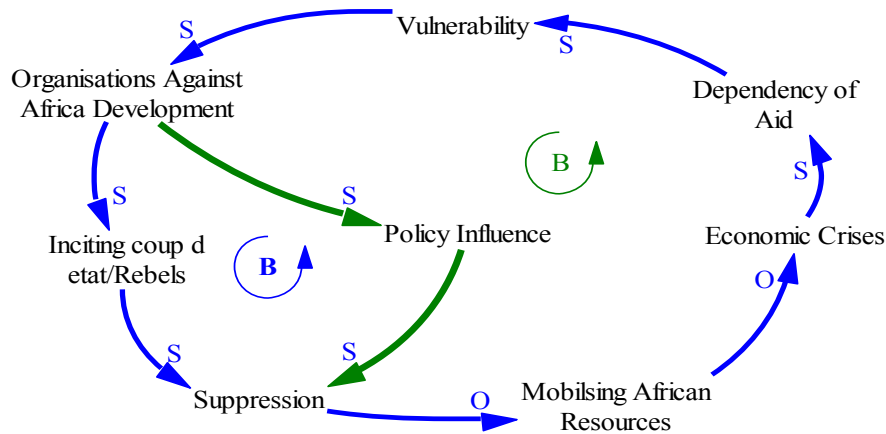


Figure 6: Archetype to Keep Africans Poor.

Figure 7 indicates poor policies designed to keep Africa poor and therefore worsen the already worsening plight of the African citizens, leading to the brain drain of the educated African labour Force, leaving the poor intellect to govern the nation which leads to looting and corruption. When intelligent people are victimized, they are given opportunities back to the nation that gave them scholarships to pursue their education and others migrate out of the country[108] because there are no leaders who are true crusaders as shown in Figure 7. The UN will send peacekeeping forces into Africa where there is no peace in the first place to be kept[109]. Our African leaders and young people have no sense of a history, presence and future[110]. As long as our leaders and people in positions of leadership are in continued slumber, Africa will never realize her potential. Every party campaigns against

misgovernance and corruption, but when in power, they loot the nation and forget the African agenda. They send their children to school with monies which are corruptly acquired, they build houses and own businesses which are corruptly acquired not only in their home country but abroad [111]. A lot of people have died because money that was supposed to build roads, and hospitals, was looted.

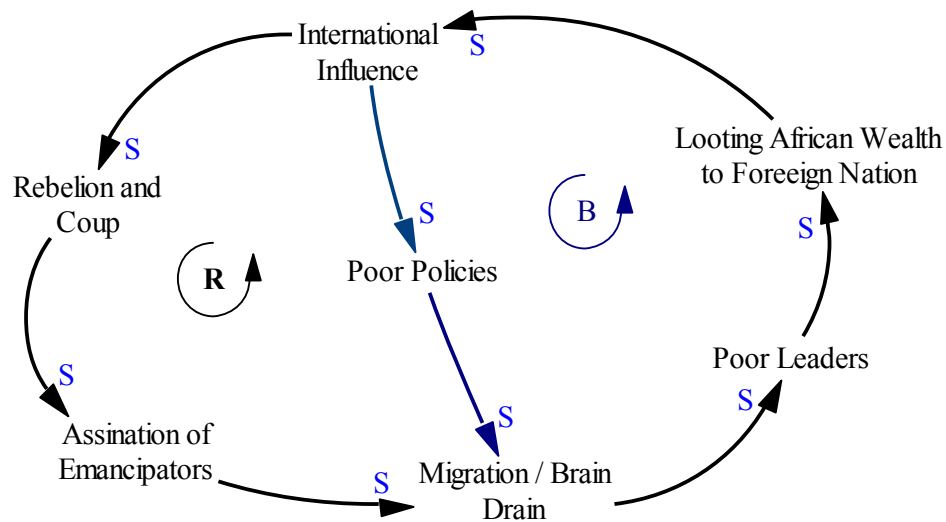


Figure 7: Brain-draining abled leaders.

When one chooses to fight corruption, he or she can be eliminated at any time. Africans have everything in terms of resources, timber, bauxite, uranium platinum, gold, diamonds, human resources etc.; and yet our policies are influenced to keep Africans in a constant state of conflict. The French persuaded their former colonies that they were more French than their Yoruba counterpart in Nigeria [112]. The British persuaded their colonies that they were more British than their counterpart [113], leading to division among the African people. The United Nations Sustainable Development Goals (SDGs) like the MDGs are the most ambitious development frameworks to assist in driving inclusive development globally and particularly in Africa [114]. Several efforts have been made to achieve development in Africa, but more efforts are needed to achieve desired results. To overcome this challenge, the United Nations with allied countries must recognise sustainability as a dynamic system, with interdependencies and interlinkages that transcend individual sectors, locales, and times [63]. Dynamic systems have inherent interconnections, woven through overlapping relationships of causal effects that carry ripples of impacts from any system driver to any others, synergizing emergent phenomena beyond the sum of its components, and often through one or several degrees of feedback loops [63].

High Tax Rates

Figure 8 shows that high tax rates discourage investors: work, savings and innovation which leads to the depletion of capital which could induce economic development. Poor African countries can never repay their loans except by cutting taxes in that country. Some African tax rates are the highest in the world [115], in Tanzania, the 30% rate kicks in at \$475 of income plus another 20% value-added tax added to everything you buy. These taxes are making it impossible to build capital in these countries (Figure 8). So, nothing gets built, not roads, factories, hospitals etc. Poor African countries have the lowest wage workers in the world and yet a company like Nike can't put up a factory in those coun-

tries because of the oppressive tax rates [116]. Taxes have killed any possibilities of economic development [117]. It kills every hope of the people in the countries to ever help themselves and that leaves them completely at the mercy of charity and loans. The worst part is that these countries resort to high tax rates to pay the loans from the IMF and foreign nations [118]. But taxes cannot raise any money if the economy is killed. The unintended loan kindness from these foreign loans has led Africans to lock themselves in gruesome economic depression. If these poor countries do not cut their tax rate, they will never grow their economy, people will live a lifetime of unemployment, disease will be rampant, poverty will be permanent, and charity will never be enough.

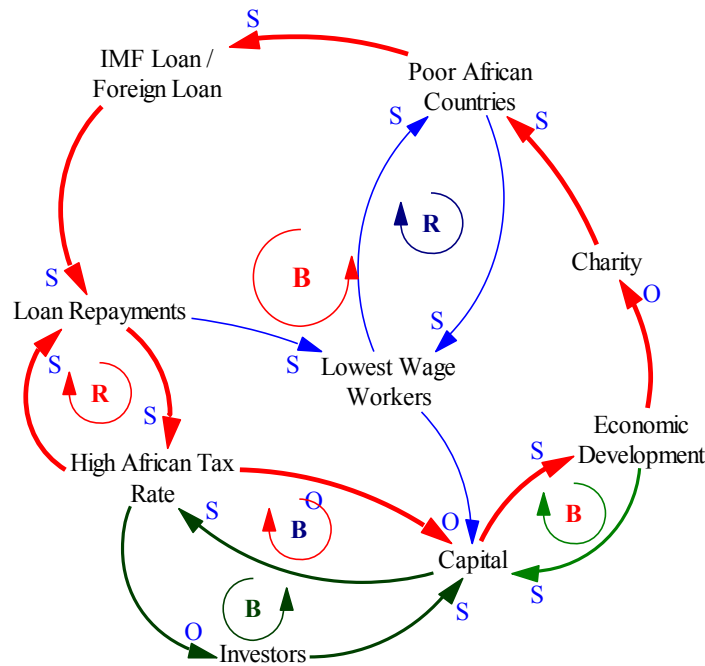


Figure 8: High Tax Rate Loop.

Conclusions

From the results, illustrated above, exploitation, poor policies, forced dependency on the Western world, brain drain, unfair trade rules and high taxation are key factors that take away the economic freedom of African citizens and inhibit socio-economic development. Africa can be great and take its rightful position by instituting the right policies without influence from the Western world by finding African solutions to African problems and avoiding dependency on aid. Achieving the United Nations' 17 Sustainable Development Goals as a coherent unit requires decision-makers to take a system-based approach, acknowledging that progress on one goal can undermine or enhance progress on others. African politicians must resist policies that will slow and limit African development. Until African units set forth their development agenda other than SDGs, targeted to eliminate the root cause of domestic challenges to sustainable development they will fail to develop. African countries must embrace inward investment from primary commodities, oil, gas, mineral resources, and good governance through integration and implementation of regional free trade to spur economic transformation across Africa. Inter-African trading of the primary commodity will be immune to agricultural prices against the Prebisch-Singer thesis and lead to the growth of the terms of trade within the African continent. These will unlock significant opportunities for job creation, value addition, and investments in

human development making Africa the Promised Land the Africans seek. Impunity must be punished irrespective of the culprit in Africa. Electorates are in the business of celebrating thieves. Africans must learn that the world is not bothered by Africans. The world is bothered by Africa when they want to take resources out of Africa. The time is now to wake up and begin to find African solutions to African problems.

Instead of finding new avenues to tax African people to raise money to pay foreign debts and to aid in African development, we can generate money from punishing corruption and impunity. The police can generate a lot of money from spot fines. The officers who generate this income can be rewarded in addition to their salaries with the interest from the absolute amount generated during their active service. This will reduce bribery and reduce impunity. African countries must resolve their disputes and refuse wars that will undermine African affairs. All these rebel groups including the “bukoharam” have to be invited and through peaceful negotiations, resolve their cause or what it is they are fighting about to provide the platform for socio-economic development. African education systems must be revived to teach programs that will help Africans maintain and utilise their resources within the continent to liberate them from Western control. The African Union must interrogate governance systems in Africa whether they are compatible or not. African countries should export products and raw materials among Africans and surplus beyond Africa. Any country that wants to import produce or any product from Africa must pay in the currency of that African country to strengthen their local currencies. African Union must back the traditional institutions within the continent to eliminate corruption. This study fulfil SDG goal 4, quality education will exonerate Africans from manipulation further promote lifelong learning opportunities for all, goal 8, Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all and final SDG 9, Building resilient infrastructure, promoting inclusive and sustainable industrialisation and fostering innovation

References

1. Kilyachkov, A.A., L.A. Chaldaeva, and N.A. Kilyachkov, *Dynamics of stability of the world economic system*. Data Science in Finance and Economics, 2023. 3(1): p. 101-111.
2. Acemoglu, D., S. Johnson, and J.A. Robinson, *An african success story: Botswana*. 2012: Princeton University Press.
3. Northwestern University. *Independence in the air: African Aviation in the 1960s*. 2021 [cited 2021 22nd April]; Available from: <https://sites.northwestern.edu/independenceintheair/#:~:text=By%20the%20end%20of%20the,in%201980>.
4. Grant, R., *Economic globalisation: politics and trade policy in Ghana and Kenya*. Geopolitics, 1999. 4(1): p. 57-82.
5. Country Economy. *Country comparison Ghana vs China*. 2021 [cited 2021 22nd April]; Available from: <https://countryeconomy.com/countries/compare/ghana/china?sector=GDP+per+capita+%28Dollars%29&sc=XE34#tbl>.

6. Badenhorst, J.W. and R.S. Radile, *Poor performance at TVET colleges: Conceptualising a distributed instructional leadership approach as a solution*. Africa Education Review, 2018. **15**(3): p. 91-112.
7. Goda, T., *The global concentration of wealth*. Cambridge Journal of Economics, 2018. **42**(1): p. 95-115.
8. Statista. *Burundi: Gross domestic product (GDP) in current prices from 1985 to 2025(in billion U.S. dollars)*. 2019 [cited 2021 22nd April]; Available from: <https://www.statista.com/statistics/451356/gross-domestic-product-gdp-in-burundi/>.
9. Nelson, P.J. and E. Dorsey, *New rights advocacy: changing strategies of development and human rights NGOs*. 2008: Georgetown University Press.
10. Engerman, S.L. and K.L. Sokoloff, *Colonialism, inequality, and long-run paths of development*. 2005, National Bureau of Economic Research.
11. First, R., *The Barrel of a Gun: political power in Africa and the coup d'état*. 1970: Allen Lane The Penguin Press.
12. Igwe, A.U., *Zik of Africa-An appraisal of the contributions of Dr. Nnamdi Azikiwe to African socio-political and economic growth in the twentieth century*. Global Journal of Arts Humanities and Social Sciences, 2015. **3**(4): p. 14-27.
13. UNITY, O.O.A., *Lagos plan of action for the economic development of Africa*.
14. Banson, K.E., N.C. Nguyen, and O.J. Bosch, *Using system archetypes to identify drivers and barriers for sustainable agriculture in Africa: a case study in Ghana*. Systems Research and Behavioral Science, 2016. **33**(1): p. 79-99.
15. Moss, J. and J. Ravenhill, *Trade developments during the first Lome Convention*. World Development, 1982. **10**(10): p. 841-856.
16. García, E.C., J.A.R. Martín, and M.N. Pabsdorf, *The features of development in the Pacific Countries of the African, Caribbean and Pacific Group*. Social Indicators Research, 2010. **99**(3): p. 469-485.
17. Rodrik, D., *How should structural adjustment programs be designed?* World development, 1990. **18**(7): p. 933-947.
18. Bank, W., *Millennium Development Goals*. 2015.
19. Assembly, G., *Sustainable development goals*. SDGs Transform Our World, 2015. **2030**.
20. Frazer, G. and J. Van Biesebroeck, *Trade growth under the african growth and opportunity act*. The Review of Economics and Statistics, 2010. **92**(1): p. 128-144.

21. Maiwada, S. and E. Renne, *The Kaduna textile industry and the decline of textile manufacturing in Northern Nigeria, 1955–2010*. Textile history, 2013. **44**(2): p. 171-196.
22. Wolff, E.A., *The global politics of African industrial policy: the case of the used clothing ban in Kenya, Uganda and Rwanda*. Review of International Political Economy, 2020: p. 1-24.
23. Akokpari, J.K., *The AU, NEPAD and the promotion of good governance in Africa*. Nordic Journal of African Studies, 2004. **13**(3): p. 21-21.
24. Okumu, W., *The African Union: pitfalls and prospects for uniting Africa*. Journal of International Affairs, 2009. **62**(2): p. 93-111.
25. Morikawa, J., *Japan and Africa: Big business and diplomacy*. 1997: Africa World Press.
26. Elwakil, R., et al., *Global excellence in gastroenterology: Africa*. 2023, Frontiers Media SA. p. 1121276.
27. Agullah, A.O., *Taliban's Capture of Power in Afghanistan Despite the United States Huge Investment: Lessons to Sub-Saharan Africa in their Fight Against (ISWAP) and Other Extremists Groups*. Journal of International Relations Security and Economic Studies, 2021. **1**(4): p. 22-34.
28. Ezekiel, U.A. and J.U. Anthony, *THE MATHEMATICAL ANALYSIS TO ECONOMIC CRISES OF THE SUB-SAHARAN AFRICA AND THE WAY FORWARD TO SUSTAINABLE DEVELOPMENT*. BW Academic Journal, 2023: p. 7-7.
29. Group, W.B., *Sierra Leone Economic Update, June 2018: Reviving Urban Development-The Importance of Freetown for the National Economy*. 2018: World Bank.
30. Oluwole, O.B. and O.F. Olagunju-Yusuf, *Food and Nutrition Insecurity in Africa: The Primary Drivers and Sustainable Strategies to Improve the Current Status*, in *Food Security and Safety Volume 2: African Perspectives*. 2022, Springer. p. 265-282.
31. Prayitno, G., et al., *Structural Model of Social Capital and Quality of Life of Farmers in Supporting Sustainable Agriculture (Evidence: Sedayulawas Village, Lamongan Regency-Indonesia)*. Sustainability, 2022. **14**(19): p. 12487.
32. Beintema, N. and H. Elliott. *Setting Meaningful Investment Targets in Agricultural Research and Development*. in *FAO Expert Meeting on How to Feed the World in*. 2009.
33. Nagegowda, N., et al., *Effect of Precision Farming Techniques Involving Fertigation and Mulching on Growth Attributes and Seed Yield of Okra Var. Arka Anamika [Abelmoschus esculentus (L.) Moench]*. 2019.
34. Akinagbe, O. and A. Ajayi, *Challenges of farmer-led extension approaches in Nigeria*. World Journal of Agricultural Sciences, 2010. **6**(4): p. 353-359.

35. Leavy, J., *Future Farmers? Exploring youth aspirations for African agriculture*. 2010.
36. Lobao, L., K. Meyer, and D. Harper, *farm power without farmers*. contexts, 2004. 3(4): p. 12-21.
37. Chauvin, N.D., F. Mulangu, and G. Porto, *Food production and consumption trends in sub-Saharan Africa: Prospects for the transformation of the agricultural sector*. UNDP Regional Bureau for Africa: New York, NY, USA, 2012.
38. Salahuddin, M., J. Gow, and N. Vink, *Effects of environmental quality on agricultural productivity in sub Saharan African countries: A second generation panel based empirical assessment*. Science of The Total Environment, 2020. 741: p. 140520.
39. Longo, R. and K. Sekkat, *Economic obstacles to expanding intra-African trade*. World development, 2004. 32(8): p. 1309-1321.
40. Banson, K.E., et al., *Impact of small scale irrigation technologies on poverty alleviation among peri-urban and urban farmers*. Journal of Life Sciences, 2014. 8(2).
41. Sanchez, R.G., et al., *Freshwater use of the energy sector in Africa*. Applied Energy, 2020. 270: p. 115171.
42. Bosch, O., et al., *Using a systemic approach to improve the quality of life for women in small-scale agriculture: Empirical evidence from Southeast Asia and Sub-Saharan Africa*. Advances in Business Management. Towards Systemic Approach, 2014: p. 273.
43. Banson, K.E., et al., *A systems thinking approach to address the complexity of agribusiness for sustainable development in Africa: a case study in Ghana*. Systems Research and Behavioral Science, 2015. 32(6): p. 672-688.
44. Othieno, H. and J. Awange, *Energy resources in Africa*. 2016: Springer.
45. McQueen, N., et al., *Ambient weathering of magnesium oxide for CO₂ removal from air*. Nature communications, 2020. 11(1): p. 1-10.
46. Freire, M.E., *Urbanization and green growth in Africa*. 2017.
47. Zhou, T., *Understanding China's Economic Growth: A Perspective of Dualistic System Analysis (A Brief Introduction)*. Available at SSRN 3931959, 2021.
48. Bliss, S., *India: Population and urbanisation*. Geography Bulletin, 2019. 51(2): p. 78-98.
49. Enomoto, T. and K. Umeya, *Bouncing Back: Critical Reflections on the Resilience Concept in Japan and South Africa*. 2022: African Books Collective.
50. Gravito, L. and A. Alli, *Infrastructure financing in sub-Saharan Africa-best practices from ten years in the field*. Development Finance Agenda (DEFA), 2017. 3(3): p. 18-19.

51. Frynas, J.G. and M. Paulo, *A new scramble for African oil? Historical, political, and business perspectives*. African affairs, 2007. **106**(423): p. 229-251.
52. Bush, R., *Scrambling to the bottom? Mining, resources & underdevelopment*. Review of African Political Economy, 2008. **35**(117): p. 361-366.
53. Curtis, M., *The New Colonialism: Britain's scramble for Africa's energy and mineral resources War on Want*. 2016, July.
54. Curtis, M. and T. Jones, *Honest Accounts 2017: How the world profits from Africa's wealth*. Retrieved September, 2017. **22**: p. 2017.
55. Calderón, C. and A. Zeufack, *Borrow with Sorrow? The Changing Risk Profile of Sub-Saharan Africa's Debt*. The Changing Risk Profile of Sub-Saharan Africa's Debt (January 30, 2020). World Bank Policy Research Working Paper, 2020(9137).
56. Akinrinade, S. and O. Ogen, *Historicising the Nigerian diaspora: Nigerian migrants and homeland relations*. Turkish Journal of Politics, 2011. **2**(2).
57. Haken, J., *Transnational crime in the developing world*. Global financial integrity, 2011. **32**(2): p. 11-30.
58. Roy, A., et al., *Global Norms and Planning Forms: The Millennium Development Goals Towards an Intellectual Leadership: Rediscovering the Role of the United Nations in the 21st Century The Central Role of Local Organizations in Meeting the Millennium Development Goals (MDGs) The Story of Chintan*. 2008, Taylor & Francis.
59. Zondi, S. and P. Mthembu, *From MDGs to Sustainable Development Goals: The travails of international development*. 2017, Pretoria, South Africa: Institute for Global Dialogue (associated with the
60. Group, A.D.B. *African Development Bank Revises Economic Forecast for Africa downwards amid continued global shocks*. 2023 [cited 2023 02 December]; Available from: <https://www.afdb.org/en/news-and-events/press-releases/african-development-bank-revises-economic-forecast-africa-downwards-amid-continued-global-shocks-66351>.
61. Bjornlund, H., et al., *Research and development needs in agricultural water management to achieve sustainable development goals*. Irrigation and Drainage, 2023.
62. Kalibata, A., *Reflections on food systems transformation: an African perspective*. Global Social Challenges Journal, 2022. **1**(1): p. 138-150.
63. Clark, S., et al., *Including digital connection in the united nations sustainable development goals: A systems thinking approach for achieving the SDGs*. Sustainability, 2022. **14**(3): p. 1883.

64. Engel, U. and J.G. Porto, *The African Union's New Peace and Security Architecture: Toward an Evolving Security Regime?* African Security, 2009. 2(2-3): p. 82-96.
65. Nunn, A., et al., *Keeping the faith: African American faith leaders' perspectives and recommendations for reducing racial disparities in HIV/AIDS infection*. PloS one, 2012. 7(5): p. e36172.
66. Lumumba, P.L.O. *Corruption deeply rooted in Kenya, says anti-graft body*. 2021 [cited 2021 08/10]; Available from: <https://www.dw.com/en/corruption-deeply-rooted-in-kenya-says-anti-graft-body/a-19120699>.
67. Nkrumah, K., R. Arrigoni, and G. Napolitano, *Africa must unite*. 1963: Heinemann London.
68. Patterson, A.S. and R. Cole, *The politics of AIDS in Africa*. Bulletin of the African and African American Studies Program Grand Valley State University, 2006. 39.
69. Pankhurst, R. and D.H. Johnson, *The great drought and famine of 1888–92 in northeast Africa*, in *The Ecology of Survival*. 2019, Routledge. p. 47-72.
70. Tappis, H., et al., *Food security and development in South Sudan: a call to action*. Public health nutrition, 2013. 16(9): p. 1631-1636.
71. Lombard, L., *State of rebellion: Violence and intervention in the Central African Republic*. 2016: Zed Books Ltd.
72. Faromiki, O.G., *The Economic Implications of Processed Tomato Importation on Local Tomato Farmers Production in Nigeria*. 2019.
73. Short, C., W. Mulinge, and M. Witwer, *Analysis of incentives and disincentives for maize in Kenya*. Gates Open Res, 2019. 3(424): p. 424.
74. Syroka, J. and A. Nucifora, *National drought insurance for Malawi*. World Bank Policy Research Working Paper, 2010(5169).
75. Banson, K.E., et al., *Impact of fall armyworm on farmer's maize: systemic approach*. Systemic Practice and Action Research, 2020. 33(2): p. 237-264.
76. Bratspies, R., *Owning all the seeds: consolidation and control in agbiotech*. Env'tl. L., 2017. 47: p. 583.
77. Diouf, J., *The challenge of agricultural development in Africa*. 1989.
78. Eicher, C.K., *African agricultural development strategies*, in *Alternative Development Strategies in SubSaharan Africa*. 1992, Springer. p. 79-102.
79. Porto, G., N.D. Chauvin, and M. Olarreaga, *Supply chains in export agriculture, competition, and poverty in Sub-Saharan Africa*. 2011: International Bank for Reconstruction and Development, World Bank.

80. Banson, K.E., N.C. Nguyen, and O.J. Bosch, *Systemic management to address the challenges facing the performance of agriculture in Africa: case study in Ghana*. Systems Research and Behavioral Science, 2016. **33**(4): p. 544-574.
81. Toole, T.M. *A project management causal loop diagram*. in ARCOM Twenty First Annual Conference. 2005.
82. Soderquist, C. and S. Overakker, *Education for sustainable development: A systems thinking approach*. Global Environmental Research, 2010: p. 193-202.
83. Bettis, R.A. and C.K. Prahalad, *The dominant logic: Retrospective and extension*. Strategic management journal, 1995. **16**(1): p. 5-14.
84. Richard Mshomba. *How Northern subsidies hurt Africa*. 2002 [cited 2023 9th October]; Available from: <https://www.un.org/africarenewal/magazine/september-2002/how-northern-subsidies-hurt-africa>.
85. Knölsdorfer, I. and M. Qaim, *Cheap chicken in Africa: Would import restrictions be pro-poor?* Food Security, 2023: p. 1-14.
86. Akotey, J.O., *The political economy of the Ghana cedi performance: A community level explanation*. Development Finance Agenda (DEFA), 2023. **8**(1): p. 8-9.
87. Diallo, D.M., et al., *VULNERABILITY OF WAMZ MEMBER COUNTRIES TO EXTERNAL SHOCKS: IMPLICATIONS ON THE CONVERGENCE PROCESS*. 2022.
88. Yadav, S.B., *Aid Dependency in Africa: An Example of 'Shifting the Burden' System Archetype*, in *Food and Environment*, S. Yadav, Editor. 2012, Food and Environment: Nepal.
89. Gilpin, S.I., *China, Africa and the International Aid System: A Challenge to (the Norms Underpinning) the Neoliberal World Order?* Journal of Asian and African Studies, 2023. **58**(3): p. 277-297.
90. Onebunne, J.I., *African Philosophy of Education for African Development*. Nnadiabube Journal of Education in Africa, 2023. **8**(2).
91. Lockwood, P., *'He who relies on relatives and friends die poor' : class closure and stratagems of civility in peri - urban Kenya*. Journal of the Royal Anthropological Institute, 2023. **29**(2): p. 326-346.
92. Husain, I., *Towards a New Paradigm for Future Development Pathway (FATIMA JINNAH LECTURE)*. Journal of Gender and Social Issues, 2022. **21**(2).
93. Krishna, K. and K. Luhila, *The Economic Diversity of Africa: Flexing her Economic Muscles and Forging a New Identity*. 2022.

94. SHIKHALIYEV, E.A., *THE REALITY OF "BIG POLICY" OF GREAT POWERS AND THEIR STANCES ON THE SECOND KARABAKH WAR*. Review of Armenian Studies, 2022(45): p. 127-149.
95. Dong, L., et al., *Parallel selection of distinct Tof5 alleles drove the adaptation of cultivated and wild soybean to high latitudes*. Molecular Plant, 2022. **15**(2): p. 308-321.
96. Hopper, M.S., *Slaves of one master: Globalization and slavery in Arabia in the age of empire*. 2015: Yale University Press.
97. Addis, A.K. and Z. Zuping, *Criticism of neo-colonialism: clarification of Sino-African cooperation and its implication to the west*. Journal of Chinese Economic and Business Studies, 2018. **16**(4): p. 357-373.
98. Belser, E.M., *The Turn to Global Constitutionalism at the WTO and Its Impact on African Constitutionalism*. Constitutionalism and the Economy in Africa, 2022.
99. Verbruggen, A., *The geopolitics of trillion US \$ oil & gas rents*. International journal of sustainable energy planning and management, 2022. **36**: p. 3-10.
100. Megbowon, E.T., L. Mothae, and J.R. Relebohile, *Effect of government agricultural expenditure on economic growth: Evidence from a developing country*. Studia Universitatis Babes-Bolyai, 2022. **67**(2): p. 1-20.
101. Lauermann, J., *The declining appeal of mega-events in entrepreneurial cities: From Los Angeles 1984 to Los Angeles 2028*. Environment and Planning C: Politics and Space, 2022. **40**(6): p. 1203-1218.
102. Cinotto, S., *The fascist breadbasket: food, empire, and modernity in Italian East Africa, 1935–1941*. Journal of Modern Italian Studies, 2023. **28**(3): p. 296-322.
103. Ighoshemu, B.O. and U.B. Ogidiagba, *Poor governance and massive unemployment in Nigeria: as causes of brain drain in the Buhari administration (2015-2020)*. Insights into Regional Development, 2022. **4**(2): p. 73-84.
104. Jacobsen, K.L. and K.P. Larsen, *Liberal intervention's renewed crisis: responding to Russia's growing influence in Africa*. International Affairs, 2023. **99**(1): p. 259-278.
105. Santeramo, F.G. and M. Kang, *Food security threats and policy responses in EU and africa*. Sustainable Horizons, 2022. **4**: p. 100044.
106. Mokomane, Z., et al., *HIV-sensitive social protection: an assessment of east and southern Africa's social protection policies and programmes*. African Journal of AIDS Research, 2023: p. 1-10.
107. Biglaiser, G. and R.J. McGauvran, *The effects of IMF loan conditions on poverty in the developing world*. Journal of International Relations and Development, 2022. **25**(3): p. 806-833.

108. Oliinyk, O., et al., *Integrated assessment of the attractiveness of the EU for intellectual immigrants: A taxonomy-based approach*. Technological Forecasting and Social Change, 2022. **182**: p. 121805.
109. Khudaykulova, A.V., *Regionalization of peacekeeping in Africa: The case of the African Union*. Vestnik RUDN. International Relations, 2023. **23**(2): p. 339-357.
110. Mayer, C.-H., R. von Niekerk, and P.J. Fouché, *Servant leadership during a struggle for political freedom: A psychobiography of Albertina Sisulu*, in *The Palgrave handbook of servant leadership*. 2023, Springer. p. 199-225.
111. Ackon, P., P.P. Dagadu, and K.E. McDave, *"Bring Back Our Money": The Legality of Returning Assets and Wealth Acquired by African Leaders Through Corruption to African States*. European Journal of Law and Political Science, 2022. **1**(1): p. 1-8.
112. Le Vine, V.T., *Cameroon, Togo, and the states of formerly French West Africa*, in *Politics and Government in African States*. 2022, Routledge. p. 78-119.
113. Rotaru, M.-C., *QUEEN ELIZABETH II AND THE COMMONWEALTH—HER ROLE AND LEGACY*. Polis. Journal of Political Science, 2023. **11**(1 (39)): p. 5-23.
114. Akanle, O., D. Kayode, and I. Abolade, *Sustainable development goals (SDGs) and remittances in Africa*. Cogent Social Sciences, 2022. **8**(1): p. 2037811.
115. Asen, E., *Corporate tax rates around the world, 2020*. The Tax Foundation. December, 2020.
116. Kavanagh, M.M., et al., *Access to lifesaving medical resources for African countries: COVID-19 testing and response, ethics, and politics*. The Lancet, 2020. **395**(10238): p. 1735-1738.
117. MacNeill, J., *Strategies for sustainable economic development*. Scientific American, 1989. **261**(3): p. 154-165.
118. Ismi, A., *Impoverishing a continent: The World Bank and the IMF in Africa*. 2004: Canadian Centre for Policy Alternatives Ottawa.