INTRODUCTION

Background

Africa is great for its physical potential. The continent is a treasure-trove of natural resources from agricultural land and precious metals to wildlife and hydropower. The continent is endowed with productive lands and with valuable natural resources, which include renewable resources and non-renewable resources. Africa is blessed with 30% of the world known reserves of minerals, about 10% of oil and 8% of gas resources, it has the largest colbat, diamonds, platinium, and uranium reserves in the world. The African continent is also home to the second largest tropical forest, the highest rainfall in the heart of the Congo basin. Its vast lands, and water represent significant socio-economic development assets. (Ploeg, 2007; AfDB, 2007 & 2017; Mills, 2010).

Africa is great for its human diversity. The continent of Africa is known to be the site of origin of millions of Americans both in south and north. Reed and Tishkoff (2006) found that:

> Africa contains a considerable amount of diversity, not only in regard to genetic diversity but also in regard to cultural, linguistic and phenotypic diversity. The continent of Africa has been estimated to contain over 2000 distinct ethno-linguistic group – speaking languages that constitute nearly a third of the worlds living languages. (p. 597)

They go on convincingly arguing that “the richness of Africa for human genetic, anthropological and medical studies is unparalleled” (p. 597).

Notwithstanding the quality and quantity of their physical resources endowments and human potential, which are the key assets in the early stage of socio-economic development; yet the reality of deprivation, widening inequalities, greater vulnerability and persistent poverty rightly described African nations as paradox of plenty or resource curse. (Davis &

Tilton, 2005; AfDB, 2007; Brown, 2011). As such, the point is to understand why these physical and human resources fail to be translated into a broad-based equitable socio-economic development? Mills (2010) answers that "there has been little interest among the leadership of many African countries to reform the system" (p. 4). Given this internal weak enforcement of governance reforms, should we conclude with (Kabou, 1991) that Africa denies development? Or that victim of its natural resources, Africa is rather being denied development through unequal exchange rates (Ploeg, 2007); and western-sponsored conflicts. Humphreys (2005) advises to establish a link between natural resources and conflicts in Africa when he aptly observes that "the problem is that unless we can understand the mechanisms linking resources to conflict scholars will be of limited use to the policy community" (p. 509).

No matter the answer one would like to give to these critical questions before us, it is essential to recognize that, many resource-rich countries in Africa have disastrous growth performance, low investment in human capital and high degrees of inequality. "Africa's youth, for example, is not being regarded as a huge source of talent and energy to be harnessed. Rather, this group is regarded as a destabilizing force because it is largely unemployed and uneducated" (Millls, 2010, p. 3). As a result, African nations perpetuate mediocrity; even as they are left behind in progress.

Statement of Problem

The focus of this research is on the very specific questions to understand why African nations perpetuate mediocrity and are left behind in progress and how to turn their physical and human rich resources into productive assets for sustainable development. What are the fundamental variables needed for African nations to be built in a sustainable manner? What is the significance of the multi-equilibria model for sustainable development in Africa?

Purpose of Research

This research takes all the steps to build a sustainable model that actually works for the nations that though endowed with less natural resources compare to African nations, have succeeded to reduce poverty over relatively short time periods. The multi-equilibria model of human capital accumulation provides us with a coherent framework to understand the reasons for the persistence of poverty in African nations as well as the way forward to build Africa in a sustainable manner. The purpose of this study is not to investigate what prevent African nations from applying of multi-equilibria model of human capital accumulation. Rather, the study stresses on the implications in poverty for failure of applying the multi-equilibria model of human capital accumulation by African nations.

Significance of Research

The multi-equilibria model of human capital accumulation describes steps crucial in creating incentives through which all individuals can realize their capabilities. Thus, it focuses on what to do to produce sustainable development results; it focuses equally on what not to do and what to stop doing. After decades of development effort, it is obvious that there has not been considerable socio-economic progress in many African nations which continue to suffer from unfavorable human conditions such as famine, curable disease like malaria, and other unmet basic needs. These symptoms of unsustainability are becoming permanent features in African nations and should be considered to a great extent, as the manifestations of the failure of the governance of African nations.

How on earth does a continent, rich with physical and human resources, remain perplexed with basic needs crises, economic poverty, social inequality, political instability, and external dependence? Satellite images indicate that only a quarter of the 800 million hectares of arable land available in the African continent is currently use. (Nzabanita, 2012, p. 28). “Many African states possess agricultural land in abundance. Yet, 35 out of 48 sub-

Saharan African economies were net food importers at the end of the 2000s" (Mills, 2010, p. 3). Mysorekar (2012) found out that "95% of the basic staples in Africa are not regionally produced, but imported, megacities like Abidjan, Accra or Nairobi even depend on food imports from overseas" (p. 444).

Beyond the question of food dependency, sustainable development should mean, a higher accumulation and better allocation of African human capital to carry out policies, projects and programs to improve the social, economic, and political conditions.

Methodology

From an initial universe of 54 African nations, we turned our attention to a deep analysis of each case. We collected and contrasted data on governance of African nations with Asian nations which enforced governance reforms and successfully combined structural change and inclusive growth to reduce poverty over relatively short time periods. Throughout our research, we were continually reminded that the "Asian Tigers": Hong Kong, the Republic of Korea, Singapore, Taiwan and China were at the same level of development with African nations in 1960s. Their potential to catch up and sustain growth teaches us the that, it is possible to turn the most unlikely situations into great ones. While contrasting data on governance of African nations with the Asian Tigers, we always asked the question: What makes the difference? What distinguishes African nations from the Asian Tigers? Then we decided to undertake a systematic look at the concepts that guided the Asian Tigers in contrast to African nations. We were not looking for the four levels of equilibrium in our research, or anything related to human capital accumulation, but the data were overwhelming and convincing. The multi-equilibria model of human capital accumulation in this study is the product of empirical deductions directly derived from data.

CONCEPTUAL FRAMEWORK

The condition of poverty involves a network of issues beyond the mere facts of abundant shortages: in food, health, services and infrastructures such as power, road, water, transport etc.). It is important to understand the social setting. Sachs (2005) aptly noted that "not every problem facing the impoverished world is homegrown, nor will all solutions be found in good governance, belt tightening, and further market reforms" (p. 81). A society may be suffering from more than one condition at a time, and the poverty trap might be interrelated.

A thorough diagnosis of the social setting "requires a commitment to be thoroughly steeped in the history, ethnography, politics, and economics" (Sachs, 2005, p. 81). This step is crucial in the path to sustainable development as it allows the governance to base its development policies on facts about the context, history, or direct observation and prescribe appropriate remedies that are tailored to each society's specific conditions. Since the challenge to understand the origins and causes of the persistence of poverty in African nations has been addressed, and we now understand how we got where we are, it becomes crucial in that understanding to find the way forward.

The multi-equilibria model of human capital accumulation for sustainable development in Africa is a simple and crystalline model that flows from the link between human development, enforcement of governance reforms and structural change and inclusive growth. Reduction of poverty and sustainable development evolve from a governance system in which developed human beings are the center of development interest. The model requires that the 12 components of the human development; namely: health, education, income, inequality, gender, poverty, work and employment vulnerability, human security, trade and financial flows, mobility and communication, environmental sustainability and demography should be addressed. The model rejects the old adage that people are the most important asset for development. In building a nation in a sustainable manner, people are not the most important asset. Developed people are.

To build a nation in sustainable manner requires enforcement of governance reforms on structural change and inclusive growth. When a governance system enforces these two complementary forces - structural change and inclusive growth - it leads to a magical alchemy of human capital accumulation conducive to both poverty reduction and sustainable development.

HUMAN DEVELOPMENT AS THE FIRST LEVEL OF EQUILIBRIUM FOR SUSTAINABLE IN AFRICA

The concept of human development defines the significance of human efforts, skills and talents in the process of development of a society. There is a growing consensus that the first seminal contribution to the definition and conceptualization of human capital emerged since the eighteenth century. Smith (as cited in Goldin, 2014) clarifies that the concept of human capital is "the acquisition of…talents during…education study, or apprenticeship, costs a real expense, which is capital in [a] person. Those talents [are] part of his fortune [and] likewise that of society" (p.1).

The United Nations has used the concept of human development since 1991 and defines it as a process of providing more choices to people to realize their potential. Human development puts developed people at center of development interest. According the United Nations Development Programme (2007) "Human development is about the realization of human potential. It is about what people can do and become – their capabilities – and about the freedom they have to exercise real choices in their lives" (p. 1). Health, education, income and composition of resources, inequality, gender, poverty, work and employment vulnerability, human security, trade and financial flows, mobility and communication, environmental sustainability and demography form the 12 components of the development of human beings. Without these 12 elements people are handicapped to build their nations in a sustainable manner.

By measuring the human development index of nations around the world every year, the UNDP creates both awareness and conditions for nations to confront the brutal facts of reality head-on and reform their entire system in response.

Data of the 2016 human development report reveal that none out of 54 African nations has a very high human development; only five nations have a high human development: Seychelles 0.782, Mauritius 0.781, Algeria 0.745, Tunisia 0.725 and Libya 0.716. 13 African nations have medium human development: Botswana 0.689, Gabon 0.697, Egypt 0.691, South Africa 0.666, Cabo Verde 0.648, Morocco 0.647, Namibia 0.640, Congo 0.592, Equatorial Guinea 0.592, Ghana 0.579, Zambia 0.579, Sao Tome and Principe 0.574 and Kenya 0.555. And finally, 35 African nations have low human development: Swaziland 0.541, Angola 0.533, Tanzania 0.531, Nigeria 0.527, Cameroon 0.518, Zimbabwe 0.516, Mauritania 0.513, Madagascar 0.512, Rwanda 0.498, Comoros 0.497, Lesotho 0.497, Senegal 0.494, Uganda 0.493, Sudan 0.490, Togo 0.487, Benin 0.485, Malawi 0.476, Cote d'Ivoire 0.474, Djibouti 0.473, Gambia 0.452, Ethiopia 0.448, Mali 0.442, Republic Democratic of Congo 0.435, Liberia 0.427, Guinea-Bissau 0.424, Eritrea 0.420, Sierra Leone 0.420, Mozambique 0.418, South Sudan 0.418, Guinea 0.414, Burundi 0.404, Burkina Faso 0.402, Chad 0.396, Niger 0.353, Central Africa Republic 0.352. Based on her previous performance and current situation, we can conclude that Somalia too has a low human development.

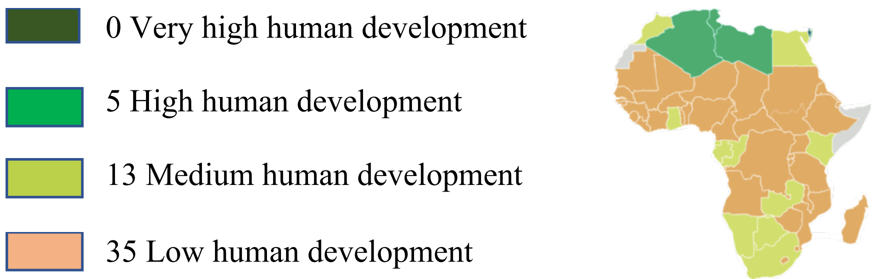

Figure 1: Human Development Index of African Nations in 2015.
Source: Human Development Report Office

When we compare the data of figure 1 on human development index of African nations in 2015 with those of the Asian Dragons, it is interesting to note that, in the exception of China 0.738 that has a high human development, all the others have very high human development. Singapore 0.925, Hong Kong 0.917 and South Korea 0.901. The 2016 human development report clarifies that data do not include Taiwan.

Table 2: 2015 Human development index of Asian Dragons

Countries	Ranks	Values	Observations
Singapore	5	0.925	Very high
Hong Kong	12	0.917	Very high
Republic of Korea	18	0.901	Very high
China	90	0.738	High

Source: Human Development Report Office.

The above figure, facts and numbers reveal the significance of human development through health, education, income and composition of resources, inequality, gender, poverty, work and employment vulnerability, human security, trade and financial flows, mobility and communication, environmental sustainability and demography in the aspiration of human societies to themselves in a sustainable manner. They convey the message that human development should be the foundational level of equilibrium to realize in order for any nation to aspire to sustainability. No country can build itself in a sustainable manner without first developing its people. The Asian Dragons that have succeeded to reduce poverty over relatively short time periods understood that the ultimate throttle on growth is not natural resources or market or technology. It is one thing above all others: ability to get enough developed people. In revealing the single secret behind the success of resource-poor-

Singapore and its move from third world to first, Premier Minister Lee Kuan Yew stated that "the key to success was the quality of the people in charge" (Lee, 2000, p. 67).

ENFORCEMENT OF GOVERNANCE REFORMS AS THE SECOND LEVEL OF EQUILIBRIUM FOR SUSTAINABLE DEVELOPMENT IN AFRICA

For some scholars including many Africans, the ignorance hypothesis carries the burden for the persistence of poverty and unsustainability of African nations. The ignorance hypothesis "asserts that world inequality exists because we or our rulers do not know how to make poor countries rich" (Acemoglu & Robinson, 2012, p. 63). These two authors document numerous cases that invalidate the ignorance hypothesis and go on convincingly arguing that "if ignorance were the problem, well-meaning leaders would quickly learn what types of policies increased their citizens' incomes and welfare, and would gravitate toward those policies" (p. 65).

We live in an information age, when those who have power are in the position have fast and better information about what works and what does not work. But the key lies, not in better information, but in turning information into indicators and assets that cannot be ignored. Every year renown institutions around the world provide valuables information on condition of the governance. The World Bank publishes reports in doing business, the German NGO Transparency International publishes reports in corruption and human rights, The United Nations published reports on inequality, the International Labor Organization publishes reports in labor. The Department of Economic and Social Affairs (DESA) of the United Nations Secretariat published in 2006 a collection of articles under the theme: *Innovations in governance and public administration: Replication what works.* This comprehensive work provides a broad overview of approaches and methodologies for the assessment and transfer of best practices in governance and public administration. Each author who participated in the production of this masterpiece work sheds light on the process, capacities, and environment required for successful transfer, adaption, and implementation of innovations in governance and public administration. As far as policies are concerned, the point is not whether the information available and accessible to African leaders provide insights on what to do to, what not to do or what to stop doing in order to build the nation in a sustainable manner. The real point here is whether the governance reforms are being enforced.

Upon invalidating the ignorance hypothesis from the causes of the persistence of poverty in poor countries, Acemoglu and Robinson (2012) demonstrate that "poor countries are poor because those who have power make choices that create poverty" (Acemoglu & Robinson, 2012, p. 68). Why have those leaders made those choices? The logic of their findings supports that weak and lack of enforcement of governance reforms is the main factor responsible for the persistence of poverty in Africa.

Enforcement of governance reforms means confronting the brutal facts of reality head-on and getting rid of bad practices in response. Enforcing governance reforms is equally about creating an environment where the truth is heard. It means having the humility to grasp the facts that undermine the move of society and do something about it. The truth to be heard and the brutal facts of reality to be confronted by Africans are that, they are building their own people, homes, roads, schools, hospitals, bridges, and societies. In this dynamic of building, graft, corruption, favoritism, cronyism, nepotism, inequality and unemployment and socio-economic and political injustices will take them nowhere.

As far as enforcement of governance reforms is concerned, the World Bank yearly publication on Doing Business focuses on regulation that affects small and medium-size enterprises, operating in the largest business city of a country in areas such: starting a business, dealing with construction permits, getting electricity, registering property, getting credit, protecting minority investors, paying taxes, trading across borders, enforcing contracts and resolving insolvency.

The data of 2017 Ease of doing business reveal that African nations set barriers on the opportunities to create jobs, generate incomes and provide good and services cheaper and better for everyone. The first African nation Mauritius 72.27, is ranked 49 followed by Rwanda 68.81, Botswana 65.55, South Africa 65.20, Tunisia 64.89, Kenya 61.22, Seychelles 61.21, Zambia 60.54, Lesotho 60.37, Ghana 58.82, Namibia 58.82, Uganda 57.77, Egypt 56.64, Cabo Verde 55.28, Tanzania 54.48, Malawi 54.39, Mozambique 53.78, Mali 52.96, Cote d'Ivoire 52.31, Gambia 51.70, Burkina Faso 51.33, Senegal 50.68, Sierra Leone 50.23, Niger 49.57, Comoros 48.69, Togo 48.57, Benin 48.52, Algeria 47.76, Burundi 47.37, Ethiopia 47.25, Mauritania 47.21, Zimbabwe 47.10, Sao Tome and Principe 46.75, Guinea 46.23, Gabon 45.88, Cameroon 45.27, Madagascar 45.10, Sudan 44.76, Nigeria 44.63, Guinea-Bissau 41.63, Liberia 41.41, Congo, 40.58, Equatorial Guinea 39.83, Chad 39.07, Angola 38.41, Republic Democratic of Congo 37.57, Central African Republic 36.25, South Sudan 33.48, Libya 33.19, Eritrea 28.05, and Somalia is ranked 190 with a score of 20.29.

When we compare these numbers with the Asian Dragons the data reveal that they all occupy the top ten in the ease of doing business with the exception of China ranked 78 with a score of 64.28. Singapore is top two with a score of 85.05, Hong Kong is top four with a score of 84.21, South Korea is top five with a score of 84.07 and Taiwan is top 11 with a score of 81.09.

What makes the difference here is that, while local and foreign investors in Africa deal with a large number of departments, ministries and procedures to start a business, Singapore and other Asian Dragons confronted the brutal facts about administrative bottleneck and corruption by setting up a one-stop agency to sort out all the requirements related to investment (Lee, 2000, p. 58). Enforcement of governance is a signature of the

Asian Dragons that succeeded to develop rapidly and sustain growth. Enforcement of governance reforms made the rise of Asian Dragons simple and straightforward. When it comes to enforcement of governance reforms, the Asian Dragons are implementing this simple policy with fanatical consistency, creating as a result a culture of discipline. Rigor in Asian Dragons applies first at the top, focuses on those who hold position of responsibility.

When we look at the facts, there is no really question about what African nations should do, what they should not do and what they should stop doing with regards to the enforcement of governance reforms. However, the fact that African nations are being provided with yearly reports and even generate their own information on governance and yet fail to hit the realities of their situation head-on and act on the implications; may indicate that Africa feels comfortable in applying the "Ostrich policy[1]" or simply denies development (Kabou, 1991).

The second level of equilibrium in the multi-equilibria model of human capital accumulation is the fact that sustainable development in Africa will come about by a series of enforcement of governance reforms, diligently executed and accumulated one on top of another. It is only when yearly reports on governance, be it, in ease of doing business, in corruption, human rights, inequality, socio-economic and political injustices will be viewed as useful tool for turning information into indicators and assets that cannot be ignored that the governance of African nations will create an environment where truth is heard and brutal facts about reality are confronted. A caveat of the multi-equilibria of human capital for sustainable in Africa is the fact that sustainable development in Africa depends crucially on the enforcement of governance reforms for structural change and inclusive growth.

[1] **"Ostrich policy"** is a metaphoric expression referring to the tendency to ignore obvious dangers or problems and pretend they don't exist; the expression derives from the supposed habit of ostriches to stick their head in the sand rather than face danger.

STRUCTURAL CHANGE AND INCLUSIVE GROWTH AS THE THIRD LEVEL OF EQUILIBRIUM FOR SUSTAINABLE DEVELOPMENT IN AFRICA

Chronic unemployment is the rule rather than the exception in many African nations. According to the International Labor Organization's World Employment Social Outlook 2017 report, the problem of poor quality jobs is endemic in sub-Saharan Africa, where over 70 per cent of workers are in vulnerable employment, […] the lack of productive opportunities for the youth and adults alike mean that 247 million people were in vulnerable employment in 2016, equivalent to around 68 per cent of all those with jobs. From the perspective of the Millennium Development Goals, Mills (2010) early observed that "high unemployment, especially among young people, is no recipe for long-term stability" (p. 4). Table 2 shows the sub-Saharan African labor market outlook in 2017, with 70.4 percent of labor force participation rate; 7.5 percent of unemployment rate; 3.1 percent of employment growth; 69.6 percent of vulnerable employment; 31.7 percent of extreme working poverty for those earning less that 1.90 U. S Dollars; 30.4 percent of working poverty for those earning 1.90 U.S Dollars and 3.10 U.S Dollars; and finally sub-Saharan Africa is in 1.7 of productivity growth.

Table 2: Sub-Saharan African labor market outlook 2017.

Components	Year 2017
Labor force participation rate	70.4
Unemployment rate	7.5
Employment growth	3.1
Vulnerable employment	69.6
Extreme working poverty (less than $ 1.90)	31.7
Working poverty (between $1.90 and $ 3.10)	30.4
Productivity growth	1.7

Source: International Labor Organization.

Another rule in African nations is the high levels of inequality. The United Nations Research Institute for Social Development (2010) observed that “high levels of inequality make it harder to reduce poverty even when economies are growing, while the evidence also reveals that poor countries are generally unequal than rich ones” (p. 5). The organization elucidates that “in contexts of high inequality, growth is often concentrated among sectors that benefit the elite; the poor, on the other hand, are likely to be excluded from market opportunities or to lack the resources to benefit from” (UNRISD, 2010, p. 5).

In the response to the dominance of these two themes of high unemployment and high levels of inequality in the governance of African nations, the multi-equilibria model of human capital accumulation for sustainable development in Africa, put together the two complementary forces of structural change and inclusive growth in order to get a magical alchemy of human capital accumulation conducive to reduce poverty and build Africa nations in a sustainable manner.

The UNRISD (2010) made it abundantly clear that “a fundamental precondition for poverty reduction is a pattern of growth and structural change that generates productive employment, improve earnings and contributes to general welfare of the population” (p. 4). “Structural change involves continuous shifts in the shares of manufacturing, services and agriculture in output and employment in favor of more dynamics sectors” (UNRISD, 2010, p. 31). The organization found out that “in many mineral-rich economies, structural transformation has in involved a movement from agriculture to mining, or a change that is largely confined to the primary sector” (p. 50). The case of the Asian Dragons illustrates well what happens when nations have the discipline to shift their workforce in the more dynamic sectors of production. Much of the success of the resource-poor Asian Dragons, lies in the dynamics of structural change to manufacturing and services; and the discipline to do whatever it takes to become the best within those selected arenas and then seek continual improvement from there. UNRISD (2010) corroborates that “countries that have been successful in increasing the well-being of the majority of their populations, long-term processes of structural transformation, not poverty reduction per se, were central to public policy objectives” (p. 2).

Unfortunately, the dynamic of structural change is not yet being implemented in the resources-rich African nations. According to the Food and Agriculture Organization of the United Nations “in sub-Saharan Africa over 60 percent of the entire workforce are involved in agriculture” (FAO, 2012, p. 18). From the perspective of sustainable development in Africa, a key challenge is to enforce employment –centered structural change and redistributive policies. Employment plays an essential role in enabling people to contribute in the production of wealth and in so doing to extricate themselves from poverty. Employment-centered structural change will have attractive opportunities for growth and a strong multiplier effect on various sustainable development targets by strengthening the organic link between the different sectors of the economy and expanding domestic production.

Poverty and inequality are interconnected parts of the same problem. Inclusive growth is crucial in the perspective of sustainable development in Africa. Acemoglu and Robinson (2012) corroborates that “the distribution and ability to exercise power will ultimately undermine the very foundations of economic prosperity, unless political institutions are transformed from extractive to inclusive” (p 95). Inequality still runs rampant in most African societies. The extent to which the governance of many African nations is far from being inclusive is illustrated by the fact that inequality of opportunity denies to many Africans access to socio-economic and political right enshrined in numerous texts such as the United Nations declarations. This inequality of opportunity takes various forms: graft, corruption, favoritism, cronyism, nepotism, unemployment, and lack of healthcare, lack educational opportunities, etc. The people in position of power use their offices to enrich themselves, create monopolies for their cronies, and flaunt their privileged before the men and women who do the real work, then wonder why things don't move in society. In these conditions, it is not hard to understand why poverty persists in human and nature-rich African continent. By being shortsighted and greedy, the extractive and exploitative governance systems of African nations lose numerous of their most skilled and talented manpower in exile, and sadly in the Mediterranean Sea.

Inclusive economic and political institutions did not emerge by themselves in Asian Dragons. The UNRISD (2010) found out that "Countries that have successfully reduced poverty in relatively short periods of time had purposeful, growth-oriented and welfare-enhancing political systems, they also built and maintained competent bureaucracies" (p. 6). Prime Minister Lee Kuan Yew confessed that "if we had not redistributed the wealth generated by our people competing in a free market economy, we would have weakened Singaporeans' sense of solidarity, the feeling that they are one people sharing a common destiny" (Lee, 2000, pp. 105-106). In their book: *Dynamic governance: Embedding culture, capabilities and change in Singapore*, Neo and Chen (2007) expound on the overwhelmingly positive impact of inclusive governance has had for the transformation of Singapore from third world to first, in just a decade.

There are substantial lessons that we can learn from such a system in the perspective of sustainable development in Africa. First, is the importance of discussing the human behaviors that create the problem of poverty in the society. The success of Singapore resides on the ability of it governance system to engage the people in rational dialogue aimed at resolving issues. Neo and Chen (2007) elucidates that the framework of inclusive governance system "depicts a supportive institutional culture interacting with proactive organizational capabilities to produce adaptive paths that incorporate continuous learning and change" (p. 12). This rational approach to problem solving suggest a two-way traffic: from the governance system to the people and from the people to the governance system, which in turn provides an opportune avenue to re-examine the values and principles leading to policy adaptation. Neo and Chen (2007) clarify that "policy adaptation is not merely a passive reaction to external pressure but a proactive approach to innovation, contextualization, and execution" (p. 13). By being continually and objectively putting itself in the dynamic of learning and evaluating potential improvement not only allowed Singapore to move rapidly from rags to riches, moreover, it afforded it governance to provide the people with the thing they really need, which is, an environment conducive to reduce poverty and sustain growth.

HUMAN CAPITAL ACCUMULATION LEADING TO POVERTY REDUCTION AND SUSTAINABLE DEVELOPMENT AS FINAL GOAL OF AFRICAN NATIONS

The ultimate goal of the multi-equilibria model of human capital accumulation is to achieve the reduction of poverty and production of sustainable development in African nations, not through natural resources, but through developed and accumulated human capital. The multi-equilibria model of human capital accumulation rejects the old adage people are the center of development interest. People are not the center of development interests. Developed and accumulated people are. The evidences from our study reveal that, though blessed with both natural and human resources African nations perpetuate mediocrity and are left behind in progress by nations with scarce natural resources such the Asian Dragons. It is the neglect of building developed and accumulated human capital that make up the common and fatal sin of African nations. The multi-equilibria model of human capital accumulation shows how learning from our past and present mistakes as well from the exemplary case of the Asian Dragon provides room for improvement as long as the governance systems of African nations are willing to work toward those improvements.

Figures 2 summarizes the conceptual framework of the multi-equilibria model.

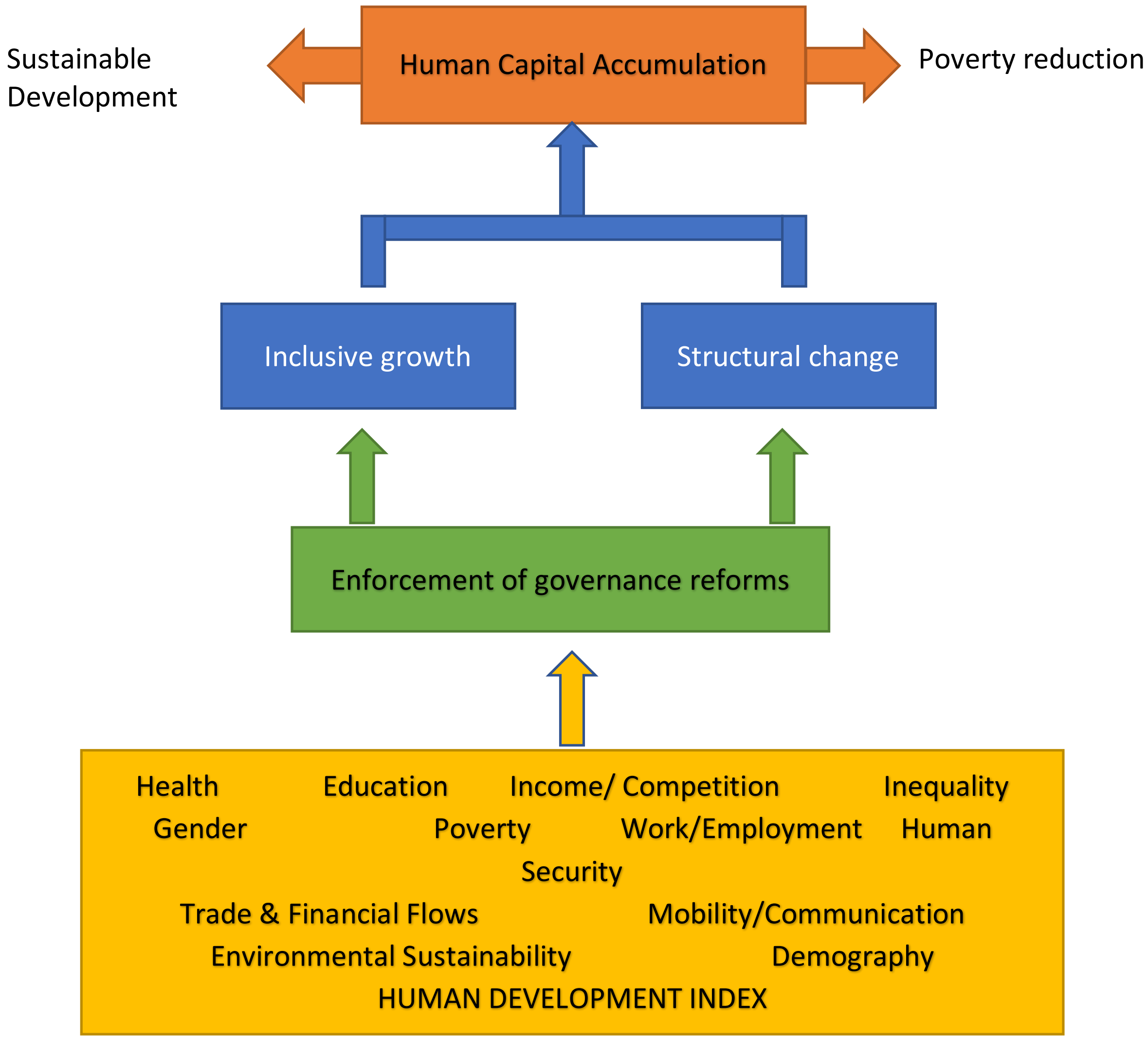

Figure 2: Conceptual framework of the multi-equilibria model of human capital accumulation for sustainable development in Africa.

CONCLUSION

In response to the question: What is the significance of the multi-equilibria model for sustainable development in Africa? Empirical deductions directly from the data reveal that, sustainable development is about creating environments of developed and accumulated human capital in Africa. It all starts with developed human being through good health, education, income and composition of resources, inequality, gender, poverty, work and employment vulnerability, human security, trade and financial flows, mobility and communication, environmental sustainability and demography. Next is to have the discipline to act on the right and wrong things. This implies, doing the right things and equally stop doing the wrong things. Create employments in various sectors of the production of wealth and fairly redistribute wealth with grow are the two key factors in producing developed and accumulated human capital who will reduce poverty and build African societies in a sustainable manner.

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