KNOWLEDGE BASED AND AGENDA SETTING FOR SUSTAINABLE DEVELOPMENT IN SUB-SAHARAN AFRICA

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Abstract

Ever since the beginning of modern science, from Galileo's time onwards, knowledge has been sought about 'the nature of nature', how nature manifests itself and how mankind impact, and is in turn impacted upon, by nature. Human beings draw from their repertoire of knowledge to deal with problems that confront them as a society - either through procedural knowledge, declarative knowledge or both. This implies that there is a link between the process of knowing and how a society tackles its problems. Accordingly, this linkage means that understanding how people and societies acquire and use knowledge (and why they sometimes fail to do so) is a necessary guide on how to improve peoples' lives. Concerns about sustainable development mirrors our (humankind) collective anxiety about the sort society we wish to create and how we wish to live in it. It is also about the sort of society we have created and the implications for present and future existence. For this reason, there has been a tremendous amount of efforts, generally, to expand and enrich the knowledge of sustainable development. Many developing and African regions have remained bystanders in the sustainable development discourse yet they bear the brunt of the fall-outs. This paper argues that a reversal of the cycle of decline in which Sub-Saharan Africa is trapped requires that the concept of sustainable development be considered from a much broader perspective than presently the case. Thus, a new knowledge of sustainable development is not only required but should also be sufficiently sensitive and respectful of the complexity and multiplicity of trajectories characterising the region. It is through this

knowledge base that a useful sustainable development agenda for the region might emerge.

Key words: *Sustainable Development, Knowledge, Agenda setting, Sub-Saharan Africa*

Introduction

According to Adams (2006), the idea of Sustainable Development dates back more than 30 years ago, and it was coined by the World Conservation Union (Association of African Universities, 2009). The Bruntland Report defines Sustainable Development as "development that meets the needs of the present without compromising the ability of the future generations to meet their own needs." The Organization for Economic Cooperation and Development (OECD, 2001) also defines Sustainable Development as the development path along which the maximization of human well-being for today's generation does not lead to the decline in the well-being of the future generation. These definitions suggest that Sustainable Development considers the needs of the future and current generations in tandem, and it is rooted in the pursuit of the welfare and well-being of the people. Sustainable Development is motivated by the negative externalities that are responsible for natural resource depletion and degradation; it requires screening public goods that are essential for economic development, and it also stresses the importance of retaining the flexibility of the environment to respond to shock (OECD, 2001). In order to achieve Sustainable Development, African governments have launched several strategies. In Ghana for instance, the Ghana Poverty Reduction Strategy (GPRS I and II) and the National Environmental Policy (NEP) were designed. In Tanzania, the National Development Vision (NDV) 2025 was designed. In Egypt, there was the National Strategy for Solid Waste Management (NSSWM). Across the entire continent, there has been an increased number of Sustainable Development initiatives being implemented in some 28 countries; these initiatives manifested in the transformation of the Organization of African Unity (OAU) to the African Union (AU) in 2001, the establishment of the New Partnership for Africa's Development (NEPAD) and the establishment of Regional Economic Councils (RECs) in the sub-region (UNECA, 2012). In spite of these attempts by African governments towards Sustainable Development, there is a growing perception

that Africa could fail in achieving Sustainable Development. This perception is fuelled partly by the evidence that while the world is undergoing rapid change, which is driven prominently by technology and globalization, Africa remains unprotected and at risk of being exploited without due recognition of, and remuneration for, its resources (Association of African Universities, 2009). Additionally, there is the continued escalating trend in poverty and the diminishing strength of the environment to meet current and future needs of African countries (UNDP, 2003). Given the fact that Sustainable Development appears to be contradicting in between the opposing imperatives of growth and development on one hand, and ecological sustainability on the other (Robinson, 2004), the trend in Sustainable Development on the African continent has generated some scepticism about whether Sustainable Development is achievable in Africa. The paucity of a coherent literature that documents the achievements, challenges and prospects of Sustainable Development on the continent reinforces the scepticism of achieving Sustainable Development in Africa.

According to Pezzey (1989) there are about sixty definitions for Sustainable Development, and the sheer number of definitions for Sustainable Development is suggestive of the chronic debate over its definition since its coinage in the 1980s (Jepson, 2004). Hopwood et al. (2005) add that the many different interpretations of Sustainable Development are confusing, and the literature is rife with several attempts to define the term (Mebratu, 1998). The debates have erupted between those who prefer the Three Pillars Approach- emphasizing the social, ecological, and economic dimensions of sustainable development or a more dualistic typology-emphasizing the relationship between nature and humanity (Gibson, 2001). Holmen (2001) contends that pursuing both ends of what is 'sustainable' and 'development' are difficult to pin down, and so it is a wonder how we can avoid compromising future generations' needs when we cannot for-see what these needs will be. Given these difficulties, it is not surprising that the conceptual constraints tend to rather reflect the political and philosophical position of those proposing the definition more than any scientific view (Mebratu, 1998), which may influence policy options towards the implementation of Sustainable Development programs. Such difficulties in defining the term lead to the phenomenon of cosmetic environmentalism where the tag of sustainability is stuck on what may be unsustainable, and hence gives

way to questions of determining what is environmentally benign (Gibson, 2001). Irrespective of these conceptual constraints, the international community appears to embrace the idea that Sustainable Development is an imperative. This belief finds expression in the words of Annan (2002, cited in Domfeh et al., 2012) that, "the world cannot continue to act, produce and consume unsustainably, this is the time to act especially on water, energy, human health, agriculture and biodiversity (WEHAB)", if Sustainable Development is to be achieved.

Ever since the beginning of modern science, from Galileo's time onwards, knowledge has been sought about 'the nature of nature', how nature manifests itself and how mankind impact, and is in turn impacted upon, by nature. A convenient method for generating and communicating knowledge about nature has been through a formalised discourse using mathematics and other kinds of symbols. For Sustainable Development to make sense to Sub-Saharan Africa, the discourse should be clearly aligned with the realities on the ground (World Bank 2001) – not with prescriptions but education. This paper reviews some of the contentious issues embedding the conventional knowledge of Sustainable Development, brings Sub-Saharan African situation into the discourse and points to some of the factors that should be addressed in order to develop a sensible Sustainable Development agenda for Sub-Saharan Africa.

Methodology

The objective of this paper is to critically explore Sustainable Development in Sub-Saharan Africa in the context of the progress made, the current barriers that need to be removed, and the prospects that should be pursued. Based on this the study is situated in the qualitative paradigm of social research which is relevant for conducting exploratory studies (Babbie, 2004). The desktop research instrument was used for data collection. The source of data for the study is secondary data. This was collected from books, journal articles, magazines, and conference reports. The data collected were subjected to narrative analysis in order to arrive at the relevant conclusions.

Foundation of knowledge for Sustainable Development

Taken at face value, the idea of Sustainable Development resonates with the aspirations of people everywhere, regardless of ideological persuasions. While

the notion of 'sustainability' is generally appealing, its precise content has remained elusive (World Development Report, 2003). As a result, the discussion of Sustainable Development to date has become increasingly rhetorical rather than a clear guide to action, leading to a great deal of scepticism about the whole concept. Consequently, debates on the topic have largely transformed into discordant tunes - arising from the diverse rationality of different players. Each player brings to the arena a set of idiosyncratic rules that are, by and large, mutually exclusive. These rules serve as justifiers for the rule makers, reinforcing the myopic prism through which they view Sustainable Development. Unfortunately, because of this, opinions have been polarised among different constituencies of interest; society is divided (e.g. north versus south, developed versus developing) and sectional interests dominate.

At issue, therefore, is not so much the intensity or currency of debates about Sustainable Development but the inherent limitations arising from the process of knowledge production (and assumptions) that underpins most of the debates. From the field of cognitive science, Nelson and Nelson (2002) remind us that human beings draw from their repertoire of knowledge to deal with problems that confront them as a society - either through procedural knowledge, declarative knowledge or both. This implies that there is a link between the process of knowing and how a society tackles its problems. Accordingly, this linkage means that understanding how people and societies acquire and use knowledge (and why they sometimes fail to do so) is a necessary guide on how to improve peoples' lives – the thrust of Sustainable Development. In recognition of this, the World Development Report (1998/99) in its 21st edition examined the complex interrelationship between knowledge on the one hand and economic and social development on the other. It argued that strong economies are built not merely through the accumulation of physical capital and human skill but through a solid foundation of knowledge. It is this wider foundation of knowledge that provides the basis for making the choices that determine the direction of development taken by societies. However, development trajectories pursued by societies have not always led to positive outcomes – the aspect that casts doubt on Sustainable Development. The British economist, Alfred Marshall, once said that "while nature ... shows a tendency to diminishing return, man … shows a tendency to increasing return … Knowledge is our most powerful engine of production; it enables us to subdue

nature and … to satisfy our want" (Marshall, 1890). Thus, striving to subdue nature, craving to satisfy (sometimes, insatiable) wants, and advances in science and technology that could potentially destroy human existence, albeit intended, are to be considered integral in the ontological assumptions of development. Nevertheless, the righteous indignation of humans often instigates them to seek corrective actions, hence the idea of Sustainable Development.

Today, 'science' and 'technology' have dominated mainstream discourses on the problems of development, especially of the environment. These underpin many genuine efforts at conceptualising and reversing development externalities. Both science and technology, as systems of knowledge, have undoubtedly stimulated greater sensitivity to Sustainable Development and proven a salutary canvass around which revolves various societal hopes and anxieties. Ingenuously, both humankind (in their conscious or subconscious machinations) and nature have combined to challenge the potency of scientific knowledge to deal comprehensively with the problems of development. Essentially, in dealing with our world as we know best (through our production and consumption decisions), we humans have tended to create problems at a much faster rate than we are able to cope with, despite our breath-taking advances in modern science and technology. A number of questions consequently arise. Is it the case that nature is unknowable and/or that we need to rethink our taken-for granted assumptions and, consequently, the process of generating knowledge about nature? For countries in Africa and many developing regions that have continued to back-slide in virtually all facets of 'modern development', what system is more likely to help generate and communicate a comprehensive synthesis of knowledge relating to Sustainable Development in ways to which they could relate? While the causative relationship between 'knowledge' and 'development' is not in doubt, there will always be questions about the stability of such a relationship unless the mode of knowledge production is rigorously engaged with regard to contexts, relevance and impact.

Achievements and challenges of SD in Africa
Economic growth and poverty reduction
Economic sustainability requires countries to be on a broad-based quality economic growth which focuses on reducing poverty and inequality, supporting

investment, and building an efficient social services system towards Sustainable Development (United Nations Economic Commission for Africa-UNECA, 2012). By 2012, the International Monetary Fund (IMF) estimated that "with a Gross Domestic Product (GDP) growth rate of 35%, Sierra Leone was the fastest growing economy in the world and that over the ten years, six of the world's fastest growing economies were in sub-Saharan Africa" (Boateng, 2013, p. 8). These six African countries include: Angola, 11.1%; Nigeria, 8.9%; Ethiopia, 8.4%; Chad, 7.9; Mozambique, 7.9%; and Rwanda, 7.6% (UNECA, 2012). Additionally, forecasts by the IMF also suggests that seven African countries are likely to be among the top ten over the next half decade, 2011-2015 (Ethiopia, 8.1%; Mozambique,7.7%; Tanzania, 7.2%; Republic of Congo, 7.0%; Ghana, 7.0%; Zambia, 6.9%; and Nigeria, 6.9%). Given the current prospects, there is a strong likelihood that Africa will surpass Asia in growth in the next decade (Boateng, 2013; UNECA, 2012). This is further supported by evidence that from 1990-2002, the average real GDP in Africa grew by 3.3% and from 2003-2004, the average real GDP growth was 3.8%. Central Africa had the highest growth rate (4.2%); North Africa (3.9%); East Africa (2.9%); and West Africa (2.4%). After the initial slump in growth from 1991-1992, Africa's growth began to improve peaking in 1996. (UN, 2010). Available data suggest that "government debt in sub-Saharan Africa was around 70-80% of GDP ten years ago but that has been halved to about 45-40% of GDP currently. At the turn of the Millennium, "Africa's GDP was $600 billion; today, it is $2.2 trillion- adjusted for inflation, Africa's GDP has doubled in 10 years" (Williams, 2013, p.50). It can be deduced from these statistics that African countries are making great strides towards building robust economies for the current generation, but more importantly for future generations. Even though the statistical figures put Africa in a positive light, how has such efforts directly translated into poverty reduction, infrastructural development, and improved sanitation? These are critical questions that demand immediate answers if the perceived economic growth on the continent will have any meaning. These questions appear difficult to answer given the fact that only 10% of Africa's trade is within the continent (Boateng, 2013). Africa exports only 18% of manufactured goods and imports 65% (New African, April 2013). The level of private sector investment currently stands at 5-8%, but that needs to be drastically increased. Africa's share in the $130 trillion global trade has

remained a minimal 3% over the years and intra-trade is a meagre 10% (Dogbevi, 2012). On the global platform, of the 1.2 billion living in extreme poverty, 25% are from sub-Saharan Africa (Moyo, 2006). The World Commission on Environment and Development identified that one of the issues that is fundamental to overcoming the challenge of Sustainable Development is the overriding state of poverty on the African continent (South African HDR, 2003). The Millennium Assessment suggests that not only does the level of poverty remain high, but inequality is growing (Adams, 2006). Consequently, the UNECA (2010) concludes that the overarching Sustainable Development challenge in Africa is poverty eradication. This is a barrier that African government must remove if the pursuit of Sustainable Development is to be achieved.

Demographic characteristics and education

How to manage the demographic dynamics of Africa's population is critical to the achievement of the Sustainable Development in Sub-Saharan Africa. Populations in the region have been growing steadily over the past decade compared to the world average. For instance, between 1994 and 1995 alone, population growth in Africa was around 3%, twice the world average. Growth rates in individual countries varied from 2.6% in Senegal to 3.4% in Niger (Heaps et al., 1999). The pattern with regard to biodiversity shows escalating use of natural resources, rising pollution levels and climate change, and it must be borne in mind that these feedbacks can trigger aggravation of the initial problems (ILO, 2012). Some aspects of Africa's current demographic characteristics will put the continent in an advantageous position if managed properly. For example, Africa has the world's fastest growing population- and the youngest, with more than half under 20 years old, compared to 28% in China, and with more than 40% of its population living in cities; by 2020, more than 500 million Africans will live in urban centres, and the number of cities with more than one million people is expected to reach 65, which is an increment from 52 in 2011 (New African, 2013). While population growth might be positive, there is a corresponding challenge with the nature of the population growth dynamic. Several reports highlight the problem of youth unemployment on the continent; with a rapid growth in population in the past 50 years, each generation is much larger than its predecessors and there are

twice many people under the age of 28 as over it; this implies that employment must grow at a faster rate, but it is estimated that about 71% of sub-Saharan Africa's working age population lacks full time employment. Additionally, Africa's population is largely rural-based and therefore heavily dependent on agriculture for their livelihood; rural areas are home to some 80% of the total population, which includes 70% of the continent's extreme poor and undernourished (Moyo, 2006). The UNECA (2012) report argues that progress towards universal primary education has been a steady success in some African countries. Such countries include: Burundi, Ghana, Ethiopia, Kenya, Mozambique, and Tanzania. However, progress is still needed in related aspects like infrastructure, quality of education, completion rates, enrolment in secondary and tertiary education and teaching capacity. The necessity of education is to transform and improve the conditions of both the learner and the community towards Sustainable Development (Association of African Universities, 2009).

Environment, health and sanitation
For Sustainable Development to be attained, there must be conscious efforts towards friendly environmental practices. This must be practiced in tandem with improved health and sanitation. The race to reducing infant and maternal mortality is being won in the region. For instance, Mozambique has achieved a reduction of over 70%; Malawi, 68%; and Niger, 64%; maternal mortality rates have also fallen and the fight against malaria has also improved significantly through the distribution of insecticide-treated mosquito nets in sub-Saharan Africa (UNECA, 2010). By the year 2000, malaria was killing over twenty-nine thousand people in Ethiopia and as part of efforts to meet the Millennium Development Goals (MDGs), the government introduced a prorgam to deliver two mosquito nets to every family at risk, alongside a reduction in the cost of malarial drugs by half; within 3 years of implementation, deaths from malaria were cut in half (Annan, 2012). In Rwanda in 2003, access to healthcare stood at just 7% of the population; but when a health insurance scheme was established, with the small scheme subsidized by foreign aid for those who could not afford it, the scheme saw access to healthcare rise to 85% by 2009 (Annan, 2012). There are however some harsh environmental conditions that tend to affect livelihoods. One such condition is climate change, which has been

identified as one of the leading human and environmental crisis in the 21st century (Institute for Security Studies, 2010). The institute suggests that Africa is already facing considerable water stress as a result of insufficient and unreliable rainfall that changes pattern and causes flooding. Climate change also negatively impacts on agriculture on which three-quarters of Africa's population depend for their livelihood. The effect is seen in the reduction in arable land for farming, prolonged droughts, and crop failure (UNESCO, 2003). It is also argued that in some African countries like Egypt, deteriorating air quality is linked to industrial emissions and traffic density, and suspended dust is the major air pollution problem in the country; In Zambia, sulphur dioxide is particularly a problem in Kitwe due to the smelting of copper and roasting of cobalt among other industrial activities; In Uganda, most of the imported cars are second-hand; In 1971, it was 44, 510 cars, and by 1999 the number increased to 186, 244, a four-fold increase in less than 30 years (APINA/SEI, 2004). While Nigeria has seen a steady economic rate of approximately 7% every year for the last decade, it is also faced with other discouraging statistics. For instance, it still has some of the worst human development indicators in the world; nor is it on track to meet most of the health and education MDGs (New African, April 2013). The reason for the high impact of climate change could be that as a continent, Africa has probably benefited least from industrial development and exploitation of fossil fuels, leading to the crisis of human induced climate change and variability (Owusu, 2012).

Agriculture
Available evidence suggests that Africa's Sustainable Development agenda cannot be achieved without Agriculture taking its rightful place in this process. Programs such as the Comprehensive Africa Agriculture Development Program (CAADP) and the declaration of 2014 as a year of Agriculture by the AU all point to placing agriculture in the hub of achieving Sustainable Development in Africa. Moyo (2006) argues that agriculture contributes a significant share to the continent's GDP and the majority of Africa's labour force is employed in Agriculture. In Nigeria for instance, there has been a boost in access to fertilizer with a privatized company Notore, where farmers currently receiving subsidized fertilizer have increased from 20% to 94%. Doreo Partners gives farmers training, credit, seed and fertilizer and helps them to market the product

(The Africa Report, April 2013). Farmers in Osun State receive a new strain of Cassava as part of the government's push for the crop; hence, there is growth in Nigeria's Cassava industry after a decade effort resulting in flour makers including 10% Cassava in bread and government offers 12% tax rebate to companies that comply. Again, agriculture provides employment for some 70% of Africa's labor force and contributes 50% of export earnings and 35% of GDP in most countries (Ngongi, 2013). Even though Agriculture is believed to be one of the mainstays of Africa's achievement of the SD, there are enormous challenges that have to be overcome if Africa can fully tap into agriculture's potential. Food prices have risen in Africa mainly because Africa imports most of its food and so global price changes affect food prices in Africa. The problem of hunger in Africa is rooted in an inability to produce enough food to feed its growing population (Moyo, 2006). Perhaps the reason for Africa's inability to produce more to feed itself is that the rudimentary and labour-intensive tools, equipment and low level of inputs used in African agriculture results in low productivity, making the sector unattractive, especially to youth; African agriculture is still largely subsistence, and receives less than 4% of all commercial credit (Ngongi, 2013). Currently, "there are a lot of talk about agriculture being a strategic element in Africa's growth, but how many financial institutions are willing to give loans to farmers to embark on expansion; in Uganda for instance, only 4% of the total loans given by banks goes to Agriculture, while 64% of the population in Africa is engaged in Agriculture, contributing to 34% of GDP" (New African, April 2013, p.56). In a study by the African Studies Centre (ASC), Leiden University, it was found that grain production in Africa has remained static since 1961, and that total domestic cereal production has dropped from 83% to just 67%; while 5 out of 12 countries selected for the study had a positive trade balance, in terms of agricultural commodities in 1961, however none do so now (Norman, 2012). Other constraints identified regarding the poor performance of African agriculture include: inadequate infrastructure, unstable markets opportunities, small markets and lack of current market information, uncertain policy environment and poor competitiveness of African products on the international market (Moyo, 2006). It has been argued that the continent is the most food-insecure place on the planet, and this is compounded by escalating food prices, which could trigger social and political unrest (UNECA, 2012). It is worth mentioning

that the phenomenon of food insecurity is partly blameable on foreign land purchase for agriculture (United Nations, 2010). The evidence suggests that most of such land acquisitions are not for growing crops for domestic markets, but rather part of food and energy security goals for the home state of the investor. For example, African countries that lease large tracts of land to foreign investors have some of the highest undernourished people in the world including Democratic Republic of Congo (76%), Ethiopia (46%), Kenya (32%), Madagascar (37%), Mozambique (38%), Sudan (21%), and Tanzania (35%). As a result of this, some of these countries imposed restrictions on food exports in response to the massive spike in agricultural prices and the internal food security issues created (United Nations, 2010).

Towards an agenda for sustainable development in Sub-Saharan Africa
Sustainable Development is multifaceted and each nation has to decide what the ideal means to them and how best to respond. In the contemporary setting, the nature of Sustainable Development is, in important regards, more complex than was perceived during Britain's industrial revolution. For example, vast continents are no longer open to be ravaged in the process of capital accumulation and the development of markets. In some respects, the whole process of Sustainable Development is a far more global and integrated one now and certain costs that were externalised previously have now to be internalised – this does not detract from contextual peculiarities that are glaringly evident especially when Sub-Saharan Africa contexts are focused.

It is worth pointing out that, contextually, Sustainable Development is a phenomenon that is solidly rooted in traditional African societies and which secured their overall development through the ages. Aided by the economic ideology of developed economies and the pervasive forces of globalisation, the evolving orthodox focus and retooling of Sustainable Development by "modern society" seems to ignore the building blocks that sustained the development of traditional societies, thereby sacrificing its locale-specific, socio-cultural, political and economic relevance. Without a locale-specific explanation, one will necessarily ask the questions: What development? Is Sustainable Development merely a survival game? It would seem then that Sustainable Development would involve not only the complex issue of arbitrating among

the various objectives that may be possible but also arguing between the various ways to achieve the outcomes.

For Sub-Saharan Africa, a useful Sustainable Development agenda could emerge through a broad-based and collaborative evaluation of local systems and practices. This can only be possible through processes of knowledge generation and dissemination that are contextually relevant, socially distributed and accountable – a requisite platform from which to progress Sustainable Development ideals. A raft of issues necessary for developing an Afro-centric agenda readily comes to mind, including the following:

• **Systematising development objectives:** Africa's development, or absence thereof, has lessons for everybody. Lack of progress is bad enough but slipping back is worse. Perhaps the starting point should be an appreciation of what exists contemporaneously, their features and dynamics and how they relate to any overt policy objectives or covert policy rationale. Development initiatives falter when they are not conceived within the framework of sustainability. What does the concept of development mean in African contexts – in a world of poverty? What should be the principal thrusts of development? The notion of development is relevant insofar as it is related to a context. Without contextual definitions, Sustainable Development policies will mean nothing more than theoretical possibilities – trying to march to the beat of an imported rhythm/technology/ambition, the intrinsic merit of which is without a domestic connection and, as a process, represents the very antithesis of what Sustainable Development should be about. Therefore, an essential feature of Sustainable Development should be indigenous and contextual. This does not make nonsense of the UN Millennium Declaration (UN, 2002) but caution is necessarily required in giving operational substance to such notions.

• **Plugging human capital deficits:** The bases for sustainable growth are essentially found in skills and knowledge rather than natural resources. The evidence on this is overwhelming, it has always been so and if we do not appreciate this then we have entirely missed the essential feature of development. Development has inherently progressed from a resource exploitative model to one that is knowledge-based and technology-driven (Ikeme, 2000). It has always been about the development of people, with human capital at the heart of the process. Resources may play a very important role in kick-starting the process, providing for 'great leaps forward' and for exchange

sustainability but has never been the end game for development. That is, a few of the most resource-poor countries are relatively developed, while some of the most resource-rich are among the very poorest. Hitherto, the dominant perception of Sub-Saharan Africa in relation to Sustainable Development discourse mainly revolves around natural resources whereas attention should be directed to the inherent capacities needed to carry the seeds of future economic and social development in the form of human capital, tacit knowledge and intellectual capital. Channelling knowledge flows into new and dynamically evolving arenas is a key task for any veritable system of knowledge production for Sustainable Development. In fact, there can be no exit from poverty and underdevelopment until there is a better-educated population, with flexible life skills to operate in a dynamically evolving global economy. The human capital dilemma of lack of sufficient trained persons is the major blockage to sustainable progress in Sub-Saharan Africa.

• **Implanting good governance:** Poor governance cannot merely profoundly damage prospects for economic growth but entirely subvert the development process, indeed, all spheres of human progress. A country run by a corrupt, venal oligarchy, where democratic principles and institutions are brazenly abused merely impoverishes its people. Economic progress goes hand in hand with political progress (Nwankwo, 1997). Indeed, political progress may even be seen as the important binding constraint on social and economic progress, since it provides the framework of laws and regulations within which the process has to take place. Moreover, given the mobility of finance and the various forms of capital, restrictions and constraints will encourage the movement of valuable human and financial capital to more conducive environs. However, responsive governance need not be solely measured on the Westminster of Capitol Hill model. Many societies in Africa have indigenous political systems (where tradition and culture embed political administration) which might usefully apply to promote Sustainable Development.

• **Promoting the local economy:** Identifying and supporting new sources of competitive advantage within the local/regional economy and projecting these outward – both at national and international levels. To move from a traditional production culture to an industrial/post-industrial one requires the structural transformation of substantial elements of the national economy. Each nation's transformation is related to precedents and linked to existent productive

relations in others but there is no prescriptive roadmap to follow. The route to structural transformation requires, uniquely, the ingenuity of solutions developed to meet existent conditions. Post hoc analyses may rationalise such transformations by giving them an air of concreteness that are rarely warranted. For example, we may look back to Japan's late 20th century transformation and trace the essential policy elements that forced the process but this has not made the industrial transformation road any easier to travel for the Asian Tigers. This is because the essential elements necessary to their progress were substantially different, as is always the case. Such structural transformations bring about substantial shift in power relations and these only take place when that power is won by the emerging economic nations - and it is never won easily.

Conclusions

Essentially, because of its precarious conditions, Sub-Saharan Africa is a bystander in the global Sustainable Development debate. In this regard, it makes sense that any genuine effort at kick starting meaningful development will have to start from within - not with prescriptions but education. Sub-Saharan Africa is the architect of its own 'arrested' development and must look inward for start-up solutions and sustainable strategic adjustments.

For Sustainable Development to be meaningful, the debate surrounding it should adopt the same guiding principles observed in nature. As Charles Darwin long ago demonstrated, one of the main guiding principles of the natural world is that sustainability and regeneration come about due to the great diversity inherent in the system. It may well be that the diversity which is embedded in locale specific and pluralistic modes of knowledge production may pave new strategic routes towards Sustainable Development for Sub-Saharan Africa.

Therefore, for Sub-Saharan Africa, how 'new intelligence' on Sustainable Development is generated and disseminated will prove a critical determinant of success with regard to Sustainable Development programme development and implementation. From a practical standpoint, Sustainable Development may be conceived as a political ethic. It is analogous to a political struggle, which in addition to resistance against different forms of domination and exploitation, also entails combat with different forms of discursive power (Moisander and Pesonen, 2002). If it is acknowledged that power and discourse constitute our subjectivity, then an important aspect of this combat is to "refuse what we are"

but rather "invent, not discover, who we are" (Foucault, 1980) - by inventing, developing, and promoting new forms of subjectivity that can be sources of effective resistance to culturally syncretic power of discourse (Bernauer and Mahon, 1994). This "politics of ourselves" and the ethico-critical reflection it involves (Moisander and Pesonen, 2002) constitutes a mode of self-information - a moral action that will enable Sub-Saharan Africa to engage in radical questioning and re-questioning of the broader conditions that made the region what it has become. The real challenge, therefore, is to evolve a conceptualisation, an understanding, acceptance and ownership of Sustainable Development knowledge that is sufficiently robust to guide this critical and reflective evaluation. This could, in turn, help develop the region's collective ability to question the conditions that account for its present subjectivity and to start imagining and building new kinds of subjectivities.

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