

UNDERSTANDING AND PROMOTING THE NOTION OF SUSTAINABLE  
DEVELOPMENT IN COUNTRIES OF THE DEVELOPING WORLD

by

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## DEDICATION

To Zainab O. Wurie

*Mom, all that we are, or hope to be, we attribute to your unconditional love and sacrifices.*

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I thank the Lord, my God, for guiding me throughout this entire process; what a true best friend I have in You! Thank you to my family and friends for stretching my endurance, and for your unwavering love, prayers, support, and encouragement.

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April, 12, 2011

## ABSTRACT

### UNDERSTANDING AND PROMOTING THE NOTION OF SUSTAINABLE DEVELOPMENT IN COUNTRIES OF THE DEVELOPING WORLD

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God created all humans equal and we all deserve the opportunity to have our basic needs met. This thesis discusses the fundamentals of sustainable development and explains the importance of achieving these measures in order to keep us humans safe, healthy, and prosperous *and* our Earth functioning properly. The purpose of this paper is to stimulate conversation and action about the state of our planet and its inhabitants; regarding our environmental, social, and economic wellbeing.

This work particularly focuses on countries where people are suffering, and fighting to solve extreme poverty, amidst their wealth of blessings. It confers special

attention to the African continent because of the evident gross poverty disparities and economic marginalization faced by her people.

This study explores non-traditional sustainability indicators to determine their influence and contribution to environmental health. Paying close attention to the effects of colonialism, and cultural, economic, and social development factors, this paper analyzes the effects of population and consumption on environmental performance and ultimately sustainable development.

After excluding missing data, the methodology utilizes 75 of 98 World Bank identified 'developing countries' for the final results. The findings of this basic research indicate that regarding countries in the 'third world', while energy consumption has a significantly negative effect on environmental performance, population growth does not.

This thesis further examines several avenues of implementing sustainable development, and provides sound recommendations and guidance to actualizing this concept. Future research, accountability, and social work implications are also detailed.

## TABLE OF CONTENTS

ACKNOWLEDGEMENTS .....	iv
ABSTRACT.....	v
LIST OF ILLUSTRATIONS.....	xi
LIST OF TABLES .....	xii
Chapter	Page
1. INTRODUCTION .....	1
1.1 Sustainable Development.....	1
1.1.1 Varying Ideas of Sustainable Development.....	2
1.1.2 Intergenerational Equity.....	3
1.1.3 Agenda 21 .....	4
1.1.4 Developing Countries .....	5
1.2 Statement of the Problem.....	7
1.2.1 Poverty .....	7
1.2.1.1 Highly Indebted Poor Countries .....	9
1.2.2 Distorted Development .....	11
1.2.3 Underdevelopment.....	12
1.3 Purpose of the Study .....	13
1.3.1 Consumption and Population.....	14

1.3.2 Culture and Development .....	14
1.3.3 Sustainability Paradigm Shift .....	15
1.4 Significance of the Study .....	17
1.5 Research Question .....	19
2. MYSTERIES OF HISTORY AND CULTURE.....	20
2.1 Colonialism.....	20
2.1.1 Scramble for Africa.....	21
2.1.2 Economic Colonialism.....	23
2.1.2.1 India and Economic colonialism.....	24
2.2 Culture.....	25
2.2.1 Aspects of African Culture .....	27
2.2.1.1 Land Tenure .....	27
2.2.1.2 Family Planning .....	29
3. LITERATURE REVIEW .....	31
3.1 Toward Sustainable Development: Estes .....	31
3.2 Air Pollution: Pillai .....	32
3.3 Measuring Sustainable Development: Stevens .....	33
3.4 Sustainable Development in Nigeria .....	35
3.5 Urbanization in developing countries: Cohen .....	37
3.6 Barriers to Sustainable Development.....	39
3.7 The Tea Party Targets...Sustainable Development .....	41
3.8 Sustainable Development: American Policy Center .....	42
4. METHODOLOGY .....	45



4.1 Theory Section .....	45
4.1.1 Population .....	45
4.1.1.1 Cultural Values and Population Control .....	46
4.1.2 Consumption .....	47
4.1.2.1 Consumption Disparities .....	48
4.1.3 Culture .....	49
4.2 Research Description .....	51
4.2.1 Research Question .....	51
4.2.2 Hypotheses .....	51
4.2.3 Variables .....	52
4.2.3.1 Dependent Variable .....	52
4.2.3.2 Independent Variables .....	53
4.2.3.3 Control Variables .....	54
4.3 Sampling Procedures .....	55
4.4 Research Design .....	57
5. RESULTS AND ANALYSIS .....	58
5.1 Results .....	58
5.2 Analysis .....	60
6. IMPLICATIONS AND CONCLUSIONS .....	62
6.1 Discussions .....	62
6.1.1 Strengths Based Approach .....	62
6.1.2 A Group of 8 Wealthy Nations .....	63
6.2 Recommendations .....	64

6.2.2 Growth Triangles and Partnerships.....	66
6.2.3 Cultural Recommendations.....	66
6.2.3.1 Land Use.....	67
6.2.4 Political Recommendations .....	68
6.3 Sustainable Development Implications for Social Work.....	69
6.3.1 Social Justice, Empowerment, and Advocacy .....	69
6.4 Future Studies .....	70
6.5 Conclusion .....	71
REFERENCES .....	73
BIOGRAPHICAL INFORMATION.....	81

## LIST OF ILLUSTRATIONS

Figure	Page
1.1 Sustainability.....	2
1.2 Lindner and Brown .....	2
1.3 Sustainable Development.....	4
2.1 The Partition of Africa .....	22
2.2 Three Aspects of Culture .....	25
4.1 Population Growth.....	45
4.2 Consumption Patterns .....	47
4.3 Four Culture Objectives.....	50
4.4 Environmental Performance Index .....	53

## LIST OF TABLES

Table	Page
3.1 Barriers to Sustainable Development.....	40
5.1 Frequencies .....	58
5.2 Correlations.....	59
5.3 Regression.....	59
5.4 Developing Countries .....	61

## CHAPTER 1

### INTRODUCTION

The basis of sustainability deals with long-term maintenance, continuity, and endurance. Matson (2009) refers to this as meeting the basic needs of people, without compromising our planet and the ecosystems on which we, and future generations depend. Sustainable development was birthed from a paradigm shift to sustainability.

#### 1.1 Sustainable Development

The concept of sustainable development was introduced in 1987 by the World Commission on Environment and Development (WCED), now known as the Brundtland Commission, in a report titled “Our Common Future” (United Nations, 1987). The commission defined the term as, “meeting the needs of the present without compromising the ability of future generations to meet their own needs” (United Nations, 1987).

Simply put, sustainable development is responsible and accountable development; development which facilitates a thriving planet, and unifies, “aspects of human development, environment conservation, decreasing poverty, eliminating hunger, and power inequality through empowering people and developing democracy and participation” (Valadbigi & Ghobadi, 2010, P. 545).

As seen in Figure 1.1, Stephen (2005) states that, “the concept of sustainable development encompasses three dimensions of welfare – economic, environmental, and social – and involves complex synergies and trade-offs among them” (P.1). Sustainable development further refers to how well we are taking care of our earth and its people, and moreover why we should or should not care for each other and the world we live in.

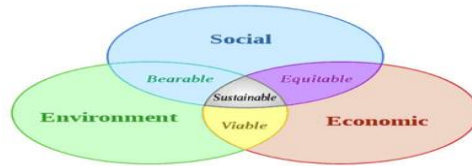


Figure 1.1 Sustainability

### 1.1.1 Varying Ideas of Sustainable Development

The Brundtland Commission’s definition of sustainable development is the most popular, but varying ideas of the concept have evolved. Linder (1989) defines sustainable development as meeting human needs and aspirations, of not just one country or area, but of all people who inhabit the earth presently and in the future. Brown (1991) expresses that sustainable development has four dimensions of sustainability which are as follows: ecological, economic, political, and cultural.

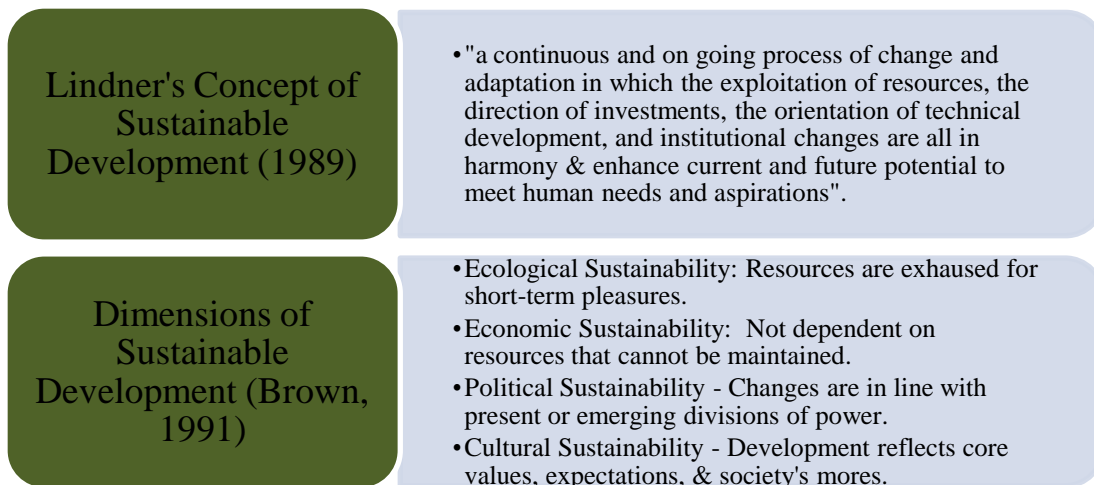


Figure 1.2 Lindner and Brown

### *1.1.2 Intergenerational Equity*

At the heart of sustainable development lies inter-generational equity, which deals with satisfying our needs, while being mindful of the needs of future generations. We have to exercise caution in using our finite resources, thereby providing: “equal consideration to our own immediate needs and, our own future needs, and our children’s and grandchildren’s future needs” (Sustainable Measures, 2010). Udo & Jansson (2009) echo that we must, “focus on replenishing the earth or there will be neither earth nor human beings to inhabit it in the long run” (P. 3701).

Sustainability remains a complex concept because it is such an inter and multi disciplinary concept, which addresses an array of different aspects of socio-economic and environmental aspects of daily living. Udo & Jansson (2009) affirm that, “many researchers and policy makers seem to agree that SD is a multidimensional, multidisciplinary, and interdisciplinary problem of significant complexity” (P. 3701). As Stevens (2005), further explains, “the sustainable development agenda is a broad one, covering virtually all aspects of life at national and international levels and of government policies” (P. 2); the concept is further complicated because countries have differing outlooks on sustainable development. In an attempt to specify and describe sustainable development, a plethora of researchers have leaned on the idea of a sustainability transition, which according to NRC-BSD is “one in which basic human needs are met, hunger and poverty are reduced, while maintaining the life supports of the planet” (Mabogunje and Kates, 2004). Overall, sustainable development refers to development that does not destroy the environment on which we depend on, and cares for the people that live on the land.

This thesis aims to determine the independent effects of consumption and population on the environmental health of developing countries, as population growth, pollution, and poverty are all elements that directly influence the environment's health. Figure 1.3 illustrates that the efficient performance of the environment is vital for sustainable development, because without the environment's survival, the society will perish, and therefore there will be no economy.

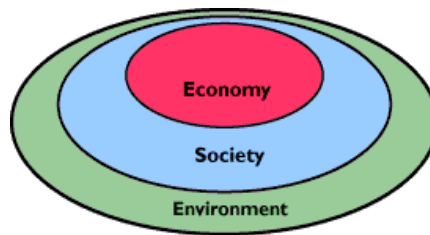


Figure 1.3 Sustainable Development

While the environment is pertinent because it encompasses both the society and the economy, it is crucial to recognize that all three segments (environment, society, and economy) of sustainable development share equal importance. The Brundtland Commission successfully bridged the connection between ecological (environmental) sustainability and social and economic sustainability; equalizing these three segments.

### *1.1.3 Agenda 21*

Agenda 21 characterizes a global commitment to achieving the highest level of development and environment cooperation. It evolved during the 1992 Rio Earth Summit and elaborates on the ideas of the then four-year old Brundtland Report. According to the United Nations (2009), Agenda 21 is a “comprehensive plan of action to be taken globally, nationally and locally by organizations of the United Nations System, Governments, and Major Groups in every area in which human impacts on the



environment” (UN, 2009). Subsequently, the document was adopted by 178 Governments, and these principles were firmly reasserted at the 2002 World Summit on Sustainable Development (WSSD) in Johannesburg. The Summit also incorporated a global partnership to attain sustainable development with a primary concentration on poverty reduction. The idea of sustainable development is controversial, and there are many who do not support the concept. Members of the Tea Party believe that sustainable development is a conspiracy theory that is hidden in the pages Agenda 21.

#### *1.1.4 Developing Countries*

For analytical purposes, this study utilizes the World Bank’s definition of developing economies as a common measure for developing countries. The World Bank’s main standard for defining economic well-being is the Gross National Income (GNI) per capita of countries. On the basis of GNI per capita, the World Bank classifies economies as low income, lower middle income, upper middle income, or high income. Low-Income economies generate around \$995 or less; lower middle income range around \$996 - \$3,945; upper middle income generate \$3,946 - \$12,195; and high income economies generate \$12,196 or more. The economies that rank within low and middle income are considered developing countries (World Bank, 2011). Notwithstanding, this study recognizes that developing countries do not fit a cookie-cutter description, as “differences between the nations of the Third World have continued to grow and contrasts in Gross National Product or standards of living have widened, with many African States, in particular, experiencing real deterioration in economic and social conditions” (Drakakis-Smith, 2000, P. 2).

In addition, this thesis acknowledges that the concept of development is relative to one's cultural views. Regarding development, Conteras (1999) affirms that, "the meaning a particular person attaches to the term depends on her subjective view of the world". Premasiri (1996) explains that the term development is often associated with a process of desirable and worthwhile change. Questions about what is desirable and worthwhile cannot be generalized or "decided purely on the basis of descriptive criteria" (Premasiri, 1996), because they are not "questions of empirical science" (Premasiri, 1996); rather they rely on the cultural values of a people. Despite, Premasiri (1996) points out that, "today it appears to be the case that there is a tendency towards the establishment of a global culture or universal culture and the dominant elements of this global culture appear to be supplied by the Western model". Premasiri (1996) explains that a major flaw of this model is that it conveys very materialistic values, and does not entertain the deep wisdom apparent in the cultural fibers of Non-Western civilizations.

Premasiri posits that our perception of development is biased by this materialistic view, and suggests that the method used to classify countries into categories of developed and developing supports his theory. A nation's stage of development is usually gauged by, "the quantity of goods produced and consumed, the gross national product, and the per capita income of the people" (Premasiri, 1996); factors that are all, exclusively monetary or materialistic in nature. Premasiri (1996) argues that because of our popular monetary world view of development, it would not be fitting to call a society developed if its people are dying of starvation, have dilapidated public health institutions, or lack shelter and clothing. Premasiri (1996), considers this to be a skewed, materialistic conception of development, because:

If people face the threat of being robbed at gunpoint in the most modernized cities of the world, or of being shot in broad daylight in a market square, or if a young lady is not safe from being molested and raped by sex criminals, or if people attempt to overcome their discontentment with life with large doses of debilitating drugs and alcohol which create immense misery within their families and households, and if more and more people have to seek the help of sedatives or psychiatric treatment to overcome their mental distress and above all if we face the constant threat of being annihilated by nuclear war between superpowers who incessantly compete for a bigger share of the world's resources? Under such circumstances can we boast of any genuine development?

It is wise to remember that the conventional definitions of development, though dominant, may not necessarily be the only true measure of development. Development does not have to take the same shape or form in all parts of the world; nations can have different forms and trajectories of development that is still considered sustainable.

## 1.2 Statement of the Problem

### *1.2.1 Poverty*

Our society will not have the ability to actualize sustainable development with poverty running amuck in many developing nations. Valadbigi & Ghobadi (2010) assert that “while reserving environment and natural resources is among the most important human challenges, the necessity of improving the level of life standards in developing countries still keeps its importance” (P.542). The UNEP Global Environmental Outlook 2000 determined that reducing the absolute poverty of the majority of Africans who are poor is fundamental.

According to the United Nations (UN), sustainable development has remained unattainable for many countries on the African continent, and poverty still stands as a major challenge for almost half of the Sub-Saharan population. Unfortunately, most countries in this region have not had the opportunity to take part in or enjoy the benefits of the globalization process, because, “for those who have little to offer the global marketplace, exclusion rather than inclusion is far more common” (Drakakis-Smith, 2000, P.3). Africa’s efforts towards sustainable development have further been stifled by issues such as: “multiple armed conflicts, insufficient access to education, and widespread pandemics” (United Nations, 2009). The UNEP report concludes that there is an immediate need for new bottom-up approaches that consider the least wealthy at the head of the environment and development agenda , as this “could tap and release the latent energy and talents of Africans to bring about development that is economically, socially, and environmentally sustainable” (1999).

In addition, the basic needs of people living in poverty must first be met in order to spark their concern for the environment. A quantitative study conducted by Udo and Jansson (2009), proved that, “as in Marslow’s hierarchy of needs, nations that are struggling to survive are less concerned with environmental sustainability than advanced and stable nations” (P. 3700). In the developed world, it is less of an onerous task to promote environmental sustainability because for the most part, the basic needs of those citizens are met; a requirement of sustainable development. It is more challenging to focus on protecting the Earth while millions are starving. As cities become wealthier, they are better equipped to handle environmental concerns.

Poverty is also, “a major cause and consequence of the environmental degradation and resource depletion which threaten economic growth” (UNEP, 1999). For example, Africa faces major environmental endangerments, such as deforestation, climate change, and desertification, while India is in danger of facing some of the most intolerable environmental challenges in the world (Kapur, 2009). A 2009 government report stated that about 45% of India’s geographic area is affected by land degradation, air pollution contributes to three million deaths yearly, and approximately 70% of the nation’s surface water is contaminated. The World Bank affirms that “environmental sustainability could represent the biggest obstacle to the nation’s development” (Kapur, 2009). The close relationship between developing economies and the occurrence of environmental degradation suggests that poverty must be tackled in order to properly address environmental issues and sustainable development.

#### *1.2.1.1 Highly Indebted Poor Countries*

Sachs (1999) discusses countries that have been labeled as Highly Indebted Poor Countries (HIPC) and explains that extreme poverty coupled with financial insolvency targets these nations for “a special kind of despair and economic isolation”. A plethora of developing countries are in debt and poverty stricken partly due to the policies of international organizations such as International Monetary Fund (IMF) and the World Bank (Sachs, 1999). During the late 1970s or early 1980s, a majority of African countries were in deep economic troubles due to, “a rise in inflation, and a drastic fall in output, export revenues, and private capital inflows” (Sandbrook, 2000, P. 11).

This economic mayhem and need for international credit, “pushed African governments into the arms of the IMF and World Bank” (Sandbrook, 2000, P. 11),

causing them to accept structural adjustment or market-oriented reforms. These structural adjustment programs were neo-liberal or neo-classical in nature, and the World Bank believed these reforms had the potential to thrust the African Market into equilibrium. Structural Adjustment Policies (SAPs) imposed on poor countries for debt repayment and economic restructuring purposes, have thus complicated the poverty problem; causing these countries to neglect health, education, and development needs to focus on debt repayment (Shah, 2010). UNEP (1999) also states that the debt burden carried on by many developing countries has caused them major constraints, and has prohibited these nations from taking care of the basic social service needs of its people. Further, in the 60's African economies boasted an emerging middle class, but after the premier of these reforms in the 80's that sector disappeared, causing the gross income disparities witnessed between the richest and poorest of these nations.

These reforms did not work as planned due in part to the stage of development that these African countries were in, and the failure of these international organizations to involve the African people in the structure of these programs. Economies that are in an earlier stage of development may benefit from more communal tactics, rather than the capitalist rules followed in more developed nations. These developing economies need more human intervention in market practices, because they are not strong enough to withstand pure market exchange.

Also, these programs suffered because entrepreneurial investment was stifled, as these reforms did not completely factor in the culture of land use and property rights in these developing countries. Moreover, the reforms were not in the position to deal with other factors that affected the African Market such as, "absence of social peace and

political stability, a range of reliable physical and social infrastructure, a disciplined and expert Weberian-type bureaucracy, functioning financial institutions, the rule of law, and a predictable and non-confiscatory tax system” (Sachs, 1999, P. 12).

### *1.2.2 Distorted Development*

According to Midgley (1995), though many developing countries have experienced economic development since World War II, “the development process is highly distorted” (P. 5). Midgley (1995), explains that one of the major concerns with today’s development is the “phenomenon of persistent poverty in the midst of economic affluence” (P. 3). He refers to this phenomenon as “distorted development” and describes it as the “coexistence of economic development and social deprivation” (P. 4). Midgley further explains that distorted development is not only evident in poverty and deprivation, but also in the “exclusion of sections of the population from full participation in development” (P. 5). Distorted development also manifests itself in environmental degradation via the exploitation of the land and its natural resources.

Distorted development is not representative of sustainable development, and Midgley affirms that the problem of distorted development remains prevalent in the world, especially in what he refers to as the “third world” (P. 6). According to Drakakis-Smith (2000), the third world is united by its colonial past and its continued subordinate role in the world economy; further, most residents in developing countries live in extreme poverty. In attempting to correct this unsustainable form of development, Midgley states that there should be measures in place that promote economic development while simultaneously ensuring social development.

Building on Midgley's argument, social, economic, and environmental aspects must work hand in hand, and be enhanced concurrently; otherwise it will be a tough process to achieve sustainable development in developing countries. Further, Midgley's discussion on distorted development suggests that economic development cannot solely achieve sustainability. As witnessed in most developing countries, social inequalities increase with economic development. Instead, there must be a focus on social, environmental, economic, and cultural aspects of development.

### *1.2.3 Underdevelopment - Core and Periphery Regions*

Jorgenson (2003) introduces us to what he refers to as core regions and semiperipheral and peripheral regions, and the effects that this world-system position has on the region's per capita consumption also known as its ecological footprint. The core regions represent countries whose consumption rates are significantly higher than other regions, and regions that enjoy the strongest and most powerful economies. On the other side of the spectrum, the periphery regions represent countries that have lower rates of per capita income and literacy rates, resulting in lower rates of per capita consumption. For the most part, core regions represent the colonizers or imperialist nations, while the periphery symbolizes colonized or developing nations.

Generally, core regions host well-nourished economies and prospering markets, while peripheral and semi-peripheral regions host extractive economies and markets that are disorderly. Besides their extractive characteristics, non-core regions are prone to dependent industrialization and underdevelopment due to the infiltration of foreign capital via channels like exploitive multinational industries. Jorgenson (2003) posits that high level infiltration of foreign capital in the periphery is undesirable because this



creates, “an industrial structure in which monopoly is predominant, labor is insufficiently absorbed, and there is underutilization of the potentially productive forces” (P. 6).

Periphery regions are exposed to uneven or distorted development, and are characterized by income disparities, underemployment, and rising marginalization of the population in relation to countries that are less saturated by and dependent on multinational corporations. Further, a majority of the commodities produced in these non-core countries are exported to core countries for consumption, and the revenue generated from these transactions are transferred to the more powerful countries from which the direct assets originated.

Primarily, the more powerful countries enjoy greater levels of GNI per capita and economic development. One reason for this occurrence is that people in core regions have been endowed with economic advantages, which allow them to obtain and consume natural and produced commodities at higher proportions. Another reason is that the core countries have established comparatively larger military units, strength, and international political authority, enabling them to perpetuate unfair trade with less powerful nations. Jorgenson (2003) concludes that there is direct positive relationship between a country’s consumption levels measured as ecological footprint and its position in the core or periphery hierarchy of the world-system.

### 1.3 Purpose of the Study

Sustainable development is an important concept because it helps us to understand how we are using the Earth, and holds us accountable to future generations for our actions. Sustainable development is also important for humans and communities to live healthy, long, prosperous lives and enable them to maintain a situation which is

viable for future generations. In order to implement this form of development successfully, we must first have a firm grasp of exactly what sustainable development refers to and how this form of development, as opposed to distorted/unsustainable development is beneficial not only to us, but to future generations and generations thereafter.

### *1.3.1 Consumption and Population Arguments*

Massive consumption of resources and population growth are at the cusp of sustainability arguments. This paper seeks to investigate the effect of energy consumption per capita and population size on the environmental performance index. Valadbigi A. and Ghobadi S. (2010), state that destroying the environment directly affects the economic process. The authors also affirm that the combined consequences of erosion, thin ozone layers, pollution, and climate changes, “have a bad effect on people’s lives”. Pollution degrades the environment, and one of pollution’s major causes is poverty. Since pollution has such a negative effect on sustainable development, we have to deal with poverty in developing nations to achieve sustainable development in that segment of our world, or risk hurting those people, the world, and ourselves.

### *1.3.2 Culture and Development*

According to Skinner, the debate about the role of culture in development, particularly in respect to Africa and other developing countries, “had become so sterile that no new insights appeared possible” (as cited in Collins, 1997, P. 172). Now, a mélange of factors have been responsible for recognizing the role of culture in development. One such factor is the “emergence of Japan as a global giant whose success is said to be due not only to its cultural characteristics, but retrogressively, to the

‘racial homogeneity’ of its population” (as cited in Collins, 1997, P. 172). Social scientists have long posited that culture is pertinent to development and all aspects of human life, because it “provides the necessary designs or models for living, indicating what is considered proper, or moral, or even sane” (as cited in Collins, 1997, P. 172). In addition, culture affords a genuine collection of knowledge, beliefs, and doctrine by which humans try to comprehend our existence.

Skinner explains that, “the present concern about the ‘inability’ of African countries to develop as rapidly as other countries is as much due to cultural perception as it is a concern with the actual rate of cultural change there” (as cited in Collins, 1997, P. 173). While many Non-Africans and Africans abroad may complain about the ‘slow’ rate of the continent’s change, “many rural Africans believe that they are living in a runaway world” (as cited in Collins, 1997, P. 173). Skinner indicates that a well thought out developmental approach to Africa should accept that, “African traditional cultures can provide the philosophical justification for looking to their own culture and existential condition for the strength to modernize” (as cited in Collins, 1997, P. 178).

### *1.3.3 Sustainability Paradigm Shift*

Matson (2009) reminds us that though we may not instantly attain the goal of sustainability, “humanity is beginning to make decisions based on criteria that show concern for both people and for our life support systems” (P. 39). The paradigm shift to sustainable development is one that should not be ignored if we do not desire to face adverse consequences. For example, in the past the Swiss dominated the watch industry, but when they failed to pursue their own invention of electronic watches, they missed out on this paradigm shift by abiding to mechanical watches. This cost the Swiss dearly, as

the invention was later accepted by the Japanese who were thus able to take over the watch industry. This historical lesson teaches us that it is critical to recognize paradigm shifts or risk regretting the consequences it in the future.

Prince Charles, the Prince of Wales, is an avid environmental sustainability advocate. During a 2010 interview on NBC's Dateline, the Prince spoke very passionately about his support of sustainability and explained that sustainability is directly tied to the viability of our planet. Regarding consumption and pollution, he compares the way we are treating the earth to a runaway science experiment on the only planet we have. Regarding sustainable development, the Prince asserts that we need to design cities to be more earth friendly. He warns us to give back to nature instead of just taking from it, and urges us to become more aware of the macroeconomics of sustainability and natural capital.

Prince Charles formed a non-profit organization called The Prince's Rainforest Project, to combat deforestation and further damage to our environment. The Prince believes that we have to factor natural capital into economics, and the goal of the Rainforest Project is, "making the forests worth more alive than dead" (The Prince's Rainforest Project, 2010). During the interview, the Prince gives us an example of calculating natural capital into economics. He states that people cutting down trees should have to pay the amount of money that it takes for the tree to provide its services. If relying on a tree for oxygen costs X amount, then that is what the tree is worth for that service! Myers (1997) further explains this concept of correcting marketplace failures and obligating prices to reflect all environmental costs. For instance, "if we calculate the 'true social cost' of burning gasoline by internalizing the more immediate externalities

such as air pollution (which alone is worth \$300 billion), we would be able to increase prices for such a good and, both dissuade the excessive use of the product and promote innovative alternatives. Prince Charles deems that we have created an age of convenience, and he does not want his grand-children or ours to ask why we did not change our behavior towards the environment, knowing the consequences of our adverse habits. The Prince asserts that if we fail the earth, we fail humanity!

This research recognizes that sustainable development does not equate a utopia. The earth and its inhabitants may not be around forever, but how much sooner its resources are depleted profoundly depends on our present actions.

#### 1.4 Significance of the Study

Admittedly, there has been a vast array of studies conducted on sustainability. This research is unique though, and belongs in a class of its own, because it tests the effects that non-traditional variables (population, consumption, culture) have on environmental performance. When environmental sustainability has been studied in the past, researchers have mainly focused on the usual indicators including: CO<sub>2</sub> emissions, water vapors, global warming, sulfur dioxide, and greenhouse effect; for example, Pillai (1996) focuses his environmental pollution study on carbon dioxide emissions as an indicator of environmental pollution. This research slightly differs from other sustainability studies, because it uses a more valid and sophisticated measure of sustainable development and environmental health. Further, Salim explains that development encompasses multiple dimensions including culture, but “the cultural dimension is a long-neglected aspect of development” (as cited in Serageldin & Taboroff,

1994, P. 9), and the United Nations Environment Programme (2010) agrees that, “there has been relatively little work published on energy” (P. 51).

In a 2009 article, Matson notes that the demand for energy is ever-increasing in the developing nations; a research such as this thesis is essential because, “the need for integrative, problem-focused research becomes clear when addressing some of the grand challenges of sustainability” (Matson, 2009, P. 40). We owe it to future generations to leave the earth in a state that is socially, environmentally, and economically viable, and our understanding of how to achieve such a situation is of utmost importance.

This study is further important because it analyzes important pieces of information dealing with sustainable development, and condenses this information into a more useful, succinct, and workable piece. Instead of spending time, rummaging through an array of data and details, this paper can be utilized to gain a greater understanding of sustainable development, and why it is important for society to achieve. Valadbigi & Ghobadi (2010) announce that, “conserving the environment and the regional habitats has become the serious concern of governments, environmentalists, and those service and educational institutes involved in this matter” (P. 543).

Among others, the information in this paper is useful to communities and their residents; the private sector; the academic community; urban planners; developers; non-governmental and non-profit organizations; international organizations; policy makers; federal, state, and municipal governments; think tanks; environmentalists; and leaders of our world. The information contained in this thesis will be useful and impactful for sustainable transformation and change.

### 1.5 Research Question

In an effort to explore the correlation between environmental performance and sustainable development, this research will investigate how population and consumption influence and contribute to environmental health in countries of the developing world. It will study the effect that these variables have on environmental performance, while factoring in human development, economic development, and culture. This research question is both interesting and challenging, because the regression results derived from the study will help to manifest tangible solutions for achieving sustainable development.

## CHAPTER 2

### MYSTERIES OF HISTORY AND CULTURE

#### 2.1 Colonialism

The underdeveloped state of the “third world” can partly be credited to colonialism. Colonialism is the ruling or seizing of territory and resources by one people over another (Rodriguez, 2010). In order to dig deeper and understand why some nations on the earth are still developing, and others are developed, it is only fair to examine colonialism and its adverse effects on developing countries. Skinner reports that, “the European impact was so shattering that it will take generations of people to cope with its effects” (as cited in Collins, 1997, P. 173).

Though colonialism introduced modernization, it also resulted in the exploitation of natives and their resources, while imposing a foreign system of values over a conquered people (Rodriguez, 2010). Another consequence of colonialism is the Dependence Theory, which posits that developed economies depend on the continued expansion of their economies and exploitation of underdeveloped countries for economic survival (Rodriguez, 2010). Thus, it has been challenging for third world countries to develop because their wealth is extracted to serve developed countries (Rodriguez, 2010).



### *2.1.1 Scramble for Africa*

One mentionable continent in regards to its colonial history and underdevelopment is Africa. The African continent is arguably the richest in natural resources, “the continent has a wealth of natural resources, including minerals, forests, wildlife and rich biological diversity” (UNEP, 1999), but ironically is a place that has been characterized with the most extreme poverty. An insight to this paradox is the systematic and planned occupation of the continent by the “civilized” world during the second half of the nineteenth century. According to Chamberlain (2010), “in 1870 barely one tenth of Africa was under European control. By 1914 only about one tenth - Abyssinia (Ethiopia) and Liberia – was not” (P. 3). Referred to as the “scramble” or “race” for Africa, European Powers were successful in taking over and carving up the continent in merely six years, with little or no consultation of the inhabitants.

The discovery of natural resources in Africa increased Europe’s interest in the continent and the competition was so keen, that the European Powers held the Berlin Conference during 1884 to 1885 to curb inevitable war over territory (Prusser, 2008). With an agenda to divide Africa into spheres of control, the foreign ministers of 14 European Powers and the United States met at the residence of Berlin Chancellor, Otto Von Bismack, to establish the governing principles for the future exploitation of the “Dark Continent” (Scramble, 2010).

Driven by a divide and conquer mentality, the Berlin Conference set the stage for the now familiar political geographical map of Africa. According to Prusser (2008), one negative effect of colonial rule is, “the artificial boundaries that divided or combined groups unnaturally and still create problems today”. Ethnic or linguistic groups were not

considered when the African pie was sliced, and this has perpetuated the ethnic and tribal wars that the continent has experienced. This malicious carving of Africa was further detrimental to the continent’s development, because United we Stand (The United States of America) and divided we fall (The partitioning of Africa). Scramble (2010) explains that, “by the time Africa regained its independence after the late 1950s, the political fragmentation of the land could not be eliminated nor made to operate satisfactorily”.

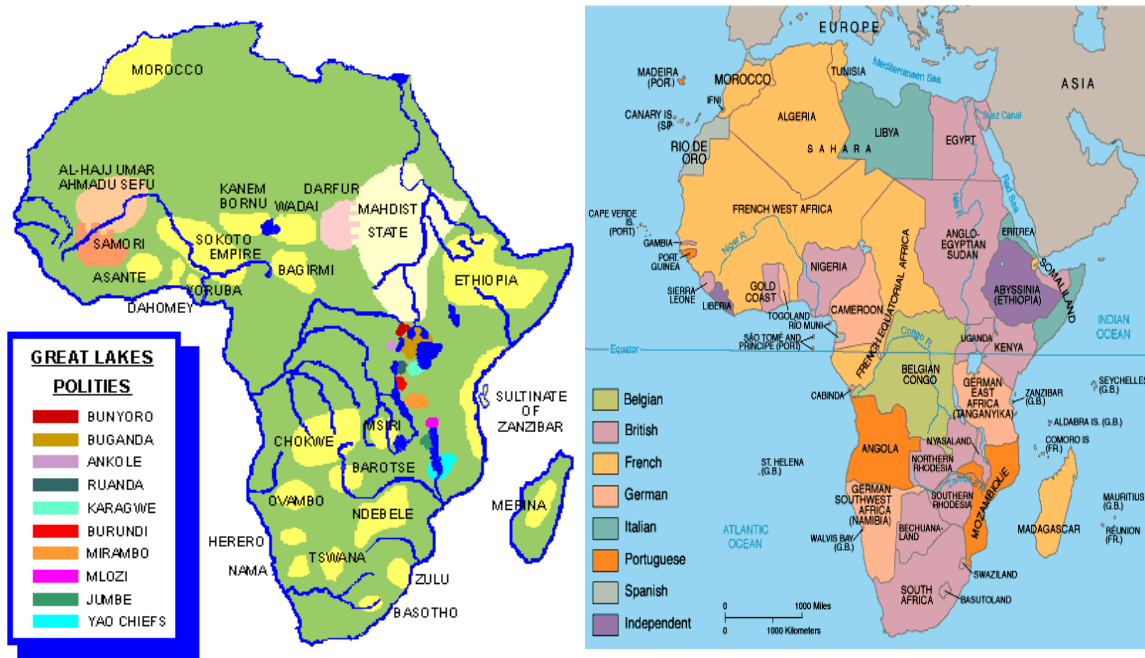


Figure 2.1 The Partition of Africa

The post 1884 map that, “resulted from the three months of ignorant, greedy inquisitiveness during a time when Europe’s search for minerals and markets had become insatiable” (Scramble, 2010), posed a serious liability to the African continent. One explanation for this uncontrolled takeover of Africa is the industrial revolution, which though bolstered by the West African Slave Trade, the African continent was not privy to (Chamberlain, 2010). According to Chamberlain (2010), “for the first time in history

there was an enormous gap, economic, technological, and military, between the two continents with the balance entirely in Europe's favour" (Chamberlain, 2010, P. 3) -

The European Powers were successful in depleting resources from the African continent, but this did not occur without resistance from the Africans. This imperialistic time period between 1870 -1900 is usually perceived as a series of struggles between European Powers, but in reality, "it was the time when tribal and feudal African societies showed the most decisive resistance to colonization; when Ethiopians defeated the Italian army near Adowa; when the Sudanese crushed the British Army near Khartoum; when Zulus gained the victory over English forces" (Collins, 1970, P. 51-52). Alas, the Europeans had a wide collection of technological equipment and advances that gave the colonists the upper hand in the situation.

### *2.1.2 Economic Colonialism*

Skinner (1989) explains that the fundamental aspect of Africa's development problems lies in the fact that the economies of most of her countries are still being controlled by past colonizers. For instance, large multinationals "have remained intact and battered on the bilateral and multilateral funds destined 'to develop' the African countries" (Collins, 1997, P. 175). Salim (1992) explains that the international economic climate is hostile and less welcoming to the issues relevant to countries of the developing world, especially those in Africa. Salim argues that exacerbating the situation, "the efforts of most African countries continue to be hamstrung by the huge debt burden, unfavorable terms of trade, and resource flows. These factors have combined to wreck havoc on the economy of the continent" (as cited in Serageldin & Taboroff, 1994, P. 11).

### *2.1.2.1 India and Economic colonialism*

The people in a small Indian village called Valdura were up against Enron, a then powerful American energy company, over territory. This multinational company was interested in building a massive power station in the region, while the people of the land had no say so in the development decisions.

The infrastructure of India may seem futile, but the local and foreign businessmen in Bombay will assure you that the space is valuable. They believe that India is on the move, and that business is booming stronger than ever before for the country. Investment bankers and leaders believe that the country is strategically and economically poised, leading a new breed of entrepreneur to emerge and invest in India's great economic leap forward. At the bottom end of this economic spectrum are tens of thousands of common workers who have developed an enterprise of touting hot homemade lunches to school children and business people alike in the city.

According to the narrator, a Hindu political opportunist has risen in India. Dubbed Mr. Remote Control because of his power to get things done, this politician runs Bombay by exploiting ignorance and prejudice. The interviewed speaker believes that if Mr. Remote Control will become more rational, the state will benefit more from his leadership. These Hindu fundamentalists despise foreign investors like the Multinational Enron, as these companies have become a symbol in Bombay for economic colonialism. After the European colonialism in India, colonialism of any sort is met with distaste in this country. Regardless of the stigma of economic colonialism and its exploitation of cheap labor, the leaders of India realize that foreign investments and the multinationals are key players in the nation's race to becoming Asia's next and greatest "Tiger".

The tiny village of Valdura won its battle with Enron due to the upheaval of the fundamentalists, but the people are still weary of the economic colonialism war ahead. Ultimately, the decision about the development of Valdura has been made by the majority of Indians who believe they can utilize multinationals better than they can places like Valdura. The narrator reminds us that in the developing world, this is may be the price to be paid for progress. (Journeyman Pictures, 1995).

## 2.2 Culture

Culture, a fundamental set of ideas with a human biological resonance (Brenner, 2010), is a crucial element to regard in relation to the implementation of sustainable development, particularly in developing countries. Brenner (2010) states that culture is a coherent set of ideas with three aspects that are all linked together like the human body. The foundation of these three aspects of culture is ideas:



Figure 2.2 Three Aspects of Culture

In the Declaration of MONDIACULT, UNESCO defined Culture as the, “distinctive spiritual, material, intellectual, & emotional features that characterize a society of social group. It includes not only arts and letters, but also modes of life, the fundamental rights of the human beings, value systems, traditions, and beliefs” (Serageldin & Taboroff, 1994, P. 2). Serageldin asserts that due to the innovation that

areas in Asia have demonstrated towards economic vitality and development, there is a “need to study much more effectively those more elusive qualities of a society’s reality that we call Culture” (Serageldin & Taboroff, 1994, P. 1). Further, Serageldin states that, “nowhere is the elusiveness more apparent than in Sub-Saharan Africa” (Serageldin & Taboroff, 1994, P. 1). In light of Serageldin’s observation, this paper will focus on the role that culture plays in attaining sustainable development of the African continent.

In 1992, the World Bank held an International Conference on ‘Culture and Development in Africa’ to address Africa’s economic position in our globalizing world, and to brainstorm ways of harnessing the competitive economic advantage of this continent and its people. The consensus of the conference was that Africa requires a holistic approach to development, one that encompasses elements of a broad development or a sustainable development strategy. The conference also identified that there has been a perpetual separation between the narrow and broad definitions of culture. While Cultural heritage (music, art, painting, dance, etc...) represents the heart of society’s cultural identity (narrow view), we must also recognize the broader aspect of culture (society’s institutions, its legal system, government) as this aspect also plays an intricate part in shaping society’s character.

Salim explains that development should be motivated by a society’s own cultural roots as, “a people does not commit itself to a development undertaking unless that undertaking corresponds to its deeply felt needs” (as cited in Serageldin & Taboroff, 1994, P. 9). Salim further expresses that Africa possesses a culture that is universally acknowledged and appreciated. The African people are dedicated to their cultural heritage and values, enabling this continent to merge specific and universal cultures; thus,

“Africa itself must synthesize these values to ensure humane and equitable development” (as cited in Serageldin & Taboroff, 1994, P. 9). Salim reminds us that Africa is currently positioned at a political, social, economic, and cultural crossroads due to Western infiltration of those norms. Therefore, Africa is tasked with fusing both of these cultural values in order to host a “more humane, balanced, and equitable process of development” (as cited in Serageldin & Taboroff, 1994, P. 13).

### *2.2.1 Aspects of African Culture*

The context of African culture is usually based on one or all three religions (Islam, Christianity, and Traditional African Religion-TAR) practiced in the continent. While Christianity and Islam are world religions, TAR is somewhat unique to African societies. According to Nyang (1992), Traditional African Religion (TAR), “is deeply rooted in African history, African psychology, and pre-colonial African political and economic thought” (P. 437). He explains that TAR plays a role in African development in various ways including land tenure and family planning.

#### *2.2.1.1 Land Tenure*

According to the Food and Agricultural Organization of the United Nations (2002), “Land Tenure is the relationship, whether legally or customarily defined, among people, as individuals or groups, with respect to land”. In most African countries, land is in communal ownership, and De Soto explains that because, “the rights to these possessions are not adequately documented, these assets cannot readily be turned into capital...and cannot be used as a share against an investment” (P. 6).

According to De Soto (2000), “the major stumbling block that keeps the rest of the world from benefitting from capitalism is its inability to produce capital” (P. 5).

Capital is the wealth creation engine that is powered by increased productivity of labor, and De Soto posits that, “it is the lifeblood of the capitalist system, the foundation of progress, and the one thing that poor countries of the world cannot seem to produce for themselves, no matter how eagerly their people engage in all the other activities that characterize a capitalist economy” (P. 5). This situation is paradoxical in nature because, “most of the poor already possess the assets they need to make a success of capitalism” (De Soto, 2000, P. 5). The climax of this situation is that even if the U.S. raised its foreign-aid budget aid to 0.7 percent as recommended by the U.N., “it would take the richest country on earth more than 150 years to transfer to the world’s poor resources equal to those they already possess” (De Soto, 2000, P. 5). De Soto credits this phenomenon to the land tenure systems of these countries, which lack of a formal property system, “capital’s hydro electric plant” (P. 47).

The communal idea of Land tenure and land use in Africa can be linked to the traditional customs and the world views of the African people. These traditional African beliefs of communalism and collectivism were exploited and manipulated by colonial leaders in an effort to avoid land annexation from other world powers at that time, and make settlement of these non-natives more difficult. The issue of land tenure has long been debated and the arguments are split between the traditionalists who believe in the system and modernizers who view the land as a huge investment opportunity. Nyang states that these opportunists believe that the land, “could be better put to use through mechanized farming or through the creation of larger units of farms for the better endowed farmers” (as cited in Serageldin & Taboroff, 1994, P. 438). Nyang believes that



these traditional beliefs have made it challenging to “accelerate economic development and social transformation” (as cited in Serageldin & Taboroff, 1994, P. 439) in Africa.

One example of land use restrictions occurred in Ghana, when then President, Kwame Nkrumah introduced a new urban renewal policy. The plan was to temporarily relocate settlers in a dilapidated part of Accra and build a healthier, more attractive area in which the people can then go back to reside in. This decision was resisted by the natives of the land, because they refused to move on the stance that the land was the burial ground for their ancestors and “leaving such a piece of real estate is like walking out on one’s spiritual protectors” (as cited in Serageldin & Taboroff, 1994, P. 439). The urban plan was unsuccessful as Nkrumah’s government was overthrown before it was actualized. Thereby, “African politicians faced with the urgent task of building structures to bring Africa into the twenty-first century have to deal with these belief systems” (as cited in Serageldin & Taboroff, 1994, P.439). This perspective into Africa’s cultural land use views provides an insight on why the people of that continent may not have been as keen to extract natural resources from the land, as their imperialist exploiters were.

#### *2.2.1.2 Family Planning*

Family Planning, otherwise known as population control, is another area where Western cultures and African cultures differ in their views. The three dominant religions which have a hand in African culture (TAR, Islam, and Christianity) believe that people have a right to procreate freely without much government control. As proclaimed in Psalm 127:3, “Children are a gift from the Lord; they are a reward from Him” (Bible Gateway, 2007), Christians firmly believe that children are treasures from God and that He will surely provide for his creation no matter its size. Followers of TAR uphold that

producing children guarantees the survival of the tribe and the community. The group's weariness of Western medicine coupled with a respect for their ancestors has caused them to view "birth control and family planning as just another trick from the white world" (as cited in Serageldin & Taboroff, 1994, P. 441). Further, Muslims and Christians insist that family planning and birth control are contradictory to religious teachings (Serageldin & Taboroff, 1994). For instance in Genesis 1:28 Christians are commanded to, "Be fruitful and multiply, and fill the earth, and subdue it" (Bible Gateway, 1995).

## CHAPTER 3

### LITERATURE REVIEW

#### 3.1 Toward Sustainable Development: Estes

Estes (2004) explains that sustainable development promotes the protection of our fragile ecosystems and socio political systems, while enhancing human development. During the 1989 World Commission on Environment and Development, Brundtland held that the proportion of poverty that billions are suffering through, forces these impoverished people to continuously undermine the environment and natural resource base, which is a grave obstacle to sustainable development. Estes cites a number of continuing challenges to sustainable development, some of which include: “population dynamics, population mobility i.e. rural to urban migration, urban agglomerations, increasing global poverty, inter group conflict, crime & social disorder, and continuing assaults on the environment” (P. 10).

A sustainability paradigm towards development is a necessity because the current paradigms are counterproductive to the betterment of the earth and its people. According to Estes (2004), current paradigms are criticized because: economic growth does not necessarily mean improved lives (distorted development); the competition between rich and poor countries in the globalizing world is not a commensurate relationship; previous theories of development such as ‘free market’, ‘dependency’, or ‘Marxist’ have not been successful; the deplorable conditions of the least developed countries (LDCs) have

worsened; and development problems are systemic thus purely sectoral approaches are insufficient.

Sustainable development on the other hand is a unifying concept as it: poses a new hope; amalgamates disparate aspects of the development community; relaxes the pressure we have put on the Earth's ecosystems; produces bright solutions to the predicament of LDCs; enhances the relationships between the government *and* public, private, and non-profit sectors; and encourages intergenerational equity. Estes highlights that the goals of sustainable development are: to create innovative development paradigms; equalize the imbalance between economic, political, cultural, and physical aspects of development by recognizing that they all work hand in hand; support approaches to development that seeks out the significant sectors and key players into a universal framework of implementation; becoming more accountable of short-term development gains that result in long-term consequences; and sensibly utilizing our non renewable resources.

### 3.2 Air Pollution: Pillai

Pillai (1996), examines environmental pollution, and focuses his research on carbon dioxide emissions as an indicator of environmental pollution. The research also discusses the two main schools of thought about the population argument, regarding sustainable development. The Malthusian School believes that a large and growing population has adverse consequences on the environment and standard of living (Pillai, 1996). This school asserts that uncontrolled population growth is the, "principal determinant of poverty, and environmental stress" (Pillai, 1996, P. 36). On the other hand, the Simon School welcomes population growth, and emphasizes that human beings

are resourceful enough to produce innovative ideas to solve presented social problems (Pillai, 1996).

Another theory claims that the process of urbanization generates high scales of environmental pollution. Supporters of this theory believe that large scale urbanization has a more negative impact on the environment, than population size (Pillai, 1996).

According to the article, residents in urban areas consume greater amounts of energy than those dwelling in rural areas, and an increase in the urban population can be correlated with an increase in per capita energy consumption. In his study, Pillai (1996) found that when urban populations grow to over a million residents, there is an increase in the levels of carbon dioxide emission levels evident in both developed and developing nations. The results from Pillai's study indicate that in developing nations, increases in per capita income and cities with population percentages over a million are significantly correlated with an increase pollution levels (Pillai, 1996).

### 3.3 Measuring Sustainable Development: Stevens

This article discusses the importance of making the concept of sustainable development measurable in order for it to be useful in framing public policies. It also recognizes the need for identifying indicators or a quantitative framework on which sustainable development policies can be rooted in. The article asserts that in order to attain sustainable development, “the objectives of increasing economic efficiency and material wealth must take into account social environmental objectives” (Stevens, 2005, P. 2). Sustainable development also centers on inter-generational equity, “implying that future generations should have opportunities similar to those now available” (Stevens, 2005, P. 2). The author states that indicators are needed to assess the future implications

of our current actions and behaviors, in addition to monitoring progress towards sustainable development goals.

Since sustainable development comprehensively covers three different policy realms, it is imperative to have an organizing principle of relevant indicators. The author explains that although international organizations, many countries, and groups have developed sets of indicators to track sustainable development, a review of indicators formed by OECD (Organization for Economic Co-operation and Development) countries show great diversity in these measures. Rather, it will be more efficient to formulate, “reduced sets of core or headline indicators, which are more accessible and easily understood than longer shopping lists” (Stephens, 2005, P.3).

During a three-year period, the OECD conducted sustainable development surveys with its member countries. The six issues reviewed were as follows:

- a) Reducing emissions of greenhouse gases
- b) Reducing air pollution
- c) Reducing water pollution
- d) Sustainable use of renewable and non-renewable natural resources
- e) Reducing and improving management of waste
- f) Ensuring sustainable retirement income policies
- g) Improving living standards in developing countries

Each country reviewed, focused on three of the seven topics that were most relevant to their region, and the OECD used a number of indicators to gauge performance. Stephens (2005) posits that the process of selecting sustainable development indicators varies by country, “depending on their natural attributes, industrial structure, and political and social variables” (P. 4). Since it has been difficult for countries to accept one common core set of sustainable development indicators, it may be wisest to, “develop different

core indicator sets for groups of countries based on selected variables” (Stephens, 2005, P. 4), including level of development and natural resource base.

The article further highlights that it is extremely difficult to measure the social dimension of sustainable development, and interpretations range: “from concerns about poverty in the developing world, to the health consequences of environmental change, to issues relating to ethnic minorities and gender balance, to broader considerations about the quality of life and social relations” (Stephens, 2005, P. 5). In any case, the author states that as in economic and environmental dimensions, the selection of social sustainability indicators is a political act in which, “governments convey a sense of their priorities” (P. 5), compose action items, and are held accountable for progress. Stephens (2005) concludes that the ability to measure sustainable development requires, “developing new indicators and combining these through accounting frameworks, decoupling methods, global approaches, and composite indices” (P. 7).

#### 3.4 Sustainable Development in Nigeria

This article reports an effort to reduce poverty in Ijebu-Ode, Nigeria, “through a set of local and sustainable livelihood activities” (Mabogunje & Kates, 2004, P. 3). According to the article, sustainability targets of the UN’s millennium declaration include goals of reducing world poverty in half by 2015. The authors concur that this was a laudable undertaking, but assert that this project was blindsided by the inability of such goals to garner the economic capital, such as credit and loans to the local economy.

The civic engagement process of this project followed three steps: a poverty profile of the city, a meeting of stakeholders, and an action plan for poverty reduction in Ijebu-Ode. Though the Plan’s main focus was on enterprise development, it noted the

weak state of the city's infrastructure including the lack of: "potable water, roads, health-care centers, waste disposal, security" (P. 12). This Action Plan essentially promoted sustainable development in Ijebu-Ode by providing, "a vision of how the City, through coordinated and complementary actions, intends to raise the living conditions of the poor and vulnerable groups in the population" (P. 12). It was recommended that the local government carry out the implementation of the Plan, though it was clear that in order to promote long-term sustainability of the plan, stakeholders must also play an active role.

The Ijebu-Ode Development Board for Poverty Reduction (IDBPR) was thus created, and represented every aspect of the community from government officials to market women. The board was tasked with fundraising, and these funds were raised from the city's social capital, neighborhood associations, wealthy individuals both at home and abroad, and the local government. Acknowledging that in order to effectively reduce poverty, the knowledge and skills of the people in the community must be enhanced, the board began the implementation with activities that focused on training the poor.

Currently, the impact of the Board's efforts has been difficult to measure quantitatively, as data is unavailable on the secondary activities. Overall though, for the most part, it can be estimated that poverty has been reduced for at least the market women and the artisans providing services in Ijebu-Ode. Though they cannot be quite sure until the market is ripe with produce, the group does believe that a realistic poverty reduction strategy has been developed; attributing the success to the: "large stock of social capital, the participatory process that drew upon this stock, and the technological community that serve both as boundary spanners to link Ijebu-Ode to the national and the global and as a resource for local technologies and advice" (P. 15). The authors



recognize that the Project has been successful in “emerging efforts to create a sustainability science and technology” (P. 16).

### 3.5 Urbanization in Developing Countries: Cohen

Cohen’s article reviews the modern patterns and trends regarding urban growth in developing countries. According to the article, cities of the developing world have experienced a massive population growth, which is “seriously outstripping the capacity of most cities to provide adequate services for their citizens” (Cohen, 2005, P. 1). The author notes that currently, many international agencies have not acknowledged the massive growth of small and medium cities or the deplorable living conditions of the destitute living in urban areas. He further mentions that, “the challenges of achieving sustainable urban development will be particularly formidable in Africa (Cohen, 2005).

At the beginning of the 21<sup>st</sup> century, only 16 industrialized cities had populations of a million or more people, but today almost 400 cities contain a million or more people; seventy percent residing in the developing world. When properly managed, cities showcase opportunities for economic and social development as they, “have always been focal points for economic growth, innovation, and employment” (Cohen, 2005, P. 2). Generally, in the developing world, capital cities are areas that contain the majority of modern productive activities and gainful employment. Cities also offer important social and cultural amenities, and despite the high rates of urban poverty, urban residents compared to rural residents, usually enjoy better access to public services including education and health care. Nonetheless, the speed of urban growth in the developing world poses a great threat to, “the immediate and surrounding environment, to natural resources, to health conditions, to social cohesion, and to individual rights” (Cohen,

2005, P. 2). Albeit, the greatest concern for many observers is the colossal percentage of urban dwellers living in absolute poverty.

Cohen (2005) asserts that the rapidity and extent of population growth in the world's prime cities and metropolitan areas, "can create enormous stresses on the immediate and surrounding environment and poses major challenges for sustainable development" (P.11). Due to the "locus of global poverty moving to cities" (Cohen, 2005 P. 11), the withstanding presupposed comforts enjoyed by inhabitants of large cities have recently been doubted. The author credits, "high rates of overall population growth" (Cohen, 2005, P. 11) coupled with rural to urban migration as factors to the fast and unanticipated expansion of shantytowns on the outskirts of many large cities, which has not been complemented by extended public services and facilities.

The international debt crisis footed by African and Latin American countries has disproportionately had an adverse effect on urban residents. In developing countries, poor neighborhoods are characterized by lower levels of basic services when compared to more affluent neighborhoods. Not surprisingly, a majority of urban residents in developing countries live in conditions that expose them to extreme environmental health threats associated with limited access to potable water, unsuitable sewerage facilities, and improper waste management systems. The urban explosion theory projected in the developing world clearly indicates serious sustainable development challenges in upcoming years. Conley (2005) also sites public sanitation as a great urban environmental challenge that should be combated immediately in practically all developing cities. These developing nations lack proper garbage collection and waste management systems, and thus, "discharge ever increasing amounts of waste into the air

or into freshwater bodies, threatening water quality and aquatic ecosystems” (Cohen, 2005, P. 14).

Cohen (2005) explains that high quality land management is one method to help curb the adverse effects of urban growth on the local ecosystem. Because of this, it is imperative for planners and policy makers in developing cities to formulate, “equitable land development policies” (Cohen, 2005, P. 14). Other problems in many large cities include congestion and air pollution. Comparatively, “Sub-Saharan Africa faces a greater set of development challenges than any other major region of the world” (Cohen, 2005, P. 14). Some of these challenges include extreme poverty, low levels of literacy and health care, corruption, and armed conflicts.

Complicating the aforementioned matters, “Africa is growing rapidly-almost twice as fast as any other major region of the world” (Cohen, 2005, P. 15). If the current growth trends persist, by 2030, “Africa’s urban population will be larger than that in North America, Europe, or Latin America” (Cohen, 2005, P.15). This type of excessive urban growth is unsustainable in African cities, because the “urbanization appears to have become decoupled from economic development” (Cohen, 2005, P.15). Urbanization is not necessarily a negative connotation if it is properly managed and sustainable. Cohen (2005) reports that, “the critical challenge over the next thirty years will be to take full advantage of the potential benefits of urbanization in an inclusive way while lessening the obvious potential negatives” (P. 16).

### 3.6 Barriers to Sustainable Development

According to a special report prepared by the International Council for Local Environmental Initiatives (ICLEI), “an important element to any sustainable development

strategy is the review of existing policies and measures to ensure that they are consistent with efforts to implement that strategy” (CSD-6, n.d.). This report highlights six main types of barriers to sustainable development and promotes ways to overcome these barriers (Table 3.1):

Table 3.1 Barriers to Sustainable Development

<b>Barriers</b>	<b>Cause of Problems</b>
<b>1. Private Market</b>	Market failures and externalities.
<b>2. Public Market and Finance</b>	Government influence of price signals and the spending patterns of public agencies.
<b>3. Legal and Regulatory</b>	Rules & regulations mandated by the government.
<b>4. Jurisdictional</b>	Nature of delegation of government roles.
<b>5. Professional and Trade Group</b>	Standards, practices, & agreements in labor markets.
<b>6. Foreign Assistance</b>	Impacts of international development agency practices.

This paper identified key impediments to sustainable development as is evident in many countries reviewed. These impediments include: lack of sound consideration of environmental impacts regarding developmental decision-making processes; governments that are structured along “vertical” sectoral lines (energy division, transportation department, etc...) hinder sufficient cross-sectoral consideration of social/environmental aspects; mandating environmental regulatory duties to a department whose main focus is development; insufficient blending of social and environmental planning processes with economic planning; mismanagement of pertinent natural assets, and lack of efficient integration between regulatory measures and public sector instruments.

In order to efficiently address sustainable development, this report asserts that the main focus should be placed “upon the policies, plans, and practices of government

institutions and their impacts upon implementation of sustainable development measures” (CSD-6, n.d.). The report explains that sustainable development relies on reforming conventional avenues of development decision-making and activity. Accordingly the proper implementation of sustainable development programs will necessitate reforms of government policies, plans, and practices that will disband unintended barriers to sustainable development measures.

### 3.7 The Tea Party Targets...Sustainable Development

Members of the Tea party are attacking local planning and zoning commissions, claiming that they are “carrying out a global conspiracy to trample American liberties and force citizens into Orwellian human habitation zones” (Mencimer, 2010). The group believes that Agenda 21 is at the root of the highlighted plot, and are currently attending planning meetings and transit debates regarding the 18 year old plan formulated by the United Nations to promote sustainable development and “encourage countries to consider the environmental impacts of human development” (Mencimer, 2010).

Donna Holt, a Virginia activist, is among the Agenda 21 opponents who believe it is “really a plot to curtail private property rights and deprive Americans of precious constitutional freedoms” (Mencimer, 2010). Holt and other tea party members are fueled by advocates like Henry Lamb who, “has been arguing for decades that the UN is secretly plotting to herd humans into crowded cities so that the rest of the world can be devoted to wildlife preservation” (Mencimer, 2010). Holt also utilizes the work of Tom DeWeese, “a climate change denier whose group has been funded by Exxon” (Mencimer, 2010), and continues to campaign against, “Agenda 21 and the evils of sustainable development” (Mencimer, 2010). According to Mencimer (2010), Holt affirms that, “If

sustainable development is fully implemented, this basically will turn us into a Soviet State”.

The Tea Partiers have also received help from Ed Braddy, the executive director of the American Dream Coalition, an organization that rejects “smart growth and other standard components of modern land-use planning” (Mencimer, 2010). Although Braddy does not believe Agenda 21 is necessarily a UN plot, he does agree that sustainable development is not ideal.

### 3.8 Sustainable Development: American Policy Center (2010)

According to this special report on sustainable development by the American Policy Center, there seems to be a global lack of understanding regarding sustainable development, and the “supposed” dangers it poses to our liberty. The article frames sustainable development as a deceptive “complete agenda of control” (American Policy Center, 2010), which affects every aspect of our lives. As an introduction to sustainable development, Tom DeWeese, the president of American policy center, reports:

I have been traveling the nation sounding the alarm that we cannot win this battle to restore our Republic if we don't understand that what we face is not a bunch of random issues – but a complete agenda of control – Sustainable Development. Cap N Trade, global warming, population control, gun control, open borders and illegal immigration, higher taxes, higher gas prices, refusal to drill American oil, education restructuring, international IDs, natural health supplement control, food control, farming “reform”, control of private property, NAIS and UN Global Governance are all part of the Sustainable Development/Agenda 21 blueprint.

According to the article, sustainable development requires a change in the nation's infrastructure from private ownership to "central planning of the entire economy – often referred to as top-down control" (P.1). The report posits that the implementation of sustainable development will change our way of life; albeit, in light of sustainable development, change may not necessarily be a negative implication. As a matter of fact, sustainable development does encourage a change in people's attitudes and behaviors towards our social, economic, and environmental concerns for each other and the earth we live in. The Center explains that the concept seems innocent and critical; but that achieving it means sacrificing our Liberty and way of life. The article suggests that sustainable development does not promote "good management of resources" (P. 2); rather, it restricts resources from humans. The Center explains that sustainable development has crossed political party lines, and has become a very bi-partisan policy that has been adopted by the governmental bodies in the United States.

The article compares social justice to Socialism, and protests that, "people of great importance testify before congressional committees of the dire need for social justice" (P.2). The Center also claims that locally-elected officials are losing power due to sustainable development policies and regulations that are being enforced by non-elected regional governments and governing councils. The article discusses "Social Equity; Economic Prosperity; and Ecological Integrity (known commonly as the 3 Es)", labeling sustainable development as "a masterful mixture of socialism and fascism" (P. 3 & 4).

The article also strongly recommends removing ICLEI from communities throughout America; calling it "dangerous" (P. 5), and arguing that organizations as such

are trying to control local governments and silence politicians and citizens. In actuality, ICLEI-Local Governments for Sustainability is an international association of local governments, including national and regional local government organizations, which have made a commitment to sustainable development (ICLEI, 2008). The team aims to support local governments in achieving their sustainable development goals. The article further states that sustainable development is a four-pronged process which masks different routes and names. The Center claims that the concept is referred to as: The Wildlands Project in rural areas (which is consider a covert plot to “herd humans off the rural lands and into human settlements” P. 7), smart growth policies in municipalities, public/private partnerships in businesses, and stakeholder councils or non-elected boards in government.



CHAPTER 4  
METHODOLOGY  
4.1 Theory Section

There are two major arguments surrounding environmental sustainability: population and consumption. This thesis explores how these two variables affect sustainable development, and the interaction of human beings with our environments. This work will utilize a casual model for sustainable development to explore the intricate interrelationships between the environment *and* population growth and consumption.

*4.1.1 Population*

The population of the world is now beyond 6 billion inhabitants. 3 billion of this population resides in urban agglomerations and of those 3 billion, greater than 2 billion live in developing countries (Rodriguez, 2010). Further, by 2030 the world's urban population will increase to about 5 billion persons, and this enormous growth is expected to occur primarily in cities and metropolitan regions of the less developed nations. (Gottdiener and Hutchison, 2006).

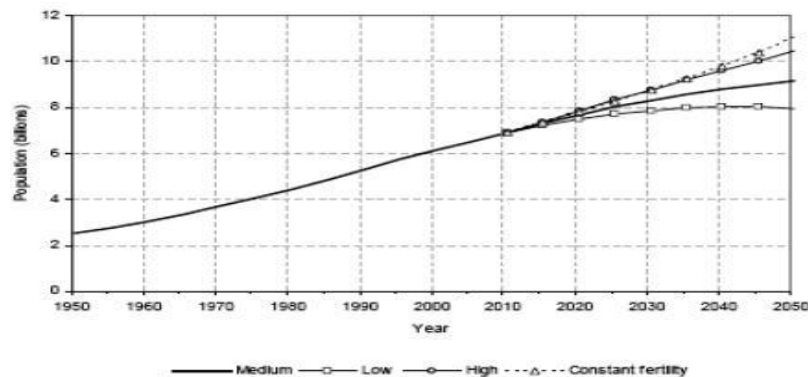


Figure 4.1 Population Growth

This growth spurt is of alarming concern because, cities in developing countries share distinguishing characteristics of poverty, centralization, and a shortage of urban services; a condition which is exacerbated by rapid and growing urbanization. (Rodriguez, 2010).

Gottdiener and Hutchison (2006), assert that in developing nations, “people’s individual fortunes are plagued by dangers and disparities unheard of in more affluent societies” (P. 284). The authors examine the urban condition in Asia, Africa, and Latin America, noting that these regions, “contain three-fourths of the world’s population and most of its landmass” (P. 284), and share the “inability to sustain economic development, and, with some notable exceptions, a declining quality of life for most of their urban residents” (P. 284). They describe this development pattern as urbanization without industrialization or what Midgley refers to as distorted development, “emphasizing the problems in providing basic needs for an ever-increasing population in cities in the developing world” (Gottdiener & Hutchison, 2006, P. 284).

#### *4.1.1.1 Cultural Values and Population Control*

A negative perception of population growth in regards to the health of our planet suggests that more attention will be directed towards population control, under the guise of family planning. Discussed in length earlier, family planning techniques may not be the most effective developmental approach for most developing nations. These nations bear strong cultural views on the precious gift of life, and value possessing abundant offsprings, thus impressing a family legacy on their inheritors. The dominant world views of development shape our concept of population growth and the argued adverse effects; however, residents of the developing world may beg to differ. In African culture, you

marry, then procreate abundantly, because children are regarded as prized possessions; whereas in Western culture a family of four is generally viewed as the ideal norm.

#### 4.1.2 Consumption

According to PERN (2003), during the 1980s and 1990s, there was a popular belief that uncontrolled population growth was accountable for all forms of environmental degradation, though critics asserted that consumption by people is the real threat to environmental health. During the last bicentennial period, the earth has experienced an “intensification of human activities” which, “has left its mark on the air, soil, water, and all living systems” (Duchin, 2001). Duchin (2001) explains that, “these human activities are degrading the environment substantially”, and one major activity that can be attributed to the root of this problem is consumption. Further, Lagarias & Herrick (1971) posit that greater energy consumption equates to a surge in by-products or pollutants; “since most of them go to the atmosphere, there is a direct relationship between energy consumption and pollution” (P. 1).

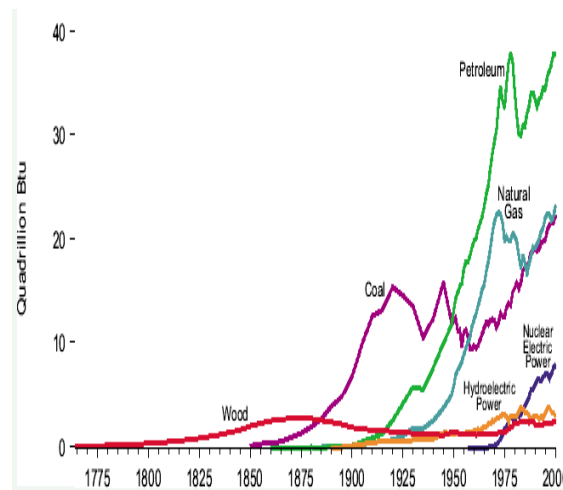


Figure 4.2 Consumption Patterns

Consumption causes pollution, and pollution is a major indicator of environmental degradation. The current rate at which we are consuming is putting a strain on our finite natural resources, contributing to global warming, and is creating, “wasteful and even toxic byproducts that affect the quality of life and health of communities around the world” (Sierra Club, 2008). Consequently, fast growing human consumption is a root cause of many global environmental issues we face today.

#### *4.1.2.1 Consumption Disparities between the Developed and Developing Cultures*

Compared to other sustainability problems such as population, environment, and development, consumption seems to be the most critical to tackle as, “consumption patterns and expectations are deeply entrenched in most societies and cultures” (Meyers, 1997). For example, the developed world possesses a grave consumerism culture, which has not been as evident in developing nations. This research focuses on consumption in regards to developing countries, but it is salient to note the consumption disparities between the developed and developing world. Generally, increases in GNI per capita or economic growth tend to equate an increase in consumption and ultimately pollution.

According to the Sierra Club (2008), “The unsustainable consumption of water, fossil fuels, and other natural resources by industrialized countries places unnecessary stress on developing countries and jeopardizes the health of poor and marginalized people” (2008). There are communities in an array of developing economies, that suffer environmental degradation and economic burdens, which are consequences of oil drilling that satisfies the fossil fuel hunger of the U.S. and other wealthier nations (Sierra Club, 2008). Fossil fuels are accountable for 80% of global energy consumption, a level which is not sustainable.

Pollution has a more physical and tangible presence in developing nations, which may at times lead to a misconception of exactly where the consumption problems lie. Myers (1997), reports that the citizens of industrialized nations are accountable for seventy-five percent of pollutants and a draining of the world's non-renewable resources. This means that the more affluent societies are responsible for the brunt of the consumption obstacle. Further, the unsustainable rate at which these nations are consuming is ever so concerning as population size continues to increase rapidly.

This research is mindful that while we strive for development in countries that are not active participants in this globalization age, sustainable development means ensuring that when these countries become “developed”, they will not be converted into mass consumers as the Western world. Otherwise, the development process will not be sustainable. If the citizens of the earth all consume at the current pace of the wealthier countries, we will devastate our planet and its fragile infrastructure. If the consumption hypothesis holds true, and as energy consumption increases then environmental performance decreases, we have to set measures to help us to maintain a sound level of consumption.

#### *4.1.3 Culture*

All people, regardless of where they reside or where they are from on this earth, are taught a cultural system which helps them to make sense of their dimensions. No matter how it is interpreted or carried out by different bodies of people, culture is engrained in our psyches and this makes it an integral part of our developmental view. The awakening of a ‘cultural dimension of development’ is mostly credited to studies pioneered by UNESCO and other groups in the 80’s concerning ‘culture and social

affairs’ and ‘culture and development’ (Serageldin & Taboroff, 1994). UNESCO in partnership with the United Nations, declared a World Decade for Cultural Development (Circa: 1988 – 1997), and established these four objectives: Acknowledging the cultural dimension of development (This objective is deemed the most important), affirming and enriching cultural identities, broadening participation in culture, and promoting international cultural cooperation (Figure 4.3).

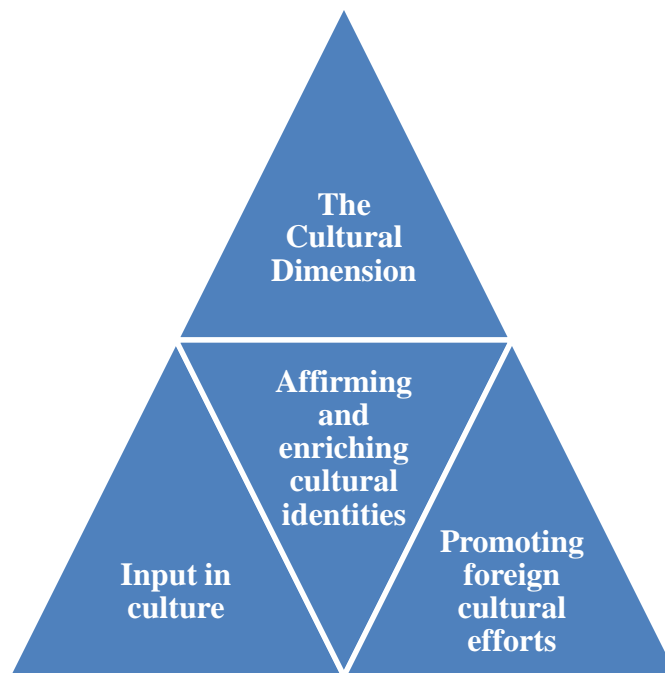


Figure 4.3 Four Culture Objectives

Both groups realized that applying a cultural dimension to development will ultimately affect most of the United Nations programs and specialized agencies. A UNESCO Information Document reports that uniting culture and development is important because “when a project, both its intrinsic goals and the way in which it is implemented, is not in harmony with the cultural aspirations and values of the targeted group, it will probably fail to yield any lasting, positive effects” (as cited in Serageldin &

Taboroff, 1994, P. 546). Salim comments that a meeting between the World Bank, UNESCO, and other development institutions acknowledged, “the failure of most development strategies adopted over the last three decades was due to the very narrow concept of development that did not take into account the diversity of cultures and societies in the world” (as cited in Serageldin & Taboroff, 1994, P. ). Incorporating a society’s culture into its development approach also helps with getting the community on board, otherwise, “when there is mental rejection or indifference on the part of the targeted group, there is no dynamic, multiplicative development effect” (P. 546). As learned from previous experiences, development approaches tend to fail when the people who the development is intended to benefit do not have a say-so in the project.

#### 4.2 Research Description

This study examines whether the population explosion theory and the consumption theory are statistically significant for explaining the level of a developing country’s sustainability. The research question, hypotheses, and variables are below:

##### *4.2.1 Research Question*

What are the independent effects of consumption and population on environmental health, and ultimately sustainable development?

##### *4.2.2 Hypotheses*

Hypothesis (H1): Regarding countries in the developing world, as population increases, environmental performance decreases.

Hypothesis (H1): Regarding countries in the developing world, as consumption increases, environmental performance decreases.

#### 4.2.3 Variables

The dependent variable for this study is the Environmental Performance Index (EPI). The independent variables are: population and consumption. The control variables are: social development, economic development, and culture.

##### 4.2.3.1 Dependent Variable: Environmental Performance Index

The 2010 Environmental Performance Index (EPI) is the third edition of the EPI produced biannually since 2006, through a collaboration of environmental experts from Yale and Columbia University. The Index grades 163 countries on their environmental performance across 25 metrics aggregated into ten policy categories (Kim, 2010). Half of the EPI measures the Ecosystem Vitality Objective via indicators related to “the goal of reducing the loss of degradation of ecosystems and natural resources” (EPI, 2010). The central policy categories for Ecosystem Vitality are: Climate Change, Air Effects on Ecosystems, Water Effects on Ecosystems, Biodiversity and Habitat, and Productive Natural Resources (EPI, 2010).

The other half of the EPI measures Environmental Health in an effort to “capture health outcomes resulting from the environmental burden of disease (EBD) and risk factors such as poor water and sanitation and indoor and outdoor air pollution” (EPI, 2010). Kim (2010) reports that analysis of policies that trigger the 2010 rankings proposes that “income is a major determinant of environment success”, though this is not always the case. For example, the United States which is presumably the wealthiest nations in the world, ranks 61 on the EPI, while Chile, “where substantial investments in environmental protection have been made” ranks 16; indicating that “policy choices also affect performance” (Kim, 2010).



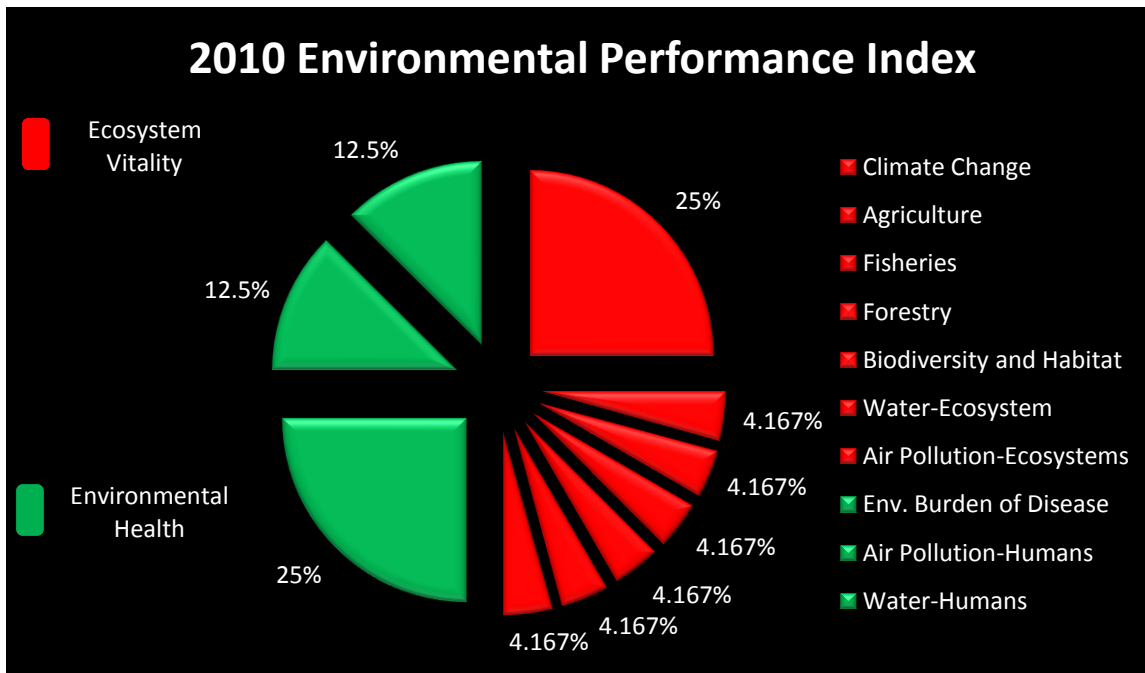


Figure 4.4 Environmental Performance Index (Adapted from 2010 EPI)

#### 4.2.3.2 Independent Variables: Population and Consumption

*Population.* To measure population, this study will use the 2005 population density data provided by WRI. According to the World Resources Institute (WRI), “population density is the number of persons per square kilometer of land area” (WRI, 2007). This data set is produced via a UNDP compilation and evaluation of census and survey results; adjusting the data as needed (WRI, 2007).

*Consumption.* Consumption is measured via energy consumption per capita data provided by the World Resources Institute (WRI) and the Global Virtual University. Due to gaps in the data, it was necessary to utilize both data sources to complement incomplete data. The 2005 WRI energy consumption data, “measures the amount of primary energy consumed, on average, by each person living in a particular country or region for the year indicated” (WRI, 2007). The 2001 Global Virtual University energy consumption per capita data “reflects annual consumption of commercial primary energy

in kilograms of equivalents per capita. It reflects the level of industrial development, the structure of the economy and patterns of consumption” (Globalis, 2011).

#### *4.2.3.3 Control Variables: Social Development, Economic Development, and Culture*

In order to statistically equalize the effect of other variables than the independent variables, this research will employ three control variables: social development, economic development, and culture.

*Social Development.* Social development is quantified by the 2010 Human Development Index, which “measures the average achievements in a country in three basic dimensions of human development: a long and healthy life, access to knowledge and a decent standard of living” (United Nations, 2010).

*Economic Development.* Economic development is measured by GNI per capita, which is, “the sum of value added by all resident producers plus any product taxes (less subsidies) not included in the valuation of output plus net receipts of primary income (compensation of employees and property income) from abroad” (World Bank, 2011). The GNI is calculated in the country’s national currency, and then converted to U.S. dollars by the official exchange rates in order to get a better picture across economies. To do so, the World Bank employs the Atlas Method, which accounts for factors such as inflation, by smoothing fluctuations in prices and exchange rates (World Bank, 2011).

*Culture.* The existence of culture has been acknowledged for centuries, but the first efforts to quantify it occurred around the middle of the twentieth century (Taras, Rowney, & Steel, 2009). Taras et al., (2009) comment that culture is a concept of urgent proportions; a Google search yields “half a billion hits and major societal sciences electronic databases provide links to \$100,000 to 700,000 articles”, when the key term

culture is searched. As stated by Taras et al., (2009), Hofstede was among the first to offer a “theoretical model and a concise set of quantitative indices for describing and ranking cultural values along several dimensions”. In an attempt to quantify the concept of culture, this study applies the Individualism element of Hofstede’s Dimensions of Culture as a variable tool. Hofstede explains that, “individualism pertains to societies in which the ties between individuals are loose: everyone is expected to look after himself or herself and his or her immediate family” (as cited in Tamas Consultants, 2009). A country or region with a high individualism score indicates that these societies value individual rights, while a low individualism score indicates societies that share close intergroup ties and value collectivism.

#### 4.3 Sampling Procedures

Data were not available for all the countries on all variables, and countries with missing data on the environmental performance index were excluded. 75 cases out of the 98 developing countries identified by the World Bank prove the final results. This study utilized secondary data analysis compiled by relatively reputable sources such as: the UN, the World Bank, the World Resources Institute, Columbia and Yale University, and Globalis. The advantage of the chosen sampling procedure is that the data is readily available and easily accessible. The disadvantage of the chosen sampling procedure is that the data is secondary and was not compiled specifically for this study. Despite some criticisms, these datasets are among the most trusted for international analysis.

The data utilized in this study would be considered both reliable and valid. The EPI is based on the best data available with indicators pulled from international organizations including, the World Bank, the UN Development Programme, the UN Food

and Agriculture Organization (FAO), and the UN Framework Convention on Climate Change, in addition to research groups such as the World Resources Institute and the University of British Columbia (Kim, 2010). Stephens (2005) explains that composite indicators like those utilized by the EPI are valuable as they are able to combine large quantities of information into formats that are easily comprehensible by a general audience. While the information may be useful to develop a study as such, Kim (2010) mentions that, “many of these data sets are based on reporting by national governments that is not subject to any external review or verification”. Further, the OECD reports that composites may sometimes supply “misleading information, be manipulated to produce desired outcomes or lead to simplistic conclusions” (as cited in Stephens, 2005).

The population density data is fairly reliable as data for developing countries is not generally available through the preferred census method, but via surveys. Energy consumption data utilized for this study are considered reliable as the information is mainly based on institutionalized and established accounting methods (WRI, 2007).

Most of Hofstede’s study on the culture variable was conducted in the late 1970s and early 1980s, and the study is challenged as being outdated. However, Tamas Consultants (2009) posit that “the dimensions are useful in understanding that members of various societies are likely to behave in different ways in a given situation”.

This research was also interested in testing a variable for colonialism based on a core/periphery measure developed by Jorgenson (2003), but due to a plethora of missing data for the identified developing countries, this variable was not utilized.

#### 4.4 Research Design

Since this study includes an analysis of several independent variables, it applies multiple regression, “perhaps the most widely used statistical technique in social and policy research” (Remler & Ryzin, 2011, P. 35). Multiple regression is useful in explaining the independent effects of multiple variables on the dependent variable or outcome. In order to analyze the significance of the independent variables, SPSS - a statistical software - was utilized.

The culture variable had quite a few missing values for developing countries; therefore each country with missing values was replaced with the average value for the continent, through a class mean imputation method. For all African countries, the missing value was replaced by the average for the continent: 25.54; for all Asian countries, the missing value was replaced by the average for the continent: 31.30; and for all South American countries, the missing value was replaced by the average for the continent: 11.00. This method gives one the opportunity to easily analyze the variable, but could cause for a biased score in the cases with missing data.

CHAPTER 5  
RESULTS AND ANALYSIS

5.1 Results

The unit of analysis for this study was developing countries. The first step with the data was to describe univariate analysis by running frequencies in SPSS. For each variable, the mean, median, mode, standard deviation, skewness, standard error of skewness, kurtosis, and standard error of kurtosis are presented in table 5.1:

Table 5.1 Frequencies

	<b>HDI</b>	<b>Energy</b>	<b>Population</b>	<b>GNI</b>	<b>EPI</b>	<b>Culture</b>
<b>N Valid</b>	87	90	96	89	81	87
<b>Missing</b>	11	8	2	9	17	11
<b>Mean</b>	.49641	568.7778	110.3500	1180.1124	51.4247	26.2910
<b>Median</b>	.48900	468.0000	64.0500	840.0000	51.1000	27.0000
<b>Mode</b>	.428	26.00	12.90	290.00	44.60	31.30
<b>SD</b>	.138607	596.08205	161.81179	912.53829	9.78821	8.69059
<b>Skewness</b>	-.146	2.406	4.093	.897	.157	.143
<b>SE Skew.</b>	.258	.254	.246	.255	.267	.258
<b>Kurtosis</b>	-.880	7.785	20.656	-.283	-.805	.925
<b>SE kurt.</b>	.511	.503	.488	.506	.529	.511

Then a bivariate correlation among the five variables in the model was conducted as reported in table 5.2. To get the results of the hypotheses, a multiple regression was conducted and presented in table 5.3. Only two of the Independent variables (human development and consumption) are significant at ( $P < .05$ ).

Table 5.2 Correlations

	<b>HDI</b>	<b>Energy</b>	<b>Population</b>	<b>GNI</b>	<b>EPI</b>	<b>Culture</b>
<b>HDI</b>	1	.625*	.097	.768*	.614*	.142
<b>N</b>	87	83	87	83	78	81
<b>Energy</b>	.625*	1	-.037	.591*	.237*	.222*
<b>N</b>	83	90	90	84	80	82
<b>Population</b>	.097	-.037	1	.090	.118	.052
<b>N</b>	87	90	96	89	81	86
<b>GNI</b>	.768*	.591*	.090	1	.532*	.093
<b>N</b>	83	84	89	89	76	80
<b>EPI</b>	.614*	.237*	.118	.532*	1	.201
<b>N</b>	78	80	81	76	81	77
<b>Culture</b>	.142	.222*	.052	.093	.201	1
<b>N</b>	81	82	86	80	77	87

\*p<.05

Table 5.3 Regression

	<b>Unstandardized Coefficient</b>	<b>Standard Error</b>	<b>Standardized Coefficient</b>	<b>T-Value</b>
<b>Constant</b>	25.284	4.551		5.555*
<b>HDI</b>	42.610	10.340	.603	4.121*
<b>Population</b>	.001	.005	.017	.191
<b>GNI</b>	.003	.002	.240	1.693
<b>Energy</b>	-.005	.002	-.317	-2.667*
<b>Culture</b>	.183	.102	.162	1.788

Dependent Variable: Environmental Performance Index, \*p < .05

## 5.2 Analysis

The study indicates that there is a negative relationship between energy consumption and the EPI; for one standard deviation increase in energy consumption, there is a -.317 decrease in EPI. This proves that consumption is a significant indicator of environmental health, and the more we consume, the worse our environment will perform. Environmental performance is a critical component of sustainable development, because as mentioned earlier, adequate environment health is imperative for the long-term survival of the human race and our planet. The recent natural disasters including earthquakes and tsunamis, that our planet has faced, reminds humans to become better stewards of the earth, so that our environment may continue to function efficiently.

There was no significant relationship found between population growth and the EPI, which indicates that population growth may not a major opponent of sustainable development as has been highly publicized. It is valuable to remember that population size can also decrease as fast as it can grow due to different causes including: war crimes, natural disasters, diseases, and episodes of mass killings.

There is also a positive relationship between the HDI and the EPI; for one standard deviation increase in the human development index, there is a .603 standard deviation increase in the environmental performance index. This validates the importance of education, a measure on the HDI, and indicates that human development is preliminary to sustainable development. Most countries in the developing world score very low on the HDI, and the results of this study suggest that sustainable development may never come into fruition if we do not take care of the needs of all of earth's people.



Table 5.4 Developing Countries

<b>Continents</b>	<b>Developing Countries</b>
<b>Africa</b>	1. *Angola, 2. *Benin, 3. *Burkina Faso, 4. *Burundi, 5. *Cameroon, 6. Cape Verde, 7. *Central African Republic, 8. *Chad, 9. Comoros, 10. *Congo, Democratic Republic 11. *Congo, Republic 12. *Cote D'Ivoire, 13. *Djibouti, 14. *Egypt, 15. *Eritrea, 16. *Ethiopia, 17. *Gambia, 18. *Ghana, 19. *Guinea-Bissau, 20. *Guinea, 21. *Kenya, 22. Liberia, 23. Lesotho, 24. *Madagascar, 25. *Malawi, 26. *Mali, 27. *Mauritania, 28. *Morocco, 29. *Mozambique, 30. *Niger, 31. *Nigeria, 32. *Rwanda, 33. *Sao Tome and Principe, 34. *Senegal, 35. *Sierra Leone, 36. Somalia, 37. *Sudan. 38. *Swaziland, 39. *Tanzania, 40. *Togo, 41. *Tunisia, 42. *Uganda, 43. *Zambia, 44. *Zimbabwe
<b>Asia</b>	1. Afghanistan, 2. *Armenia, 3. *Azerbaijan, 4. *Bangladesh, 5. *Bhutan, 6. *Cambodia, 7. *China, 8. *Georgia, 9. *India, 10. *Indonesia, 11. *Iran, 12. *Iraq, 13. *Jordan, 14. Korea, Democratic People's Republic 15. *Kyrgyz Republic, 16. *Laos, 17. *Maldives, 18. *Mongolia, 19. *Myanmar, 20. *Moldova, 21. *Nepal, 22. *Pakistan, 23. *Philippines, 24. *Sri Lanka, 25. Syrian Arab Republic, 26. *Tajikistan, 27. *Thailand, 28. Timor-Leste, 29. *Turkmenistan, 30. *Ukraine, 31. *Uzbekistan, 32. *Vietnam, 33. West Bank and Gaza, 34. *Yemen
<b>Europe</b>	1. *Albania, 2. Kosovo
<b>North America</b>	1. *Haiti
<b>South America</b>	1. *Belize, 2. *Bolivia, 3. *Ecuador, 4. *El Salvador, 5. *Guatemala, 6. *Guyana, 7. *Honduras, 8. *Nicaragua, 9. *Paraguay
<b>Australia/Oceania</b>	1. Kiribati, 2. Marshall Islands, 3. Federated States of Micronesia, 4. *Papa New Guinea, 5. *Solomon Islands, 6. Samoa, 7. Tonga, 8. Vanuatu

\* Developing countries that are included on the Environmental Performance Index.

## CHAPTER 6

### IMPLICATIONS AND CONCLUSIONS

#### 6.1 Discussions

##### *6.1.1 Strengths Based Approach in Addressing Developing Nations*

Human capital is the most important development aspect as it, “is the central source of wealth for the community” (Homan (2008), P. 35), and it involves harnessing the skills, talents, and energy of members of the community. Since this study did not find a significant relationship between population growth and environmental performance, it leads one to pay more attention to the Simon school’s notion that a growing population is welcomed, because human beings are resourceful enough to produce innovative ideas to solve presented social problems. The majority of the population boom is expected in cities of the developing world, but UNEP (1999) reports that “Africa remains under-populated”. The continent’s population density of 249 people per 1,000 hectares is considerably lower than the world average, which boasts 442. If projections are correct, and most of the population growth occurs in the developing world, those countries will have the appropriate human capital - when working together - coupled with the natural resource capital to work towards sustainable development and prosperity.

The strategies employed in the developing world by international organizations, have frequently been needs based approaches. While recognizing the importance of needs assessments for a navigational start, it is also pertinent to target developmental issues with strengths or assets based approaches.

### 6.1.2 A Group of 8 Wealthy Nations

Developing countries continue to be marginalized in the globalizing economy as they are excluded from leadership representation in association meetings of major world economies such as the *G8* (Group of 8 - Canada, France, Germany, Italy, Japan, Russia, United Kingdom, the United States, and the European Union). This powerful and influential entity dominates and controls decisions regarding the economy of our world, and BBC reports that, “The G8 has clout in other world bodies because of the economic and political muscle of its members” (BBC News, 2010). According to BBC (2010), “there are no African or Latin America members” of the G8, and critics have “accused the body of representing the interests of an elite group of industrialized nations, to the detriment of the needs of the wider world” (BBC News, 2010). Another economic powerhouse, the *G20* (Group of Twenty Finance Ministers and Central Bank Governors), has made efforts to work with leaders from both developed and developing economies, though South Africa is the only African country that is a member of that group.

At the 2005 G8 Gleneagles Summit in Scotland, the G8 nations made financial security promises of increasing development assistance to developing countries, which have yet to be fulfilled in its entirety. For instance, the group agreed that by 2010 they would increase African aid by \$25bn per year or \$30bn when adjusted for inflation rates (Sachs, 2010). Unfortunately, these leaders have not succeeded in raising aid to the full amount committed and have thus written a bad promissory note to the people of the African continent. In order for developing countries to receive the aid needed to help bolster their economies, Sachs (2010) recommends that, “the world leaders should

recognize that commitments to fight poverty, hunger, disease, and climate change are life-and-death issues that require professional management for serious implementation”.

Foreign aid is usually a popular topic of discussion. Shah (2010) explains that all too often, this development assistance is, “regarded as being too much, or wasted on corrupt recipient governments despite any good intentions from donor countries. In reality both the quantity and quality of aid have been poor and donor nations have not been held accountable” (Shah, 2010). There is a misconception that wealthier nations are always pouring great amounts of money into developing nations, but this foreign aid is not even 0.7% of their gross national income annually. These economically developed countries are not investing in developing nations to a fair proportion of their GNI per capita. As an example, “the U.S. is often the largest donor in dollar terms, but ranks amongst the lowest in terms of meeting the stated 0.7% target” (Shah, 2010). This thesis aims to wake up the moral consciousness of the developed world in terms of its responsibility and commitment to developing nations.

## 6.2 Recommendations

### *6.2.1 The Social Development Approach towards Sustainable Development*

According to Midgley (1995), the social development approach is important, because it intrinsically “links social welfare directly to economic development policies and programs” (P. 1). The social development approach is one that can be instrumental in achieving sustainable development goals of poverty reduction. In contrast to distorted development, Midgley cites societies where there is a healthier balance between economic and social development; in countries such as Austria, Sweden, and Switzerland whose economic achievements have complemented their “systematic efforts to promote

social development” (P. 6). These countries have invested in human and social capital, thus reaping the benefits of high educational attainment, extensive health and social services, and low levels of poverty and deprivation (P.6). With the help of wealthier nations, developing countries should aspire and work towards building these sorts of sustainable development notions that are evident in these aforementioned nations.

Sachs (1999) asserts that we are in dire need for new innovation and new partnerships between the rich and poor countries. Sachs (1999) reports that a great challenge for a globalizing community is “that of mobilizing global science and technology to address the crises of public health, agricultural productivity, environmental degradation and demographic stress” that these nations are currently facing. Pillai (1996) also reports that, most developed nations are equipped with technological and resource endowments that are essential to support developing countries achieve sustainable development.

Sachs (2010) highlights four steps to help bridge the economic gap and reshape the world’s global community:

- a. Rich and poor countries need to learn better communication skills in regards to dealing with each other, and the wealthy nations should not host economic stirred summits without inviting weaker economies to become members and brainstorm about economic development tactics together.
- b. A top priority of rich and poor countries should be the mobilization of science and technology to the problems of developing nations.

- c. The universal stance on intellectual property rights should be re-examined, because it is important to have global co-operation regarding the uses and development of new technologies.
- d. There needs to be serious conversations about sustainable financing of international trade, which is essential for these countries with extremely high debts to survive.

### *6.2.2 Growth Triangles and Partnerships*

Developing countries should try to form partnerships with each other and employ strategies such as the Growth Triangle Model that promotes economic cooperation between neighboring countries. The East Asia Analytical Unit explains that the growth triangle, “involves linking adjacent areas of separate countries with different endowments of factors of production—such as land, labour and capital – and different sources of comparative advantage, to form a subregion of economic growth” (n.d.). One such growth triangle partnership currently exists between Indonesia-Malaysia-Singapore.

Further, developing countries should form partnerships with nations that may not necessarily be considered developed, but foster economies that are becoming powerful in the global economy. One such partnership was formed between Sierra Leone and India when two ladies from a village in Sierra Leone were selected to visit Barefoot College in India for training to become solar engineers. These two ladies had no educational attainment, but were able to learn about solar energy technology in just six months. After the training, the ladies were sent back home to install solar panels that produced electricity in their village and a neighboring village. Also, through this technology, residents of these villages no longer have to travel far distances to obtain kerosene.

### *6.2.3 Cultural Recommendations*

Nyang recommends that governments who truly want to develop their people should not underestimate the power of local culture, rather they must “develop a stronger appreciation of these local cultures and formulate policies in light of their new understanding” (as cited in Serageldin & Taboroff, P. 445). So far, traditional cultural values have taken a back seat to planning in the developing world, and little or no attention has been paid to the study of culture and its relationship to the process of development. Nyang posits that the success or failure in the implementation of development programs in Africa rest on the how well policymakers are able to incorporate or manage fragile issues such as culture and religion, and ethnicity. Overall, it is pertinent for planners, developers, and policymakers to gain a better and broader comprehension of the cultural landscapes they wish to improve.

In order to make the most out of development efforts, it is crucial to lessen the occurrence of failure, as failure results in wasted funds, energy, and a frustration of hope. Utilizing the cultural dimension in development is a helpful tool for avoiding conflicts between traditional, “non-westernized” cultural values and those of the industrialized world. The concept also seeks to form a complementary and computable relationship between the two, and “identify methods of introducing better standards of living among the populations of the developing world while trying to respect their previous lifestyles, value systems, knowledge, and know-how” (P. 547).

#### *6.2.3.1 Land Use*

When facing development and land use obstacles in developing countries, one solution is using the tactics employed by President Senghor when he wanted to build a

national project on untouchable land that belonged to the Lebu people of Dakar. Recognizing the power of the elders in the community, Senghor held meetings with the major leaders of the Lebu people, and through oratory persuasion and gifts, he was successful in convincing the leaders to utilize the land for the project, and those elders conveyed this message to the rest of the Lebu people. This teaches us that we have to get the elders on board the mission, in order to reform any policies that override the land principles that are currently established.

#### *6.2.4 Political Recommendations*

The New Partnership for Africa's Development (NEPAD) asserts that from their past experiences, the leaders of African countries have learned that "peace, security, democracy, good governance, human rights and sound economic management are conditions for sustainable development" (P. 20). Sandbrook (2000) posits that it will be an impossible task to combat the problems currently facing the forty-eight Sub-Saharan countries if order is not restored in the region. He stands strong in this declaration because he believes that, "mass poverty, economic stagnation, and ecological degradation are obviously cause as well as effect of political disorder" (P. 1).

In order to work cohesively with developing countries and encourage their stake in the globalization process, the Western world should revisit the way business is currently conducted with these countries. Sandbrook (2000) insists that, "Beating the poverty trap and bolstering a virtuous circle of development will probably require complementary reforms in the operation of the global economic market" (P. 20). Further, Sandbrook (2000) asserts that worldwide sustainable and democratic development would benefit from a restructuring of neo-liberal globalization into social-democratic



globalization. The author persists that, “Markets-both domestic and global-are needed to create wealth, but they need to be governed by human needs and social values” (P. 21).

Further, African countries need to start looking inwards and viewing what their internal problems are outside of the ones created by the Western world. Though we still view the repercussions of colonialism in developing countries, we must not use the past as a crutch, and must take accountability for current situations and cultures of: propaganda, corruption, and internal conflicts. Africa has to move forward from the past, and take responsibility of the future.

### 6.3 Sustainable Development Implications for Social Work

#### *6.3.1 Social Justice, Empowerment, and Advocacy*

In his Letter from Birmingham Jail, Dr. Martin Luther King Jr. writes, “Injustice anywhere is a threat to Justice everywhere” (as cited in Ali-Dinar, n.d.). These same sentiments hold true regarding economic injustice and poverty in the developing world. One of the core values that Social Workers abide by is that of social justice and the NASW Code of Ethics asserts, “social workers pursue social change, particularly with and on behalf of vulnerable and oppressed individuals and groups of people” (NASW, 2008). One of the primary social justice issues that social workers are asked to focus on is poverty. Reduction of poverty is a requirement of sustainable development, and social workers must mobilize and partner with developing nations and international organizations in an effort to produce poverty reduction strategies and results for those nations.

Further, social workers who are interested in sustainable development should understand that civil society organizations (non-governmental organizations, human

rights groups, professional associations and such), play a key role in accomplishing the goals of sustainable development. According to a 1993 study conducted by Putnam, there exists, “an early and statistically significant relationship between the growth of non-state organizations and development effectiveness” (as cited in Ezeanyika, Okorie, Osita-Njoku, Pat-Mbano, and Oporum, 2010, P. 48).

Social workers can also promote sustainable community development and work towards empowering communities and nations. In addition, they can advocate for policies that promote sustainable development such as: energy sources that pose the least costs to the environment, the economy, and our social well-being. With a mentality that educating women will educate the world, through advocacy, social workers can educate women regarding the environment in areas like: household chores and renewable energy.

Also, social workers interested in sustainable development can be vehicles of change that help the developed world to understand foreign aid barriers faced by young economies. Through advocacy and other efforts, social workers can also educate and encourage wealthier nations to invest at recommended GNI proportion levels.

#### 6.4 Future Studies

Future sustainable development research could compare results between developing countries and developed countries on the environmental performance index by studying these variables – consumption, population, culture, social development, and economic development – for the developed nations, to determine if effects are the same.

Further research could also test a variable for colonialism with a scale that has more data availability for developing countries. In addition, there should be more study on the effects of culture in attaining sustainable development by exploring indicators such

as individualism and collectivism more in depth. This type of study could determine whether individualistic traits such as driving a car solo, rather than carpooling or using public transportation, have an adverse effect on environmental health.

Even though this study finds that population growth is not a significant sustainable development risk factor, it will be interesting to find out if the increase of population size in an urban space, for example: over a million people in a city, significantly affects environmental performance. When large amounts of a population settle and reproduce in urban areas, they cause the urban population to explode, which inherently drains the resources of that space and wears out the environment.

#### 6.5 Conclusion

Sustainable development is treating people and the earth we have been blessed with respectfully. This study teaches that energy should be spent on reducing consumption levels and promoting forms of development that is not only economically viable, but recognizes the consequences of our choices on people and the environment within which we all survive. Further, all facets of sustainable development work hand in hand, and all sectors must work together to develop goals and solutions that will encourage proper implementation of the concept.

This paper also goes into detail about the importance of culture in formulating the concept of development. It scrapes at the surface of the unbearable conditions of economically underdeveloped countries; digging into the history of colonialism and world power dominance. It encourages developing countries to look forward and break unhealthy barriers within themselves in order to enter the World competition known as the globalizing era. Sustainable development is the business of everyone, and we must

all work together to promote future living situations suitable for ourselves and generations to come. Humans are on this earth to help one another, “as iron sharpens iron, so one man sharpens another” (Bible Gateway, 1984), and we cannot just sit back and ignore the people who share our planet that are living in deplorable situations.

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