A Study on

WEALTH CREATION, POVERTY AND ECOLOGY IN AFRICA
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EXECUTIVE SUMMARY

In February 2007, The World Council of Churches Geneva, commissioned a study on Wealth Creation, Poverty and Ecology in Africa. The study aims at looking at the methods of wealth creation in Africa, and if they lead to poverty and ecological destruction in the continent. Poverty and Ecology have become two major issues in the international community.

Africa is facing both poverty and ecological issues. This is ironic because Africa possesses huge and valuable natural resources. In Africa, wealth is created out of these natural resources which include oil, natural gas, minerals and forests. Most Africans live in rural areas and so nature is crucial to their livelihood. People in Africa depend on nature for food, energy, and even shelter. When ecology is destroyed in the process of wealth creation, poverty is increased, and that leads to more ecological disaster, as poor, out of desperation, destroy ecology further.

The methodology used in this study is mainly qualitative, whereby four case studies are identified to describe the relationship among these three phenomena. Data collected is secondary, such as previous reports and published cases in relation to poverty, wealth and ecology in Africa. These data are and findings are analyzed in the context of how wealth creation has led to poverty and ecological destruction. Three cases; Logging in Tanzania, Copper Mining in Zambia, and Oil extraction in Niger Delta(Nigeria), are analyzed to explain how wealth created by both local people and foreign companies impoverishes poor and destroy ecology. A case on Agriculture production in Kilimanjaro is given to exemplify how wealth creation in Africa at local level, fails and increases poverty among people due to weak institutions and poor structure.

On top of adverse impact on Africa’s development brought by the international system, which advocates for free trade and market liberalization, Africa’s underdevelopment (poverty) has also resulted from poor governance, weak institutions, poor policies and lack of implementation. Africa’s poverty and ecological issues hinge on two planes- International System and Weak Internal Structures.

Major efforts done by Africa, as a region, to reduce poverty are also briefly looked at. These are Lagos Plan of Action(LPA), African Alternative Framework for Structural Adjustment Policies (AAF-SAP), New Partnership for Africa’s Development (NEPAD), and IGAD as one countries integration that aim at both environment and development.

A Wealth Line and Greed Line for Africa are computed and proposed in this paper, whereby factors such as Population, Gross Domestic Product, Income per Capita, and Income Distribution are taken into consideration. These lines are relative depending on the above factors. It is appreciated that the lines can be useful to Governments for making ideal policies and taxation laws that will be proportionally equal and beneficial to citizens at different levels.

The paper recommends that African government should fight their internal weaknesses together with putting continuous pressure to the international system to change its conduct. In addition to that the Church in Africa should freshly invest on moral ethics and streamline those in their teachings and activities.
ACRONYMS

<table>
<thead>
<tr>
<th>AAF-SAP</th>
<th>AFRICAN ALTERNATIVE FRAMEWORK FOR STRUCTURAL ADJUSTMENT POLICIES</th>
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<tr>
<td>APPER</td>
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<td>AU</td>
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<tr>
<td>DFID</td>
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<td>IFRI</td>
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<td>MNRT</td>
<td>MINISTRY OF NATURAL RESOURCES AND TOURISM</td>
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<td>NTFP</td>
<td>NON TIMBER FOREST PRODUCTS</td>
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<td>ZCCM</td>
<td>ZAMBIA CONSOLIDATED COPPER MINES</td>
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1.0. CONCEPTUAL FRAMEWORK

1.1. Background of the study
Poverty and Ecological issues are serious global concerns. Africa is one continent that has gravely faced these two issues. Naturally, Africa should not have faced these issues, for two reasons; first, Africa is blessed with enormous and valuable natural resources that could make her the wealthiest continent in the world; second, if Africa is not enjoying the benefit of exploiting her natural resources, issues of environment should not be at her back. The questions are, why is Africa facing both poverty and ecological issues? Or what leads to both poverty and ecological destruction in Africa? Where does all that wealth created in Africa go? And how is that wealth created?

This study tries to indicate methods used in Africa for wealth creation that leads to poverty and subsequently to ecological destruction. It takes cognizance of relationships in economics and ecology in the creation of wealth, the role of ethics and the way different groups fair on in the arena. The study will come out with suggestions of possibilities of a greed line, a wealth line and possible actions to address the issue of wealth creation more equitably.

1.2. Problem Statement
The existing world system oversees high levels of polarisation between wealth and poverty. This same system sub exists regionally. In Africa, for example, there are few very wealthy, and many who are poor. Just as 20% of the World’s population is rich while 80% are poor, similar ratios can be observed regionally.

Being wealthy is not an issue; the concern is why there are only few wealthy and many poor? The issue therefore is how that wealth is created for only few and leaves others deprived. Ecology at large has been a global issue. Poverty and ecological destruction are main subjects of global apprehension. Wealth that is created for few at the cost of poverty for many and ecological destruction is of no use and will ultimately lead to destruction of both humanity and environment.

1.3. Methodology
This is a qualitative study, in which case studies are identified to describe the linkage between wealth creation, poverty and ecological destruction in Africa. It is largely library based research, where secondary data on wealth creation, poverty condition, and ecological issues in Africa are looked at. These data are analysed to see how wealth creation leads to poverty and consequently ecological destruction in Africa.

The study picks on Agriculture Production in Kilimanjaro as a local African case of wealth creation, poverty and ecology linkage. Case studies from three selected countries in Africa are also analyzed to show the linkage of these three aspects. These three cases are unique from the local case, as they feature foreign impact. These case studied countries are Tanzania, Zambia, and Nigeria. The criterion for selection of these case study countries was regional base (Southern, Eastern and Western Africa regions) together with the strength of their case in relation to this study. It is important to mention that these three cases are highly borrowed from the previous work of other researchers. These cases were well researched, and could best present the linkage of wealth creation, poverty and ecological destruction.

Using data from Gross Domestic Product, Income per Capita, Population, Living Standards, Population, and Income Distribution, both wealth line and greed line for Africa are computed. The formula was designed, and by using Microsoft Excel, the lines were computed.

This study is therefore largely qualitative however without total disgrace of quantitative methodologies having in mind that some secondary numerical data that were quantitatively analysed are utilized.
1.4. Wealth Creation, Poverty and Ecology: Definitions and linkage

The relativity aspect of both wealth and poverty makes them very difficult terms to define. However, scholars and ordinary people (wealthy and poor) have all tried to define what they think wealth or poverty means according to their knowledge or life experiences. The following are different definitions of wealth and poverty:

1.4.1. Wealth

Wealth is defined as being the possession of a certain level of material and spiritual as well as cultural commodities (Munene, 2005). Wealth is possession of great amount of property, money, etc.; riches (Oxford Dictionary, 1962). Wealth is a means of power—whether it is the power of bribery, political power, power over employees, or other forms of power (Lewis, 1969). Wealth is manifested differently in different societies. In nearly all, it is a symbol of status expressing itself in conspicuous consumption or possession of prestigious things. It also finds expression in massive expenditure in glamorous wedding ceremonies, funerals and anniversaries. In others it is a source of power. Wealth is applied to influence society negatively or positively. In some societies, without substantial wealth it is difficult to attain leadership position. For other, wealth is a means of generating more wealth. With it additional resources are acquired and put into productive use, thus generating much more wealth. How wealth is used depends on culture, religion, ethics, and other factors that set the norm of society.

1.4.2. Poverty

Poverty is an economic or social condition, and has major implications for policy. A person is poor when one’s personal income or consumption is below a specific ‘poverty line’ (Coudouel and Hentschel, 2000).

Poverty can be said to be inability to meet basic needs which could be materials, economic, spiritual and intellectual, cultural and social, legal and political (Oxford Dictionary, 1962).

Amartya Sen defines poverty as “capability failure” or the “failure of basic capabilities to reach certain acceptable levels” (Sen, 1992: Anderson, 2005).

Poverty is a human construct that creates and sustains a state of deprivation. It is inability to create wealth or denial to sharing the created wealth. Powerlessness is the driving force of poverty. (Godwin, 2002)

Poverty is deprivation in the most essential capabilities of life, including leading a long and healthy life, being knowledgeable, having adequate economic provisioning and participating fully in the life of the community (UNDP, 2005).

The World Development Report 2000/01 (World Bank, 2000b) claims ‘to broaden the notion of poverty to include vulnerability and risk- and noiselessness and powerlessness’. A person is considered poor if his or her income falls below some minimum level necessary to meet basic needs. This minimum level is usually called poverty line. The World Bank admits “What is necessary to satisfy basic needs varies across time and societies. Therefore, poverty lines vary in time and place, and each country uses lines which are appropriate to its level of development, societal norms and values.

There is much discussion and debate on empirical definitions and evidence of poverty. Development literature is full of this. But poor people express themselves in their conditions. A visit to slums in towns all over Africa, a visit to many rural villages in the larger parts of our
countries, visits to some institution, notably rural schools and health care centers or if one cared spending a day or two, perhaps a week with a family in rural areas would demonstrate ability to see, feel and understand poverty in Africa without figures.

“You ask me what poverty is. It is here, staring you right in the eye. Look at me! I live alone. I do not have enough food. I have no decent clothing and accommodation. I have no clean water to drink. Look at my swollen legs. I can’t get to the dispensary, which is too far for me to walk. I have to walk a mile to catch a bus. I cannot see well. I can no longer do any farming. So don’t ask me what poverty is. Just look and see for yourself” (Grandmother, Fiji, p.7: Christianity, Poverty and Wealth, the findings of ‘Project 21’)

From Nairobi, we have a similar quotation

“You ask me what poverty is because you have met it outside the house. Look at the house and count the number of holes. Look at my utensils and the clothes that I am wearing. Look at everything and write what you see. What you see is poverty” - from a poor woman in the slums of Kibera, Kenya

Wole Soyinka observes poverty in Africa with memories of over 50 years ago when things were better in his childhood. (Wole Soyinka, IFPRI, 2004)

‘Children from the hunger zones of the continent, their stomachs bloated in the malnourishment, victims of perennial drought and of war displacement year after year, but also victims of improvident attitudes of African leadership. Today …… stare unbelieving at the images of homesteads where the only evidence of abundance would be swarms of flies in competition for the least moisture on the eyes, lips and nostrils of human beings sunk in lassitude. One would shudder at attenuation of limbs of soon to be mortal statistics that continue to rebuke a continent of such diverse and abundant material resources and recoil at the portent of once thriving farming villages whose production routine has been drastically attenuated by HIV/AIDS, the surviving inhabitants being just wide eyed, orphaned children looking lost, uncertain of the source of their next meal.’

Poverty is manifested in failure to access essential services including health and education. Families fail to pay for treatment of both simple and complicated disease. They fail to pay for primary, secondary and tertiary education…… and water,. Thirdly poverty is manifested in housing and overall living conditions of people. It renders individuals incapable of performing or fulfilling certain requirements, obligations or responsibilities that confer benefits to them, their families or the society at large.’

Poverty is a two sided phenomenon characterized by:

- Material deprivation – Scarce material ownership insufficient to guarantee humane existence.
- Moral deprivation – low self-esteem, discontent, and ungratefulness, characterize moral deprivation. Both the materially wealthy and poor can be morally deficient. This is reflected in form of greed, which can feature on both poor and wealthy. The entire humanity is therefore prone to poverty in terms of morals.

1.4.3. Ecology

Ecology is the study of the distribution and abundance of organisms (Andrewartha and Birch 1954). Ecology is the relationships and interactions between living organism and their natural and developed environment. This relationship is very clearly explained in the story of creation found in Genesis Chapter 2.
“Thus the heavens and the earth were completed on their vast array ……… The Lord God formed the man from the dust of the ground and breathed into his nostrils the breath of life and the man became a living being…Now the Lord God had planted a garden in the east, in Eden, and there he put the man he had formed. And the lord made all kind of trees grow out of the ground - trees that were pleasing to the eye and good for food. In the middle of the garden were the tree of life and the tree of the knowledge of good and evil…A river watering the garden flowed from Eden……it winds through the entire land of Havilah where there is Gold. The Lord God took the man and put him in the Garden of Eden to work it and take care of it.”

The above Bible quotation reflects the interdependence and interaction of living organism right from their creation and formation. These living things depend on non-living things such as water and heavens. For example, the sun is central to photosynthesis, without photosynthesis plants cannot survive, and without plants animals cannot survive too. This is all in one circle. So the earth is ecology in itself.

1.5. Wealth, Poverty and Ecology-Linkage and Relevance to Africa

From the above short treatise we note first the primacy of human life. In the entire creation God has called to life plants and animals in forms, sizes and varieties too numerous to be accounted for by human beings. God intricately created a man and woman out of dust and breathed life into them.

Secondly we note the splendour and intricacy in which nature and life are arrayed at the centre of which humanity is put. Human beings are integral parts of the environment, indeed the very centre of ecology.

Thirdly, immense responsibility is put upon the human being. Human beings are to tend the garden, and rule the entire creation –heaven and earth. They manage the resources upon which their livelihoods depend.

We talked of wealth as possession and poverty as deprivation. In so far as the ecology is concerned, human beings possess all is needed for a full life. Any deprivation of any aspect or all of what is listed above i.e. life itself, the natural arrangement or placing which makes life possible, including resources, the responsibility given to human beings and the glory and honour is impoverishing.

Companies, both local and multinational, as well as individuals are busy creating wealth at the expense of millions of people. In the absence of social cost benefit analysis, economic activities consider only private costs. The bottom line of the investor (profit) is the major item of concern. Thus plantation farming and flower production leave large stretches of land depleted, bare and incapable of food production at affordable costs. The scale and efficiency of operations leave the peasants with no alternative but to offer oneself as a labourer at a fraction of the wealth created in the process. Where forests have been cleared, climatic changes such as reduced rainfall adversely reduce the productive capacity of regions and livelihood of people. Commercial fishing operations have greatly marginalised small scale fishermen and subsequently depletion of fisheries. Mining industry, in many countries praised for raising the national incomes is fast leaving stretches of wastelands and poor people behind.

“Development has meant the infusion of mostly foreign capital in order to increase the rate of exploitation of forests, soils, and agricultural potential in order to generate increased income, including foreign exchange” (Hall, 2000)
Moving from primary economic activities to secondary activities such as trade and manufacturing exacerbate impoverishment of populations and ecological destruction. On the large, labour compensation in a situation of high unemployment harbours a lot of irregularities and unfairness. Many commercial workers in very profitable commercial activities end up with a meal as compensation for their labour. The industrial waste and pollution have an adverse effect on the environment and the quality of lives of people.

Both wealth creation and poverty have effects on ecology. This is arguable. However, ecology has suffered in both wealthy nations and poor nations. The consumption patterns of the wealth put a high demand on resources and energy far beyond the reach of their countries, thus depriving others. At the same time pollution emitting consequential to their consumption is greatly making life both expensive and difficult for the poor in Africa. On the other hand the consumption pattern of the poor equally destroys the environment. Use of firewood and charcoal for domestic energy is destroying forests and sources of water. Farming with inadequate capital is causing a lot of soil erosion. The rampant use of plastic packaging of consumables is fast destroying pasture in Africa.

The majority of the poor in Africa are small scale farmers who depend on agriculture for their livelihood. Agriculture depends on ecological processes, interactions and ecosystem services that occur in the natural environment. The ecological processes and the delivery of eco-system services in nature are underpinned by a rich diversity of organisms, adapted to each other and making use of all possible niches in the physical environment. Thus wealth creation is both an aspect of economics and ecology.

2.0. AFRICA’S SITUATION ON WEALTH, POVERTY AND ECOLOGY

In Africa, nature revolves around wealth, poverty and ecology. Natural resources are major sources of wealth such as foresting, farming, wildlife (tourism), extracting oil and minerals. Africa is blessed with enormous natural resources. Whether these resources are a curse or blessing to Africa, is a matter of debate. What is important to know, is that nature, which comprises ecology, is a source of both wealth and poverty in Africa, and the consequences of both hit back to itself (nature). These three aspects are intractably related.

In 2005 at Gleneagles, the leaders of most wealthy nations in the world (G8) had two main topics to discuss; poverty in Africa and global climate change. Poverty in Africa and climate change are increasingly interlinked with time especially if trends and volume of rainfall keep on changing. Poor people are the most dependant of ecology, and are most vulnerable when ecology is destroyed. Poverty often forces people to give priority to immediate needs, and use resources unsustainably. A diverse natural environment provides a range of services- for instance, pollination, soil conservation, pest control and break-down of waste and pollutants. The poor, who cannot afford alternatives, rely most on these services. DFID argues that many services are provided by complex ecosystems, such as forests, or mangroves and coral reefs which protect vulnerable coastlines. (DFID, Biodiversity- a crucial issue for the world’s poorest)

2.1. Poverty in Africa

Despite enormous natural resources Africa is the poorest continent. Most Africans, particularly in the Sub-Saharan Africa, lack basic needs. Sub-Saharan Africa is the only developing region with the lowest growth in income per capita during 1990-2005 (UNDP, 2007). See the Table below
Table 1: Selected Development Indicators for Major Developing Regions

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<td>South Asia</td>
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</table>

Source: UNDP ANNUAL REPORT (2007)

Of the 49 least developed countries of the world, Africa hosts 34. Sub-Saharan Africa accounts for 13 percent of the world population and 25 percent of the undernourished people in the developing world (FAO, 2006). It is the developing region with the highest proportion – one-third – of people suffering from chronic hunger. In 14 countries in the region, 35 percent or more of the population were chronically undernourished in 2001–03 (FAO, 2006).

Hunger in sub-Saharan Africa is as persistent as it is widespread. Between 1990–92 and 2001–03, the number of undernourished people increased from 169 million to 206 million, and only 15 of the 39 countries for which data are reported reduced the number of undernourished (FAO, 2006) (figure 1).
Food poverty is perhaps the most degrading aspect of poverty and most effective barrier to the attainment of human potential, which is equivalent to low quality human resource. Giants of faith like Abraham sacrificed their dignity at the face of hunger. Esau for a short hunger gave away his birthright, a contributory factor for over 3 millenniums tumult in the Middle East. Famine led Jacob to Egypt where his descendants became slaves for four centuries. In Africa today, periodic or extended famine in nearly all countries is grinding Africa.
Over half a century, despite receiving development aid, Africa is more indebted and economically disoriented. The majority of African countries are heavily dependent on aid, 34 being categorized as Least Developed Countries (LDC) in the world (United Nation Conference on Trade and Development; 2005). Over 50% Uganda’s and Tanzania’s national budgets are run by aid. In such cases, the leadership has little incentive to listen to their electorate but donors. Most government experts in Africa spend close to 60% of their time negotiating with donors. Once they secure the loans, they spend an estimated 30% of their time filing audit reports. A former finance minister in Kenya spent 75% of his time with donors while Tanzania churned out 2,400 reports and studies on different aspects for donors in 2001 alone (Erixon F; 2003). Aid thus leads to little time being spent on unearthing homegrown strategies to problems afflicting each country. Tied aid is even worse: donor countries condition recipient nations to purchase material and consultancy from them, facilitating a re-exportation of the aid money. The World Bank estimates that tied aid reduces the value of intended assistance by 25% (www.worldbank.org/research/aid/overview.htm [7th March 2006). Between 1986 and 1990, there was a net transfer of $4.7 billion to IMF and the World Bank. It is estimated that Africa looses $20 billion in capital flight each year.

Aid fuels conflicts in Africa. In 1998, Africa suffered 11 major conflicts. The same year, U.S.A weapons to Africa totaled $125 million. Many of the countries engaged in serious conflicts over the past 50 years received weaponry amounting to an estimated $1.5 billion from U.S.A alone. For a continent struggling to build institutions that can promote trust and thereby enhance trade, investment in war efforts is counterproductive (www.worldpolicy.org/projects/arms/reports/congo.htm). Africa spends $15 billion on arms and military; $18 billion on food imports and another $216 billion on unquantifiable leakages (Ayittey, G; 2005).

Caufield notes that since the early 1980s, mainly as a result of a sharp decline in new lending by private banks coupled with ongoing repayments of old loans at rising interest rates, the wealthy countries have consistently been net recipients of funds from the Third World - not net donors to it - even when Overseas Development Aid (ODA) is taken into account (Caufield, C. 1998). Initially the gain of the North was small – just $300 million in 1983. In 1984, however, it had risen dramatically to $12.5 billion. Since 1985, the poor South’s net transfer of finance to the rich nations has exceeded $30 billion per annum. The figure for the year 1 July 1987 to 30 June 1988, for instance, was $39.1 billion (Shikwat, J., 2005)

- In the years 1986 – 1988, the IMF received net payments totaling $8 billion from the Third World.
- The International Bank for Reconstruction and Development (IBRD) in the financial year to 30 June 1988, received $1.9 billion from poor countries.
- Africa’s foreign debt in 1992 totaled $282 billion, repayments consuming 24% of her export earnings.
2.2. Ecology in Africa

There is a close relationship between African livelihoods and ecology. The Food and Agriculture Organization (FAO) reports that in Africa forests cover 5 million square kilometers- one sixth of the continent’s land area. Forest and woodland species provide firewood, structural timber, traditional medicines, staple food, and drought emergency food. A large part of the population lives in rural areas and depends on trees and shrubs for subsistence. Biomass (Firewood and charcoal) provide approximately 60% of the energy used in Africa (IPCC, 2001) (figure 3).

Africa contains about one-fifth of all known species of plants, mammals, and birds, as well as one-sixth of amphibians and reptiles. This biodiversity provides an important resource for African people, but intensive use of forest species is bound to have an effect on indigenous biodiversity. Much of Africa’s remarkably biodiversity is protected by an extensive system of national parks, game reserves and forest reserves. DFID argues that sometimes these ecosystems are preserved- as protected areas or national parks- at the expense of local people’s use rights, more for the benefit of people living far away, in cities or in other countries (DFID, Biodiversity- a crucial issue for the worlds poorest).
2.3. Wealth and Wealth Creation in Africa

It can be argued that Africa’s natural capital is bigger than any other region in the world. Africa is endowed with an overwhelming abundance of rare and valuable natural resources such as 60% of the world’s diamond, 40% of the world’s phosphate, 30% of the world’s cobalt resources, oil, gold, uranium, metals, thick forests, big rivers, and long coastlines (table 2). In this sense, Africa is a wealthy continent. However, the wealth of Africa is benefiting only few Africans and many outsiders. Africa in total is not enjoying its wealth. Africa loses its wealth for others benefit among others through the central processes associated with exploitative debt and finance, phantom aid, capital flight, unfair trade, distorted investment, ecological exploitation and the ‘brain drain’. (Bond, 2005). For example the third World repayments of $340 billion each year that flow northwards to service a $2.2 trillion debt, more than five times the G8’s development aid budget, notes Patrick Bond. In addition Africa’s citizens experience depletion of assets like forests and mineral resources, and suffer the impact of pollution as a result of mining. Patrick Bond keeps on arguing that Sub-Saharan Africa today still suffers the dispossession of wealth, along two trajectories: South-North resource flows, and adverse internal class formation.

Table 2: Africa Mineral Resources

<table>
<thead>
<tr>
<th>Region</th>
<th>Mineral resources rich %</th>
</tr>
</thead>
<tbody>
<tr>
<td>South Africa</td>
<td>Diamonds (12), Gold (19), Manganese (5), Nickel (6), Phosphat (8), Platin (88)</td>
</tr>
<tr>
<td>Congo, DR</td>
<td>Diamonds (26), Cobalt (45), Copper (2), Zink (1)</td>
</tr>
<tr>
<td>Guinea</td>
<td>Bauxit (30)</td>
</tr>
<tr>
<td>Botswana</td>
<td>Diamonds (22.6)</td>
</tr>
<tr>
<td>Namibia</td>
<td>Uran (7.1), Zinc (1.2)</td>
</tr>
<tr>
<td>Morocco</td>
<td>Phosphat (32), Zink (1)</td>
</tr>
<tr>
<td>Zambia</td>
<td>Copper (3.4), Cobalt (3.6)</td>
</tr>
<tr>
<td>Gabon</td>
<td>Manganese (3.4)</td>
</tr>
<tr>
<td>Niger</td>
<td>Uran (2.4)</td>
</tr>
</tbody>
</table>

Source: Bundesanstalt fur Geowissenschaften & Rohstoffe, 2006
3.0. WEALTH CREATION IN AFRICA BY THE INDIGINOUS

3.1. Locally

This case study depicts the situation of wealth creation by the local population in Kilimanjaro Region of Tanzania. It is an abridged and modified version of a paper prepared by Clement Kwayu and Samuel Moshi for Kilimanjaro Regional Investment Forum. The paper titled “Investment Potentials and Business Opportunities in Kilimanjaro Region” analyzed the entire regional potential for increasing incomes. The aspects brought are those relating to production of wealth, mainly through Agriculture by the small scale producers. The case is presented because the factors that influence the creation of wealth are found in many areas of Africa.

3.2. Kilimanjaro Regional Setting:-

Kilimanjaro region is at the center of a unique socio–economic–geographical region, extending as far as and including Tanga, Mombasa, Nairobi, Arusha and Manyara. The people of Kilimanjaro are close relatives of the people of this extended region. Their culture is a unique blend of cultures of the entire region. Geographically, the region combines features of coastal lowlands and alpine configuration, both of which result in a variety of soils, climate, and vegetation and consequently a differentiated pattern of economic activities. Kilimanjaro Region, with a population of 1.4 million, has an area of 13,309 km<sup>2</sup>, with a population density of 104 people per km<sup>2</sup>, compared with the national average of 37 people per km<sup>2</sup>. The highlands of Kilimanjaro, however, where most farming takes place, have a population density of over 350 people per km<sup>2</sup>. The region has four ecological zones, namely: the mountain peaks, the highlands, the midlands and the lowland plains. Each of these zones has unique ecological characteristics which determine patterns of socio-economic activities and investment opportunities. These characteristics are summarized in table 3.

<table>
<thead>
<tr>
<th>ZONE</th>
<th>ALTITUDE RANGE METRES</th>
<th>DOMINANT SOILS</th>
<th>RAINFALL MM</th>
<th>TEMPERATURE °C</th>
<th>POTENTIAL; ECONOMIC ACTIVITIES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kilimanjaro Mountain</td>
<td>1800-5895</td>
<td>Volcanic</td>
<td>2000+</td>
<td>Below 15</td>
<td>Tourism Timber Forest products, NTFP</td>
</tr>
<tr>
<td>Peaks</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Highlands</td>
<td>1100-1800</td>
<td>Volcanic</td>
<td>1250-2000</td>
<td>15-20</td>
<td>Tourism, temperate crops, fruits, vegetables</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Fodder, dairy and, NTFP</td>
</tr>
<tr>
<td>Intermediate Zone</td>
<td>900-1100</td>
<td>Moderately Fertile Soils</td>
<td>900-1250</td>
<td>20-30</td>
<td>coffee, bananas cereals and beans Livestock,</td>
</tr>
<tr>
<td>Lowlands Plains</td>
<td>Up to 900</td>
<td>Variable Fertile Soils</td>
<td>700-900</td>
<td>Above 30</td>
<td>Variety of tropical Crops, beef, goats, Fishery, NTFP, Folder</td>
</tr>
</tbody>
</table>

Table 3: Kilimanjaro Agro-Ecological Zones.

There are two rainy seasons, the major one extending from March to May and a minor one between October and December. The pattern of economic activity is very much influenced by the amount of rain and actual distribution of the same. In many areas of Kilimanjaro, rainfall has to be supplemented with irrigation.

The mainstay of Kilimanjaro economy is agriculture. The main crops are coffee, wheat, sugar cane, cotton, cardamom and sunflower as cash crops. The major food crops are maize, bananas, beans, fruits, sorghum, cassava and paddy. Total cultivated land is about 401,000 ha. (2000-2001). Kilimanjaro with a dairy cattle herd of 123,000 is leading the nation in the number of grade dairy cattle. In addition to these there are about 420,000 indigenous beef cattle, and 700,000 small
animals. In 2000 Crop farming contributed 77.2% of the agricultural sector while livestock contributed 16.2%.

Income per capita in Kilimanjaro region rose from US$ 108 in 1994 to US$ 194 in 2000. While in 1988, Kilimanjaro ranked 3rd in per capita income among 20 regions, in year 2000 it ranked 7th. This is one of the indicators of slow rise in incomes of the people.

In terms of Human Development Index (HDI), Kilimanjaro with an index of 0.603 was ranked second to Dar es Salaam (0.734). The national average is 0.482. This index takes into account life expectancy, literacy, primary school enrollment, education and economic expenditure. However there is a paradox to the apparently high HDI. This is shown by the low economic expenditure index of 0.327. We can safely conclude that the relatively good quality of life is a result of past investment and the resultant good infrastructure. Persistence of the current situation will soon see the quality of life drop drastically just of that of income.

3.3. Kilimanjaro Region Investment Matrix:-

According to J. B. Say, entrepreneurs shift resources from areas of low productivity into areas of higher productivity and yield. In Kilimanjaro Region, considering resources, their basic conditions, action factors that make resources productive, productivity and yield, we may arrive at conclusions as depicted in table below.

Table 4: Kilimanjaro Region Investment Matrix:-

<table>
<thead>
<tr>
<th>Resource</th>
<th>Basic conditions</th>
<th>Action factors</th>
<th>Productivity</th>
<th>Yield</th>
<th>Conclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Land</td>
<td>Scarce. Dry, expensive, Tied up</td>
<td>Capital, Knowledge, Institutional reforms</td>
<td>Medium to low</td>
<td>Low</td>
<td>Shift to areas where larger quantities are available.</td>
</tr>
<tr>
<td>Human Resources</td>
<td>The majority the inhabitants Fairly literate, with reasonable skills in agriculture. Low productivity</td>
<td>Capital, land</td>
<td>Medium to low</td>
<td>Low</td>
<td>Shifts to areas of higher pay.</td>
</tr>
<tr>
<td>Capital</td>
<td>Fairly well developed infrastructure of roads and electricity. Idle capacity in machines and buildings. Low supply of money</td>
<td>Land, Human resources</td>
<td>Limited market and low purchasing power make productivity low</td>
<td>Low</td>
<td>Shift to some other places.</td>
</tr>
</tbody>
</table>

In the past, the purchasing power in Kilimanjaro was relatively high, mainly due to good coffee prices. Related industries such as coffee-curing, bag manufacturing, construction, food processing and provision of social services increased employment and incomes. Development of dairy was encouraged by ready demand for milk. High meat consumption made a tannery feasible. These encouraged investors to invest in Kilimanjaro Region. With the collapse of coffee industry, the regional economy slumped. A lot of economic ventures were no longer profitable. Resource productivity and yield was low leading to the flight of investment.

The fall in price of coffee, is not the sole explanation of the collapse of the coffee industry or the economy of the region as a whole. Other factors include infestation by coffee berry disease (CBD), unrealistic foreign exchange rates, nationalization, collapse of institutions, notably the co-operatives, frequent change of policies notably those relating to agriculture, and restrictive bureaucratic practices in business.

Kilimanjaro has been experiencing changes, some of which are global but many national. The people find themselves impoverished. Investment is flying away. Business is rather stagnant.
What is needed is a duo action that addresses the international issues and managerial entrepreneurship that will exploit the changes and turn round the situation. This requires new mind set.

3.4. **Investment Areas in Kilimanjaro Region:**
The Japanese International Development Agency, JICA, undertook an in-depth study of the whole Region in late 70s and early 80s. JICA identified key development constraints as follows:

(a) **Population Pressure:**
The observations made by JICA in 1978 were that the population figures did not match availability and distributions of scarce resources particularly when taking into account that only about one third of the land, notably around the slopes of Mt. Kilimanjaro, was intensively under farming – coffee and bananas. The other two thirds was arid land under livestock and annual crops.

(b) **Land Pressure:**
Land under agriculture was not efficiently and effectively utilized because most farmers were not using agro-mechanization and production per unit area was very low.

**JICA development strategies were:**
- To place greatest emphasis on agricultural development for expansion of employment opportunities by increasing production per unit area on the already cultivated land area;
- To implement irrigation for suitable crops both for local consumption and export;
- To develop small scale industries for expansion of employment opportunities in both urban and rural areas;
- Develop Northern Circuit which forms a link of the Kilimanjaro and Arusha Regions and plan the promotion of national and international tourism;
- To consolidate economic infrastructure, plan the adjustment among concrete plans of agriculture, small scale industries and tourism development;
- To consolidate the social infrastructure, and place emphasis on the welfare and education of residents who settle in the new land for agricultural use without differentiating urban and rural parts; and
- To expand human capacity building and improve the spread rate of education.
- JICA came up with a number of proposals for possible investment opportunities in Kilimanjaro.

3.4.1. **Investment Areas in Crop Production:**
**Intensification of crop production through improved husbandry.** Productivity is a measure of yields in relation to resources used. The per hectare yields of small scale farms in Kilimanjaro Region are far below the expected average. Let us take a few examples
Table 5: Crop Current Yields

<table>
<thead>
<tr>
<th>Crop</th>
<th>Yield: per acre – Tons</th>
<th>Standard -Tons</th>
<th>%age of actual over standard.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coffee</td>
<td>0.2</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td>Maize</td>
<td>2.1</td>
<td>7.5</td>
<td>28</td>
</tr>
<tr>
<td>Beans</td>
<td>0.8</td>
<td>3.5</td>
<td>23</td>
</tr>
<tr>
<td>Bananas</td>
<td>11.5</td>
<td>55</td>
<td>20</td>
</tr>
<tr>
<td>Barley</td>
<td>2.7</td>
<td>4.0</td>
<td>68</td>
</tr>
<tr>
<td>Wheat</td>
<td>1.5</td>
<td>4.5</td>
<td>33</td>
</tr>
<tr>
<td>Paddy</td>
<td>2.7</td>
<td>10</td>
<td>27</td>
</tr>
<tr>
<td>Groundnuts</td>
<td>0.7</td>
<td>2.2</td>
<td>31</td>
</tr>
<tr>
<td>Potatoes</td>
<td>5.0</td>
<td>40</td>
<td>12</td>
</tr>
<tr>
<td>Finger Millet</td>
<td>0.8</td>
<td>6</td>
<td>13</td>
</tr>
<tr>
<td>Ginger</td>
<td>10.0</td>
<td>40</td>
<td>25</td>
</tr>
<tr>
<td>Vegetables</td>
<td>8.4</td>
<td>40</td>
<td>21</td>
</tr>
<tr>
<td>Average</td>
<td></td>
<td></td>
<td>25.5</td>
</tr>
</tbody>
</table>

Table 6: Production of Main Food Crops – 1995/96-2000/2001 Tons

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Paddy</td>
<td>47000</td>
<td>39483</td>
<td>(7517)</td>
</tr>
<tr>
<td>Beans</td>
<td>21367</td>
<td>20872</td>
<td>(495)</td>
</tr>
<tr>
<td>Bananas</td>
<td>657510</td>
<td>607990</td>
<td>(49520)</td>
</tr>
<tr>
<td>Irish Potatoes</td>
<td>54018</td>
<td>77530</td>
<td>(23512)</td>
</tr>
<tr>
<td>Cassava</td>
<td>40540</td>
<td>30683</td>
<td>(9857)</td>
</tr>
<tr>
<td>Sweet Potatoes</td>
<td>2020</td>
<td>13145</td>
<td>11125</td>
</tr>
<tr>
<td>Maize</td>
<td>183045</td>
<td>126607</td>
<td>(56438)</td>
</tr>
<tr>
<td>Sorghum</td>
<td>35464</td>
<td>369</td>
<td>(35095)</td>
</tr>
<tr>
<td>Finger Millet</td>
<td>4350</td>
<td>38</td>
<td>(4312)</td>
</tr>
</tbody>
</table>

**Source:** Kilimanjaro Regional Agricultural Office Reports 2001

Several reasons are attributable to this low productivity. In many cases land fertility is depleted. These crops have been cultivated on the same land for almost 100 years. Extension is not accompanied by soil tests and methods of replenishing the soil. Asking people to just apply fertilizers is not scientific or practical enough to improve yields.

The other possible reason has to do with seeds and variety of crops. Although a lot of research on better yielding varieties has been done, the practice of use of these varieties has not reached the people. Practices in better seeds are much more in maize than in some other crops.

The third reason for low yields has to do with low knowledge in agriculture among the farmers. Many farmers claim that farming is their culture. In so doing they defy any learning of new practices. They also have not learnt from their fathers because farm work is done when the children are at school. In schools, agricultural teaching is a mockery even in those schools biased on agriculture because the gap between textbook farming and practical farming is very wide. In offices and factories information technology has replaced old practices. Computers for instance have replaced typewriters and a whole cadre of secretaries is quickly dying. In farming practice among the small holders the practices are both outmoded and corrupted. There were better coffee husbandry practices in the fifties than today.

The fourth reason for low yield is little labour input. In offices, work is a minimum of eight hours a day. In farm areas, people spend hardly four hours. Plant tending including pruning, weeding, pest control, soil improvements, harvesting and processing are done very haphazardly. This problem was worsened by the falling of coffee prices resulting in lower farmer incomes. Farmers could no longer finance inputs such as fungicides. Finally, the marketing arrangements and prices do not provide adequate incentives for farmers to put more efforts in farming.
It is important to note that the lowest yield (6%) is in Coffee. Coffee introduced in Kilimanjaro in just over a century ago, grew to become in the 60s and 70s both the largest contributor to GDP and foreign exchange earner. Kilimanjaro at its peak used to produce 40% of the national crop equivalent to 2000 metric tons. It is coffee which gave impetus to early economic growth and development of social and physical infrastructure that has given Kilimanjaro relatively higher living standards.

There are three blows that have brought coffee down:
First is the very nature of coffee industry. It is produced in tropical climate in developing countries, processed and consumed in developed countries. Processing took place mostly in Europe, because processed coffee in Europe attracted more tariffs than raw coffee. Expertise and lobbing has developed in these countries such that quite a number of them export more coffee than producers. German for instance is the fourth largest exporter of coffee. Tanzania, the producing country remains a raw material exporter, with little value added to coffee, making it earn only 8% of the value of retail coffee. Kilimanjaro then at its peak production and at prices of U$2 per kg could bring home about U$ 4 m. per year. This had to be shared among the farmers, co-operatives, the Marketing Boards and whosoever participated in getting the raw bean reach the sea. The rest of the world had U$50 m. to share. In the 70s, World Bank and IMF advised producing countries to increase production to raise incomes and foreign exchange. More coffee came into the market pulling down the prices. Meanwhile prices of inputs, mainly chemical imports from industrialized countries rose. The coffee farmers become worse off. Incentive to produce declined.

Secondly, to worsen things in Tanzania, foreign exchange rate against foreign currencies was artificially held down so that the purchasing power of coffee producers for food and other consumables within their own countries became unfavorable.

Thirdly, the institutional arrangements in coffee production become very much disturbed by frequent changes following genuine policy changes but also frequent technical advice from foreign experts. The co-operative structure, the coffee marketing structures, pricing of both the crop and inputs all experienced rapid and fundamental changes very adversely affecting coffee.

The last blow was the market liberalization policies which completely disrupted the coffee marketing arrangements. The effect of all this is that coffee production is no longer profitable to the small farmers. Attempts of the government to revive the crop over the last 20 years have fallen on rocks.

With fall in coffee prices and liberalization other industries also collapsed. In Moshi, coffee sisal bags factory, tanneries, timber utilization factory, grain milling, animal feeds plant and a number of small scale industries all collapsed causing unemployment of over 30,000 people. The current effort of continued production of coffee encompasses large private firms, most of them with foreign connection taking over and running the once nationalized farms on a large scale. This is producing coffee, although it is likely to cause clashes between this large farmers and peasants on water use.

Production of nearly all crops as seen in Table No. 6 is on the average 25.5% of the standard level. For key crops like coffee, the production level is only 6%. Table No. 6 shows that between 1995/96 season and 2000/01 production of key food crops declined. If productivity could be improved to bring the level of production to 51% i.e. double the present level, Kilimanjaro GDP would double from the current Tsh. 290,317 million to Tsh.580, 634 million. This would bring the region into third position after Dar es Salaam and Arusha. The multiplier effects on trade, transportation and subsequent employment would raise the expenditure index raising demand and
re-stimulating local industry. The current low productivity in agriculture contradicts the myth of land scarcity.

To increase productivity, one has to work on the entire above factors. Some actions have to be done by farmers themselves. The Government must do others. Investment on the land by the farmer is too small to increase yields substantially. Some of the steps that can be taken include:

i. **Provision of Irrigation Infrastructure Works:**
   In Kilimanjaro irrigation is traditionally the center around which things are organized. The lowest unit of administration and the most important one was organized around a furrow. The local authority in villages was conferred to the traditional irrigation leader for irrigation furrows. The furrow management was however based on the then existing water sources, water levels, population densities, settlement patterns cultural practices and political systems of administration. All these variables have changed substantially. The need now is re patterning of the entire system of irrigation in order to create a workable structure. The new structure may need a feasibility study. It is however envisaged that given the current situation, construction of dams, drip (perforated pipe) irrigation and overhead sprinkle irrigation systems may have to replace the surface canal irrigation system on the smallholdings on the mountain. The irrigated land on lower areas of Kilimanjaro will have to be greatly expanded. This infrastructure has to be done by the government, or a large company that will have to charge water users in the same way as drinking water or electricity is charged. This is an investment potential as well as business opportunity.

ii. **Improved Soil Management Techniques and Practices:**
   These improvements require first of all extension services equipped with soil testing and analysis facilities, continuous training and demonstration in improved practices. Secondly there is great need for land development capital per acre. In Israel, land development is estimated to cost about US$ 3000 per acre. Here in Kilimanjaro nothing is invested on the land development. Such aspects as terracing, water installation, fencing and soil treatment have been taken for granted. Thirdly, rethinking is needed on the current spatial management of land. How far should land be subdivided among descendants? How well can a small household manage fragmented parcels of land spatially located in different areas 5-15 km away? What is the value of land where a person is buried? To what extent should we allow haphazard buildings on land?

iii. **New ways of Training the Farmers to Change Attitudes and Practices.**
   That farming is a business may be a fact in Kilimanjaro. Coffee farming thrived on this notion. The incorporation of this concept to all crop farming and livestock keeping activities accompanied by alert awareness and response to market demands is not yet. Capacity building in this area is badly wanted. Production and marketing techniques all want improvements through intensive training. The mentality of “kazi ya jadi” (Traditional works) must be destroyed. Accountants, doctors, pharmacists and various skills need licenses and certificates to practice. It is high time that this was introduced to farming. In addition to entrepreneur skills, farming practices in seed selection, breeding, plant tendering, harvesting and preparation for marketing all need to be beefed up.

iv. **Inadequacy of Institutional Arrangements that Supports Small Holders.**
   Throughout the history of our country, it is only cash crops that had organized marketing and reasonable inputs supplies system. Experimentation with crop authorities, fragmented village based co-operatives and latest liberalized crop marketing system all left the farmer without proper marketing channels and input supply arrangements. There is need for serious thinking and action in this area.
v. Policy Issues
National policy initiatives have for a long time impacted Agriculture. In Kilimanjaro, nationalization of estate farms without properly defined management arrangements did a big blow to the regional economy. The former policy of fixed foreign exchange hurt the regions with export crops for about three decades. This made production of cash crops uneconomic. The global and old age debate on what constitutes an agricultural policy is not yet settled in Tanzania. At one time Government supports strategic food reserves and set minimum prices. Subsidies are available. Some advice to the government from thin air changes such policies with devastating effect on the farming community. Absence of strong farmer organizations has made it difficult to redress the situation. Development strategies based on agriculture must be supported by well thought out national agricultural policy.

vi. Perception and Value System
Changed perceptions and value systems may be calling for a complete shift in thinking and activity. The official mentality in Kilimanjaro is that Coffee is the “cash crop”. It is the golden egg. Even if a nationalized farm is having a good maize crop after which tons of fodder for animals are harvested, it is classified as 100% non-performing if there is no coffee on it. Worse still is if the mode of production is decentralized, such that several peasants are managing the seasonal production of maize. Our old fathers would pick a bean of coffee falling on the ground. They would build drying beds to ensure quality. Today’s generation care little for these things. The technically researched possibility of producing 5-7 kg of coffee per tree is a myth to growers because no body is working on this. With current production of less than half kg per tree, production on the same land and same number of trees would increase tenfold. Re-thinking leading to re-patterning of activity may be what we all need. This may not apply to coffee only, but perhaps to every aspect of what gave Kilimanjaro the glory of the past including education, land management, animal husbandry and commerce. There seems to be incongruity between reality as it is and reality as is perceived to be.

3.4.2. Investment Areas in Livestock Production
i. Commercial fodder production is a large investment potential and business opportunity in Kilimanjaro. Zero grazing is a centuries old practice. The heart, the psyche and actions of Masai translated what was seen as cattle into a project that ensured confiscating of the same or else a bloody war. In certain cases traditional beliefs had it that if milk cows were seen by certain evil eyes, milk yield would decline. The answer to these and other related issues were zero grazing. This has fitted well in the environmental protecting needs and declined grazing land. This immediately raises demand for fodder crop.

ii. The grazing land is very much limited in Kilimanjaro. If on the average one herd of cattle needs 2ha of pastureland, the 541,000 strong herd of cattle requires 10800 km2. The small stock animals numbering over 700,000 require another 2800km2. This land is not available. It does suggest the region is already very much overstocked. The clash between pastoralists and agriculturalists is imminent. Similarly, clashes between Large scale estate owners and peasants who practice zero grazing is just a matter of time. The answer to this is intensive production of affordable fodder crop that support zero grazing or enclosed ranches. This combined with feeds factories is a big business opportunity. The livestock industry needs to be properly planned and managed through improved husbandry coupled with marketing practices that make business out of it.
iii. Milk production, collection and processing is both an investment area and a business opportunity. Under smallholder production there is a great need for organized milk collecting activity. This requires a milk processing plant.

iv. Production of small stocks like pigs and poultry is scattered and unorganized. The market is severely limited. Possibilities of Dares salaam and the Middle East are wide, if production costs can be kept down. This calls for innovation. Provision of veterinary services, including cattle dip spraying services and private extension services for livestock keepers is a big business opportunity in Kilimanjaro.

3.4.3. Investment Related to Industrial Agro Processing:–
Apart from coffee curing and sugar refinery there is little processing of Agriculture produce in Kilimanjaro. Flour milling and rice hulling and oil expelling are done on small scale process mainly to food for home consumption. Processing adds value, shelf life, marketability, employment and incomes. Absence of it increases post harvest losses and discourages expansion of production.

A variety of agro-based industries can thrive well in Kilimanjaro. The first major category would be an integrated food processing plant producing both human food and animal feeds. Grain milling produces flour for human consumption. The byproducts in form of marsh are good raw materials for animal feeds. This is also the case for oil seed pressing. The oil is for human consumption while the cake is for animals. The food products have markets beyond the region and even beyond the country. The animal fodder has enough market within the region. Market is guaranteed. The raw material base is large. Grains and seeds can be secured from within and from neighboring regions of Arusha, Manyara, Singida and the Lake belt. Fruits and vegetables processing for both local consumption and export are potential business opportunities in Kilimanjaro. Scattered productions in very small quantities make assembling of sufficient quantities difficult. This is an area in need of operation.

3.4.4. Investment in other areas:–
There are a number of areas in Kilimanjaro where profitable investment that would create wealth, restore ecology and greatly reduce poverty. These include investment in roads, transport and communications; energy sector; forest plantations and timber industry; tourism, manufacturing and financial services. All these need careful balance between local policies, careful extension, training programs and national policies that guard against dumping of foreign manufactured goods. As said early, trade liberalization opened markets through removal of tariff. All industries at Small scale industries estate were wiped out. They alongside medium size industries were closed reducing Moshi into a rural town. Unfortunately the fortunes from coffee that had caused Moshi to grow had also gone. Today, foreign goods including foodstuffs from countries with higher technology and subsidized agriculture find their avenue in Moshi. They fill the shops. The poor people have to complete that little portion of price left off the huge government subsidy in Europe. This keeps them out of profitable jobs but makes them hunt for daily subsistence employment perhaps in a flower farm.
To make investment in these other sectors profitable in the long run Kilimanjaro must make an investment in education. A little explanation of this is needed.

3.4.5. Investment in Education Sector:–
Historically, education has played a key role in the development of Kilimanjaro Region. The existing institutions of learning can’t meet the existing demand. Investment in education will help in creating opportunities in skills especially new technical skills necessary to cope with change. Availability of technical skills will strengthen technical base
necessary for the future development of the region. This will enhance socio-economic opportunities, which will make the region more attractive to both foreign and local investment.

Investment in Education is mother of all investments in terms of its magnitude, longevity, and return on investment. Quality education is done over a span of 20 years. Yields begin almost after 25 years. It involves individuals, parents, community the government and at times the community of nations. The ultimate result is knowledge packed in a person. If the education is given en mass, the result is knowledge society.

Knowledge society under programmes of continuing education results in a learning society. Such investment is a vehicle for development. It is also a goal in itself. It is a development product. Returns on such an investment are very high. Today, there are knowledge workers earning US$ 1000 to 3000 per day. US$ 200-500 per day is very common. These workers have no borders. Discrimination does not reach them quickly. Their resources are not vast expanses of land, minerals or capital. This resource is capable of endowing resources with a new capacity to create wealth. It can innovate thus changing the wealth producing potential of already existing resources. It changes the yield of resources. As noted earlier, this is what Kilimanjaro needs.

Currently the resources in Kilimanjaro have a low yield and low productivity. The natural behaviors of entrepreneurs will be to shift them to some other areas within or outside the country where yields are high. Else educated people from other areas have to come in with innovation that is endowing resources with new value to enable them to yield more.

For education to be a meaningful investment, it must be purposely directed to embody enhancement of thinking skills, creation of new and positive attitudes, instilling of right morals, discipline and correct work attitudes.

Major areas of investment are:-
   i. Establishing new schools and expanding the existing ones;
   ii. Construction of Hostel facilities particularly for female students;
   iii. Establishing technical training institutions;
   iv. Provision of education materials;

3.5. Gender in Relation to Wealth Creation, Poverty and Ecology in Africa

Gender, if defined in terms of roles assigned according to sex by the society, is very well manifested in Africa. Most societies, if not all, in Africa have, at least traditionally, very clear identification of specific role for both sex and even age groups in certain traditions such as Maasai of Eastern Africa. In Africa, women are after children while men herd flocks; these have automatically given an African woman more responsibilities than what is perceived. In taking care of children, women are responsible for food and shelter. A typical African woman would therefore work her sweat out to make sure her children are at least eating. The main activity since time immemorial is to produce food and/or generate income through agriculture. Most women are small scale farmers (peasants) who produces just enough for consumption and sell whatever remains. In Malawi for example, 70% of farmers are women and contribute 87% of total agricultural labour force. (One third of farming households in Malawi, and one fifth in Zambia, are headed by women (Curtis, M. 2007). This is an emblematic African woman who has been creating wealth- tilling the land. In spite of comparatively few educated women, together with rural-urban migration and other factors, which have led to some women performing similar roles as men; huge chunk of Africa population still live in their traditional set up.
Therefore, agriculture being the main activity in wealth creation by African women, its recent upheavals in relation to modes of production, market, and environmental concerns, has been a pain for both an African woman and man, but mostly to women. Rekha Datta argues that there’s a decline in women participation in labor force in African countries such as Kenya, Nigeria, Senegal, Zaire and others. She adds that this can be explained by mechanization and modernization in the agricultural sector. As factories and mills replaced traditional modes of agricultural production more and more women lost jobs in the agriculture sector (UN 1994 World Survey: Rekha Datta, 2002).

Both former modes of wealth creation and the modern ones, lead to increased poverty to African women and ecological destruction. This is because, in the old modes of production, land was tilled on and off without allowing natural re fertilization of soil nutrients which in itself is a disaster to ecology and poverty creator as production declines over time. Zambian government figures suggest that 15% of all female headed households survive on just one meal per day (compared to 9% for male-headed households) less than a third eat three meals (Curtis, M. 2007).

The modern modes of production which uses mechanizations, creates poverty by taking out women out of income earning activities and forces them into marginal lands. This modern mode of production increases wealth but leads poverty to women and ecological destruction from various angles. Agricultural activities are one, but good example to show the linkage between gender, wealth creation, poverty and ecology in Africa. In this context, it’s clear that, an African woman is trapped in this web of being responsible for creating wealth, and suffers both poverty and ecological destruction. This is a vicious circle in itself.

4.0. WEALTH CREATION IN AFRICA BY FOREIGNERS- CAPITAL FLIGHT

In Africa, wealth is not created by Africans only. This has been a historical trend, whereby people from Europe and Asia come to create wealth out of Africa’s natural and human resources.

Capitalism and more over globalization have widely opened doors for companies and individuals to create wealth wherever they can. Africa, with weak policies and institutional structures, together with the blessing of rare valuable resources, has been an ideal place for foreigner to create enormous wealth at cheap production costs but with very high poverty and ecological costs.

Wealth creation from Africa has not only been in terms of exploration and extraction of natural resources, but also financially. The game of international credits and debt servicing have drained Africa’s financial resources obtained from her natural resources, agricultural export, and any economic activity that earn something to Africans.
Figure 4: FDI inflows to Africa, 1994-2000 (Billions of dollars)

Source: UNCTAD, FDI/TNC database.

The following cases from Tanzania, Zambia, and Nigeria explains how natural resources are extracted in Africa to create wealth both inside and outside Africa leaving poverty and ecological destruction behind.

CASE STUDIES

4.1. TANZANIA

Tanzania is one of the poorest nations in the world. According to the World Resource Institute data, the Gini Index for Tanzania is 35. Population living by less than 2$ a day is 90%, and life expectancy for both sex is 47 years. The World Bank categorizes the country as one of the Highly Indebted Poor Countries (HIPC). The economic reforms, which have been going on since 1992 have improved Tanzania growth rate with limited impact on poverty. Anders Danielson explains two reasons for this: First is the pattern of growth which is currently biased to sectors with weak linkages to other sectors and with limited participation of the poor, such as mining and tourism. This implies relatively low poverty elasticity. Secondly the institutional structure designed for delivering social services is weak and often characterized by inertia and leakages that are hampered by inadequate resources for non-salary recurrent expenditure.

Natural resources are major sources of Wealth Creation in Tanzania. The country is endowed with various natural resources such as tanzanite, gold, diamond, wildlife, lakes, rivers, a long coastline, and forestry. Revenue collection by the Ministry of Natural Resources and Tourism has increased from USD 8.4 million in 1995/1996 to USD 26.5 million in 2004/2005. (MNRT, 2005A; TRAFFIC, 2007). The control and access for such resources are two determinant of wealth creation. Considering governance status, corruption, weak policy implementation, together with weak institutional structure, only few Tanzanians can have access to these resources for wealth creation. As they create wealth out of these resources, they make many poor while destroying the ecology.

The following documentation of logging traffic in Tanzania is a good case describing wealth creation, poverty and ecological destruction:
LOGGING IN SOUTHERN TANZANIA- Wealth Creation, Poverty ad Ecological Destruction.

Simon A.H. Miledge, Ised K. Gelvas, and Antje Anrends,
FORESTRY, GOVERNANCE AND NATIONAL DEVELOPMENT:

Summary Description of the issue:
Forests and woodlands cover around 40% of the total land area, and support the livelihoods of 87% of the poor population who live in rural areas. Over 90% of energy used in Tanzania is wood fuel derived from the forests. Forests and woodlands are therefore crucial to the livelihoods of many Tanzania. The Government has a policy to govern forest management.

The current policy, as set out in the formal laws and regulations governing the management of forestry resources, is systematically being manipulated by domestic and foreign private sector interests in concert with senior Tanzanian and foreign government officials. Consequently, the forests are being depleted at a rate that means that they would not be available to contribute significantly to the livelihoods of future generations. In addition there are massive revenue-collection shortfalls at every level of government and significant, long-lasting negative effects on the environment.

Forestry has continued to degrade at an alarming rate At the harvest rates experienced during 2003 and 2004, and based on official forest inventories, it is apparent that all harvestable Class I and II trees in Rufiji and Kilwa Districts will have been felled within 20 years. The deleterious effects of deforestation on water catchments, hydroelectricity, soil erosion, fire outbreaks and the status of biodiversity are now evident in many parts of the country. Between 1970 and 1998, Tanzania lost around 10 million hectares of forest land through uncontrolled clearing of forests mainly for agricultural and livestock expansion (FBD, 2001). Deforestation rates are estimated at 91 000-98 000 ha per annum (Mariki et al, 2003; VPO, 2002).

Wealth Creation: Trade in hardwoods from southern Tanzania dates at least as far back to colonial times, with exports to the Far East and Europe through Mtwara, Lindi and Kilwa ports. Following independence, poor infrastructure, and civil unrest in neighboring Mozambique, pushed many people to migrate towards urban areas, especially Dar es Salaam. Population density remained low and forest regenerated quickly. During the 1990s, heavy depletion of forest resources and increased Government intervention in places such as Tabora Region led timber merchants to start looking for alternative sources of hardwood. The miombo woodlands and coastal forests of Southern Tanzania soon became targeted as awareness grew regarding the utilitarian uses of lesser known commercial timber species. At the same time, the export market from Tanzanian hardwoods was expanding, enticing more people to invest in timber processing and export.

In August 2003, the opening of Mkapa bridge over the Rufiji River greatly increased access to forests in southern Tanzania. Due to the relative vacuum of effective controls, timber trade became very profitable and many people entered the business mainly to export round wood to lucrative overseas markets. 96% of timber during mid-2004 was illegal. Similar levels of illegality were likely to have occurred throughout 2003 when harvesting was rampant in southern Tanzania. Though official records showed around 21 000 metre cubic of timber was harvested from southern Tanzania during 2003 (worth USD 6.3 million freight –on-board, FOB), in reality over 500 000
metre cubic (worth around USD 150 million FOB) was likely to have been harvested for commercial purposes with the addition of unrecorded, illegal felling. Tanzania was the sixth largest timber exporter to China in 2005. Unfortunately, the globalization of markets and trade dynamics has also expanded the opportunity for collusive and concealed trade arrangements and transactions to unfold (Andvig et al, 2000). This has certainly affected the timber trade sector in Tanzania. The below table illustrates how reported Chinese imports of timber from Tanzania have greatly exceeded Tanzania’s reported total exports (i.e. to all destinations).

**Table 7: Comparison of timber export volumes (metre cubic) from Tanzania**

<table>
<thead>
<tr>
<th>Tanzania total export</th>
<th>China imports from Tanzania</th>
</tr>
</thead>
<tbody>
<tr>
<td>2002/2003</td>
<td>4920</td>
</tr>
<tr>
<td>2004/2005</td>
<td>5867</td>
</tr>
</tbody>
</table>

Source: Tanzania and China government statistics

Timber trade in southern Tanzania generates high profit margins. This is due to relatively high abundance of hardwood species targeted for export in recent years, the continued increase of value of logs from Tanzania (e.g. from USD 251 to USD 330 per metre cubic in 2002/2003 and 2004/2005 respectively). Other reasons include low levels of enforcement effort and low awareness of the true market value amongst rural communities. This enabled many traders to secure low purchase prices at the outset and subsequently avoid paying government royalties later on. The diagram in figure 1 below highlights the small percentage of profit from the hardwood timber trade that was retained at village level. For every cubic metre of Class I hardwood, village harvesters earned on average USD 3.50, equivalent to just five percent of the value collected by central government from harvest fees (USD 70 per cubic metre). At the time of export, it was worth around USD 330 per cubic metre, almost 100 times the price at village level, yet ironically no value had been added to the product.

**Figure 5: Diagram illustrating the value chain for hardwood lumber in Tanzania.**

Harvesters $3.5/mc → License fees $70/mc → Export $330/mc → Processed $1500/mc

**Lost Revenues:** Whilst timber-based revenues contribute a large proportion of some LGA budgets, current revenue is insufficient to finance both development and protective services provided by FBD. Disregarding revenue collected and retained at source, FBD revenue collected during 2002/2003-2003/2004 did not cover its budget (World Bank, 200B). Simply realizing more of the potential revenue would go a long way to strengthening growth.

Some major sources of revenue loss along the timber trade chain together with the main stakeholders affected are given in (figure 6). Unrealized revenue from logging basically fall into four broad categories, and may be further split according to whether or not they are accidental or deliberate in nature. Firstly, potential revenues are lost due to wasteful practices, which frequently results in significant quantities of timber left in the forests during harvesting. For example, during high intensity logging in southern Tanzania during late 2003 and early 2004 many non-commercially viable trees were felled by inexperienced loggers. The degree of accidental wastage was reportedly lower prior to steps taken to ensure greater community involvement in harvesting.
On a much larger scale, the branches were discarded following the felling of almost every tree destined for export from Rufiji and Kilwa Districts during the same period, a practice which represented around 30% wastage on every tree. Further wastage occurred at sawmills. The 2005 FBD evaluation of sawmills and other primary wood industries calculated 20-43% recovery rates, which was comparable to earlier figures of 30-40% for miombo woodlands sawmills (Moyo et al, 1986; MNRT, 2005b)

Table 8: Examples of unrealized revenues from logging in Tanzania

<table>
<thead>
<tr>
<th>Categories</th>
<th>Accidental</th>
<th>Deliberate</th>
<th>Estimate revenue loss</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wasteful practices</td>
<td>Harvesting non-commercially viable trees</td>
<td>Discarding branches after harvesting</td>
<td>10-30%</td>
</tr>
<tr>
<td>Under-collection (or underpayment</td>
<td>Insufficient management capacity</td>
<td>Illegal harvesting and trade practices</td>
<td>72-96%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Illegal or unreported exports</td>
<td>Up to 90%</td>
</tr>
<tr>
<td>Under-valuation</td>
<td>Royalties not reflecting market rates</td>
<td>Forceful underpayments to rural harvesters</td>
<td>Up to 75%</td>
</tr>
</tbody>
</table>

Secondly, under-collection of royalties (tax compliance) provided another source of revenue loss at all levels of government. Under-collection has been identified as a serious challenge to FBD with current revenues insufficient for the needs of sector (Mbonde, 2005; National Forest Programme; SAVCOR 2005). It can arise from both accidental grounds (e.g. misclassification as a result of unskilled checkpoint staff) and deliberate motives (e.g. illegal logging, unlicensed trading, cheating in classification and evasion of checkpoints). Moreover, traders’ efforts to ensure deliberate underpayment may also involve the collusion with other stakeholders (including public officials, i.e. corruption).

Poverty resulted: During the peak of timber trade activity in southern Tanzania up to mid-2004, collected revenue represented barely four per cent of timber harvested and transported.

The deliberate under-payment of forest product royalties is clearly the greatest threat with respect to achieving sustainable and broad-based growth, since it undermines efforts to create self-financing institutions, denies incomes to numerous stakeholders, and further fosters a culture of illicit forestry behavior. Some district councils would have been able to easily exceed their total annual budgets through more efficient forest product revenue collection. It is also possible that FBD lost some USD 58 million annually due to under-collection of indigenous forest timber product royalties at district level nationwide. Further financial losses are evident at the point of export, with Chinese import statistics in order of magnitude greater than Tanzania export statistics. (Table. 6)

A third category of unrealized revenue arises through under-valuation, whereby forest products are incorrectly priced or valued. Under-valuation in Tanzania normally happens as a result of not
using market-based scales and values for setting forest royalties. A recent World Bank review emphasized the importance of “correct pricing of traded economic goods and services that rely on forestry resources and services” (World Bank, 2005).

Whilst large, short-term economic benefits have been accrued to many rural communities— the true forest custodians in much of southern Tanzania— the majority of villages (unknowingly) lost considerable revenue as a result of widespread under-pricing practices. For example, it was normal for village harvesters to receive just USD 2.00 per metre cubic for logs that may have taken some 60-80 years to grow and sold at prices many factors higher (e.g. USD 200-300 per metre cubic of round wood on international market from Tanzania and even higher for parquet flooring produced in overseas markets). Local communities, the apparent custodians of the largest areas of forest that exist on general land (National Forest Policy, 1998) were largely unaware or disenfranchised of the true value of the resources under their jurisdiction. In reality it was increasingly common for traders to make fixed offers of less than USD 0.50 for a log during 2004, irrespective of the value (e.g. size, species or quality). This represented just one-quarter of the average price at that time (which was already under priced as described above). Nevertheless, many villagers continued to sell at such low prices, due to both ignorance of true values and poverty-related desperation.

**Ecology destruction:** The importance of sustainable yield basis of management for sustainable growth in the forestry sector was stressed in a 2005 World Bank study of growth and environment links (World Bank, 2005b). Unfortunately, irrefutable evidence serious forest degradation in southern Tanzania, including the 2005 FBD inventories that concluded most forests in Liwale and Tundururo Districts “are degraded” whilst those in Rufiji, Kilwa and Nachingwea Districts “are heavily degraded”. Independent forest surveys matched FBD inventory results, demonstrating a decline in forest status, moving southwards in line with relative harvest pressures. Other evidence of unsustainable timber trade was evident from changes in species composition, harvest areas and timber product dimensions over time. Even villages that have a long history of investment in JFM/VFR initiatives have witnessed unsustainable losses of their timber resources in a very short space of time, with minimal livelihood benefits. Further, management plans drawn up during these initiatives are now undermined by the decline in resource status.

A quick comparison of harvest levels in Rufiji and Kilwa Districts during 2003 and 2004 – a period of time when timber trade targeting the most valuable hardwoods peaked— showed how harvesting at the same intensity would have depleted supplies in less than 20 years.

**Table 9: Predictions of timber harvest outlook in Rufiji and Kilwa Districts**

<table>
<thead>
<tr>
<th>Total annual volume of timber actually harvested and transported α</th>
<th>Annual volume harvested including 30% wastage (branches left) β</th>
<th>Total harvestable timber recorded during FBD inventories γ</th>
<th>Estimated harvestable Class I and Class II timber δ</th>
<th>Theoretical number of years to harvest all harvestable Class I/II trees ε</th>
</tr>
</thead>
<tbody>
<tr>
<td>151,008 metre cubic</td>
<td>215,726 metre cubic</td>
<td>992,1087 metre cubic</td>
<td>416,6857 metre cubic</td>
<td>17</td>
</tr>
</tbody>
</table>

*Source: Field work; Malimbwi et al (2005a, b, c, d, e)*

*Notes: α Derived from two month field observation and extrapolation during 2003/2004
β Wastage during felling estimated to range 10-30%
γ Official FBD forest inventories conducted in 2005
δ Extrapolated from figure of 42% total harvestable timber in Rufiji District consisting of class I and II species.
ε Harvestable volume of class I and II species divided by total annual volume harvested.*
Comments
The case summarized above is an excellent documentation of how wealth creation can lead to poverty and ecological destruction. The case study is very professionally and very meticulously done, with unparalleled transparency. From our interest in wealth creation, poverty and ecology we note the following:-

1. Being rich in resources in itself does not lead to reduction of poverty or betterment of life for poor people in Africa. The rich resources attract exploiters both from within and outside to fully take advantage of both the resource itself and the people supposedly to be owners. Ignorance and poverty desperation of local people grease the exploitation. In our case, a natural forest is being degraded at an alarming rate. The villagers in these forests are receiving 1% of the value of timber ex Dar-es-salaam port. Worked out, it does not bring the villager at US$ 1 PPP. The trees which may have taken up to 80 years to grow are gone forever, with the ramification of destruction of wet lands, flight of certain species of fauna and animals, and climatic changes. The gains at harvest are temporary and short lived, so that very soon the whole area is left poorer.

2. The government both at local level and national level are denied incomes that would have gone to development administration. Illegal activity, falsification of documents and bribery make this possible. Linkages of the traders with both foreign and national government leaders at all levels make it a mockery for the government through good governance strategies to improve upon the situation.

3. Globalization makes it possible for dubious trading activities to take place. These activities rig the economy leaving the poor poorer.

4. At the centre of all activity, right from the village to international level, the issue of character embodied in ethics is absent. Integrity is simply not part of this business. It is the most important factor in the equation of looting and sharing the loot.

4.2. ZAMBIA
Zambia’s economic performance has been on decline since 1975. This has been reflected in nearly all economic indicators. For example, formal sector employment went down from 12 percent in 1996 to about 11 percent by the year 2000. Between 1990 and 2000 savings declined from 17 percent of Gross Domestic Product (GDP) over the past decade. Between 1991-1998, poverty levels increased from about 63 percent to 73 percent. (Nsemukila, 2001).

According to World Resource Institute, the Gini Index is 42, Population living on less than $ 2 per day is 94%, Literacy rate 68%, and life expectancy is 39 years.

Copper, more than anything else is what has kept Zambia in the world economic map. Zambia depends, largely, on copper for earning foreign exchange. Wealth in Zambia has been created on copper more than anything else. Despite huge copper mining extraction, Zambia is one of the poorest nations of the world. Most of the population in Zambia cannot afford basic household needs. For example, by 1991, an estimated 60 percent of Zambian households had an income below the cost of a nutritionally adequate food basket (PIC, 1991). Amartya Sen argues that, in the long run, poverty is a major determinant of chronic household food insecurity since the poor do not have adequate means or ‘entitlement’ to secure their access to food, even when food is available in local or regional market. (Sen, 1991)
The following Case Study, documented by the Christian Aid, is the typical example of how while a lot of wealth is created in Zambia, ecological destruction increases and many are made poor to the point of not affording food.

COPPER MINING IN ZAMBIA


Summary of the issue: Copper has been mined commercially in Zambia since 1928. In 2005 Zambia was the world’s tenth producer of copper, mining 435,500 metric tons each year. With Copper mining and the then prevailing high international prices, post-independence Zambia enjoyed a boom period, with a GDP in 1969 that was higher than Brazil’s or South Korea’s. Following concerns about the low rates of investment by mining companies, the Zambian government nationalized its mines in 1969. The government acquired 72.7% majority shares, Anglo-American – the former sole owners – retained 27.3% minority share. While the copper prices remained high in the early 70s, the nationalized copper mines contributed up to 2/3 of total government revenue, as well as services for the communities living around the Copper-belt.

External Pressures: As early as 1993, Zambia’s second Privatization and Industrial Reform Credit (PIRC II) from the World Bank required that the government study options for privatizing the state owned Zambian Consolidated Copper Mines (ZCCM). Consequently it was broken up to seven companies – (six mines and associated companies and one smelter) – and sold off as separate units for US$627 million.

By 1995 the World Bank and IMF had both extended loans to Zambia because of its acceptance of the condition that it adopt and implement plans within this framework. The World Bank repeated this demand in 1996 and 1999; the IMF repeated it in 1999. In 1996, privatization became a condition of Zambia’s debt relief under the HIPC (Highly Indebted Poor Countries) initiative.

The 1995 and 1997 Investment Acts set general royalty rate at 3%, with provision for lower rates if negotiated individually. It also provides for the possibility of writing off investments against tax and relief from customs duties, but the actual value of these incentives are left to individual negotiations. The mining companies themselves were instrumental in designing the mining act.

Environmental impact: Agreements that came out of those negotiations provide other incentives to the companies. For example, they are not responsible for environmental liabilities such as the slag heaps built by the state-owned enterprises, and they enjoy a higher permitted level of pollution than ZCCM had. In effect, the government is subsidizing the mining companies by dealing with their environmental problems.

Creating wealth at cost of poverty: Before privatization, the Zambian copper mine company fulfilled a number of social responsibilities, maintaining the infrastructure of towns in the copper belt, and providing health and education services to the population.

The sharing of these responsibilities post-privatization is itemized in some detail in the development agreements. However, the mining companies have generally contravened the agreements. Those companies that still run health and education services for employees and their dependents are now in the minority. At the time of privatization, a number of hospitals and clinics managed by the mines were closed down.

On top of that the mines had a deliberate program of supporting local businesses. A number of industries sprung up in the areas around the mines to support various activities. Since privatization, many of these businesses find that the new mine owners are less interested in buying from Zambian firms.
At the time of privatization, about 31,000 people worked in the mines – most of them on permanent contracts. Between 1997 and 2004, employment in the sector fell to 19,000. The current number is estimated at around 21,000 workers on pensionable contracts at the mining houses, another 16,000 employed indirectly via contracting firms and at least 1,900 employed by the mining companies on either fixed-term contracts or as seasonal or casual labor. Chambasi Mines (owned by Chinese state enterprise NFCA) operates a highly unusual system: of 2200 workers, only 52 have permanent contracts. According to Zambian Union of Mineworkers (ZUM), mining companies pay (salaries) less than 8% of the value of copper production for the year.

Table 10: Revenues to Government Forgone In 2004 at the Level Paid By ZCCM in 1992. (In US $)

<table>
<thead>
<tr>
<th>Year</th>
<th>production/ton</th>
<th>Price/ton</th>
<th>REVENUES</th>
<th>Gvt revenues rate</th>
<th>Gvt revenue actual</th>
<th>Actual received by Gvt</th>
<th>loss</th>
</tr>
</thead>
<tbody>
<tr>
<td>1992</td>
<td>400,000</td>
<td>2280</td>
<td>91.2m</td>
<td>21.9</td>
<td>200m</td>
<td>200</td>
<td>0</td>
</tr>
<tr>
<td>2004</td>
<td>400,000</td>
<td>2868</td>
<td>114.4m</td>
<td>21.9</td>
<td>251m</td>
<td>8</td>
<td>243m</td>
</tr>
</tbody>
</table>

Table 11: Royalties to Government Forgone from 2002-2004. (USD)

<table>
<thead>
<tr>
<th>Year</th>
<th>Royalties</th>
<th>Actual Paid</th>
<th>Loss</th>
</tr>
</thead>
<tbody>
<tr>
<td>2002</td>
<td>15.7mil</td>
<td>0.7mil</td>
<td>15.0mil</td>
</tr>
<tr>
<td>2003</td>
<td>17.9mil</td>
<td>2.1mil</td>
<td>15.8mil</td>
</tr>
<tr>
<td>2004</td>
<td>32.6mil</td>
<td>0.2mil</td>
<td>32.4mil</td>
</tr>
<tr>
<td>Total amount of royalties lost</td>
<td>63.2mil</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

From above, as a result of privatization, the government lost 243 million USD in the form of direct revenues and 63.2 million USD in royalties. The case study further demonstrates that during this period the companies earned 2.2 billion USD and paid taxes amounting to 24.5 million USD. It is clear that great amounts of wealth were created in Zambia at the substantial amount of revenues denied to the government. Such denial must have meant less for already impoverished healthcare system, education, infrastructure, and other essential services.

Comments

Privatization is a major instrument of Bretton Woods Institutions. It is argued that this introduces efficiency and releases the government from business, giving free hands on good governance. Often, pressure is exerted from all corners including from the National Institutions created to hasten privatization, to award the privatized industry to Foreign Firms. These may be MNC or TNC. In certain cases, it may even be as the case of the Chinese firm in Copper Mines or the Indian Company which took Tanzania Railways a State Corporation in the Mother country. There, unlike in Africa, governments don’t need their hands free of business to practice good Governance.

The contracts are complex. Often they are made secret even to the State organs or to news reporters. The investors have a bigger say. Often they are granted big tax concessions and other incentives to make attractive for them to ‘save the situation.’ Results as demonstrated in this case are that governments lose a lot of revenue. According to my calculations Zambia is losing in the form of tax revenue and royalties over 6% of GDP per year. Jobs have been lost. Related industries have closed down, so that the mining of the most important resource is not having a multiplier effect in the country. Between 2002 and 2004 royalties paid were USD 3m. as opposed to 66.2m, supposed to be paid. Lost royalties were USD 63.2 m. Why and how could this have happened? Cases of falsification of records, bribery, or just arrogance refusal to pay are common.
in Africa. The power of governments to collect taxes and reinforce agreements or contracts has
greatly reduced. Formal employment over the years has been reduced by 12,000. In African
one formal employment in a well paying firm supports about five other jobs. There is a
redistribution effect of wages earned in Africa in terms of economics, where did the USD 2.2
billion go to? This money goes where the capital and ownership comes from. Zambia is much
more impoverished with the privatization of investment. The environment issue was neglected at
initio. For years to come the heaps of soils dug out of ground, the holes and mining druggy will
remain a costly environmental task to Zambia.

The case for Zambia Copper Mining Industry is typical in Africa for both new mines and
Privatized Companies. Attempts to make contracts and operations transparent have in some
countries met resistance from the Governments. What has happened in Zambia may be happening
in Tanzania, Ghana or other countries. What is happening in DRC under such circumstances is
unimaginable.

4.3.  NIGERIA

Nigeria has the largest population in Sub-Saharan Africa with nearly 110 million in 1995 (World
Bank, 1996). Most of this population lives in poverty. Using the head-count index, it was found
out that an increasing number of Nigerians are living in absolute poverty: 38% in 1985, 43% in

Nigeria’s economy is characterized by a large rural mostly agriculture based traditional sector,
which encompasses about two-thirds of the population living in poverty, and by a smaller urban
capital intensive sector. According to the World Resource Institute, the Gini Index of Nigeria is
44, and Life Expectancy for both sexes is 44 years.

Ironically, Nigeria is blessed with natural gas and oil. It is the seventh largest exporter of oil in the
world. The exploitation of the nation’s oil resources and the management of oil windfalls have
dominated the progress and decline of Nigeria’s economy over more than two decades (World
Bank, 1996).

The Delta region in Nigeria, where huge quantities of natural gas and oil are deposited, provides
classic example of how wealth creation can lead to poverty and ecological destruction. In his
article, titled ‘Curse of the Black Gold Hope and Betrayal in the Niger Delta’ published in the
February 2007, National Geographic Magazine; Tom O’Neill narrates that ‘beyond the city,
within the labyrinth of creeks, rivers, and pipeline channels that vein the delta- one of the world’s
largest wetlands- exists a Netherlands. Villages and towns cling to the banks, little more than
heaps of mud walled huts and rusty shacks. Groups of hungry, half-naked children and sullen, idle
adults wander dirt paths. There is no electricity, no clean water, no medicine, no schools. Fishing
nets hang dry; dugout canoes sit unused on muddy banks. Decades of oil spills, acid rain from gas
flares, and the stripping away of mangroves for pipelines have killed off fish…the cruelest twist is
that half a century of oil extraction in the delta has failed to make the lives of the people better.
Instead, they are poorer still, and hopeless. “The institutionalized looting of national wealth”-
cancer of corruption

Between 1986 and 2003, more than 50,000 acres of mangroves disappeared from the coast,
largely because of land clearing and canal dredging for oil and gas exploration1. “That is a

1 Findings from fieldwork and a satellite based study conducted by Jimmy Adegoke,( a Nigerian born research
scientists at the University of Missouri) and a team of researchers
significant amount given how valuable the mangrove ecosystem is,” Adegoke said, referring to the coastal forest’s high productivity for fish populations. “I think the loss of one acre is too much. You’re wiping out the means for people to sustain themselves.” Communities complain of corroded roofs, crop failures, and respiratory diseases.

OIL EXTRACTION IN NIGER DELTA - Wealth, Poverty, and Ecological Disaster

Oil Wealth:
Nigeria had 36.2 billion barrels of proven oil reserves as of January 2007. The Nigerian government plans to expand its proven reserves to 40 billion barrels by 2010. The majority of reserves are found along the country’s Niger River Delta, in southern Nigeria. Nigeria has total production capacity (total potential production capacity if all oil currently shut-in came back online) of three million barrels per day (bbl/d) including two million bbl/d onshore and one million bbl/d offshore. (Energy Information Administration (EIA), 2007)

Wealth Creation:
The Nigerian Delta in West Africa has become a major oil producing area in recent years. Averaging 2.5 million barrels of oil a day, Nigeria's production has increased from under 1.5 million barrels a day in the late 1980s (Ibid). U.S. oil companies are heavily involved in Nigerian oil and gas exploration and production.

Exxon Mobil currently produces around 570,000 barrels of oil per day in Nigeria and plans to invest USD 11 billion in the Nigerian oil sector by 2011, with plans to take production to 1.2 million barrels per day.

Chevron Texaco and Conoco Phillips are also heavily involved in the Nigerian oil sector. In 2005, Nigeria was the fifth largest exporter of oil to the United States (1.1 million barrels a day), right behind Mexico (approximately 1.75 million barrels a day), Canada (1.72 million), Saudi Arabia (1.4 million), and Venezuela (1.3 million). (Jerome Corsi, World Net Daily, 2005: EIA)

Figure 7: Nigeria’s Oil Production and Consumption
Poverty resulted: Despite the oil wealth, Nigeria remains a poor country where the wealth is not broadly distributed among the population. The Niger Delta communities have remained grossly socio-economically underdeveloped. Oil extraction has impacted most disastrously on the socio-physical environment of the Niger Delta oil bearing communities massively threatening the fragile subsistent peasant economy and bio-diversity and hence their entire social livelihood and very survival.

Adeyemi Oludare Tolulope, in his article “Oil Exploration and Environmental Degradation: the Nigerian Experience”, in the Environmental Informatics Archives, Volume 2 (2004) explains the ecological disaster due to oil spillage in Niger Delta. The following analysis is heavily borrowed from his work.

Ecology: The Niger Delta is environmentally rich and extremely sensitive to impacts of oil through physical disturbance, chronic discharges of accidental spills. It consists primarily of mangrove swamps with areas of fresh water swamp and rainforest. An immense network of streams and tributaries linking lagoons play an important role in the area. The rivers also provide the main source of portable water for many towns and villages along their banks. Numerous forms of animals and plant life support a major fishing industry. The mangrove swamps provide nurseries and feeding grounds for many commercial important species of fish and crustaceans and help protect the shoreline from river erosion.

Ecological Destruction: The above described ecology of the Niger Delta is adversely affected by occasional oil spillage. Between 1986 and 2000 the Nigerian Petroleum Industry experienced 3,854 oil spills incidents. These oil spills resulted in the loss of 437,810 barrels of oil into the Nigerian environment. Oil spillage have caused massive destruction of farmlands, sources of drinking water, mangrove forests and fishing grounds, and decimation of fish crabs molasses, periwinkles and birds. People living there are faced with a range of environmental problems from health hazards to lack of safe drinking water and arable land.

Table 12: Oil Spill Rate and Volume Spilled 1986-2000

<table>
<thead>
<tr>
<th>Year</th>
<th>No. of Spills</th>
<th>Quantity Spilled</th>
</tr>
</thead>
<tbody>
<tr>
<td>1986</td>
<td>155</td>
<td>12,905</td>
</tr>
<tr>
<td>1987</td>
<td>129</td>
<td>31,886</td>
</tr>
<tr>
<td>1988</td>
<td>208</td>
<td>9,172</td>
</tr>
<tr>
<td>1989</td>
<td>195</td>
<td>7,628</td>
</tr>
<tr>
<td>1990</td>
<td>160</td>
<td>14,940</td>
</tr>
<tr>
<td>1991</td>
<td>201</td>
<td>106,827</td>
</tr>
<tr>
<td>1992</td>
<td>367</td>
<td>51,131</td>
</tr>
<tr>
<td>1993</td>
<td>428</td>
<td>9,752</td>
</tr>
<tr>
<td>1994</td>
<td>515</td>
<td>30,282</td>
</tr>
<tr>
<td>1995</td>
<td>417</td>
<td>63,677</td>
</tr>
<tr>
<td>1996</td>
<td>236</td>
<td>24,806</td>
</tr>
<tr>
<td>1997</td>
<td>280</td>
<td>15,004</td>
</tr>
<tr>
<td>1998</td>
<td>146</td>
<td>18,921</td>
</tr>
<tr>
<td>1999</td>
<td>198</td>
<td>29,337</td>
</tr>
<tr>
<td>2000</td>
<td>219</td>
<td>11,542</td>
</tr>
<tr>
<td>Total</td>
<td>3854</td>
<td>437810</td>
</tr>
</tbody>
</table>

Source, NNPC
Table 13: Potential Impacts of Oil Operations on the Environment

<table>
<thead>
<tr>
<th>Oil Operations</th>
<th>Potential Impacts on the Environment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exploration</td>
<td>Destruction of vegetation and farmlands/human settlement</td>
</tr>
<tr>
<td>Geographical Investigation</td>
<td>Noise pollution and vibration seismic shooting, Disturbance of Fauna and Flora habitat</td>
</tr>
<tr>
<td>Geological Survey</td>
<td>Accumulation of toxic materials from drilling materials, oil pollution of the sea, beaches or land</td>
</tr>
<tr>
<td>Drilling</td>
<td>Destruction of breeding and spawning grounds for some marine organisms. Alteration of the taste of fishes, pollution of underground water.</td>
</tr>
<tr>
<td>Production/processing</td>
<td>Water pollution from long-term cumulative effects of produced water (with high salinity)</td>
</tr>
<tr>
<td></td>
<td>Water and land pollution from sanitary wastes, used lubrication oil, solid waste.</td>
</tr>
<tr>
<td>Platforms and Tank farms</td>
<td>Air pollution from gas and oil processing and flaring production of heat.</td>
</tr>
<tr>
<td>Gas Flaring</td>
<td>Kills vegetation around the heat area and suppress the growth and flowering of some plants diminish and reduce agricultural production destruction of mangrove swamps and salt march.</td>
</tr>
<tr>
<td>Tank Loading</td>
<td>Water pollution from ballast and tank washing</td>
</tr>
<tr>
<td>Locations and offshore</td>
<td>Deck drainage and spillage during loading operations with all its accompanying effects on the fauna and flora destruction of seabed by dredging</td>
</tr>
<tr>
<td>Storage Depots</td>
<td>Land pollution from storage tanks destruction of farmland for the establishment of the storage depots. Air pollution from the gaseous fumes during loading Water pollution from water and solid waste of chemical cans and rums.</td>
</tr>
<tr>
<td>Transportation: Pipelines, Tanks</td>
<td>Destruction of seabed by dredging for pipeline installation sedimentation along pipeline routes. Water pollution from consequences of leaks from fracturing or breaking of pipe, caused by metal figure, trawlers and dredged, of seafloor failures or sabotage. Air pollution by transport tankers. Destruction of environmentally sensitive area e.g. lowland where estuaries wet land dune exist. Erosion and flooding.</td>
</tr>
<tr>
<td>Refinery</td>
<td>Water pollution from effluents, which contain wide range of organic and inorganic pollutants such as phenols, hydrogen sulphide, ammonia, oil and greases, phosphates, cyanide and toxic metals</td>
</tr>
<tr>
<td>Health Effect</td>
<td>All above have serious adverse effect on health.</td>
</tr>
</tbody>
</table>


The Niger Delta has faced all of the above effect. Words of Ken Sarowiwa below summarize all:

“Oil exploration has turned Ogoni into a wasteland: lands, streams and creeks are totally and continually polluted; the atmosphere has been poisoned, charged as it is with hydrocarbon vapours, methane, carbon monoxide, carbon dioxide and soot emitted by gas which has been flared 24 hours a day for 33 years in very close proximity to human habitation. Acid rain, oil spillages and oil blowouts have devastated Ogoni territory. High-pressure oil pipelines criss-cross the surface of Ogoni farmlands and villages dangerously.” (Ken Sarowiwa, Speaking at the Unpresented Nations and Peoples Organization in Geneva, 1992)

Comments
The case for oil production in Africa is not unique in Nigeria. Other oil producing countries suffer more or the same predicaments. Countries burst with joy at the strike of oil, but soon among its citizens is mourning. Wealth has not been a blessing to Nigeria similar to other countries with oil in Africa. 49 years of Oil extraction in Nigeria has not been able to pull Nigeria out of poverty.
In terms of Human Development Index, Nigeria is 159th out of 177 countries. Human Development Index development trends of Nigeria since 1975 to 2004 grows very little, from 0.317 to 0.448. It is one of the countries with low Human Development Index.

Ongoing conflicts in Ogoni have been between local people and MNCs. MNCs are busy creating wealth disregarding local communities’ interests and the entire ecology. Apart from oil, Nigeria has other minerals, abundance of forest, good land suitable for food production. Despite all these Nigerians are still poor.

In Africa, the countries, which are rich in oil, other minerals or both combined, are found among countries with low Human Development. These countries include Zimbabwe, Nigeria, Angola, Tanzania, Zambia, Sierra Leone, DRC, and Chad.

One would wonder whose side the African governments are. Perhaps this case of oil as well as minerals as resources in Africa attract so powerful external entities to an extent the national government is unable to work positively for the welfare of its people foremost of which is salvaging them from poverty.

5.0. REGIONAL EFFORTS TO CURB POVERTY AND ECOLOGICAL DESTRUCTION

African people through regional bodies and leaders have sought solutions to combat poverty and ecological destruction. So far, these efforts have largely been focusing on finding /exposing the cause of Africa’s misery.

5.1. Organization of African Union (Current AU)

5.1.1. Lagos Plan of Action

In 1980, the OAU came out with a plan known as Lagos Plan of Action (LPA). This plan blamed the historical injustices suffered by the continent and the continued dependence on external forces for the crisis. Having diagnosed the problem as essentially exogenous, the solution was obvious: it must involve “far reaching regional approach based primarily on collective self-reliance.

LPA envisaged continental cooperation among African states to culminate in the establishment of an African Economic Community by the year 2000. African states were assigned increased roles in their economies, and national-based strategies and prescriptions were proposed on issues ranging from food and agriculture to women and development.

The LPA was taken aback by the 1981 World Bank sponsored Berg Report, ‘Accelerated Development in Sub-Saharan Africa’. The Berg report diagnosis of the continent’s problems and the solutions it proposed are direct opposite to the LPA. It held African leaders responsible for the crisis and blamed it on domestic factors including failed domestic policies, corruption, and mismanagement. This report recommended the famous Structural Adjustment Policies (SAPs). SAPs were stronger than LPA, which was like a warning to African leaders that blaming external factors was not good politics mainly because often times foreign funding is an integral part of the solution.
5.1.2. African Priority Plan for Economic Recovery (APPER)

In 1985, the OAU came up with African Priority Program for Economic Recovery 1986-1990 (APPER). APPER upholds and embrace the principles and ideas of both LPA and the Berg report respectively.

In support for APPER African leaders established African Alternative Framework to Structural Adjustment Programmes for Social-Economic Recovery and Transformation (AAF-SAP) in 1989. AAF-SAP devoted its attention to developing an alternative strategy for addressing the crisis and articulating the role of the state in the development process.

Although AAF-SAP recognized the need for adjustment in African economies, it insisted that SAPs are not appropriate for Africa. It distinguished between structural transformation and structural adjustment- the former is a “holistic package” that would transform social and economic relations. It was an attempt to redefine the debate over the role of the African state in development. It did so by drawing attention to the need for good governance and state-capacity building in the continent.

The key to restructuring African economies therefore, according to AAF-SAP, is to improve the capacity for national economic management.

5.1.3. New Partnership for Africa’s Development (NEPAD)

NEPAD is a regional initiative that aims to eradicate poverty and to place African countries both individually and collectively, on a path of sustainable growth and development and halt the continent’s marginalization in the globalization process. Its goals include GDP growth of 7% per annum and the achievement of the international development goals by the year 2015.

NEPAD identifies a set of conditions for achieving sustainable development and sets up special initiatives for achieving them, including the Peace and Security Initiative, Democracy and Political Governance Initiative, and Economic and Corporate Governance Initiative.

NEPAD is different from other former African initiatives. NEPAD attributes nearly all of Africa’s problems and nearly all the responsibility for sorting them out to Africa itself.

5.2. Inter Governmental Authority on Development (IGAD)

In 1986, Kenya, Djibouti, Somalia, Sudan, Uganda, Eritrea and Ethiopia, formed the Inter-Governmental Authority on Drought and Development (IGADD) with a mandate around the issues of drought and desertification. The founding members of IGADD decided in the mid-1990s to revitalize the organization into a fully-fledged regional political, economic, development, trade and security entity similar to other regional bodies such as Southern African Development Community (SADC) and Economic Community for West African States (ECOWAS).

One of the principal motivations for the revitalization of IGADD was the existence of many organizational and structural problems that made the implementation of its goals and principles ineffective. The IGADD Heads of State and Government met in 1995 at an Extraordinary Summit in Addis Ababa and resolved to revitalize the Authority and expand its areas of regional cooperation. In 1996, the Heads of State and Government at the Second Extraordinary Summit in Nairobi approved and adopted an agreement for establishing the Inter-Governmental Authority on Development (IGAD). IGAD aims to expand the areas of regional co-operation, increase the members' dependency on one another and promote policies of peace and stability in the region in order to attain food security, sustainable environmental management and sustainable development.
The IGAD strategy is to attain sustainable economic development for its member countries. Regional economic co-operation and integration are given special impetus and high priority to promote long-term collective self-sustaining and integrated socio-economic development.

6.0. GREED LINE AND WEALTH LINE

Greed is the pursuance of wealth for self gratification without regard to God’s purpose or the rights of others. The basis of greed is the notion that life consist in the abundance of one’s possession. In the Bible it is associated with deadly sin of those depraved off their minds because of taking the knowledge of God in vain. As such, greed is regarded as evil. It is immoral and can easily grab the rich as well as the poor. The Lord Jesus counsels us to guard against all kinds of greed. Wealth however can be a result of greed or genuine hard work. It is possible to establish wealth lines and give the same various interpretations. It is even possible to incorporate wealth line in national policies for allocation of resources, taxation, or aid to vulnerable communities. It is possible to designate a yardstick, a level of wealth beyond which one would term wealth evil.

As seen from the cases cited in this study, Sub Sahara Africa is gripped with poverty evidently seen with the naked eyes in both rural and urban areas. Empirical World impels us to measure degrees of poverty and wealth. Numerous methods have been adopted for this purpose. In the early days, it was the measurement of income upon which discussions of wealth and poverty were based.

Various methods of estimating National Incomes were devised. Incomes thus estimated, either by summation of consumption within the country, or production of goods and services were aggregated and adjusted to incorporate certain variables for instance external transactions. The figure adopted, Gross Domestic Product, GDP, was then divided by the total population to give GDP per capita. This figure has been extensively used both within and among Nations for both assessment and comparison of levels of poverty, wealth and development. In the course of time modifications have been incorporated, but the gist of it has remained income based measurement method.

As development debate, dialogue, theories and practice have continued, many have pointed out at the inadequacy of income measurements. The issues relating to poverty and development have many dimensions. Many forms of variables have been incorporated. With the advent of IT, both collection and analysis of Data has greatly been eased. The underlying issues however continue to be debated.

In recent years, the Human Development Index has been developed. There are several indices developed. They hinge on long and health life, knowledge, and a decent standard of living. These give a Human Development Index, HDI, Human Poverty index (for developing countries and selected OECD countries,) HPI-1 & HPI-2, Gender related development index GDI and finally Gender Empowerment Measure, GEM. The indexes, the variables involved and methods of calculation are well elaborated in Human development report of 2005. The issues at hand are the quality of life, education, levels of income, unemployment, gender issues and participation. With the current emphasis on the MDGs more elaboration of measurements and some refinements are incorporated.

I personally agree there is need to go beyond income levels when addressing poverty. The multi-dimensions of the subject call for this wider approach. But we should bear in mind that these are not absolute measures. They are relative, both within the country and among countries when
taking into account international comparisons. Averages and comparative generalized data is good for general conclusions and insight at issues. When it comes to specific studies or plans, one might use the statistics as a starting point. In this study I have freely taken the indicators as guidance into matters relating to poverty and wealth, without challenging their rationale.

Within the various measures we have poverty line. We do not however have a wealth line. We do not have a greed line either. It seems society has come to accept the notion of assessment of levels or depth of poverty. When it comes to wealth the phraseology used is ‘much wealth, little wealth ‘and so forth. As the paper demonstrated there is a clear linkage between wealth creation and poverty creation in Africa. If you consider international comparisons as well as internal comparisons, there are large disparities in ownership of wealth. Wealth goes with power and influence. Amassing wealth beyond certain limits may mean deprivation and denial of resources to others. This may lead to oppression, injustice and waste. History has shown that civil strife and wars have been caused on account of differences in wealth and resources among the warring parties.

An attempt is here made to suggest a possible method of establishing a wealth line and greed line.

The method employs secondary data, mainly statistics found within the country or the Human Development Reports. The main variables are the country population, the GDP, the percentage share of the GDP by the poorest 10% and the richest 10%. Table 14 illustrates the computations.

The shares of the richest and the poorest 10% are combined to give a total income for the group now totaling 20% of the population. (column6). Using this figure, an Income per capital is computed. (column7) The rationale of taking the extreme poor and extreme rich both ways is an attempt to capture the reality of the nation. In nearly all cases in Africa, too much wealth is possessed by too few people, while too little is owned by so many people. One would wish and expect redistribution to affect a flow of wealth from the richest 10% to the poorest 10%. In the process of flowing those in between would be positively affected.

Having obtained the new Income per capital, one asks the question – Given the level of income per capital for the richest and the poorest 10%, how much wealth should be reasonable for individual to have? This is a debatable issue. The GDP per capita includes wealth in hands of government and institutions and is only indicative of what individuals are entitled. The answer to the question is very debatable. I have given 100 times this GDP per capita as a reasonable wealth for an individual. This is my wealth line. (column9). Rounding the figures the Wealth line is U$ 46,000 for Tanzania, 80,000 for Zambia, 71,000 for Mali and 30,000 for Malawi. States should aim at their people attaining this position. Such levels of Income should not be eyed. One would expect a rise over time. People do not stop working for higher incomes and therefore create wealth in the process. How much is enough. History and Maslow, hierarchy of needs and theories of motivation suggest there is no voluntary limit as far as most people are concerned. The state, the church and other institutions must pull an alarm when generation and amassing of wealth reach beyond certain levels? What is this level and who sets it? The answer to this question is again debatable. I for one would settle it at 10 times the wealth line or 1000 times the combined income per capita. Column 9 has the computation. This is the Greed line. Rounding up the figure, Greed Line for Tanzania is US$460,000. For Kenya it is U$ 842,000 while for Cote d’Ivoire it is U$ 1,401,000. See the table 14.
Table 14: Computation of Wealth Line and Greed Line

<table>
<thead>
<tr>
<th>Country</th>
<th>Pop. Million</th>
<th>GDP $ Billion</th>
<th>% Share 10% Poorest</th>
<th>% Share 10% Richest</th>
<th>Total 4&amp;5 Income</th>
<th>Average income/Capita (4&amp;5)</th>
<th>Wealth line US$</th>
<th>Greed line US$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tanzania</td>
<td>36.9</td>
<td>10.3</td>
<td>2.8</td>
<td>30.1</td>
<td>3.3887</td>
<td>459.1</td>
<td>459173</td>
<td></td>
</tr>
<tr>
<td>Zambia</td>
<td>11.3</td>
<td>4.3</td>
<td>1</td>
<td>41</td>
<td>1.806</td>
<td>799.1</td>
<td>799115</td>
<td></td>
</tr>
<tr>
<td>Mali</td>
<td>12.7</td>
<td>4.3</td>
<td>1.8</td>
<td>40.4</td>
<td>1.8146</td>
<td>714.4</td>
<td>714409</td>
<td></td>
</tr>
<tr>
<td>Malawi</td>
<td>12.3</td>
<td>1.7</td>
<td>1.9</td>
<td>42.2</td>
<td>0.7497</td>
<td>304.7</td>
<td>304756</td>
<td></td>
</tr>
<tr>
<td>Cote D’ivoire</td>
<td>17.6</td>
<td>13.7</td>
<td>2</td>
<td>34</td>
<td>4.932</td>
<td>1401.1</td>
<td>1401136</td>
<td></td>
</tr>
<tr>
<td>Mozambique</td>
<td>19.1</td>
<td>4.3</td>
<td>2.5</td>
<td>31.7</td>
<td>1.4706</td>
<td>384.9</td>
<td>384973</td>
<td></td>
</tr>
<tr>
<td>Burundi</td>
<td>7</td>
<td>0.6</td>
<td>1.7</td>
<td>32.8</td>
<td>0.207</td>
<td>147.8</td>
<td>147857</td>
<td></td>
</tr>
<tr>
<td>Ethiopia</td>
<td>73.8</td>
<td>6.7</td>
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Note. (Population and GDP figures are taken from Human Development report, 2005. Some of the figures of the GDP are from earlier period. As the figure is meant to illustrate the method and computations, this difference in timing can be ignored.)

Wealth and Greed lines can be instrumental in the formulation of various policies by both the Government and non governmental institutions. Such policies would include matters relating to taxation, allocation and ownership of property, remuneration and rents. It would be useful for the church in its teaching and development services.
7.0. CONCLUSIONS AND RECOMMENDATIONS

7.1. Conclusion

The issue of wealth creation, poverty and ecological destruction in Africa hinges on two planes both of which must be tackled together. One plane is the international scene which harbours globalization, trade, power and influence. This plane holds the world together through treaties, trade rules, pacts and practices which make it difficult for most African countries to make independent decisions and arrangements on the use of their resources for maximum benefits to their people. As seen in different cases presented here, the international scene is present in all forms of economic activity. In the case of Zambia, policies advocated and conditions set by Bretton Woods Institutions forced the Government to privatize copper mining, which in turn led to flight of capital, impoverishment of the country and postponement of environmental care. In Tanzania, the industry around coffee in Kilimanjaro is greatly affected by the global practices of processing coffee in developed countries. The industry is affected by global trade patterns and even advice from the Bretton Woods Institutions. The timber industry in Southern Tanzania assumed such a pattern because of the international nature of Timber trading, the upsurge of Chinese economy and its decision to close her Forest while plying on those of weaker economies. The Nigerian issue is typical of Oil production in Africa by the Multinationals. The internal forces are hardly capable of controlling activities of these institutions.

The internal plane comprises of Governance, Institutions that manage production, marketing and international relations, and the local people, their technology and practices. In the case of Copper mining in Zambia, the internal plane actors concede to external pressure, but watch the wealth of the nation flying away. In the case of Forest logging the players see a whole forest reserve wasting away with all associated wealth. The villagers out of ignorance dance over a token price for logs not aware of real value of the product or the ensuing poverty resulting from the current transactions. In the case of production around Mount Kilimanjaro, typical of peasant production in Africa, the scenery is haunted by outmoded agricultural practices, rain fed dependency, fragmenting farms, underinvestment, volatile institutional arrangements and unfriendly international experiences. In both planes the underlying issues of ethics form the bedrock of relations.

7.2. Recommendation

In the light of the above conclusions the following recommendations are made.

A. Our first set of recommendations pertains to the creation of wealth at local level by indigenous people. The case of Kilimanjaro is typical. The dreadful depiction of poverty by Nairobi Lady, the Fiji grandmother and Wole Soyinka are vivid. In these set of recommendations we first of all bring the Church at the centre and forefront before addressing the government and other alliances. In outlining here a greater role for the church, I am aware that the church can not be everything. But the church can do more. The situation is such that the church can not remain passive or content with past achievements. Besides, there are many churches not yet involved.
i. The first role of the church is to be what it has been sent to be – a people of God and a community of the world. As a people of God, the church stands for and advocates the practice of the word God. Many people do not take seriously the call to stewardship. The resources are left lying idle or grossly mismanaged. Burning grass and bushes greatly destroying ecology is widely practiced in Africa as method of preparing land for sowing. On slopes of mountains and hills blessed with adequate rains, soil erosion washes away tons of fertile soils, leaving the soil bare and unproductive. Overgrazing in some parts is gazed with blind eyes in praise of false wealth. Many people do not take work seriously. There are large stretches of unworked land. Where there is population pressure the soils are fertile and even precipitation is good. But even in these areas, people are wasting a lot of time. Planned hard work at family level would go a long way towards increasing food. Food poverty is one the most degrading phenomenon in Africa. God ordained work so that we may provide for weak, the poor and the lesser in the society. To have within our church non working people is to reject the teaching of the word of God.

ii. To achieve work for everybody and for that matter fruitful work, the local church must have a program for teaching the word of God correctly to all, as well as very carefully planned farming and animal husbandry programs. This requires personnel. In certain areas personnel are available at the local church, but have not been empowered to see this point and the existing possibilities. The program would cover the technical skills required, the cost aspects, and the scale of operation. I have witnessed large donor funded programs which enable people to keep one or two chicken! The church can do better than this without funding. An example of success in this area is where the church worked with heifer International to provide dairy cows to families. While it is true that the government and others have responsibilities in this, enough is not being done. It is the church that is with the people. It is the church that has proven competent in this area. It can work with others, but must not abandon this area. Don’t ask for the market at this point. I am talking about food that is consumed at family and village level.

iii. The church at local level is obliged to advocate for justice, just wages, fair distribution of land, water and other resources at the village, equitable access to services such as education and health, law and care. It means seeing to it that public officials in the local communities understand and practice the message of Jeremiah – I am the Lord who practices, righteousness, judgment and steadfast love. It is the presence of these things that stimulate economic development.

iv. To move on a higher plane, the local church must be a learning centre. In the past the church engaged in formal education. In quite a number of places the governments have taken responsibilities in this area. But continuing functional adult education is lacking, particularly in rural areas. No body in the office is using techniques of 1980s in offices or industry. Our farmers are employing techniques of 1920s.

v. At national or regional levels, the church embodying Dioceses and national offices can work on advocacy of right policies and practices within the country. Often low rate of economic development has to do with policies being pursued, corruption, misallocation of resources, non functioning government bureaucracies. The prevailing produce and input prices, the marketing arrangements, the contracts, labour compensations, allocation of resources and national priorities and ownership are all issues the church must deal with through engagement with the Government and various agencies.

vi. At international level – advocate by church bodies – as is being done by WCC, AACC, NCCS and similar bodies is very necessary. The recent AACC awareness seminar on EPA
in Dar made African countries aware and conscious of implication of entering into
economic pacts with EU. A lot of debate arose after the Dar conference. Here the issue is
advocacy. Continuous pressure must be put on the international scene to change the mode
of conduct of trade and business. The most prevalent of this is the abolition of all forms of
subsidy on all agriculture and livestock production in Europe, America and Japan. This
will remove the artificial protection of Agriculture production in these areas exposing
Africa as an area of comparative advantage in food and Agriculture production. This will
stimulate both internal and external investment in Agriculture and related industries. This
is not a new call. It is a reminder that must be hammered constantly by an alliance of
regional bodies as outlined above, international coalitions of institutions fighting for a
better world, the World Council of Churches and its member churches. The church should
be the first to reject cheap food imports and food aid unless there was a disaster. African
nations should first learn to live on their sweat. It is not true that food grown in Europe or
America is cheap. It is made cheap by subsidies perhaps made possible partially by wealth
created from Africa.

vii. Governments in Africa are urged to act along the same line as outlined for the church
above. Much more is however expected out of the government.

viii. Pro poor wealth creation policies. These must first of all address production at family
level. Agriculture will for along time be the base of the African economy whose role must
be seen as production of food and raw materials of plant and animal source.

ix. The pro poor wealth creation policies should encompass food and Agriculture processing
at local and later at national level. Later manufacturing should support agriculture and
move on to other sectors.

x. Economic nationalism is very necessary. To acquire this deliberate change of attitudes for
the entire nation is very necessary. Africans in schools, homes, offices and hospitals must
learn to consume home made products if they are locally produced. We see the power of
advertisement persuading our people to consume anything foreign even if it were fake
medicine. On the whole in the name of liberalized trade and globalization Africa is a
damping ground for very inferior products. The question is what sort of support are our
governments giving to local producers in form of infrastructure, credit, research, marketing
and encouragement?

xi. Action by African governments, institutions, the church and intellectuals on poverty,
wealth creation and ecological destruction need to take a firmer ground. The cases
demonstrate, inaction, laxity in thinking and corrupt collaboration with those who plunder
African wealth. Institutions such as Revenue Authorities and Resource Valuation
Department, Clearing and Forwarding, should be empowered to ensure that extraction and
export of resources are properly taxed.

xii. Public education and awareness rising on the value of natural resources, is important to
communities surrounded by these natural resources. This subject should be given emphasis
in civil education, geography and stewardship.

xiii. Moral ethics need fresh consideration in public affairs. Perhaps the Church at all levels
from the WCC to the local level may have to consider their teaching, advocacy and
prophetic roles
B. The second set of recommendations relate to the Creation of Wealth by MNCs and TNCs. This again is a battle to be fought within and without. The practices ensuing from globalization, WTO, and the Breton Woods Institution all favor open competitive system in which African nations can only pretend to match. The government arm is twisted so hard that to get out is difficult. Ignorance coupled with corruption make it easy for the large corporations to find their way and dominate African natural resources in the creation of wealth and do it in such a way that both poverty and ecological destruction becomes the necessary end. To this end we recommend: Continues alliance of lobbying and advocate by Churches and African governments to change the local ground. The necessary changes entail the following:-

i. Recognition of national states to make their own decisions regarding economic activities. This is a fight African countries have to make as an extension of their own independence from foreign domination. While recognizing the importance of international co-operation and advantages of globalization, Africa must also recognize God’s purpose for nation states. It is wrong to exert pressure on a country to pursue economic paths that result in hurting its people. Such seems to have been the pattern of behavior of World Bank, IMF and the Wealth Nations. China is also quickly assuming undue influence apt to very much to deplete resources of Africa.

ii. Recognize for each country, where a nation should have a bigger say. This should certainly be the case with extractive industries such as mining, oil drilling, forest logging and fisheries. The pattern of ownership should be such that the interests of present and future generation are taken care off. This ought to be the case for land ownership as well. The African nations must consider this as sensitive issue likely to cause trouble 50 to 100 years down the line.

iii. Create and institute policies that discourage greediness. The greed line as worked out in this paper is a crude indication of levels of wealth that encourages scandalous spending that waste resources of the nation while leaving large segments of population poor. After reaching an agreeable level, policies that tax highly excess income can be instituted. Similarly policies for acquisition of properties such as land should be put in place to discourage hoarding of land, speculation and absent land lords. Reasonable distribution of land to farming communities is a prerequisite to sustainable agriculture and peace.
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