

Poverty for Sale: Sinazongwe's Socio-Economic Needs in the Face of Climate Change

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SUMMARY

This is the story of Sinazongwe, a district in the southern province of Zambia. Like the most famous Livingstone, the home of the Victoria Falls, so is Sinazongwe, the home of largest manmade lake in Africa. After being displaced in by Government 1959 for the construction of the Kariba Dam, the people of Sinazongwe now live in a flood prone area.

Sinazongwe comprises two Chiefdoms: the Sinazongwe and the Mweemba. It is just to the northeast of Livingston, another major city in Zambia. Sinazongwe's problems are many. Firstly, the road is the district is gravel and impassable during rainy season. Agriculture wise, people grow crops but, alas, flood come. If it is not floods, then drought will come.

The focus of this paper is to accelerate infrastructure development; economic growth and diversification; promote rural investment and accelerate poverty reduction and enhance human development in Sinazongwe and fostering climate change incentives.

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1. INTRODUCTION : LAND OF THE PLENTY

Poverty still blights much of the developing world. Like development, poverty is multi-dimensional but this traditionally ignored by the headline figures. Meanwhile, Africa scores poor in United National Development programme index, ranked among the bottom billion. This bottom billion accounts for 72 per cent- three quarters of the world's poor. Among them is Zambia, stable low income economy. According to the UNDP poverty index (2008), the poor live in three types of places:

Low-income countries- one quarter of the world's poor

Middle –income countries- three quarters of the world's poor

Fragile/conflict-affected countries-these are a mix of low and middle income countries and represent a quarter which overlaps the above.

Why is Africa ranked among the bottom billion? The reason is simple. Qubo(2013) asserts that while most people are most of arising opportunities, the gap between them and those who are doing absolutely nothing about it, is widening. The potentiality of Africa lies in the use of its natural resources with plenty of water resources, land for construction, agriculture and other purposes.

At the south-eastern tip of Zambia lies Sinazongwe town, home of the Lake Kariba, wonder of the world. With beautiful sunrise and sunset, the great Lake Kariba seems endless. With beautiful hilly rocks and mountainous landscape, with the lake that reaches your horizon. Apart from this water source, there is Maamba, one of largest coal mine, with coal oozing from Sinazongwe hilltops. Such is Africa's poverty amidst plenty.



Figure 1: Sinazongwe District

Sinazongwe has 20,722 households, Males 49,187 and females 53,020, Adults above 18years 44,541. It has a population share of 102,307 (CSO, 2011). Almost half the population are able-bodied men and women.

Located at the foot of six hundred and ten metres of the Zambezi Escarpment belt, Sinazongwe lies along latitude 25 c and 30 north and between longitude 17 and 18c. During rainy season, humidity with high temperature is worse. Boundaries are lake Kariba on the North and Zimbabwe on the South.

Type of vegetation is Mopani wood and there are five types of soil and these are Pre-Karoo rocks, Karroo rocks, Karroo soils, Alluvia soils and second Alluvia soils. Alluvia is the most fertile of all, while the Karroo types are made of high clay and sand grits (Haantotola, 1975)

With minimal food, clothing, shelter and an income, life goes on for the people of Sinazongwe. Children with scanty clothes go about happy as they go to school, but their happiness is short lived as go back due to lack of school uniform. Most of these children are intelligent but due to lack of resources, they stay home adding to the social ills of poverty which are illiteracy, unemployment, curable diseases and many more.

Here is a summary list of Vulnerabilities of five (5) key socio-economic indicators

1.1 Agriculture and Food Security

Zambia's staple food is maize but there is only a handful of maize in Sinazongwe. Sindaaza (2013) asserted that district had no maize because drought had not spared the valley. *People are eating grass because there is no food.* Food is essential component of life. Since area is drought prone; they have millet, wheat, soya beans and sorghum as domestic food. The farmers are left helpless as floods come and their crops are washed away.

Sinazongwe is known for fish and kapenta supplies because of Lake Kariba. When it comes

fishing, originally built as a centre for the southern lakeshore area, and is used mainly as an outpost for kapenta fishing. Since Zambia holds much of the water in SADC, many communities across the nation depend on fishing as source of food security and livelihood. Lower rainfall would reduce nutrient levels in rivers and lakes and impacting negatively on fish breeding activity and as well as depletion of fish species in the long-term. The most vulnerable fish species being the breams and sardines in the drought-prone area



Figure 2: Lake Kariba



Fig:3

1.2 Infrastructure

What resembles a town is a bleak picture of dilapidated pan bricked shops and buildings. Critical infrastructure for electricity, transportation and water and sanitation remained poor and limited, especially in the rural areas. Poor transport infrastructure together with high cost and inadequate Information and Communications Technology (ICT) services, adversely affected the productivity and competitiveness of the sinazongwe economy.

Public transportation is available, but most roads are not paved. The only ones that are paved lead to the mine and to service areas, an indication that development of the transportation system has been connected to major corporate investment projects. Road are terrible and impassable with the heavy rains currently. Maamba road, the road that leads to the collapsed and heavy loaded vehicles were unable to cross. A Namibian contractor who is re constructive the bridge alluded that it was difficult mend the bridge. Culverts on Kafwebula-siampondo road had been swept away. The Namafulu road which leads to the border with Zimbabwe was longer passable (times of Zambia, 2014)

1.3 Water and Energy

Lake Kariba is the largest hydroelectricity power plant in Zambia and entire south east of Sinazongwe. While electric power is available in select towns in the district, telecommunications is poor. There is of lot of water but perpetual drought. There is erratic water shortage in the district while there is vast lake nearby. This is a challenge to Zambia. At

Siakodobbo primary school, there has been no water since January this year and this is worse in households(times of Zambia, 2014)

1.4 Human Health

Zambia's health status improved in term of life expectancy, mortality and burden of diseases(Africa Health Organization,2013) In Zambia, even though it is third world country, there are people who more or less fortunate than others. Sinazongwe, starvation is the order of the day and the villagers are used to it. Children are malnourished because of lack of proper food, and majority adults will eat once a day. In the rainy season when there are more fruits, they act as a meal. The basic necessities of food are not met. During floods, water and sanitation are affected. Pit latrines are filled up bringing cholera, dysentery and acute respiratory infections. Flooding also brings mosquitoes and adults and children suffer from malaria which is a killer disease in Africa. Most of all, required drugs cannot reach the clinic because of the roads.

1.5 Natural resources

Sinazongwe district is a coal belt areas and the potential of it to house at least four mines is there. The district has a lot of coal deposits stretching up to Zimbabwe. The opening up of new mines would lead to job creation for young people and other business opportunities. With the full exploitation of coal deposits, the district could have more than four thermal power plants and country could benefit especially in view of the power cut that country has continued to experience.

There is potential for local and foreign investors to invest into coal mining in the area, not cheap investors. By cheap, I mean to those investors who do not the country to progress.

2. CLIMATIC CONDITIONS OF SINANZONGWE

The developing world often lacks the resources to address the consequences of climatic change, whilst indigenous peoples typically rely heavily and directly upon ecosystem services.

The risk that ecosystem services, such as the provision of freshwater, provision of clean and breathable air, stabilisation of land surfaces and uptake of carbon dioxide from the atmosphere, may be negatively affected also is now recognised. Both biodiversity loss and impairment of ecosystem services pose potentially major threats to society (Brian) 2007.

Lake Kariba has superimposed its own weather pattern on the climate of the Zambezi valley. According to Taylor (2007) adjacent to lakeshore on the Zambia, generally there has an increase in rainfall while on the Zimbabwe side there has little rainfall activities.

2.1 Extreme heat

You are already in Sinazongwe if your body starts dripping with sweat. Temperatures were on the rise, but could not explain the differences in temperature changes between night and day times. People even sleep outside because the heat in the house is unbearable.

Heat is the number weather-related killer. Heat killer by pushing the human body its limit. In extreme heat and high humidity and evaporation is extreme. On Lake Kariba, rocks form flat stone, and flat stones form poor easily erodible soils over a short time. A heat wave is an extended period of extreme heat, and is often accompanied by high humidity. These conditions can be dangerous and even life-threatening for humans who don't take the proper precautions.

2.2 Shorter Rainy Season

The Meteorological Department has asserted that the current weather condition over the southern part is expected to continue for some days until the Inter tropical convergence zone (ITCZ) moves northwards. (ZMD, 2014) The magnitude of heavy rainfall is alarming and the roads have turned into streams of water as it continues rain to ceaselessly. People have to brave these stream roads as they have choice but to get food and other necessities.



Fig:4 men crossing the road



Fig5: Kepenta rods

2.3 Floods

As a result of incessant rainfall, during the floods of 2007, the study undertaken by Oxfam found that 65 percent of the households interviewed were affected by the floods and 33 percent mostly those on the Zambezi plains were displaced and another 17 percent had to relocate to alternative homesteads on the uplands (Bwalya, 2007).

Bina mutinta of Sinazongwe shakes her head as flooding continues. She has lost everything but her life. It started raining five days ago and the lake has reached its peak and water begins to flood various areas on the lakeside which Bina Mutinta's home. She came to lakeshore in search for an area to grow maize and sorghum, but alas, all her crops have been

washed away. Her children no longer to go to school. Bina Mutinta and her children will have to queue up for relief food and wild food.

2.4 Drought

Recurring drought also threaten food security. Zambia has experienced severe droughts in the years 1916/17, 1924/25, 1949/50, 1983/84, 1987/88, 1991/92, 1994/95, 1997/98, 2001/03 and 2004/05(Sichingabula 1998). These events are also understood to be closely related to El Niño and the Southern Oscillation phenomenon which affects Eastern and Southern Africa.

CLIMATE VARIABILITY OF SINAZONGWE IN THE LAST YEARS

Selected Socio-economic and Environmental Impacts

1972	Poorest rainy season in 50 years; drought caused substantial drop in crop yields and a reduction in groundwater reservoirs
1975/76	Heavy rainfall resulting in urban flooding in Lusaka (Kanyama disaster –extensive infrastructure and settlement damages). This resulted in considerable damage to agricultural crops in many parts of the country
1978/78	A drought rainy season, reducing maize production by 25 – 40 percent.
1972/73	A poor rainfall distributed rainy season with elongated dry spells. This caused considerable losses to the 1980 maize crop in Southern Province.
1977/78	Below normal rainfall caused reductions in crop production as well as livestock production. Rainfall deficits ranged from 30 to 50 % in Southern & Western and 10 to 40 % elsewhere. The Luano Valley of Central Province experienced significant famine.

1981/82	Frequent dry spells during the season led to poor performance in the agricultural sector, especially over the southern half of Zambia
1983/84	Drought reduced agricultural yields for the third consecutive season; worst affected areas were Southern, Central and Western Provinces
1987/88	Frequent dry spells between February and March led to widespread crop failure in Southern Province.
1988/89	Heavy rains in mid-season caused extensive water logging in crop fields; ar
1989/90	Persistent dry spell caused severe moisture stress in the major maize growing areas of Southern, Central and Eastern Provinces
1989/90	Southern, Central and Lusaka Provinces experienced dry weather conditions.
1991/92	Worst drought for many years hit the most critical crop stage (silk formation). All areas were declared disaster areas by the then Republican President, F.T.J. Chiluba
1999/00	Heavy rainfall caused floods in many parts of the country. (Season of “Mozambique” Floods).
2006/05	Heavy rainfall resulted in flash floods especially in the lower Zambezi (Kazungula floods, Kafue Gorge mudslide resulting in country wide Zesco black out)
2007/08	Excessive rains over much of the country resulting in flash floods

Public private partnerships can help to ease the bottlenecks that constrain trade (Qubo, 2013)
Local firm with Government help, should find ways innovate and develop products for their own local people. Art and culture, for example,

Foreign investors- The North needs south and the south needs north!

For all the value that they will bring to a host country, western companies and government should recognise that sustainable development will come through the application of local

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8/10

investment, ingenuity and labour (Qubo, 2013).

Sinazongwe has all types of poverty. Poverty of health, poverty of agriculture and food security, poverty of infrastructure and shelter, poverty of water and energy. I see a bright and prosperous Sinazongwe , with major hydro power stations, industrious in coal mining and booming with tourists like Livingstone and Siavonga. But there is an up mile to be done

Therefore, what is selling poverty? Selling poverty means marketing Infrastructural development, health, climate change adaptation and mitigation, poverty of agriculture and food security. Selling poverty means marketing to all those who care about Sinazongwe

Sinazongwe has all the qualities of development and therefore they should be masters of their own economy.

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