Zambia

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Abstract

The Republic of Zambia gained its independence from the UK in 1964 and until 1991 it was under a one-party control. Since then there have been minor political issues, but this is not the cause of Zambia's large problem with hunger. At the start of its independence the country was stable, but in 1975 the copper prices from Zambia were significantly lowered. This hit the country especially hard because copper is Zambia's main export. This was followed by a devastating drought in the early 90's, which led to widespread famine. The country has not fully recuperated because of additional periodic small-scale droughts and tropical storms. These environmental factors have had an extremely prominent impact of the farming industry as well as the nation's health. While over half of the land is arable less than 10% is actually used for farming (Anyangwe 2006). Zambia has a 13.5% prevalence of HIV/AIDS (CIA world Factbook) and is also plagued with many food and waterborne illnesses as well as infectious diseases such as hepatitis A, typhoid fever, and malaria. There is also a large problem resulting from the age of the population of Zambia. The median age of the population is 16.5 years old and almost half of the country is under the age of 14, which has major repercussions because it drastically reduces the size of the national workforce. This inadequacy has led to over 60% of the country living under the poverty line. Zambia has been refusing certain food aid from other developed countries because the government is concerned about genetically modified (GM) food, specifically mixing their own crop with GM seeds.

Maps

Figure 1: Map of Zambia ([https://www.cia.gov/library/publications/the-world-factbook/geo/za.html](https://www.cia.gov/library/publications/the-world-factbook/geo/za.html) 2011: Figure 1)
Background to Zambia

Zambia was once a lush, fertile country, with an abundance of arable land. Before 1855 the Chewa and Nsenga tribes inhabited the fertile area between the Luangwa River and the Zambia-Malawi border, a place with trade, surplus and cattle. Around 1855 Ngoni tribes invaded, and eventually settled in eastern Zambia. In 1892 there was a rinderpest epidemic that killed much of the wild game and cattle, which was their main form of wealth. Soon after the British Central African Protectorate invaded and defeated the Ngoni people. In 1891 British officials declared it illegal for Africans to have or buy guns and powder, and in 1896 hunting licenses were instated in order to control overproduction. Only one tenth of the cattle the indigenous people had before the British invasion remained. Because they no longer had an abundance of cattle, and they were restricted from hunting, indigenous people had much less protein in their system weakening them. Without being able to hunt game during the dry season the animal population began to get out of control, destroying local gardens and crops. Not only were the indigenous tribes not able to hunt or own guns, they were also relocated onto land that could not support the amount of people that were there. Many of the male locals went to work leaving their tribes behind, leaving the women, children and elderly to fend for their selves. They tried to support themselves but they did not have enough people to grow enough crops and could not hunt. The lands that the indigenous people were forced off of was reserved for European settlers who would raise cattle, but they never ended up arriving, so much of the land was overrun by wild game, leading to an increase in the tsetse fly. They soon infected the cattle, as well as causing the sleeping sickness in humans. This sickness was followed by a wave of the Spanish influenza, bubonic plague, and multiple waves of the sleeping sickness. Much of the soil became exhausted due to overproduction, and there were not enough workforces to clear more of the land. Elephants were overrunning crops, and because the government insisted that the villages of indigenous people were combined, they were not allowed to build houses on the land in order to protect their crops (Vail 1997). One of the saddest indictments of destructive colonial practices I've read in a while.

From 1953 up until 1963 Zambia was part of the Federation of Rhodesia and Nyasaland united under British rule. In 1963 the federation broke up in 1963 when Zambia gained it’s independence from Britain. (Scarritt 1996). In 1964 UNIP or the United National Independence Party held most of the power in the government. There was much struggle to maintain control over the people who believed that once the British were abolished things would immediately get better. Provincial demand increased and enemies of UNIP rose up to oppose them (Macolo 2006). Between 1972 UNIP controlled most of the seats in parliament. There were three main successful parties; ANC, UNIP and MMD, or Movement for Multi-Party Democracy. In 1991 the UNIP suffered a major defeat and in 1996 they withdrew form the parliamentary elections and urged supporters to boycott voting. This ended up making them less noted on a national level (Burnell 1991).

Politics and Economics

Zambia has been in a state of economic crisis for decades, and the struggling copper industry is largely responsible. The first commercial copper mine in Zambia was opened at Roan Antelope in the year 1928, and copper has been the dominating force in Zambia's economy ever since (Lungu 544). Throughout the 1960’s and first half of the 1970’s, Zambia was very stable economically, classified as a middle-income country. The copper mines were united under one state organization, the Zambia Consolidated Copper Mines (ZCCM), which was consistently producing over 700,000 tons of copper per year in the early 1970’s and accounted for 12% of the world's copper (The Economist 2006). In 1975, however, the price of copper collapsed (Lungu 545). For the next twenty years, Zambia was unable to recover, and its international economic ranking plummeted to 25th poorest in the world. 64% of Zambia’s population lived in poverty on an income of about two dollars per day. In a country where poverty is so prevalent, it is not surprising that many people are starving, unable to provide food for themselves or their families.

The Movement for Multiparty Democracy (MMD), led by Frederick Chiluba, was elected into power on October 31, 1991 (Pletcher 129). Many believed that privatizing the economy would bring about positive change. Talk of this began in 1991, but an agreement for the sale of Konkola Copper Mines (KCM) did not come until the year 2000, when Anglo American bought it for $90 million.

Initially, Anglo American boldly stated that it would take them twelve months to revitalize the copper industry (The Economist 2002). This, however, proved simply impossible. They pulled out of the operation a few years later. Perhaps their efforts would have been more successful if it were not for the corrupt practices of KCM’s miners preceding Anglo’s acquisition of the industry. Miners often practiced “scavenging”, in which they scraped out only the shallow, easily available copper deposits (The Economist 2002). This method lost the ZCCM money – money that could have been used to dig deeper to the more profitable deposits. Furthermore, if Chiluba had agreed to sell KCM just a few years earlier, the Zambian government would have received far more money than it did. The longer he waited, the lower the copper prices dropped, and the less money Chiluba collected in the end.
Chiluba’s presidency ended in 2002. His successor, Levy Mwanawasa, was intent on cleaning up Zambia’s government and improving the economy (The Economist 2002). Only this time, it was done right. In 2004, Vedanta Resources purchased KCM (The Economist 2006). Since then, foreign investment has been re-delivered, reinvigorating the industry, increasing production, and producing jobs. Mwanawasa’s rule ended prematurely when he suffered from a stroke in 2008 (Cheeseman and Hinfelaar 2009). Rupiah Banda was his successor. In 2010, the World Bank named Zambia one of the world’s fastest economically reforming countries (Lungu 2008:549).

So, hopefully Banda continues what was started by Mwanawasa, leading the nation to reach its full potential. The case of Zambia illustrates the importance of diversification within an economy. Many African countries rely too heavily on a single export (The Economist 2002). If that one industry fails, the entire economy crumbles, so there has to be something to fall back on. Zambia is beginning to make this adjustment and will eventually prosper once again.

Zambia’s hunger problem is different than that of other impoverished countries in Africa. Some would describe it as at least partially “self-imposed” because Zambia’s president, Levy Mwanawasa, has refused to receive food aid from the United States on the grounds that it may be genetically modified (Pringle 2003:43). Only three other countries have done something similar, but they did not go to this extreme. Zimbabwe, Malawi, and Mozambique only accepted milled corn from the United States, thus preventing the growth of genetically modified (GM) crops in their own countries (Paarlberg 2003:86). This refusal of food aid by Zambia has sparked much controversy and continues to contribute to hunger in the country.

Zambia’s president, Mwanawasa, did not reject this food because he is a harsh or cruel dictator. He honestly believes that the possible risks of GM produce outweigh the benefits for the nearly three million starving people in his country (Bohannon 2002:1). Mwanawasa has said “is simply because my people are hungry is not a justification to give them poison.” According to a Zambian scientific team, GM food could be dangerous not only to the environment but to the health of the people (Pringle 2003:43). These threats along with the cautious attitude of Mwanawasa and the influence of the European Union has Zambia in a state of limbo.

The main concern in regards to the environment is that planting GM crops would threaten biodiversity in Zambia. This would leave their crops more susceptible to a single disease, to which none of the few remaining varieties would be resistant to (The Lancet 2002:1261). Such a disease could be even more devastating than droughts if GM foods were to become prevalent. Another lesser, but still important, concern is that through “gene flow”, weedy relatives of the GM plants could become hardier, and overrun the arable land (Pringle 2003:46). These “super-weeds” would be extremely detrimental to the farming community.

Though research so far seems to show that there are not adverse affect to consuming GM foods, there is still a heavy mood of skepticism surrounding the issue. A major concern of Zambians is that they consume raw corn as a staple of their diet, where as Americans eat most of their GM foods after they have been processed (Pringle 2003:44). This brings about the risk of new allergies, and the potential for antibiotic resistant bacteria to enter the human digestive tract (The Lancet 2002:1261). There is no guarantee that these fears will come to fruition, but the risk certainly exists.

Aside from the environmental and health concerns, Zambia is concerned that if it were to start growing GM crops it would lose its ability to export crops to the European Union (Annear 2004:20). This is in fact a much stronger rationale than the health concerns, yet overlooked in some accounts, making Zambians seem irrational. The European Union (EU) has very strict policies against GM food. Thus it is able to deter Zambia and other countries from using GM food economically. The EU has not been nearly as accepting of GM food as the United States, and continues to support countries that will not accept and use it.

By refusing GM food aid, Zambia, a marginal third-world country, has given itself a voice in the world. Its recognition by Western countries is a step up for a formerly unimportant country (Annear 2004:20), but its people still remain hungry.

Hunger in Zambia

Hunger in Zambia is greatly influenced by drought. This south African country has experienced it’s worst drought in two decades (The Lancet 2002: 2047). According to Anonymous (2002: 2047), as a result of the food insecurity caused by drought, people are eating foods that could be potentially poisonous that they find in the wild. Some have even resorted to prostitution in order to get enough money to feed their families. Anonymous (2002: 2047) also cites the lack of action from the UN as a factor in world hunger. The HIV/AIDS epidemic has combined with the drought to affect hunger in Zambia, as well. The epidemic has caused a weakening in households. They are now less able to recover from losses in income and production that were due to the drought (Mason et al., 2010: S210). The interaction of these two factors has led to what is called a “new variant famine” (Mason et al. 2010: S210). The result of this new variant famine is that in areas where drought exists and there is a high prevalence of HIV/AIDS, the two interact. Thus, nutrition in these areas deteriorates much faster than it does in areas where only one persists (Mason et al. 2010: S210). In countries where drought occurs, the prevalence of underweight people is 3.4 percent higher than in countries not experiencing drought and in the years 2000 through 2002, the prevalence of people underweight increased around 5 to 10 percent due to drought and also partly due to economic recession (Mason et al. 2010: S213). In Zambia in 2001, a little over 30 percent of the population was underweight (Mason et al. 2010: S213). The effects of the new variant famine do not show that drought and HIV/AIDS are related, but they do show that the two can combine to cause even more hunger in a country like Zambia where they can interact to magnify the problems. Unfortunately, it does not appear that the lack of precipitation in Zambia will be alleviated soon. In northern Zambia, trends opposing the upwards ones that were found in southeastern Africa (Shongwe et al., 2009: 3). According to Shongwe et al. (2009: 3), disasters related to drought rose from 1.5 per year to 2 per year from 1980 to 2000. This increase in drought related incidents is proof that the drought is growing worse, not getting better. Drought is affecting the entirety of southern Africa. In the austral spring months, mean precipitation has significantly decreased (Shongwe et al., 2009: 549).

Health In Zambia

Zambia has an alarmingly high rate of HIV/AIDS, as well as large percentages of water borne illnesses such as hepatitis A, typhoid fever, as well as significant amount of malaria (CIA world Factbook). Those at highest risk for contracting HIV/AIDS are young women, who are four times more likely (Kapungwe 2003). This is because they are just entering the age of marriage and children, the age where they will begin to have sex. Sexual education was severely lacking in Zambia although in the 1990s the government started to intervene (Kapungwe 2003). Now, the majority almost all (90%) of the populations adults know what HIV/AIDS is and over half know how to prevent it (Kimuna 2005). Even though the people know that abstinence is the only way to completely prevent an STD and that condoms and one partner sexual activities are safest, this does not mean that they behave in this way. One variable that seems to be limiting extramarital sex within Zambia is religion. Those who selected “other” for religion in a study were seen more likely to have an extramarital sexual encounter (Kimuna 2005). Additionally, sexual practices that include dry sex and the discouragement of contraceptives are frequent in Zambia and but unfortunately no amount of sex education thus far has changed these practices. This problem is not restricted to Zambia alone. Sub-Saharan Africa has a very high rate of HIV/AIDS, which leads to major issues across the continent. This epidemic has lead to the largest number of children who have been turned into orphans (Grassly 2004).

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A major issue when it comes to public health in Zambia is a lack of commodities and resources vital for a nation’s stability. One major issue is clean water. Since the devastating drought in the early 1990s there has been a lack of clean water both for agriculture and for consumption. This is not seen in Zambia alone. Much is being done in the case of water-transfer but “due to the lack of educated manpower most African countries do not have unlimited access to the advanced technology and coordinating capacity needed even if finance were available” (Falkenmark 113). This shows that even if the country received technology or management needed to help, the water problem would not be fixed. In addition to water, the waste management program in Zambia is severely lacking. This is the reason for many food or waterborne illnesses and the uncollected waste also leads to a rise in vector borne illnesses. The Zambian government is currently working on projects that will decrease their vector borne illnesses such as Malaria. They are working with the Bill and Melinda Gates Foundation to put bednets into most households (Butler 2005). This is supposed to prevent the mosquitoes that carry the illnesses from reaching the residents of Zambia.

Prospects and Strategies for Hunger Reduction in Zambia

There are not many solutions to drought because most farmers have little access to irrigation. However, an article in Appropriate Technology titled, “Drought Tolerant Maize Will Greatly Profit African Farmers” (Anonymous 2010: 8) suggests that African farmers can plant drought resistant corn. This could potentially benefit Zambian farmers because drought is a major factor affecting hunger. Planting drought resistant corn has the ability to help at least four million people, as long as all farmers are willing to replace their crop with a drought-resistant crop and the yield advantages described are achieved (Anonymous 2010: 8).

If the Zambian government would accept limited amounts of genetically modified food it might help to alleviate some of the hunger problems while still being able to export non-GM food to Europe for income. They could also accept GM food that has been milled while denying the seeds. This way the crop won't spread and contaminate the local crop.

Pictures

Figure 3: Drought destroyed the corn crop of this farmer in Lisutu, Zambia, in 2002. ([http://faculty.washington.edu/girvetz/ClimateWizard/lisutu-zambia-ag-dead-farm-filed.jpg] 2002: Figure 3)

Scholarly and Peer-Reviewed References Cited:

Anonymous


This article is about the lack of action of the 1996 UN World Food Summit. It also mentions that the drought in Zambia is the worst one experienced in that country in 20 years.

Anonymous


This article is about the possibility of solving some of the hunger problems Africans face due to drought. The suggests that African farmers begin using drought-tolerant maize because doing so could potentially help at least 4 million people.

Anyangwe S, Chirwa B, Mtonga C.


This case study fallowed the Millennium Developmental Goals of Zambia including HIV prevalence, orphan count, condom use, disease rates, and other socio-economic developmental organizations
Bohannon, John
This article discusses Zambia’s rejection of food aid and some of the fears they have of GM products.

Burnell, Peter
This article looks at the government of Zambia up until 1991 and predicts how the government will change from 2001 forward.

Butler, Declan
http://search.proquest.com/docview/204588519?accountid=11072

Cheeseman, Nic & Hinfelaar Marja
This article discusses the aftermath of president Mwanawasa’s death and what can be learned from the actions that were taken.

Foster, Susan
This article discusses the “triple catastrophe” Zambians face. “Triple catastrophe” refers to simultaneous drought, corridor disease, and AIDS.

Frank, Emily.
This article explains about the reoccurrence of AIDS in Zambia and the Governments help on both the local and national level.

Grassly, Nicholas C.
How safe is GM food?
This article focuses on the health and environmental risks that the president of Zambia fears will harm his country if GM foods are introduced.

Kimuna, Sitawa
http://www.jstor.org/stable/3649483

Lungu, John
This article discusses the history of Zambia’s copper industry, outlining what led to its failure and current revival.

Macola, Giacomo
This article looks at the expectations of independence, and the UNIP in government and the benefits adopting an empirical sub-system approach to the study of postcolonial politics in Zambia.

Mason, John B.; Chotard, Sarah; Bailes, Adam; Mebrahtu, Saba; Hailey, Peter
This article is about underweight prevalence in Eastern and Southern Africa. The article mentions that HIV/AIDS have interacted with one another to create a “new variant famine” in Zambia.

Mason, Nicole.
Paarlberg, Robert


This article discusses GM foods in relation to world politics. It shows that the opposition of the European Union to biotechnology has influenced much of the world.

Pletcher, James


This article gives an overview of the political and economic difficulties that Chiluba faced when he was elected president in 1991. It also explains some of the reform methods that he implemented during this time.

Pringle, Peter.


This article discusses Zambia’s refusal to accept food aid from the US based on concerns about genetically modified (GM) food and crops. Zambian scientists have conducted tests that have lead them to believe that GM is unpredictable and may have negative effects on the populations for whom unprocessed corn is a diet staple.

Scarritt, R. James, Nkiwane, M. Solomon


This Article discusses the close relationship between Zambia and Zimbabwe, through colonialism up until their current relationships now.

Shongwe, M.E.; van Oldeborgh, G.J.; van den Hurk, B.J.J.M.; de Boer, B.; Coelho, C.A.S.; van Aalst, M.K.


This article shows the changes in precipitation in Africa that are being predicted.

Vail L.


This article looks at the effects of colonialism, gun control laws, game control policies, taxation, land reservation and South African capitalism on the deterioration of eastern Zambia.

Other References Cited:

Annear, Christopher


In this article, Christopher Annear examines the motivations behind President Mwanawasa’s (of Zambia) refusal to admit genetically modified foods into the country, even as aid. Annear explains that food is not only used to prevent hunger. In each society, different foods play different social roles.

CIA---The World Factbook


This webpage contains many statistics relating to Zambia. The images in Figure 1 and 2 were also from this webpage.

The Copper Phoenix


This article discusses the most recent purchase of Zambia's copper mines and what is being done to revitalize the industry.

International: Biting the Hand; Zambian Politics


This article discusses Mwanawasa's decision to strip Chiluba of his immunity from prosecution, showing his people his campaign to clean up Zambian politics.

Tragically Undermined


This article goes into great detail about the history and present situation of Zambia's copper industry.