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**Ghana, Waste Colonialism and Its Effects on Food Security**

The recent rise in overconsumption is inarguably to blame for the increasing difficulty of global waste management. Increased production directly correlates to increased amounts of waste. The total amount of solid waste generated in Canada reached 36 million tonnes as of 2020. Compared to the fact that 26.1 million tonnes of waste were either stored in landfills or incinerated in Canada in 2020, this highlights a 27.5% gap between waste produced in Canada and waste that actually gets stored in Canada (Environment and Climate Change Canada). While these statistics from Canada alone are alarming, this is unfortunately a discrepancy that can be observed amongst virtually all Western countries (Sensoneo). Looking at these numbers begs the question; where exactly do the tonnes upon tonnes of waste that are unaccounted for end up? Paying a visit to the West African country of Ghana reveals the daunting answer to this question, “Waste Colonialism.”

“Waste Colonialism,” coined as such by the United Nations Environmental Programme Basel Convention in 1989 (Longdon and Gawande), is to blame for the astronomical amounts of waste observable not only in Ghana but in many other African countries as well. As global production rose following industrialization and the rise of fast fashion, there became more waste to manage. In the 1980s, developed nations began tightening legislation surrounding waste disposal and health standards. To avoid the high cost associated with their environmental regulations, wealthy nations began exporting their rubbish to developing nations which are incapable of sufficiently storing and disposing of the waste (Warren). Furthermore, in 2012, China was importing nearly 50% of the world's waste, but in 2018 China banned the import of waste materials and Western countries rushed to find new nations to export their waste to; this burden was adopted by African countries such as Ghana (GAIA US Canada).

Waste colonialism serves as a means of gaining control over the indigenous people by taking over public space and displacing citizens from practicing their traditional subsistence agriculture. Having mountains of waste on the land becomes all-consuming; Ghanaians in affected areas are forced to collect and sell waste to make a living and experience a lower quality of life. In Ghana, this waste mainly takes the form of textile and electronic waste. In these wastelands, one can find clothing from popular fast fashion brands such as H&M and Primark and electronics from tech giants such as Apple and Samsung (Yeung and Johnson). Both technology and fashion work hand in hand to create this waste; the access technology gives us to one another has changed a previously 20-year fashion cycle into one that can change in as little as two or three months, meaning textile waste is being produced faster than ever before (Dominus). Waste colonialism can also manifest as the existence of factories that emit toxic fumes being housed within poorer countries; this damages the environment and comes at the expense of the well-being of the locals. There are also social implications that come with waste colonialism; developed nations dumping their waste into less developed nations fuels harmful stereotypes regarding the people in developing nations as being unclean and primitive. Overall, the excess waste suppresses the quality of life for people in countries such as Ghana and exacerbates poverty, resulting in increased food insecurity.

To begin to understand the relationship between waste colonialism and food insecurity, it is important to understand some information about Ghanaian culture and history. Ghanaian families eat a dish referred to as “fufu” which is a starchy, dough-like porridge typically eaten with a fish, meat, or vegetable stew (Fage and Boateng). There are also regional/tribal variations in dishes and Ghanaians utilize local spices and herbs such as pepper, cumin, coconut, chili, and curry (Tayo Oredola). Ghanaians value family to the highest degree, it is seen as a security net, social bedrock, and a unit of production and distribution (“Ghana - Family Structure, Family Formation, and Family Life”). Family in Ghana is viewed as the nuclear family, the extended family, and other community members. Language plays a large part in this; adult women and men are referred to as “auntie” and “uncle” regardless of the existence of familial ties (AFS-USA). In Ghana, more than one-half of the population is Christian, about one-fifth is Muslim, and a small segment adheres to the traditional indigenous religions (Britannica). This unique blend of religion can be attributed to the country’s history of trade with other nations.

The 15th century brought explorers from Portugal (a Christian nation) and merchants from neighboring African countries that had adopted Islam (“A Journey through Islam: Muslims Have Come up Well in Ghana”). The Portuguese acquired slaves and gold in exchange for European goods, such as metal rum, beads, and guns (Wikipedia Contributors). News of the success found in the “Gold Coast” colony, as Ghana was called at the time, spread back to other European travelers, and they started building forts along the coastline as well (Wikipedia Contributors). Britain rose to the top, taking more and more control of the area, which consequently led to a gruesome series of conflicts and wars between Britain and the local kingdoms. Ghana eventually acquired its freedom from Britain; on March 6, 1957, it became the first sub-Saraharn African colony to gain independence (Ghana Web). Liberation did not instantly resolve the problems brought about by colonization, however. In the following decades, Ghana has gradually been attempting to restore itself but the poverty, illiteracy, and food insecurity, observable in Ghana today are directly related to the colonial history in the area. Ghana, much like many other African countries, is yet to fully recover from being colonized, which in turn has weakened the nation; the land and people are still being left susceptible to exploitation and this is especially notable in the form of waste.

At the Kantamanto fashion market in Ghana’s capital of Accra, Ghanaians are left responsible for bales of textile waste that come from the global north. While Ghanianins find creative ways to revive, transform, and resell clothing, according to The Or Foundation, 40% of the clothing in Kantamanto leaves as waste (Johnson). This is because as time goes on and trend cycles speed up, the textiles being sent in are becoming less and less salvageable. John Opoku Agyemang, the secretary of the Kantamanto Hard Workers’ Association, shares that, “The problem of waste is getting worse. For 12 years, the goods coming here have not been good, we can’t benefit from them. It’s my impression that countries abroad think Africa is very poor so they give us low-quality goods and their waste” (Johnson). The unusable textiles are sent to nearby landfills where local communities once stood. “Old Fadama,” two miles from Kantamanto, is a haunting example of this; in place of what used to be a thriving community stands the largest sanctioned dump for clothing waste that leaves Kantamanto (Johnson). 80,000 people take residency here and the majority are migrant farmers and/or their children who come in search of better jobs in light of climate change’s negative impacts on agriculture in Ghana (Rapezzi). In 2021, the Ghanaian government made efforts to demolish the commercial district, nicknamed Agbogbloshie, which employed waste-collection workers and which sat on the Korle Lagoon of the Odaw River. However unsafe waste and e-waste management practices are still thriving in Ghana because the livelihoods of Ghanaians depend on this hostile market (Njoku et al.).

In these scrap yards, containers filled with secondhand technology arrive from Europe and North America and are mixed in with the textile waste from Kantamanto. The workers do the informal work of sorting and trading this metal (often with countries such as China and India) and the waste that can not be traded is incinerated. It is then picked through for metal scraps, usually by the newest, youngest, and therefore most susceptible workers on the site. These collectors can earn as little as US$1.70 a day (Rapezzi). There is no escape from the waste for these workers. These landfills are essentially slums where the workers not only toll away in the waste, but also lay their heads down at night. This highlights many concerns, one of which is health. This combined with the lack of PPE, employee training, and safety regulations at these scrap yards amplifies the inherent health risks posed (Lissah et al.).

Issues such as lung problems, cancers, back problems, headaches, and more are reported by most workers and waste workers are 5.6 times as likely to suffer from occupational injuries (Kuijer et al.). "[…] Plastics fetch the best rates, but sorting waste is hazardous. We open sacks, and there are soiled sanitary napkins in newspapers, human excreta in polythene, shards of glass, syringes, or nails. We cut ourselves and develop rashes and infections. Rotten food makes us sick. But we have no pension, recognition, or medical facilities," one waste collector shared with the Intergovernmental Committee (Amankwaa and Oteng-Ababio). Mercury, arsenic, lead, and other harmful metals seep into the soil and the nearby Odaw River, rendering the soil unsuitable for agriculture and rendering the river a sewage site (Rapezzi). “As it is now, I can’t go near the lagoon. It’s like a death pit. People used to fish there, and there were a lot of canoes with people depending on the lagoon for their livelihood,” explained 24-year-old photographer Alhasaan Fatawu (Johnson).

Health concerns are not the only issue facing the waste collectors of Ghana. Lack of education and food insecurity are also plaguing their lives. When children spend their days sifting through garbage, barely making enough to make ends meet, the funds, time, and the mere energy to attend school are simply non-existent for these children. When considering that as of 2022, 7.9 million persons (4.6 million of which are women and 3.3 million of which are men) aged 6 years and older in Ghana are illiterate, it is evident that waste colonialism needs to be solved sooner rather than later (Ghana Statistical Service). Waste colonialism and the garbage it brings is not a reliable source of income, deeming those who depend on its food insecure as defined by the Food and Agriculture Organization of the United Nations (FAO). On the days when the textiles brought in are worn beyond repair and there are no lucrative metal pieces to sell, the waste collectors go home with little to no money to buy food. Combating the issues of food insecurity and lack of education in Ghana means addressing the low wages, hostile work environments, and most importantly the root cause; waste colonialism. This can be done by exploring solutions for how to prevent the waste from coming into the country and managing it once it does enter.

EPR, or extended producer responsibility, is an umbrella term for methods of shifting the responsibility of product waste from the individual onto the businesses that create it. The Basel Convention, adopted in 1989 is known as the most comprehensive global environmental agreement on waste with 175 parties as of March 2011. The Basel Convention aims to protect human health and the environment against the negative effects that result from the generation, transboundary movements, and management of wastes. It also states that parties have an obligation to minimize the quantities that are transported, to treat and dispose of wastes as close as possible to their place of generation, and to prevent or minimize the generation of wastes at source (Environment). Further enforcing pre-existing laws such as The Basel Convention while simultaneously working towards new laws that implement EPR can serve as a foundation for fighting against waste colonialism. By holding companies accountable for what they produce from start to finish, EPR encourages changes in product design, re-usability of items, and recycling collection rates (Howell). The aforementioned “Or Foundation” is a charity founded (in 2011) and based in Ghana whose mission is to combat waste colonialism by creating a circular flow of goods in the fashion sector by utilizing EPR strategies (“The Or Foundation”). The organization upstarts numerous different ideas and projects in order to do so such as paid apprenticeships, clean-up projects, intensive research, and multimedia outreach (“The Or Foundation”).

One important thing to keep in mind is that as unpleasant and dangerous as it is, working in waste management is how thousands of Ghanaians make a living, therefore any solution to this crisis must be mindful of this fact. To take inspiration from a pre-existing and successful waste management strategy that is observant of this, Ghana could utilize an approach similar to that of the group “Sungai Watch.” Launched in 2020, Sungai Watch is an NGO based in Indonesia whose goal is to stop waste from ending up in the ocean. They do so by sending some of their 119 workers to different rivers and coastlines where they pick the trash and bring it back to one of their seven sorting facilities where it will then be categorized, cleaned, and then turned into chairs made 100% from recycled material (Sungai Watch Team). Sungai Watch also does work to care for the land post-clean-up, they notably turned a former dump into a sunflower garden; this builds community and fills the gap (both literally and figuratively) that removes the waste leaves. This approach would afford Ghanaians who are employed as waste collectors the ability to provide for their families while transforming the work they do into something beneficial to the community. This is an approach that also helps tackle the pressing health issue by leading to cleaner water supply. Not only does a cleaner water supply mean better health, it means an overall improvement in the land quality and environment which means better crops and a greener future.

Another approach for repurposing waste is the implementation of plastic roads. First tried in India around two decades ago, they not only help absorb the surplus of waste, they also prove to be a durable pavement option; “Using waste plastic in road construction helps to improve substantially the stability, strength, fatigue life, and other desirable properties of bituminous mixes, leading to improved longevity and pavement performance,” Michael Burrow, an engineer at the University of Birmingham and senior author of a global study of the technology, said in an email (Parson). Plastic roads address the waste crisis while making transportation cheaper and safer and will create job opportunities, better access to healthcare and schools, and increase overall safety.

To take further inspiration from pre-existing waste management initiatives while also tackling the education crisis, the so-called “coconut school,” an initiative started in Cambodia, could be implemented throughout Ghana. The Coconut School Foundation (CSF), founded in late 2016 by Ouk Vanday and Seyla Khoem, focuses on sustainability by using recycled materials such as used tires, plastic bottles, and cans in its construction of schools. In their own words, “CSF dedicates itself to the schooling of children from less advantaged backgrounds, nurturing them to be catalysts for transformation within their localities” (CSF 2024). The CSF, based in Kirirom National Park in the province of Kampong Speu, serves 180 students from kindergarten to sixth grade. The school repurposes the waste in an innovative way that makes the architecture appealing and interactive for the children. Inside the school, you can find once discarded beer bottles shimmering as the foundations for the walls, and look above to find discarded takeaway cups being used as the classroom ceiling (Board). At the coconut school, children pay their tuition via waste and those who cannot gather the waste can pay via other non-monetary contributions such as eggs and chickens. The CSF encourages impoverished youth to be innovative and eco-friendly while also providing them with the rare opportunity to gain an education. Waste-related education is a vital step in creating a better future for countries suffering from waste colonialism.

While a lot of the waste in Ghana comes from other nations, every population creates waste and has room to do better at managing it. Concepts like carbon literacy, defined by the Carbon Literacy Project as an awareness of the carbon costs and impacts of everyday activities, and the ability and motivation to reduce emissions, on an individual, community, and organizational basis,” can be fundamental in unlocking a better tomorrow for Ghana (The Carbon Literacy Project). The Carbon Literacy Project aims to educate people about their carbon footprint and how to reduce it; they do so via many mediums, including courses that can be offered to the students who attend coconut schools.

Waste management in Ghana is a complex and multifaceted issue that requires a level of sensitivity, awareness, and knowledge in order to tackle its effects. An important element to consider in tackling this issue is the delicate history of Ghana, particularly the effects of British colonization. Britain’s rule was like a toxin, seeping into Ghana and killing its spirit in the same way that the surplus of waste the country is battling now does the same. Ghanaians are drowning in waste from developed countries. It causes a level of poverty that wreaks havoc on their health, their access to clean water, their education, and causes crippling food insecurity. However, the future is hopeful as there are many unique initiatives that can be implemented. It is vital to be mindful of job security and what will be done with the waste when exploring solutions for the waste crisis and it is crucial to focus on ideas that demonstrate long-term sustainability. By drawing wisdom from non-governmental organizations that focus on tackling waste management, such as Sungai Watch and The Coconut School Foundation, the waste pickers of Ghana can transform their health, community, land, and lives. Ultimately, the goal is to work towards a cleaner and safer Ghana where poverty is mitigated and food is accessible to all.

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