

A SUMMARY OF RESILIENCY DURING COVID-19: ANALYZING WOMEN BUSINESS OWNERS IN BOTSWANA TO IDENTIFY SUPPORTIVE POLICIES THAT PROTECT WOMEN AGAINST PANDEMICS' NEGATIVE NUTRITIONAL AND FINANCIAL EFFECTS

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## ABSTRACT

The onset of the novel coronavirus pandemic (COVID-19) has been disproportionately destructive to women entrepreneurs across the globe. Botswana, an Upper Middle-Income nation with relatively high women business ownership rates, saw inequitable losses due to pandemic lockdowns. Despite Botswana's initiatives to protect their micro-, small-, and medium-sized enterprises that engage in the market, women-led businesses suffered financial losses and operation closures at a higher rate than that of their male counterparts due to socio-economic and cultural constraints. Women business owners experienced higher rates of business closures and asset losses, and lacked access to credit, subsequently experiencing decreased food security. As a result, the economic losses from COVID-19, which were suffered more heavily by women, exasperated family malnutrition and diminished gender equity in Botswana. This paper summarizes Botswana's COVID-19 experiences through the lens of gender inequality and follows with policy recommendations on how to better protect women business owners from future economic downturns through capacity building projects, and programs. This report ultimately suggests policies such as assisting women's engagement and participation in male-dominated workspaces, improved international gender equity programs, enhancing women's access to technology and bank accounts, and the prioritization of household food security to better protect women business owners during future economic shocks such as pandemic lockdowns or recessions.

## BIOGRAPHICAL SKETCH

Aly Mashek was raised in Frederick, Maryland located on the cusp of the Appalachian Mountains' foothills. She spent many summers during her youth at her family's dairy farm in Calmar, Iowa where she grew to appreciate farming, nature, and the steadfast dedication of those who manage it. She holds a Bachelor of Science in Human Nutrition and Foods & Food Science, from the Davis College of Agriculture, Natural Resources, and Design at West Virginia University. Following her undergraduate career, she sought out nutrition-related food security work. From 2019 to 2020, Aly served as a Peace Corps Volunteer in Arghakhanchi and Dadeldhura, Nepal working on sustainable food systems, nutrition education, and capacity building projects such as women youth leadership events. In March 2020, when the COVID-19 pandemic's initial lockdown phases were enacted, her cohort was evacuated out of Kathmandu after roughly 14 months of service. In sum, these experiences led her to pursue a Master of Professional Studies in Global Development at Cornell University, where she focused her studies on regenerative food systems, nutrition-sensitive food programs, and non-profit organization management. In her free time, Aly enjoys hiking, singing, comedy, and conversing with friends over coffee.

This paper is dedicated to my beloved grandparents,  
Robert William Mashek “Babbo”, Kathy Davis “Memaw”,  
Constance Moore “Mawmaw”, and Charles Casper Moore “Dada”

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## LIST OF ABBREVIATIONS

- CEDA - Citizen Entrepreneur Development Agency (Botswana)
- COP 23 – 23<sup>rd</sup> Conference of the Parties
- COVID-19 – Coronavirus Disease 2019
- FAO - Food and Agriculture Organization of the United Nations
- GCAN – Gender, Climate Change, and Nutrition Integration Initiative
- GDP – Gross Domestic Profit
- GNI – Gross National Income
- IFPRI – International Food Policy Research Institute
- IFC – International Finance Corporation
- ILO - International Labor Organization
- IMF - International Monetary Fund
- IPCC – The Intergovernmental Panel on Climate Change
- IWPR – Institute for Women’s Policy Research
- LEA – Local Educational Agency (Botswana)
- MIWE – Mastercard Index for Women as Entrepreneurs
- mSMEs- Micro, Small, and Medium-Sized Enterprises
- OXFAM – Oxford Committee for Famine Relief
- RRR – Recognize, Reduce, Redistribute (Framework)
- SSA- Sub-Saharan Africa
- T&H – Tourism and Hospitality
- UNESCO – The United Nations Educational, Scientific, and Cultural Organization
- USAID – United States Agency for International Development
- WB - World Bank
- WHO – World Health Organization
- WTO- World Trade Organization

## INTRODUCTION

The role of micro, small, and medium-sized enterprises (mSMEs) in the global market space as a catalyst for a country's development cannot be understated. mSMEs, organizations with less than one hundred employees, employ significant shares of working populations across the world, playing a crucial role in economic development, income generation, gender equity, and ultimately food security (Cherchi and Kirkwood, 2019). mSMEs not only play a central role in providing employment opportunities at lower capital costs than large industries, but also advance the industrialization and development of rural areas, thereby promoting local trade and more equitable distribution of national income and wealth on a macroeconomic scale (Stein et al., 2013). The World Trade Organization (WTO) estimates that mSMEs represent over 90 percent of active businesses across the globe, while representing 55 percent of the total Gross Domestic Profit (GDP) of developing economies (The World Bank, 2021). Furthermore, 60-70 percent of the formally employed labor force are employed by an mSME (World Trade Report, 2016); this statistic is even more dramatic when considering the informal labor force, such as street vendors, traders, and seasonal workers. Although comprehensive data is lacking, the World Bank (WB) estimates that there are approximately 280-340 million informal and undocumented mSMEs participating in the economies of the developing world (The World Bank, 2021). Of the informal work force in Sub-Saharan Africa (SSA), 89 percent of the workers are women, promoting opportunities for women to engage in income generating activities at a local level and generating trade within local municipal sectors (Stein et al., 2013).

Upon the imposition of worldwide COVID-19 lockdown measures, women led mSMEs bore the brunt of capital losses around the globe (The MIWE Report, 2020). A Finnish study on small business owners in Southern Africa documented that around 76 percent of surveyed

businesses experienced significant decreases in revenue from COVID-19 lockdown measures and forced the indefinite closure of 42.7 percent of all small businesses in the region (Business Tech, 2020). In May 2020, 26,000 business owners in over fifty countries were surveyed by the WB, and across the Sub-Saharan African (SSA) countries sampled, 34 percent of male owned mSMEs were temporarily closed at the time of the survey compared to 43 percent of women owned mSMEs (Goldstein et al., 2020). Moreover, the WB found that women owned mSMEs were 5.9 percentage points more likely to have closed their businesses indefinitely than male-owned businesses (Goldstein et al., 2020). These studies raise the question of how and why women-led businesses, so ubiquitously, suffered more during COVID-19.

This research paper examines the disproportionate effects of women-led mSMEs closure rates from COVID-19 related economic disruptions. Botswana was selected due to the fact that their economy heavily relies on the productivity of mSMEs, which is a significant market space for women. Among the non-agricultural workforce, almost 50 percent of women in Botswana (compared to less than 40 percent of men) are entrepreneurs, with the vast majority of these women being self-employed in small business settings (Cherchi and Kirkwood, 2019). This paper further summarizes Botswana's market structures and COVID-19 response in order to contextualize the disproportionate negative effects of the pandemic on women business owners, following with policy recommendations on how to better protect women business owners against future economic downturns through capacity building projects, programs, and policies.

The findings of this compendium touch on how governments, and all affiliated stakeholders, may increase women entrepreneurs' resiliency\* to shocks and stressors by investing in capacity. The 'adaptability' or 'absorptivity' of social groups to overcome shocks and stressors is also defined as resiliency and will be the primary informant variable for this

report's analysis. To build capacity with women entrepreneurs is for governments to procure resources and investments in women's education, improve women's access to technology and credit, reduce unfavorable loan terms, among many other strategies that can improve women's resiliency. Policy and programs that protect women business owners, and make changes that improve their well-being outcomes in the long-term, are crucial for protecting women and children against future pandemics (Byran et al., 2017).

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\*Definition of resiliency is provided in Literature Review Section 3.1

## THE GENDER, CLIMATE CHANGE, AND NUTRITION FRAMEWORK

The UN Climate Change Conference: COP23 was held in November of 2017 with a mission to define capacity, i.e., to measure resiliency during environmental shocks and stressors, in a comprehensive framework that did not compromise the advancement of gender equity and nutrition-related outcomes in malnourished populations. The result was the Gender, Climate Change, and Nutrition Integration Initiative (GCAN) framework (Bryan et al., 2017). The GCAN model, devised by the International Food Policy Research Institute (IFPRI), is used by many organizations to contextualize the relationships between nutrition-related food security outcomes and women's advancement in society, in order to minimize group vulnerability to climate change (Figure 1). This report will reference the GCAN framework, taking as a premise that COVID-19 greatly shocked and caused prolonged stress to the "economic-climate" of communities worldwide, similar to how climatic disaster would. Throughout the report I will use this phrasing to describe the devastating economic repercussions that stymied business globally throughout the ongoing COVID-19 pandemic, while adhering to the GCAN framework's parameters.

To elaborate, GCAN aids stakeholders with a conceptual guidance tool to analyze the relationships between resiliency, gender, and nutrition (Bryan et al., 2017). GCAN generates causation between seemingly disparate subjects such as food price shocks, civil instability, and conflict, and nutrition and gender-related outcomes (Figure 1). According to the IFPRI, individuals' or social groups' ability to withstand shocks, mitigate risks, or withstand infectious diseases, such as COVID-19, is a resiliency measure and will be used accordingly to contextualize the case of women business owners in Botswana (Byran et al., 2017). A timeline of Botswana's COVID-19 lockdowns, outbreaks, and responses are laid out in the later chapters of

the report to help contextualize the government's response, and shortcomings leading to a higher rate of women's losses in assets and decreases in food security.

As the core purpose of GCAN is to identify key elements of resiliency, while highlighting gender and nutrition outcomes, this framework will assist this report in contextualizing the observation in which COVID-19-related disruptions directly affected women's capital resources and worsened their nutrition outcomes; ultimately obstructing global development and gender equality outcomes. It is also crucial to note that the children of women experiencing malnourishment are more likely to have higher rates of disease and infection, poorer mental and physical development, and higher childhood mortality (Ransom and Elder, 2003). Therefore, as we analyze the economic-climate shocks of COVID-19, which reduced women's income and nutrition, there is also a link to the obstructed health and wellbeing of children.

Adapting the GCAN framework to explore COVID-19's economic shocks on Botswana's women entrepreneurs' yields valuable insights on how economic-climate stressors affect women, and aims to define solutions in which policies, programs, or actions might be implemented to improve well-being outcomes; guiding actors on how they may better respond while supporting women-led businesses (Bryan et al., 2017).

## LITERATURE REVIEW

### **3.1 Defining Resiliency and Capacity in the Context of COVID-19**

Resiliency is defined as people's mental and physical ability to absorb external shocks or stressors that influence their quality of life (Byran et al., 2017). This "adaptive/absorptive capacity" is gauged by the success of systems, institutions, communities, businesses, and individuals to adapt to economic damage (IPCC, 2014). Research suggests that the most successful approach to "build" resiliency is by means of poverty reduction through resource establishment, asset ownership, trainings, skill building, and opportunity creation for communities and individuals (Kulb et al., 2015).

Resiliency is commonly experienced as a series of actions, such as flexibility and adaptability, meaning that the most resilient individuals are those who do whatever needs to be done to acquire the knowledge, assets, resources, and skills to help them face turbulent times with creativity and optimism (Loh and Dahesihnsari, 2013). Though above all else, the aptitude of a business to survive an economic shock is dependent on both the traits of the entrepreneur running the business, and their access to resources, weaving a strong lattice in which resilient-minded personality traits and forms of capital intersect (Loh and Dahesihnsari, 2013).

Resiliency is a preeminent measure in recognizing key vulnerabilities in marginalized groups, based on their individual, and community-wide, response to a traumatic shock (Frankernberger et al., 2014). During Western Africa's Ebola outbreak in 2013, researchers found that women had been more active than men in income-generating activities within their local communities, ultimately finding that in times of crisis, women tend to demonstrate greater resiliency and adaptability to their communities in order to enhance their families' survival chances (Korkoyah and Wreh, 2015). This tendency for women to engage with their

communities is also a form of social capital, describing the networks of relationships among people who live and work in a particular society. Social capital is a key resource that makes people resilient to risks by forming a community nexus of individuals, generating security and bonds through networks (IPCC, 2014).

Notably, research shows that resiliency may be developed, encouraged, and learned when given a proper environment, defining a point of policy intervention when investing in building capacity within marginalized communities (Ayala and Manzano, 2014). Research in Kenya has shown that investing in resiliency and social capital building within communities can be a genuine public health strategy, over time leading to improved community health outcomes and poverty reduction as they tend to create microeconomic networks that contribute to community-wide self-sufficiency, income generation, and savings accounts (Kulb et al., 2015). Thus, resiliency serves as an informative measure for monitoring an individual's and community's capacity to mitigate or respond to economic stressors such as COVID-19. Where resiliency is strong, or lacking, may inform decision-makers on what kind of capacity programs will protect their citizens most efficiently from future economic downturns.

### **3.2 Time Poverty, Women's Entrepreneurship, and the COVID-19 Gender Gap**

A review of the literature suggests that there are disparities in the ways that economic-climate shocks affect women versus men across businesses, nutrition, health, and migration. War, natural disasters, famines, or disease outbreaks such as COVID-19 are all found to increase women's vulnerability, while worsening their socio-economic and cultural gender burdens (McLaren et al., 2020). This is largely because women are at a profound disadvantage regarding

access to, and control over assets necessary for economic participation such as land, financial capital, time, and education (Meinzen-Dick et al., 2011).

Particularly in the Global South, women tend to have less access to education, technologies, and are less likely to be in positions of decision-making authority in households, community groups, institutions, and governments. Women also endure a triple burden in society where specific societal roles are expected from them, such as reproductive, productive, and community management roles, regardless of their working status (McLaren et al., 2020). Moreover, women face pervasive cultural practices tasking them with domestic duties alongside their own personal, or entrepreneurial activities, resulting in a consistently heavier workload. The inequitable constraint of time as a resource for women poses an immense obstacle for women's education, economic prosperity, and health (Women's World Banking, 2015). This gender-based constraint on women's quality of life is a development concept known as 'time poverty', an economic term defined by the lack of discretionary time being spent in unpaid work for family and household responsibilities (Hyde, Greene, and Darmstadt, 2020). The time that is lost and tasked to unpaid work prevents women and girls from attending school, visiting the doctor, and generating their own sources of income. Time poverty also correlates to poorer health outcomes in both women and children, as shown by a study administered in South Africa which noted a significant decrease in prenatal care amongst pregnant women who were tasked with fieldwork and obtaining water for the household (Hyde, Greene, and Darmstadt, 2020). Furthermore, the opportunity costs of unpaid work, representing any potential losses, or benefits, of time and money spent in alternate ways (Behrman et al., 2014), are profoundly important for poorer households due to budget constraints allowing very narrow margins of error (Bertrand, Mullainathan, and Shafir, 2006). In other words, a family's opportunity cost of a woman

engaging in an income-generating activity, such as a self-owned kiosk, versus the time spent engaged in unpaid domestic work keeps households in poverty and thereby makes households more vulnerable to economic-climate shocks (UN Women, 2020).

Globally, women spend an average of four and a half hours a day on unpaid work, comprising roughly 75 percent of the world's time devoted to childcare, caring for the elderly, cooking, and cleaning (Figure 2). Depending on the cultural practices of the region, the statistics can be even more dramatic. For example, in India women spend an average of six hours a day cooking, cleaning, and tending to children while Indian men spend on average one hour engaging in domestic duties (ILOSTAT, 2021). Over a women's lifetime, decades are devoted to unpaid care.

As women's participation in the paid workforce grows, women across economies continue to provide the majority of the unpaid work, meaning that paid work does not simply crowd out unpaid work for women. A study from Mozambique revealed that while women's income generating work hours were similar to men's, caregiving and housework were still almost entirely women's responsibility (Arora, 2015). Women business owners in developing nations are at a constant economic disadvantage in market-based activities due to the immense burden of taking on both domestic duties and entrepreneurial activities, representing a "double-duty" effect for women who enter the workforce (Hyde, Greene, and Darmstadt, 2020).

Women from poorer households are more likely to face time constraints that hinder their ability to participate in the economy, or generate their own businesses, ultimately obstructing their potential for income generation, and leaving them exponentially more vulnerable to economic shocks such as the COVID-19 pandemic (Behrman et al., 2014). Recent International Monetary Fund (IMF) research shows that annual GDP per capita growth in SSA could be up to

0.9 percentage points higher if gender inequality was reduced through women's engagement in income generating activities (Hakura et al., 2016). In sum, time poverty is a major indicator of gender inequality and contributes heavily to the disproportionate vulnerabilities women face during economic shocks (Giurge et al., 2020).

The effects of the pandemic have not been gender neutral. When the string of COVID-19 pandemic lockdowns went into effect in early 2020, a business-closure related phenomenon, coined as the “She-Cession”, occurred around the globe (IWPR, 2020). During the “She-Cession,” jobs in women-dominated sectors were hardest hit by lockdowns and business closures, particularly the hospitality sector, food and restaurants, tourism, and the services (UN Women, 2020). Globally, 42 percent of women are employed in high-risk sectors compared to 32 percent for men; these women-dominated sectors suffered the most rapidly from initial lockdown phases, had higher rates of indefinite closure, and generally lack fringe benefits (The MIWE Report, 2020). As a result, women-led businesses were 2.6 percent more likely to close from COVID-19 related closures, while across Southern Africa, it is estimated that women have suffered two-thirds of the job losses due to the pandemic (Appiah, 2014). These facts in summation ultimately raise the question: Why are there so many women engaging in low-income, high-vulnerability sectors?

Research shows that women's choice of businesses directly reflects social and cultural constraints (Loh and Dahesihnsari, 2013). This “occupational segregation” describes a scenario in which many women entrepreneurs choose traditionally women type-casted industries to establish their businesses in. Women have a propensity to engage in traditional home-based or service-oriented business ventures as this is most familiar (Loh and Dahesihnsari, 2013). Studies have also

found that women entrepreneurs tend to own and operate mSMEs where cashflow is limited from the natural size of the business (Marlow et al., 2009).

Though there are many constraints on women entrepreneurs in the developing world, the potential growth of societies investing in women-focused income generation is astronomical. In 2019, the WB estimated that the global economic cost of gender inequality amounted to 160 trillion USD (Cherchi and Kirkwood, 2019). By 2021, the WB emphasized that economies across the globe are losing 172 trillion USD solely due to the differences in lifetime earnings between women and men – a non-negligible increase from the \$160 trillion it projected two years prior, showing that the gap is widening and has largely been facilitated by COVID-19 (Mastercard Engagement Bureau, 2021). However, the McKinsey Global Institute also shows that women's engagement in the economy is the world's largest driving market force, with the potential to add \$12 trillion to global GDP by 2025, recognizing that parity and participation for women in business across all sectors is vital to economic recovery, resiliency, capacity building, and societal advancement (MIWE, 2020).

Lastly, in a study conducted by Loh and Dahesihnsari (2013), women were characterized as resourceful and resilient in both good and challenging times. In the study, 93 percent of women interviewed claimed that their businesses were sustainable due to their mindset, embodying the motivation to succeed, quick learning, creativity, high social skills, optimism, confidence, integrity, honesty, independence, high ambition, tolerance of failure and risks and positive thinking, showing resiliency from an intrapersonal perspective, but not an economically viable perspective (Loh and Dahesihnsari, 2013). Despite the obstacles, the influence of optimism on the success of their businesses is greater for women than for men (Ayala and Mazanom, 2014). The Mastercard Index for Women as Entrepreneurs (MIWE) also found that women

business owners showed a positive and eager commitment to contribute back to their communities in the form of social capital, and encompassed a high regard for risk taking, innovativeness, individuality, creativeness, all while noting an absence of alternative income sources (Mastercard Engagement Bureau, 2021). Investing in education and trainings for African women is investing in economic growth at the community, country, and continental level (UNESCO, 2021).

As of now, global responses to economic-climate shockers, such as pandemics, will continue to occur in ways that do not reflect women's needs and priorities, thereby continuing to diminish women's resiliency during economic turmoil. Therefore, when evaluating the impacts of COVID-19 on mSMEs, it is critical to address the hardships, cultural roles, disadvantages, and extra burdens that women take on. Proper policy and resource allocation, in terms of fiscal capital, social capital, and time allocation, is key to assuring heightened absorptive and adaptative capacity for future economic-climate events (Kulb et al., 2015).

### **3.3 Women's Role in Household Health & Malnutrition During Economic Turmoil**

COVID-19-related restrictions and mandates around the world have fueled labor shortages and supply chain disruptions, causing an overall reduction in international trade resulting in less available money and less available food. The Oxford Committee for Famine Relief (OXFAM) noted that regions suffering from crises prior to the pandemic, such as civil unrest or immense class and gender inequality, experienced the brunt of supply chain failures and endured an egregious increase in famine (Action Against Hunger, 2021). Their research found a six-fold increase since early 2020 in people suffering famine-like conditions, with half a million more people experiencing famine due to of COVID-19 disruptions, putting the world's

total estimate at 811 million hungry people (Action Against Hunger, 2021). As of July 9, 2021, 11 people are dying every minute from hunger (OXFAM, 2021). Of the people at risk for hunger, 97 percent will live in developing countries, with the highest number in SSA (Debucquet, Martin, and Vos, 2021). Lastly, mass unemployment and severely disrupted food production have led to a 40 percent surge in global food prices—the highest rise in over a decade; making nutrient-dense, fresh food options unobtainable and unaffordable (OXFAM, 2021). The IFPRI has predicted that one hundred and fifty million more people could fall into poverty over the course of the next year, and subsequently will not have enough money to buy the foods they need (Action Against Hunger, 2021).

Dramatic changes in food production have large impacts on household nutrition security, physical and mental health, and environmental security. Research shows that malnutrition and ill health are traceable partly to economic causes and partly to educational factors (Byran et al., 2017). Incomes fall and food prices increase, poorer households will reduce their intake of nutrient-dense and diverse fresh foods in favor of cheaper food staples such as potatoes, cassava, and rice (Debucquet, Martin, and Vos, 2021). The African Ministers of Agriculture, speaking about COVID-19's impact on food security and nutrition in Africa, emphasized a need to develop resilient localized food systems and gender-inclusive economic trade routes, in order to improve nutritious food access, economic development, mental well-being, and gender equity, to address their most important sustainable development goals and ensure heightened resiliency within their communities (African Union, 2020).

Literature strongly suggests that economic shocks affect men's, women's, and children's food security differently, as women and children are often more affected in terms of their nutritional status and overall health; in the Global South, women tend to reduce their own food

intake or sell assets to ensure their household's food security, whilst men often respond by seeking additional income-earning opportunities (Behrman et al., 2014). Notably, men and women generally do not share the same preferences regarding household investment in children's health and education or dietary choices while women tend to invest twice as much as men on families' wellbeing (Ukala, 2020). Moreover, research finds that in economic strife, women take on greater responsibilities for household food preparation and production, whereas men tend to partake in market-related activities (Behrman et al., 2014). Women tend to prioritize social capital building activities that promote long-term food and nutrition security, such as engaging in community level projects, educational trainings, constructing facilities for food storage and preservation, and the promotion of micro-nutrient rich foods (Behrman et al., 2014). Given evidence that suggests women are more likely to spend earnings on nutrition-enhancing purchases (Gillespie et al., 2012), an increase in women's asset ownership and bargaining power can enable women to negotiate for access to various health services for themselves and their children, often leading to enhanced nutrition outcomes in the household. Evidence also suggests that women's control over land, cash, and engagement in decision-making processes reduces the prevalence of child malnutrition (Rahman, Salma, and Goni, 2015).

The indirect effects of malnutrition put women and children at higher risk of contracting diseases in post-disaster situations leaving them more vulnerable to virulent strains of infectious diseases (Behrman et al., 2014). COVID-19 has compounded these problems for women and children as research indicates that child health, nutrition, and school enrollment in Africa diminishes while infant mortality rises during economic-climate shocks (Ferreira and Shady, 2009). Research estimates that an increase of 9.3 million children will be considered "wasting" while maternal anemia in pregnant women will rise by 2.1 million as a direct result of COVID-

19 disruptions, resulting in an estimated \$29.7 billion USD alone in productivity losses (Osendarp et al., 2021). Improved child nutrition is associated with higher cognitive and educational performance in middle childhood, and greater productivity in adulthood due to the increase in physical strength (Victora et al., 2008), making malnutrition disastrous for the future well-being of neglected, malnourished populations.

Thus, reduced household income and indefinite business closures, both suffered disproportionately by women during COVID-19, have unequivocally disrupted health behaviors and have further increased disease and malnutrition in women and children (African Union, 2020). For children, adolescents, young people, pregnant women, and lactating mothers this may not only have an impact on their immediate health and protection, but their longer-term learning outcomes and ability to thrive in society. When reviewing the major trends, above all else, women's education, women's nutritional knowledge, eating habits, and income in aggregate combat child malnutrition the most significantly and need to be given utmost priority to preserve the progression, and improve the resiliency, of women in developing nations against future economic-climate shocks and pandemics (Gulati, 2010).

## BOTSWANA

### 4.1 Country Background

Botswana is a landlocked country located in Southern Africa that spans over 581,720 square kilometers and is 70 percent occupied by the Kalahari Desert. As of November 2021, Botswana's population size is nearly 2,416,000 citizens, and is one of the most sparsely populated countries in the world with a population density rate at four people per km<sup>2</sup>; ten percent of the which reside in the country's capital, Gaborone (World Population Review, 2021).

Due to Botswana's geographic latitude, seasonal torrid environmental conditions, and high occupancy of desert-region, the country is considered as Group B: "dry arid and semi-arid" climate under the Koppen-Trewartha classification system. The nation is projected to experience decreased rates of food security by 2050, as only five percent of Botswana's land is considered suitable for agricultural production, and of that, less than one percent is cultivated (USAID, 2010). Currently, 70 percent of Tswanan people depend on subsistence farming for their livelihoods, while 20 percent rely on business productivity (Botswana Agribusiness Sector, 2018) meaning that most of the nation's citizens rely on the crops they can produce on their own soils for profit and consumption. However, despite Botswana's high engagement of citizens in the agricultural sector, in 2019, agriculture contributed only 1.95 percent to the total GDP of Botswana while a prodigious 89.3 percent was generated from the diamond mining industry, and the services sector (Cherchi and Kirkwood, 2019).

Throughout the last six decades, Botswana has undergone an economic renaissance, this rapid growth largely being driven by the public sector and the diamond industry. Shortly after Botswana's Independence in 1966, diamonds were discovered North of Gaborone and subsequently catalyzed the economy of the nation. Once considered one of the world's poorest economies, within a 53-year timespan, the Gross National Income (GNI) per capita has risen

from 100 GNI per capita in 1966 to 7,650 GNI per capita by 2019, currently ranking above the world's average GNI rate (World Bank- GNI, 2019). This magnitude of growth in such a short amount of time has only been noted one other time in history, by China (McCaig et al., 2017). Botswana, the “African Success Story” (Acemoglu, Johnson, and Robinson, 2001, pp1), is now the fourth richest nation in the continent at \$18,110 GDP per capita and is now considered to be both a developing country and an upper-middle income nation (United Nations Botswana, 2021).

Though a majority of its wealth is concentrated in Gaborone and within the companies of the diamond mining industry, to date, Botswana’s economic prosperity is still heavily reliant on tourism and its mining industry as the largest income generators, mining representing more than 60 percent of total exports (Trading Economics, 2021). Tourism and hospitality (T&H), Botswana’s third largest contributor to the national economy, accounts for almost 12 percent of the nation’s GDP. T&H is a significant space for women entrepreneurs in Botswana (See Figure 3.) and is a major source of income for Tswana women engaged in the economy. T&H is a key contributor to job creation, skills transfer, mSME generation, parity, and the development of new competencies in the nation.

Botswana’s economic situation creates an unusual dichotomy where the country represents a developing nation with little infrastructure, low structural transformation, and high reliance on imports, but an advanced economy with exorbitant monetary resources, outpacing the usual trend of sustainable economic growth around the globe. Unfortunately, the nation’s rapid economic expansion has left many individuals behind. Income inequality is extremely high, and much of Botswana’s rural population is well below the poverty line (United Nations Botswana, 2020). Ultimately, Botswana’s rags-to-riches story, heavily reliant on diamonds can only sustain itself for so long. Regardless of the country’s prolific growth over the last half-century,

Tswanans are still bereft of the welfare programs and structural resources needed to support informal workers, women entrepreneurs and everyday citizens (Cherchi and Kirkwood, 2019).

#### **4.2 Women's Entrepreneurship and mSMEs in Botswana**

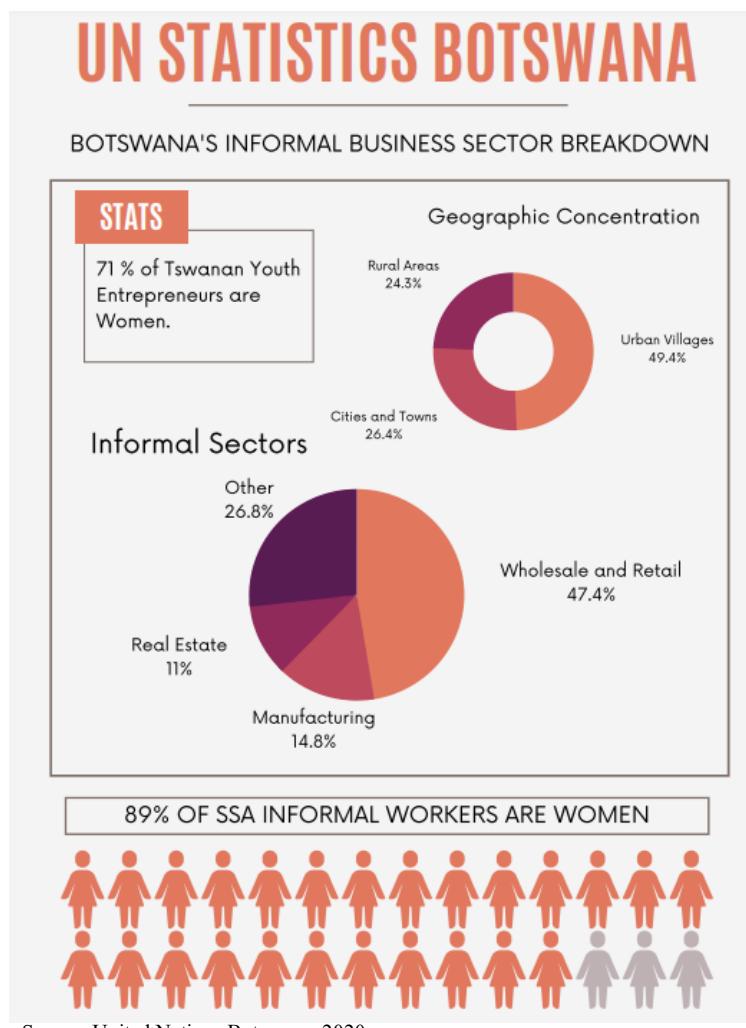
mSMEs across all Tswanan industries represent roughly 90 percent of the businesses in Botswana's economy (International Trade Centre, 2019). When mSMEs are founded, they significantly diversify economies by growing the private sector and creating jobs for skilled and unskilled workers, naturally reducing poverty and encouraging the diversification of the economy (International Trade Centre, 2019). However, COVID-19 has undone much of the progress that Botswana has made in mSME generation, directly affecting gender equality in business participation and income generation.

Impressively, women in SSA have the highest labor participation rate of any region in the world and are more likely to work as entrepreneurs in mSMEs than men in SSA. In the non-agricultural sector, 50 percent of the working women in SSA are self-employed (Cherchi and Kirkwood, 2019). As of 2021, the MIWE ranked Uganda (39.6 percent), Botswana (38.5 percent), and Ghana (36.5 percent) as the world's three economies with the most women business owners as a percentage of total business owners (Mastercard Engagement Bureau, 2021). In 2019, the labor force participation rate of women ages fifteen and above in Botswana was 65 percent, with most working in mSMEs (ILOSTAT, 2021). Working women in the nation defy socio-structural impediments such as lower ownership of personal bank accounts, lower literacy rankings, and lack of equal access to capital, and have emerged with the highest percentage of women business ownership in Southern Africa, as 30-40 percent of all Tswanan businesses are women-owned (The MIWE Report, 2020).

It is vital to mention that on average, poorer and less educated women tend to be entrepreneurs for mSMEs and to engage in the informal sector because mSMEs offer casual employment and employment opportunities through kinship or social relations, rather than contractual arrangements with formal guarantees or fringe benefits (World Trade Report, 2016; OECD, 2003). According to United Nations Statistics Botswana, the informal sector business breakdown estimates are as follows:

Wholesale and Retail (47.4 percent), Manufacturing (14.8 percent) and Real Estate (11 percent).

Furthermore, nearly 50 percent of informal sector businesses were concentrated in urban villages, followed by cities and towns at 26.7 percent and lastly rural areas at 24.6 percent (International Trade Centre, 2019). While shocks to economic activity will always affect all citizens, informal workers tend to be at greatest risk of falling into poverty as a result (United Nations Botswana, 2020). Women who are working in both formal and informal business are more likely to be entrepreneurs due to the constraints they face entering ‘advanced’ job markets including a lack of special skills, digital literacy, and overall educational access. Often, becoming an entrepreneur of an mSME is more of a necessity than an opportunity for



many women. Tswana women entrepreneurs' livelihoods are also heavily impacted by time poverty, putting them at a substantial economic disadvantage in market-based activities due to the significant burden of domestic duties (The MIWE Report, 2020).

The Mastercard Index of Women Entrepreneur's comprehensive report theorizes that Botswana's mSMEs have high women ownership rates due to factors including low fear of business failure from opening a small-scale business such as a kiosk, low start-up costs to open a small-scale business, minimal need for capital equipment, and often no prerequisite for technological skills. Mastercard also took note that Botswana and other countries in SSA have reached a point where income generation has become a necessity, and in the absence of alternative income sources, women have been pushed into the macroeconomy largely in the form of sole-proprietor or family-run, small-scale, business in the consumer services, tourism, and the retail sector (The MIWE Report, 2020). Additionally, their research indicates that improving access to credit and property rights are vital for supporting women entrepreneurship at a nationwide scale.

Lastly, WB research from across Botswana shows that women are overrepresented in sectors such as personal services, hotels, restaurants, textile manufacturing, and retail, while men are overrepresented in more profitable sectors such as construction, mining, and electronics (Figure 4). As a result, research facilitated by World Bank Profiting from Parity Report found that women entrepreneurs' incomes in Botswana are on average 34 percent lower than male business owners' (Cherchi and Kirkwood, 2019). Corresponding research also concluded that women in male-dominated sectors make higher profits than women in women-concentrated sectors yet will continue to make less than the men operating in said male-dominated sectors (Goldstein et al., 2020) creating a gender gap even when transcending sectoral boundaries.

Furthermore, Development Aid estimates that the current finance gender gap of African business owners post-2020 is around 42 billion USD, and will continue to widen without deliberate implementation of gender-focused solutions and protection (Ukala, 2020).

#### **4.3 Women’s Entrepreneurship & COVID-19 in Botswana**

The MIWE, along with the McKinsey Global Institute, found that 87 percent of SSA women entrepreneurs have been adversely affected by the COVID-19 pandemic (The MIWE Report, 2020; Madgavkar et al., 2020). The women entrepreneurs they surveyed reported myriad reasons behind their lack of absorptive capacity that left them more vulnerable. Some of the reasons they provided include that women-concentrated sectors were hardest hit by the economic downturn, that they lack digital literacy in an increasingly virtual economy, and their domestic duties/burdens of time poverty (MIWE, 2020).

African market-research analysts based in Johannesburg, South Africa emphasized the socio-economic impact of COVID-19 across Southern Africa, ultimately proclaiming that women business owners “experience greater difficulties” accessing resources (Mhlanga and Ndhlovu, 2020, pp 13). In these narratives, global market instabilities, inequity, and lack of asset control are deeply intertwined with the livelihoods and food security rates of women business owners (Kulb et al., 2015). When evaluating the consequences of COVID-19 on Botswana’s mSMEs, it is critical to center the story around the hardships, roles, and extra burden that women take on. The “unequal distribution and intensity of unpaid domestic and care work undermines the dignity of women caregivers, undermines progress towards gender equality, and entrenches their disproportionate vulnerability to poverty across their lifetime” (Carmona, 2013, p. 4). Thus women-led mSMEs, at a profound disadvantage when the COVID-19 pandemic disrupted global market chains, were hit the hardest.

COVID-19 has undone much of the progress that Tswanan communities and organizations have made over the years in gender equality. Meanwhile, the nation's initial supplemental packages and policies did not address gender barriers (UN Statistics Botswana, 2020). These decisions inadvertently prevented women entrepreneurs from accessing these business-saving benefits. For example, some of Botswana's federal stimulus packages require applicants to post proprietary collateral, whereas African women do not have equal access to collateral such as land or infrastructurally based assets (World Trade Report, 2016). Furthermore, stimulus packages did not target microfinance users, nor did they assist the increase of digital platform access for mSMEs. For women entrepreneurs, digital and financial inclusion, such as access to credit from financial institutions, and mobile banking, is crucial for competitiveness in the workplace (Madgavkar et al., 2020). Encouraging women's capital and asset independence enables them to increase their contributions in decision-making, which inherently improves gender equality in the household, across business sectors, and even improves food security outcomes during times of economic crisis (Byran et al., 2017).

Commonly for mSMEs, there is massive informal group lending, which is cash-based, microfinance, and in-person (International Trade Center, 2019). COVID-19 negatively affected microfinance programs both from the lack of in-person cash handoffs and the inhibited ability of lenders to facilitate microfinance groups. Botswana's women-led businesses, being widely cash-based and community supported, took the brunt of the damage when access to credit declined. As a result, Tswanan male businesses were disproportionately safer, by means of finances and capital resources than women during the COVID-19 crisis, reinforced by their eased accessibility to credit and their digital literacy skills.

#### **4.4 Botswana's COVID-19 Timeline**

The outcome of the COVID-19 lockdowns and curfews caused tremendous supply chain disruptions and market failures, while inhibiting access to microfinance loans, and decreasing access to digital platforms. On March 11, 2020, the WHO declared the COVID-19 pandemic and by March 30, 2020, Botswana closed its borders and declared a state of emergency after confirming its first case. Following the initial lockdown phase, trades, businesses, and schools could operate again after obtaining authorization from the Director of Health Services (AR, 2020). The lifting of road transport restrictions for public and private transportation took place in May 2020 within a 60-kilometer radius of the place of operation, while maintaining an adequate load capacity and following sanitation protocols (Dithapo, 2020). Gaborone continued to instill remote work and suspension of road transport services while prohibiting non-essential travel until October 2, 2020. From December 24, 2020, until January 31, 2021, a nationwide curfew was instilled from 7 PM to 4 AM, and a state of emergency continued until March 2021. Vaccine rollout in Botswana began in March of 2021 and by October 2021, around 16 percent of the population had been fully vaccinated (Dithapo, 2020). Since July 2021, outbreaks have increased and new cases per day has been steadily rising as Botswana was desperately attempting to revamp tourism and income from external sources. As of November 2021, Botswana has one of the world's highest COVID-19 infection rates per capita, while in 2020, Botswana's original case numbers were virtually nil (Dube, 2021).

Unfortunately for the case of Botswana, many fiscal resources were depleted during the nation's ambitious and seemingly supportive prevention phase. From 2020-2021 the mineral sector experienced a decrease in revenue from 1.7 billion USD to 566 million USD (United Nations Botswana, 2020). Now, in December 2021, Botswana is left in a state of emergency with

significantly less resources to continue its initiatives to support its economy, and thus its mSMEs continue to close indefinitely. To date, Botswana's unemployment figures are swelling as rates continue to grow since the onset of the pandemic. Over the last year, Botswana's unemployment rate increased from 18.20 percent in 2019 to 23.30 percent in 2020 and is anticipated to reach 24 percent by the end of 2021 (Trading Economics, 2021). Undoubtedly over the last year and a half, Botswana's COVID-19 related travel restrictions and regulations on transportation, events, and lack of tourism have had the highest negative financial impact on mSMEs (Dube, 2021).

## BOTSWANA'S COVID-19 RESPONSE

### **5.1 Decision Making Context: How Did Botswana React?**

To help alleviate the detrimental shock to businesses in the Global South, the COVID-19 Food Relief Program was launched in mid-April 2020 by the United Nations to assist the world's most marginalized people, including certain sectors in Botswana; shortly thereafter various federal-wide policies in Botswana were enacted and followed suit (United Nations Botswana, 2020). The Food Relief Program assisted specific Tswanan businesses with cash-flow relief which guaranteed loans by commercial banks to companies affected by the pandemic. In conjunction with the United Nations, the government of Botswana, including parastatals, were set to pay Government Purchase Orders (GPOs) within five days, while improving procurement efficiency, pledging to pay all outstanding invoices within a two-week time period (BW Covid Task Force, 2020). Meanwhile, the Citizen Entrepreneur Development Agency (CEDA) of Botswana reduced interest rates from ten percent to five percent. Most effectively, the UIF (Unemployment Insurance Fund) created a relief program where selected businesses could reduce employee salaries by 25 percent and claim the shortfall on behalf of their staff. This enabled certain employees to maintain their full salaries, 75 percent from the employer and 25 percent from the UIF along with expedited Value Added Tax (VAT) refunds to further assist with cashflow (BW Covid Task Force, 2020).

Despite the fast initial reaction by Botswana and international organizations to assist mSMEs, there was a great lack of uniformity among mSME asset procurement, while many businesses did not receive these benefits at all (Absa Bank, 2021). For example, businesses in rural areas experienced greater barriers to accessing essential services, goods, and resources, and faced much longer periods of restricted movement (Dithapo, 2020). Also, rural economic activity

was effectively stymied as informal businesses had zero access to wage subsidies or safety net measures, further exacerbating their vulnerabilities. Botswana also has an extremely high dependence on imports for food and business inputs, particularly in urban areas, making the nation highly vulnerable to disruptions in international distribution chains (United Nations Botswana, 2020). In turn, few federal initiatives were enacted to allocate supplies required to run specialized businesses, leaving Botswana's mSMEs also vulnerable to production problems in other countries. Lastly, many Tswanan mSMEs are dependent on face-to-face customer interactions, and in-person worker collaboration, which was immediately ended by social-distancing measures and lockdown restrictions, with little personal protective equipment (PPE) available, and no federal initiatives to support online or digital sales for business owners (United Nations Botswana, 2020).

## **5.2 Issues Faced by Tswanan Women-Led Businesses**

Despite government efforts to support businesses, women-led mSMEs still faced myriad obstacles while keeping their businesses alive. The Lionesses of Africa, a coalition of African women business leaders aiming to enhance women's digital assets, social capital, and network, by means of a central online community, blogged about various hardships faced by their businesses during COVID-19. By extrapolating information from online interviews with the Youth Business International of Botswana, United Nations Botswana, and Absa Bank Botswana, I have been able to denote the expansive variety of issues Tswanan women-led businesses faced. The table below assembles mentioned obstacles across online interviews and blogs:

Capital Type	List of General Issues Faced
Physical Capital	<i>Lack of public transportation, increased costs for finding private transportation to shuttle employees or export goods, delivery disruptions,</i>

	<i>unsold food and beverage products spoilage, unable to pay rent, lack of PPE for staff and customers.</i>
Financial Capital	<i>Substantial loss of revenue from plummet in demand, supply chain disruptions for inputs needed to run businesses, cost of inputs increased, lack of sales, inability to pay bank, need for smaller quickly paying customers, larger institutions took too long to pay, unable to fully meet loan obligations, dire need for fast cash, extra/unexpected expenditures, clients and customers unable to fulfill required payments.</i>
Social Capital	<i>Decreased demand/ lower sales, inability to advertise/promote products and services, limited capacity to capture online sales by lack of online presence, lack of pre-established local markets, too previously reliant on tourism and international trade routes.</i>
Human Capital	<i>Unable to fully meet employee payroll obligations causing a furlough of employees, lower staff productivity, uninspired staff members, could hire only on a part-time basis to afford payments of wages.</i>
Political Capital	<i>Lock-down related restrictions and government regulations halting business interactions, lack of uniformity with helpful services: some businesses received government assistance, some did not, African Growth and Opportunity Act (AGOA) continued help bolster trade, and fund market opportunities, from Botswana to US, though only affecting certain business sectors.</i>

\*Based on blogs from the Lionesses of Africa, dates (04/20 to 08/21), and interviews by Youth Business International (2021), United Nations Botswana (2020), and Absa Bank (2021).

In order to mitigate further devastating blows to Botswana's businesses, managerial leaders had to react quickly, utilize their interpersonal skills and available assets, and swiftly apply a strict management of cash flow. Generally, most businesses cut costs in the most feasible ways possible, encompassing strategies from using saved personal finances to avoid accumulated debt, to the complete restructuring of the business's model to include delivery services in order to access local markets and clientele (Absa Bank Botswana, 2021). Some businesses chose to completely stop the production of their least viable products, thereby cutting the weakest links of their operations and ensuring the sales of their more popular products (Youth Business International, 2021). This slicing of weak links also transfers to relationships set between clients

and business owners, as the ones who were not able to pay in full could no longer be dealt with for the time being. In some circumstances, businesses even completely changed the mission of their brand and began to produce needed goods to supply retail market chains, such as procuring disinfectants, in order to meet financial obligations (Lionesses of Africa, 2021). To keep the business functioning, managers also needed to adhere to new COVID-19 safety protocols, procuring PPE, sanitation materials, and handwashing stations for both staff and customers (Lionesses of Africa, 2021). Some shops underwent trainings on COVID-19 safety for staff as well, including the proper protocols of wearing masks, sanitizing, and recording temperatures of everyone who entered their business' premises (United Nations Botswana, 2020).

In Botswana, mainly the medium-sized enterprises in the formal sector were able to utilize wage subsidy programs, or affiliate non-governmental organizational assistance programs, such as the loan application guidance services for business development of the Local Enterprise Authority (LEA) (BW Covid Task Force, 2020), leaving the micro- and small-enterprises with less governmental support (Absa Bank, 2021). Moreover, few women mSMEs, and even fewer in the informal sector, had the infrastructure, literacy, or digital access to apply for loans or reframe their business models. Interviews indicate that the majority of women-led mSMEs which were forced to close temporarily are unlikely to reopen in the absence of supportive measures (Youth Business International, 2021).

## ESTABLISHING AN ENVIRONMENT FOR WOMEN'S ECONOMIC RESILIENCY

### 6.1 Trade Offs Between People, Scales, and Outcomes

The main issue that Botswana's women-led mSMEs faced from pandemic disruptions were, and are, financial – yet the primary perpetrator of women's poor financial security is the inhibiting socio-cultural construct in which they reside that is only perpetuated by economic-climate shocks like COVID-19. Thus, it is the duty of policymakers, and all affiliated stakeholders, to implement a comprehensive plan of policies, programs, events, and trainings, that generate an enabling environment in which women's advancement and equality in society is the primary focus and outcome. The concept of an enabling environment incorporates the emboldening of people to control their own lives by creating egalitarian spaces in which they can engage in decision-making processes, and participate in the institutions they live within (United Nations, 2020).

According to the United Nations, eradicating Botswana's gender gaps in business ownership across economic sectors, while increasing women's education, are two pathways that may generate more resiliency and capacity within the nation (United Nations Botswana, 2020). Creating an enabling environment for women means stakeholders have a defined blueprint on how to narrow the financial gender gap, strengthen women's financial empowerment, broaden their independence, teach financial agency, assist with access to savings, insurance, and subsequently enhance their decision-making capabilities (Byran et al., 2017). These plans must aim to bolster women's resiliency prior to times of crisis, creating an unbreakable foundation in which future shocks are easily mitigated and or absorbed.

The foundation of an enabling environment for women entrepreneurs should focus on capacity building where women's skills, abilities, and resources are highlighted and strengthened

(United Nations, 2020). The most imperative actions are those that ensure these core goals are established and addressed. Creating an environment that women entrepreneurs can have heightened financial and food security is determined by community agency, capacity building, and resource provision (Kulb et al., 2015). Generating an enabling environment may encourage Botswana to rebound post-COVID-19 with an equitable, and sustainable economy that is preventatively more resilient to future economic shocks (United Nations, 2021).

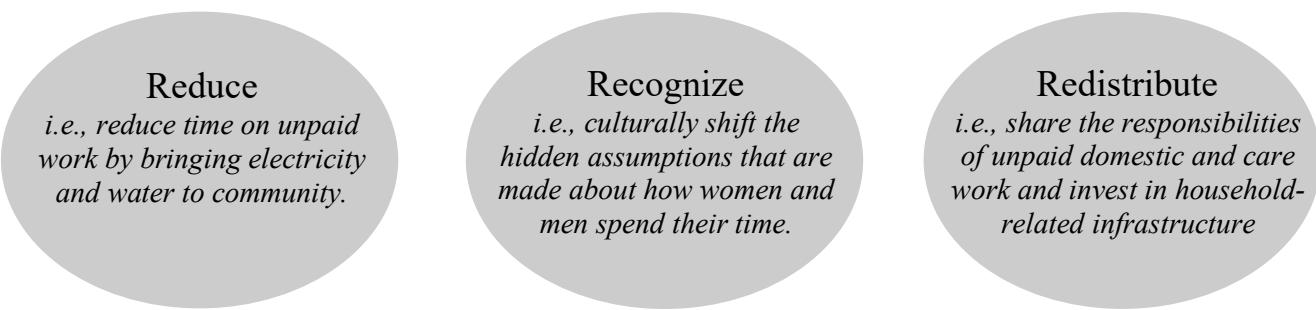
## SUGGESTED PROGRAMS AND POLICIES

### 7.1 Generating Solution Spaces: Pathways for Sustainable Development

Building capacity in Botswana's women's entrepreneurial community is critical to minimize future vulnerabilities to economic-climate shocks and to achieve sustainable development goals. For Botswana to build capacity within the nation, governments, organizations, and affiliated stakeholders must generate programs that incorporate activities that strengthen the abilities, skills, knowledge, and behaviors of communities, while also improving institutional structures and processes such that the nation can efficiently meet its long-term goals in a sustainable way (United Nations Environment Program, 2015). It is a social imperative that governments, municipalities, corporations, universities, and institutions support capacity building for women citizens.

Now is the time for governments, institutions, and organizations to take decisive action in implementing targeted gender-specific support policies, particularly in addressing business gender wage parity and tackling financial marginalization to alleviate the gender gap and ensure heightened food security for future economic-climate events (Hidayat et al., 2020). Decision-makers should focus on devising action plans among community members that incorporate information about long-term changes, and the needs of the local community itself. Programs should integrate local knowledge and risk-management strategies in accordance with the priorities and needs of women entrepreneurs, particularly in equal decision-making and income generating activities (Kulb et al., 2015).

Policymaking frameworks should also devise policy that minimizes the gender gap through the alleviation of time poverty and triple burden roles, keeping women-related barriers in mind. For example, one well-known strategy for this is the usage of the “Recognize, Reduce, and Redistribute Framework (RRR)” \* or the “Three R’s framework”:



\*Example of the Three R's Framework (Elson, 2017)

RRR is referenced to highlight desired outcomes when generating new policy, ensuring that the mission of each 'R' is clearly stated and centered around women-related burdens (Elson, 2017). Frameworks like these ensure better targeting of vulnerable groups.

Gender equality through parity, education, and financial security is an essential sustainable development goal and is arguably the most relevant policy measure to foster economic growth. The McKinsey Global Institute finds that accelerating progress toward parity could bolster African economies by the equivalent of ten percent of their collective GDP by 2025 (Moodley et al., 2019). Likewise, research by the European Commission shows that improvements in women's educational attainment across EU member states would lead to a 2.2 percent increase in EU GDP by 2050 (Maceira, 2017).

The COVID-19 crisis has prompted governments universally to improve their short-term policy responses to the economic shocks of the pandemic by boosting business support in the form of tax reliefs, subsidies, employee wage support programs, low interest loans, and more. For example, Israel, which has been given global accolades for their federal business support response, launched a \$30.6 million USD support package dedicated to immediate cash flow recovery for Israeli mSMEs (Huaxia, 2021). Impressively, as a cumulative result of their various support packages across business sectors, Israel entered a coalition of nations with the highest

GDP per capita amid the COVID-19 pandemic (Solomon, 2021). Meanwhile, Switzerland swiftly identified the country's hardest-hit sectors and offered unemployment insurance funding to only the most vulnerable sectors, efficiently mitigating the entire economic crisis by allocating resources where they were needed most at their initial stages. Likewise, in New Zealand, emergency relief measures such as tax relief, interest-free loans, leave support schemes, and wage subsidies were implemented for mSMEs to mitigate economic failure; and successfully so, as New Zealand was ranked number 1 by the Mastercard resiliency index for quality of governance during COVID-19 (The MIWE Report, 2020).

## 7.2 Botswana

In comparison to 58 economies across the globe, the MIWE identified Botswana's COVID-19 response policies and programs very poorly in support for mSMEs, reporting an 11 percent decline in gender equality, compared to other nations declining on average around 2-5 percent. This was due to women's overall lack of knowledge assets and financial access, unavailability of women's access to financial products and services, and insufficient opportunities to enroll in higher-level education prior to the pandemic (Figure 5). Therefore, Botswana's principal aim should be to protect mSMEs by generating a resilient economy through the support of their formal and informal women entrepreneurs (The MIWE Report, 2020).

Although Botswana's proportion of women engaged in entrepreneurial activity and rate of women business ownership are among the highest, women entrepreneurs remain largely constrained by less favorable economic, sociocultural, financial, and academic conditions (Mastercard Engagement Bureau, 2021). This became more pronounced during COVID-19

largely because Tswana women are at a profound disadvantage regarding access to, and control over assets necessary for economic security such as financial capital and time.

Botswana has a need for gender-focused structural change, meaning that government officials, and all affiliated stakeholders, must focus on generating transformative policy solutions that increase positive social perceptions of women business leaders, eradicate gender-biased cultural perceptions of entrepreneurs, and invest in enabling environments that support women's entrepreneurship. Botswana is also more constrained by the lack of developed physical infrastructure outside of Gaborone and has a need for government programs to support infrastructure projects across the nation (Dithapo, 2020). These projects matter even more in light of COVID-19, because many of the businesses that were able to continue functioning throughout the pandemic were those that could sell and hold assets, participate in selling on online platforms, and in some circumstances, could travel to sell and deliver their products (Absa Bank, 2021). Therefore, preventative policies that improve women's resiliency by funding knowledge assets, increasing financial access, diminishing sectoral imbalances, procuring resources for women, and reducing the digital gender gap are key to enhancing Botswana's resiliency for future pandemics or economic shocks.

Future Tswanan policy should focus on supporting women in the informal business sector by investing in literacy (including digital literacy), and capacity building, based on research and guidance of institutions dedicated to these services such as UN Women. The following sections are dedicated to listing out general international policies that enhance women's resiliency and foster women's economic independence, thereby securing Tswanan business owner's financial, health, and food security prior to, and during future economic shocks and stressors (MIWE, 2020).

### **7.3 Policy Recommendation I: Diminish Sectoral Gender Imbalances**

Globally, 42 percent of women are employed in high-risk sectors compared to 32 percent for men (Mastercard Engagement Bureau, 2020). Supporting women entrepreneurs to shift into male-dominated industries can effectively eradicate the gender gap in business in Botswana and provide heightened fiscal equity to women entrepreneurs engaged in the market, making women more resilient to economic-climate shocks.

Research shows that women who cross over into male-dominated sectors have more employees and experience heightened increases in profits than women who have businesses in women-dominated sectors (Stein, 2013). Although women's engagement in the workforce as entrepreneurs in Botswana continues to increase, women still face significant challenges regarding their ability to access capital to start, sustain, and scale up their businesses due to socio-cultural constraints like requirements for proof of collateral, or marriage certification. Research has shown that these start-up challenges ultimately lead to lower profits, short and long-term, when compared to male business owners engaged in the same business sector (Nleya, 2021). Policymakers should encourage women in Botswana to integrate into male dominated sectors by integrating coding, engineering, and STEM classes into schools across the nation, while also granting funds to funnel women's engagement in tertiary educational spaces. Notably, research has also shown that integrating women and men in the workplace together can have positive impacts on both men and women's business performance outcomes as well (Marlow et al., 2009).

In order to encourage women leaders to engage in male-dominated sectors, the nation should support women entering diverse fields of interest at a young age from the school level. Programs may include introduction of coding lessons in schools, highly funded STEM classes,

the procurement of computer labs at schools across the country, and business management, tax, and bank account creation classes at a school level (World Economic Forum, 2020). Furthermore, Botswana should publish educational information in accessible formats, and in local community languages, to ensure that all of Botswana's diverse populations and social groups have equal access to information (Nleya, 2021). With successful Tswanan policy aimed at reducing the sectoral divide among men and women in the workforce, future women entrepreneurs will not face a "She-Cession" in the way they experienced business closures during the rise of the COVID-19 pandemic, greatly protecting their fiscal and food security. The nature of these policies should generate equality among business sector engagement and should provide less of a disproportionate rate of indefinite business closures during future economic-climate events.

#### **7.4 Policy Recommendation II: Improve Capacity Building Within Communities through Social Cohesion Networks**

Policy interventions need to invest in the current women entrepreneur cohort in the country including the young professionals, the 47-year-old mothers, and the elderly kiosk owners. Policy should promote community-led and tailored solutions aimed at strengthening resiliency that aim to build 'adaptive' and 'shock-responsive' social protection systems that manage and mitigate devastating effects of future crises (Byran et al., 2017). This means improving systems so that social protection programs can reach the vulnerable more quickly, with the ability to scale up in times of crisis (UN Women, 2020). Policies include the funding of local community-based services, generating women-led social cohesion networks, and government funded programs that teach community leaders participatory planning and local

oversight of services (The World Bank, 2021). Botswana's government should aim to improve coordination across programs to develop objective targeting and service delivery mechanisms. Whether this means the procurement of resources, or the procurement of money, Botswana should cater to the decisions that a diverse team of local community members request across municipalities in the country prior to, and during, times of crisis.

Research by Kulb et al. (2015) from Kenya shows one example of a long-term oriented action plan that aims to build capacity involving the introduction of asset-based community development programs. These informal style programs involve a community-led, bank-type program where funds are pulled together and accessed by participants by means of rotating savings and credit associations, commonly in the form of microcredit. Microcredit models used in Africa and have a unique ability to utilize and generate community resources (Kulb et al., 2015). The research undertaken by Kulb et al. (2015) found that programs like this reinforce social relationships and often become safety nets within communities that provide support during economic shocks. Furthermore, they found that community-led microcredit and microfinance cash systems are a particularly beneficial route for poverty reduction by capacity building among women, because microcredit exchanges negate any external requirements large economic institutions require, such as proof of collateral. Social capital capacity building thereby increases women's opportunity to access funds and generate income while accumulating funds in perpetuity within the local community.

Moreover, these community-led rotating savings and credit association group's social components greatly enhance women's agency among other groups of working women, meaning that there is collective financial power within these once economically vulnerable groups. These credit models are highly efficient for procuring resources and building capacity amongst women

social groups, as they provide emergency loans, investments, social support funds, formal constitutions, and community outreach all between formal and informal women workers (Kulb et al., 2015). Therefore, investing in social cohesion networks through shared asset management of women-led businesses could massively benefit capacity in Botswana, and women's resiliency to COVID-19 and future economic shocks, because there are socially woven, readily available funds that can be saved and used in emergency situations, creating a reinforced safety net for women-business owners.

### **7.5 Policy Recommendation III: Reducing the Gender Gap in Access to Technology**

Policy and programs need to be founded on existing research that focuses on major hinderances of women entrepreneurship, such as the growing requirement to involve women-led businesses in the global economy through means of digital technology. According to the World Bank Group's latest Global Findex Report, more than 1 billion women do not have access to a financial system (International Finance Corporation, 2021). Globally, as of 2021, two hundred and thirty-four million fewer women than men are accessing the internet (Mobile Gender Gap Report, 2020). Furthermore, women are 15 percent less likely to use mobile internet than men, 7 percent less likely to own a mobile phone, 20 percent less likely to have internet access, and 9 percent less likely to be literate. Tswanan activist Agang Dithhogo, speaking on the gendered issues of digital literacy within the nation, stated that "Digital literacy is generally low in Botswana. The inequalities in digital access further increase for rural or remote areas, especially for women and girls" (Nleya, 2021, p 10).

MIWE notes that the three top barriers that hinder women access to the digital economy are literacy, affordability, and skills (MIWE, 2020). For Tswanan women business owners, the

digital divide means that they are less able build capital for their businesses, monitor a bank account, and adapt to e-commerce platforms that are increasingly used for no-contact COVID-19 measurements. Information communication technologies (ICTs) have the unique ability to bolster communication, facilitate online shopping, and even generate access to healthcare services to remote areas (Nleya, 2021).

Upon the introduction of successful technology inclusion programs and policies within Botswana, women-business owners could experience heightened COVID-19 pandemic resiliency by being able to stay competitive in virtual ecommerce spaces, stay connected to buyers and sellers of their products, access emergency funds through online bank account management, and product information sharing, or advertising, through internet services and Facebook marketplace (Mobile Gender Gap Report, 2020). It is crucial that women entrepreneurs are able to stay well connected technologically in order to mitigate business closure or failure, further solidifying their security measures when economic disaster strikes.

## **7.6 Policy Recommendation IV: Increasing Women's Financial Inclusion**

On average in SSA, only 37 percent of women have a bank account and in Botswana; roughly 20-30 percent of women have a bank account, meaning hundreds of thousands of women cannot manage their finances (Morsy, 2020). Additionally, only one-to-four percent qualify for a credit card as it is common practice for banks to require proof of marriage or a present husband to cosign when creating a bank account (The MIWE Report, 2020). This opportunity for development addresses a need to minimize financial exclusion through nation-wide investments in credit literacy programs, and bank account generation resources.

Gender-lens credit literacy programs, and bank account generation are a must to improve women's capacity. The overall goal being the improvement of income support and cash transfer programs to reach the women entrepreneurs experiencing severe income shocks to their business, particularly those engaged in the informal economy (Cherchi and Kirkwood, 2019). One example of how governments, educational institutions, and companies can work to improve financial inclusion was noted in South Africa, where policymakers paired up with UN Women to offer a suite of virtual tax and income learning courses through online classrooms with partners such as Google. This virtual suite facilitated trainings for 4,500 women-owned businesses on how to apply for and access government stimulus funding (UN Women, 2021). This is just one example of the various avenues policymakers can take to address women's vulnerability in banking by means of training programs, and credit literacy generation.

By investing in successful financial inclusion initiatives within Botswana, women-business owners may experience COVID-19 pandemic resiliency by being able to autonomously access and manage their own funds, especially in times of emergencies. Women entrepreneurs who didn't own a bank account, or partook in a community banking system, experienced disproportionately worse circumstances when COVID-19 lockdown and restrictions were enacted because they did not have access to cash relief programs provided by the Tswanan government. Lack of cash flow, and the increased chance of indefinite business closure among women, ensued (The MIWE Report, 2020). Moreover, given evidence that women are more likely to spend earnings on nutrition-enhancing purchases, an increase in women's monetary resources enables women to access health services for themselves and their children, often leading to enhanced nutrition outcomes in the household (Gillespie et al., 2012), a particularly vital aspect of increased COVID-19 resiliency for Botswana.

## **7.7 Policy Recommendation V: Ensure the Procurement of Health, Food, and Income Services During Crises to Formally and Informally Employed Women**

The unavailability of food and essential supplies, along with restricted access to health services, water, and sanitation, have greatly impacted women throughout COVID-19 (OXFAM, 2021). As households struggle to deal with the economic blows of the pandemic, community systems and structures suffer, weakening the capital assets and health of women. Policy and programs that are gender-sensitive should be implemented for both short-term crises protection, and long-term crises prevention.

Short-term gender-sensitive stimulus packages and gender responsive procurement policies should be devised in order to protect women and families. First and foremost, policy must ensure that adequate emergency food reserves, monetary reserves, storage facilities, and health centers are available to the most far-reaching areas of the public. Rob Vos of the IFPRI argued that there is one crucial step that governments can undergo to ensure that food systems keep functioning throughout the COVID-19 pandemic. The key element being that governments need to give people more cash in their pockets to buy more food. The IFPRI recommends achieving this in developing nations through means of government subsidies (Debucquet, Martin, and Vos, 2021).

For long-term pandemic resiliency efforts among women business owners, Vos reiterates the need for public-private partnerships, where social protection programs are devised in collaboration between government workers and community leaders, primarily among a team of diverse community members and women in the decision-making process (Debucquet, Martin, and Vos, 2021). Additionally, Caren Grown of the World Bank Group also suggests the improvement of country-wide social safety net programs in order to increase COVID-19

pandemic resiliency. This includes ensuring everyone's presence in the social registry, such as informally employed women, to make certain that all are provided with national food provision, and financial support along with free or subsidized education, COVID-19 health programs, and school feeding programs (World Bank Group, 2020); overall, enhancing women's resiliency to COVID-19 and future economic shocks because there are readily available networks, funds, and institutions during emergency situations, creating a safety net for women-business owners socially, financially, and nutritionally.

## DESIRED OUTCOMES OF IMPLEMENTED POLICIES

In accordance with the GCAN framework, actions taken in response to economic-climate shocks and stressors influence wellbeing outcomes (Byran et al., 2017). The GCAN framework defines how changes in income and assets, resulting from stressors, influence the nutrition and health outcomes of the individual experiencing the shock. GCAN shows that these economic-climate events, like COVID-19, have direct relationships and correlations to outcomes such as food and nutritional security, gender equality, and health (see Figure 1).

This section briefly describes the GCAN framework's desired outcomes of what proper programming and policymaking will do for women entrepreneurs in Botswana. With proper aforementioned program and policy implementation, women-led business owners should experience positive health, work, and food outcomes, protecting them from future pandemics and economic-climate shocks. Understanding the expected outcomes of adopting preferred policies inform policymakers on what successful investments, policies, and initiatives should look like long-term.

### 8.1 Gender Equality

Across Botswana, women continue to be held back by rooted sociocultural, economic, and financial constraints such as lack of work opportunities, government support, and access to funding and capital (MIWE, 2020). As mentioned, gender equality poses high macroeconomic, human rights, and community benefits to society, all of which should increase as a result of well-executed policy. Given that women are disproportionately more vulnerable due to their exposure in highly impacted sectors, and their high engagement in the informal economy (60 percent) (United Nations, 2020), improved outcomes such as gender parity and equal work opportunities

across all sectors should be observed in Botswana's economy. With proper policy intervention, men and women can have equal access and quality of employment, including pay. Desired outcomes for women should also include greater control of assets, such as land holding, as land is a key asset of households, important for poverty reduction (Rubery, 2015).

Furthermore, positive cultural mindsets and social acceptance of women working in diverse fields of interest will be paramount in motivating women to pursue new professional opportunities (The MIWE Report, 2020). Drawing on this information, desirable gender equality outcomes, such as the balanced gender division of both unpaid care and paid work, entail a future where there is equal time spent on caring tasks by men and women. For example, in Morocco, policy officials are working to encourage men and sons to share domestic housework with mothers and daughters (UN Women, 2019). Campaigns like these can effectively address societal behaviors and constructs straight from the source, potentially causing dramatic changes long-term in generational civil duty and societal perceptions (Ukala, 2020).

## **8.2 Health and Nutrition**

Access to highly nutrient-dense food is a basic human right and a fundamental component of life, yet women and girls are twice as likely to suffer from malnutrition as men and boys, due to a combination of biological and socio-cultural reasons, especially after economic-climate events (Debuquet, Martin, and Vos, 2021). Nutrition plays a critical role in health, since deficiencies in essential nutrients lead to malnutrition and co-morbidities that affect people's mental and physical states.

When monitoring for health outcomes, the most common issues amongst malnourished women include iron and folic acid deficiency (Milner et al., 2021). Nationwide monitoring of

essential nutrients and minerals such as iron, folic acid, body mass index, height, vitamin A, vitamin C, iodine, and zinc should be occurring regularly in municipality centers to ensure all social groups within Botswana are healthy, especially after a crisis like COVID-19 (OXFAM, 2021). When monitoring and evaluating the efficacy of implemented policies, Tswanan policymakers should make certain that all the previously mentioned comorbidities and deficiencies are being monitored and addressed during pandemic times. If these essential nutrient-based desired outcomes are not reached, Tswanan policymakers need to ensure the procurement of nutrient-dense foods, and nutrient supplements, to individuals experiencing heightened food insecurity as a result of low cash flow or business closure. This is a particularly important outcome to monitor in the context of COVID-19 and women business owners, for as fiscal resources diminish, and businesses close, accessibility to nutrient-dense food greatly declines (Action Against Hunger, 2021).

## DISCUSSION

### **9.1 Improving Resiliency Through Capacity Building**

By improving the structural capacity and recovery capabilities of the nation, Botswana can make a gradual shift toward sustainable practices that preserve capital, protect food security, and ensure gender equality, all the while strengthening the capacity of national and sub-national governments, and community structures. Botswana's national post-COVID-19 strategy and policy decisions should be largely informed by community-led groups, or in this case women entrepreneur groups, in order to enhance resiliency and capacity long-term (Kulb et al., 2015). In terms of social capital generation, women entrepreneurs often tend to establish strong networks across industries, communities, and countries, by sharing knowledge and offering a support system to develop strong local markets to meet their communities' need, such as their high engagement in training programs for women- and youth-led firms (MIWE, 2020). Botswana should heavily focus on incorporating women's propensity to engage in communities and reinforce this attribute as much as possible. One example of how this could be executed in Botswana is by building local capacity for domestic sourcing of goods and services where communities will likely be competitive within their own economic model, encouraging local trade, artisanship, and outreach (International Trade Centre, 2019).

It is also vitally important to recognize that regional coordination and multilateralism, with major corporations and banks as stakeholders, have a role to play in enhancing women's resiliency. The procurement of food, medicines, cash, transit, and trade facilitation can be greatly increased with more effective regional, and international, collaboration (The MIWE Report, 2020). Across the globe, increased multilateralism, especially around trade, is pivotal for women business owner's financial development.

International coordination, transcending governments and businesses, is needed in the prevention of and recovery from economic crises, predominantly for mobilizing resources to cushion the impacts of COVID-19 and, in the long-term, revive trade routes (Mastercard Engagement Bureau, 2021). For example, in 2020, Mastercard expanded its worldwide financial inclusion commitment, pledging to bring a total of 1 billion people and fifty million mSMEs into the digital economy by 2025. As part of this effort, Mastercard pledged to provide 25 million women entrepreneurs with solutions that can help them grow their businesses, through a range of initiatives across funding, mentoring, and the development of inclusive technologies. This involves the widespread acceptance of touchless payments for Android smartphones, the development of a Mastercard app that supports contactless payments, generated QR code payments, instant online checkout features, and compatible e-payment links for remote payment plans (MIWE, 2020). Solutions like these allow women mSME owners to enter new commerce spaces, create bank accounts, and even give women the opportunity to sell artisan goods across the globe. Ambitious programs such as these, funded and supported by large companies, organizations, and governments, generate opportunities for women to engage in the global, and local, market space, all while supporting their digital education, independence, and entrepreneurial endeavors (The MIWE Report, 2020).

However, it is important to mention that while increased multilateralism can greatly increase entrepreneurs' access to networks and resources, it is not always going to be contextually appropriate for every type of business and business owner. Technologies do not always adapt culturally in ways that they are intended and can sometimes do more harm. For example, having all of one's bank account and personal information on a virtual platform can increase vulnerabilities to cyber-attacks, stolen information, and loss of funds. Furthermore,

digital technologies adapt differently across all societies, and there is not a neutral or objective experience in which social groups “accept” technologies (Combi, 2016).

Global emergencies like COVID-19 call on countries to coordinate globally to address long-standing issues around trade, financing for development, and climate change. Unsustainable practices, such as Botswana’s high dependency on diamond mining, lead to extreme disparities and environmental degradation over time, highlighting the need to reevaluate the nation’s economic model with fresh eyes after experiencing the detriment of COVID-19. Quality education, digital connectivity, increased women’s income, and equal job opportunities need to be considered as a direct avenue for driving countries toward their sustainable development goals by increasing resiliency and capacity building within vulnerable groups.

## **9.2 Potential Issues Faced During Research: GCAN Framework**

The GCAN framework, or rather my interpretation of it, does not appreciate all factors in which variables are correlated, and does not encompass the entire scale to which desired outcomes occur. Specific household and business sector dynamics are overlooked when utilizing general frameworks such as GCAN, and do not wholly represent the exhaustive set of factors that can influence people’s individual resiliency levels, such as optimism, pessimism, or entrepreneurial spirit. Moreover, GCAN, in and of itself, is a climate change-oriented framework, and although there are similarities between the aftereffects of a climate disaster and a health pandemic, such as food price shocks, they are inherently very different circumstances.

I would be remiss not to mention that this paper greatly skipped over climate change entirely, a pressing issue that Botswana’s policymakers need to invest in heavily, to mitigate future climate disasters. Due to Botswana’s high aridity, the country needs to dedicate a portion

of the nation's monetary reserves to climate protections and water management to ensure the safety of the nation's population.

In some cases, the framework applied seamlessly to pandemic relations, such as the ability to define relationships between adaptive and absorptive capacity within women, and the relationship with their food, health, and work environment. However, as a climate change framework versus a health pandemic framework, I had to neglect elements of GCAN such as coping, displacement, and climate variability, as the COVID-19 health pandemic was sudden and unprecedented, unlike increasingly frequent climate disasters around the globe. The GCAN framework, for this report, was used as a starting point to contextualize COVID-19 and affiliated pandemic shockers to large groups of people. However, with slight adjustments of the GCAN framework, the overall flow of the framework could be more efficiently adapted to pandemic-like economic shocks and stressors.

I would recommend adaptions to GCAN such as the reframing of the climate signal to include separate pathways for short-term and long-term responses to the repercussions of said signal, such as a nationwide lockdown. I would also include the contraction of diseases in the response section as another separate pathway, as the unanticipated issues that can come with a viral contraction are not described in the climate change framework. A “contraction pathway” would include the short-term issues of abbreviated business closures, the loss of time, and the potential social stigmas of contracting the virus that may affect customers supporting one's business. In a framework devised from GCAN that encompasses pandemic response, I would also add governmental institutions and decisions within the range of response options, since much of an individual's ability to absorb or adapt to circumstances hinges on the resources and mandates imposed by their nation's government structures. Lastly, Tswanan national policy and

decision-makers can generate ideas and versions of the GCAN framework that adhere to national customs, norms, and specificities that a global framework and I, as a foreigner and American, cannot.

### **9.3 Other Potential Issues**

It is also crucial to note that statistics, even provided by leading world organizations such as the World Bank, can be skewed and altered during many stages across data collection. Data limitations obscure and neglect critical development deficits. More granular and disaggregated data would not only drive improved targeting of vulnerable groups in the short-term, but also facilitate more efficient monitoring of longer-term progress on desired outcomes. Strengthening the capacity of Botswana's national statistics to include as many populations as possible, such as a push to integrate informal sector workers into their global access data, would greatly improve the comprehension of Botswana's structure and demographics. Moreover, much of the data utilized in this paper is from self-reported data, which always has the potential of bias from the nature of the questions asked, the framing of questions, and the interpretations of the interviewers. Investing in accurate and timely data collection is essential for well-informed, successful policy choices.

Another potential shortcoming of the research is this report's lack of focus on the role of men in the households, and across businesses during economic-climate stressors. It is likely that climate-induced migration of men in search of work has consequences for both men and women, albeit in different ways. For example, male-led push and pull migrations as an adaptive response to rapid market changes increase cash flow in the household through the form of remittances, and may enhance women's decision-making authority, while simultaneously increasing women's unpaid domestic labor burdens (Lama et al., 2020).

There are many factors which alter male workplace distribution, and women's roles in households and businesses not considered within the breadth of this analysis. With current data, it is also difficult to parse the long-term versus short-term effects COVID-19 on women- versus male-owned businesses. Since many male-owned businesses that shut down were larger operations, it may be more difficult for male businesses to reopen long-term, whereas with some cash flow and microfinance loans, women may be able to re-enter their market spaces more readily, as their operations are smaller and often localized (Mastercard Engagement Bureau, 2021).

Lastly, more research is needed on the trade-offs and synergies across different development outcomes, such as agricultural productivity, livelihood resiliency, and environmental resiliency with health pandemics, as this report is only evaluating the reports and statistics describing women and general mSMEs, without going into much depth about specific sector dynamics (Byran et al., 2017). It would behoove future gender equality analysts to incorporate more sector-specific questions to ultimately understand the true effects of COVID-19 on women-led businesses. Conducting face-to-face interviews to hear of the trials and tribulations of both male and women businesses across mSMEs in Botswana would provide further context on how to improve resiliency, income, health, and nutrition of all Tswanan citizens, with or without devastating economic events.

## CONCLUSION

COVID-19 has significantly disrupted local and global supply chains, causing tremendous economic damage ubiquitously across the globe. As a result of the pandemic, the country of Botswana is going through an economic crisis, perpetuated by lockdown and curfew restrictions in conjunction with poor resource allocation. This alone has led many women-concentrated industries to collapse from severe lack of income, resulting in higher mass business closures. Ultimately it is the role of government and larger institutions to support resiliency practices for women entrepreneurs prior to disasters like COVID-19. Economic rescue efforts should be aimed at protecting the food security, stability of working status, and continuity of economic activities needed to protect women entrepreneurs. It is possible to safeguard public health and the economy while upholding human rights as these principles are mutually supportive, not contradictory (Hidayat et al., 2020).

The goal of developing this analysis was to provide stakeholders from different disciplines with a general point of reference for understanding complex gender issues, and their interlinkages with how women are more disadvantaged during pandemics. Suggestions were offered to identify research and evidence gaps that highlight targeted entry points for policies that aim to increase women's desired societal outcomes, such as resiliency, heightened food security, and financial parity. Improved risk management strategies, that involve plans, actions, and policies that aim to reduce the likelihood or impact of future pandemics need to be prioritized and transitioned into transformative responses. Transformative responses should aim to change the fundamental attributes of a system or context to improve well-being outcomes, such as actions that address underlying social vulnerabilities. Actors across myriad multi-

disciplinary sectors need to advocate for actions that meet women entrepreneur's needs, preferences, and priorities.

By observing Botswana's COVID-19 response, federal initiatives, and ultimately shortcomings to support women business owners, we can use this report's analysis to inform improved government policy across other developing regions; gaining key information on how stakeholder strategies can diminish gender inequity, and food insecurity, by better supporting women-led mSMEs. The findings of this report touched on how governments, and all affiliated stakeholders, may increase women entrepreneurs' resiliency to shocks and stressors by investing in capacity. This analysis of Botswana demonstrates general improved practices of government response policies to go beyond blanketed safety net programs and include more women-focused social protection systems by means of improved gender-sensitive support packages for both formal and informal enterprises, increased access to credit and technology, and health and food provisional services strengthened by community cohesion. Overall, dedicated programs and initiatives emboldening women's resiliency is the quintessence of successful pandemic response, and preventative, policy.

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## APPENDIX

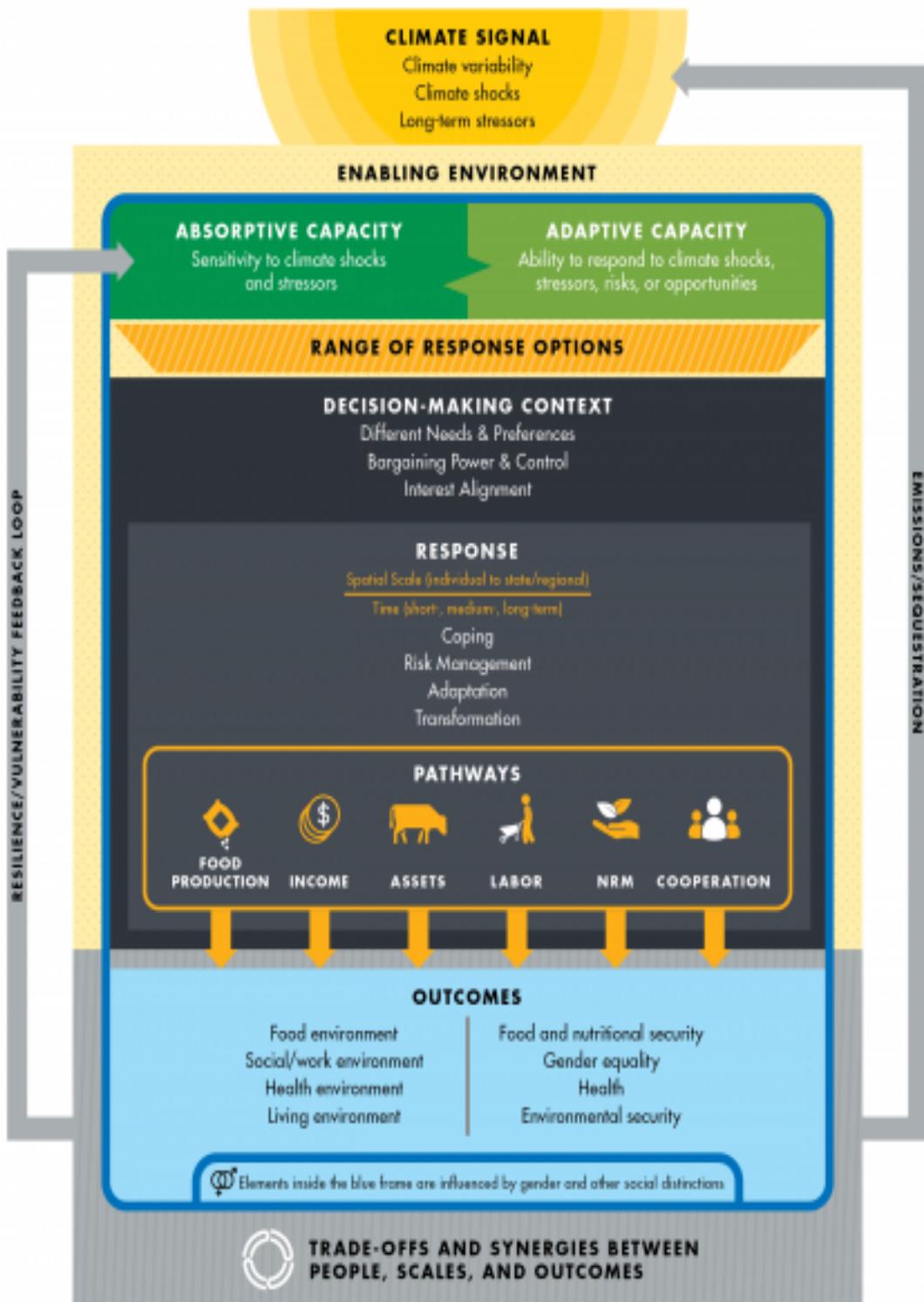


Figure 1. Gender, Climate Change, and Nutrition Integration Initiative Framework (Byran et al., 2017)

## IN EVERY PART OF THE WORLD, WOMEN SPEND MORE TIME ON UNPAID WORK THAN MEN DO

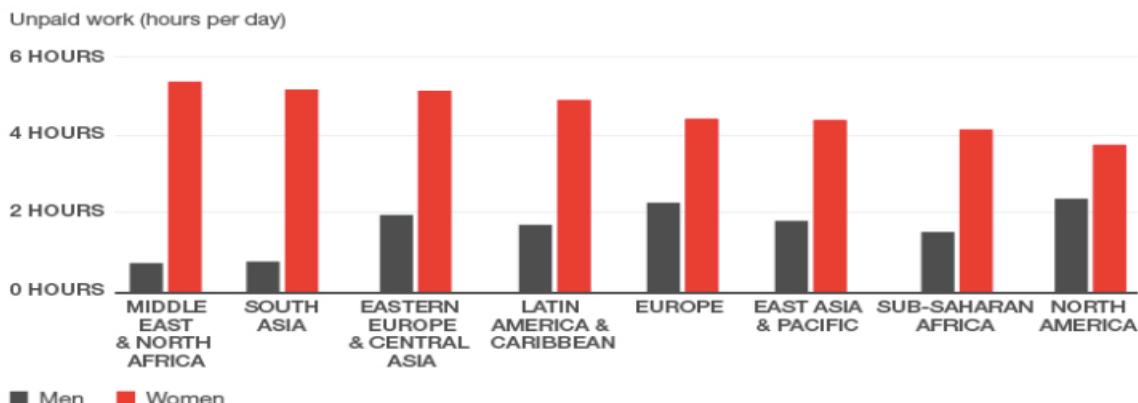


Figure 2. Global Gender Division of Unpaid Work (OECD, 2014)

Male and female owners in male-dominated sectors and female owners in female-concentrated sectors

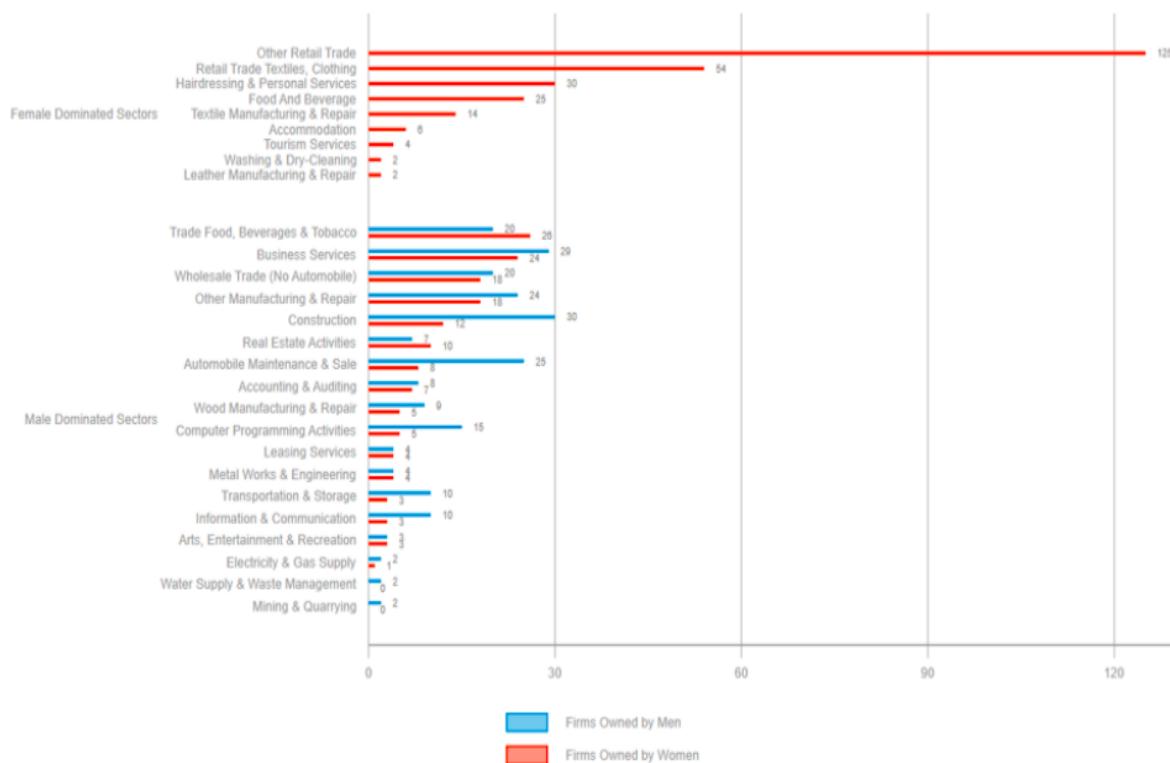


Figure 3. Botswana Sector Distribution by Sector and Owner's Sex (Cherchi and Kirkwood, 2019, pp 6)

## Male-dominated Sectors

Share of respondents who reported most businesses in the sector are owned by women/men

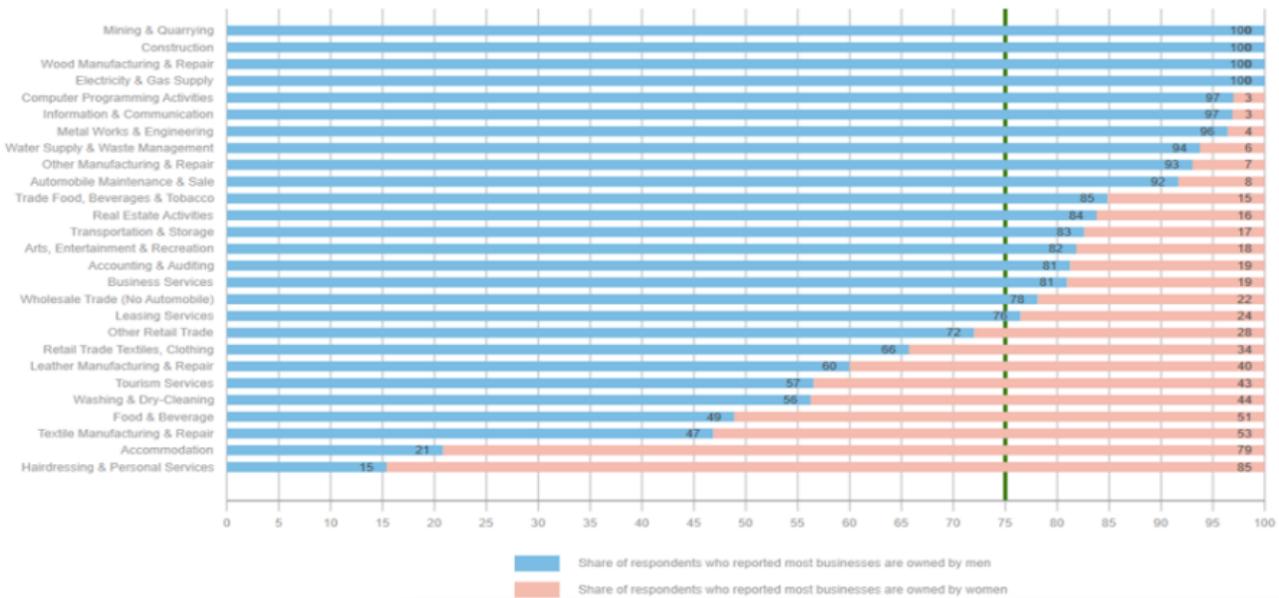


Figure 4. Botswana's Perceived Sex Domination of Sectors (Cherchi and Kirkwood, 2019, pp 5)

RESULTS			Mastercard Index of Women Entrepreneurs 2020			13
	MIWE SCORE*			MIWE RANKING		
	2020	2019	% Change from 2019 to 2020	2020	2019	% Change from 2019 to 2020
<b>Singapore</b>	<b>64.4</b>	<b>64.9</b>	<b>-0.9%</b>	<b>24</b>	<b>12</b>	<b>12 ↓</b>
<b>Vietnam</b>	<b>63.9</b>	<b>64.4</b>	<b>-0.8%</b>	<b>25</b>	<b>18</b>	<b>7 ↓</b>
<b>Malaysia</b>	<b>63.7</b>	<b>62.2</b>	<b>2.3%</b>	<b>26</b>	<b>26</b>	<b>-</b>
<b>Chile</b>	<b>63.4</b>	<b>62.7</b>	<b>1.1%</b>	<b>27</b>	<b>23</b>	<b>4 ↓</b>
<b>Germany</b>	<b>63.0</b>	<b>61.0</b>	<b>3.3%</b>	<b>28</b>	<b>28</b>	<b>-</b>
<b>Argentina</b>	<b>62.9</b>	<b>60.0</b>	<b>4.8%</b>	<b>29</b>	<b>35</b>	<b>6 ↑</b>
<b>Belgium</b>	<b>62.8</b>	<b>63.3</b>	<b>-0.9%</b>	<b>30</b>	<b>21</b>	<b>9 ↓</b>
<b>Botswana</b>	<b>62.4</b>	<b>64.1</b>	<b>-2.6%</b>	<b>31</b>	<b>20</b>	<b>11 ↓</b>
<b>Brazil</b>	<b>62.4</b>	<b>59.1</b>	<b>5.6%</b>	<b>32</b>	<b>37</b>	<b>5 ↑</b>
<b>Hungary</b>	<b>62.3</b>	<b>57.4</b>	<b>8.4%</b>	<b>33</b>	<b>41</b>	<b>8 ↑</b>
<b>Mexico</b>	<b>62.1</b>	<b>58.9</b>	<b>5.5%</b>	<b>34</b>	<b>38</b>	<b>4 ↑</b>
<b>Uruguay</b>	<b>61.3</b>	<b>60.4</b>	<b>1.5%</b>	<b>35</b>	<b>31</b>	<b>4 ↓</b>
<b>Costa Rica</b>	<b>60.9</b>	<b>60.5</b>	<b>0.7%</b>	<b>36</b>	<b>30</b>	<b>6 ↓</b>

Figure 5. MIWE 2020 Rankings for Business Gender Gap Change (MIWE Report, 2020, pp 13)