



**UNEQUAL BUT ESSENTIAL: HOW SUBSISTENCE CONSUMER-  
ENTREPRENEURS NEGOTIATE UNPRECEDENTED SHOCK  
WITH EXTRAORDINARY RESILIENCE DURING COVID-19**

Journal:	<i>Journal of Consumer Affairs</i>
Manuscript ID	Draft
Wiley - Manuscript type:	Special Issue
Keywords:	Subsistence Marketplaces, COVID-19, Poverty
Abstract:	<p>We use qualitative interviews to study subsistence consumers confronting the global, pervasive and extended challenges of COVID-19, encompassing literally all realms of daily life. For subsistence consumers whose circumstances are filled with day-to-day uncertainty and a small margin of error to begin with, the pandemic has led to manifold uncertainties and a disappearing margin of error, with potentially lethal consequences. Their constraints to thinking and lack of self-confidence arising from both low income and low literacy are magnified in the face of the complex, invisible pandemic and the fear and panic it has caused. Characteristic relational strengths are weakened with social distancing and fear of infection. Yet, subsistence consumers display humanity in catastrophe, and confront the uncontrollable by reiterating a higher power. Consumption is reduced to the very bare essentials and income generation involves staying the course versus finding any viable alternative. We derive implications for consumer affairs.</p>

UNEQUAL BUT ESSENTIAL: HOW SUBSISTENCE CONSUMER-ENTREPRENEURS  
NEGOTIATE UNPRECEDENTED SHOCK WITH EXTRAORDINARY RESILIENCE  
DURING COVID-19

**ABSTRACT**

We use qualitative interviews to study subsistence consumers confronting the global, pervasive and extended challenges of COVID-19, encompassing literally all realms of daily life. For subsistence consumers whose circumstances are filled with day-to-day uncertainty and a small margin of error to begin with, the pandemic has led to manifold uncertainties and a disappearing margin of error, with potentially lethal consequences. Their constraints to thinking and lack of self-confidence arising from both low income and low literacy are magnified in the face of the complex, invisible pandemic and the fear and panic it has caused. Characteristic relational strengths are weakened with social distancing and fear of infection. Yet, subsistence consumers display humanity in catastrophe, and confront the uncontrollable by reiterating a higher power. Consumption is reduced to the very bare essentials and income generation involves staying the course versus finding any viable alternative. We derive implications for consumer affairs.

We begin and end this paper with a note – that no single paper can come close to capturing the complexities and magnitude of the COVID-19 pandemic and its impact on those with the least (Nicola et al. 2020). Subsistence marketplaces, referring to the wide range of low-income contexts where individuals function as consumers and entrepreneurs (Viswanathan and Rosa 2007), represent the starkest of human life circumstances. In a variety of circumstances ranging from a recession to a shock to the financial system or a disaster, these circumstances are overlaid with even greater adversity, and for an extended period of time. Yet, both in consumer affairs in general and specific to subsistence marketplaces the study of large shocks is largely absent, this also being the case in the literature across multiple disciplines. Exceptions include the impact of recession (Brennan and McHugh 1993), entrepreneurial activity during economic downturn (Castaño et al. 2015), the impact of macroeconomic crisis on nascent entrepreneurs (Davidsson and Gordon 2016), entrepreneurs in Thailand facing economic recession (Egan and Tosanguan 2009), and the study of coping strategies during demonetization (Viswanathan et al. 2020).

The spread of COVID-19 represents on such a set of circumstances, at an extraordinary scale, pervasive and global (Nicola et al. 2020; Sumner et al. 2020). It highlights the plight of subsistence consumers who are very unequal, their lives much less valued to begin with. At the same time, they are also “essential” for those with more resources to survive by providing valuable, indispensable services. Thus, these consumers who are often consumer-entrepreneurs as described in the literature (Viswanathan et al. 2010; Upadhyaya et al. 2014), face twin-fold shocks due to their dual roles. This paper examines how subsistence consumer-entrepreneurs, a duality noted in the literature, are facing the challenges from COVID-19. Using qualitative methods, we conducted our study in several countries in Africa, the Americas, and Asia.

COVID-19 is global, pervasive and extended, and unlike other shocks that may relate to a realm of life such as health or economics, encompasses literally all realms of daily life (Bentley et al. 2020; Cucinotta & Vanelli, 2020; ; Sumner et al. 2020). For subsistence consumers, whose days are ordinary filled with vast uncertainties (Viswanathan, 2013), the pandemic has left them in an almost intractable position of being at the highest risk of infection, with the least available resources to defend against it (Burrer et al. 2020; Jiwani & Antiporta, 2020; Walker et al. 2020). The situationally demanding position of being seen as “essential” in the scope of the normally functioning economy, has found them unequally equipped to survive the economic downturns now at their doorstep. The multiplicity of danger, both real and suspected, occurs while such individuals and communities have the minutest margins of error against failure (Viswanathan, 2013; Azmat, Ferdous, & Couchman, 2015).

The cognitive constraints to abstract thinking and affective elements such as lack of self-confidence that are so common among those with low income and low literacy (Viswanathan, Rosa and Harris 2005), are magnified in the face of the complex, random and invisible tide of the pandemic (Walker et al. 2020). The seemingly draconian means for prevention, along with the fear, panic, and ambiguity they have caused, tear at the very heart of the social fabrics of these communities. In turn, the profound relational strengths and social capital (Trujillo, Barrios, Camacho and Rosa 2010; Viswanathan et al. 2012) that characterize these contexts are severely weakened with social distancing and fear of infection. People are caught between the immediate threats of the present, and some way of negotiating to a more bearable future. In response, subsistence consumers often display humanity within catastrophe, and when confronted with uncontrollable situations seek solace and rationalization by reiterating a deference to a higher power (Azmat et al. 2020; Bentley et al. 2020; Koenig, 2020). As many of these consumers are

necessity driven entrepreneurs (Jayachandran 2020), consumption is reduced to the very bare essentials and income generation involves walking the tightrope between staying the course with what sustained before and finding any viable alternative.

Our paper is organized as follows. Following a brief discussion of the role of pandemics in affecting those with lower income, we discuss the spread of COVID-19. These discussions are then interpreted in terms of what we know from past research on subsistence marketplaces. We then provide the context for our study across several countries. We discuss our method and then, our findings at several different levels of analysis. We derive implications for consumer affairs.

## **COVID-19 AND SUBSISTENCE MARKETPLACES**

### **Pandemics and Low-Income Communities**

Within the last half of 20<sup>th</sup> Century and the beginning of the 21<sup>st</sup>, the world has seen no less than dozen serious outbreaks of highly contagious human disease (e.g., “AIDS”, Ebola, Dengue, SARS, Zika, and the influenza strains (H1N1, H2N2), with their potential for widespread infection on a global scale. Accounts of influenza-like infections were recorded by Hippocrates and Livy as early as 412 B.C.E. (Kuszewski and Brydak 2000). In fact, the globe has seen four pandemics caused by this constantly re-configuring strain of Orthomyxoviridae virus in the last 100 years.

Within generational memory are the accounts of one of the deadliest influenza outbreaks, the so called “Spanish” flu of 1918 through 1920. Coming in in three distinctive waves during this period, (Humphries 2013), the virus ravaged the world and caused an estimated loss of life in the range 50 million (Johnson and Mueller 2002). Some accounts lead scholars to believe that nearly half of the world’s population at that time, may have been infected (Potter 2001).

Subsequently, emergent archival data are showing a distinct linkage between socio-demographic variables such as functional literacy, home ownership, unemployment, population density, age (Grantz, et al. 2016) and the impact of the 1918 influenza pandemic in Chicago, Illinois. This study directly quantifies a mortality increase of up to 32% for each 10% increase in low-literacy rates. While the lack of literacy is not discriminating factor for viruses, it may serve as a proxy for other socio-economic conditions (poor nutrition, overcrowding, poor access to appropriate care) that would, in fact, be contributing risk factors.

The 1918 outbreak was cathartic in many ways, in that at the time, it galvanized the need among many governments and institutions to take on a global perspective in regard to public health. It was also a critical period for the intersection of medical and epidemiological advances, diplomacy among global institutions, and the emerging speed and volume of international travel. All three of these factors would play a role in the subsequent efforts against the coming pandemics of the next century.

The ability to study and research influenza directly wasn't enabled until the discovery of the actual pathogenic virus by Wilson Smith and his colleagues in 1933 (Wilson, Andrewes and Laidlaw 1933). This enabled the development and distribution of preliminary vaccines as early as the mid-1940's (Francis in *Science* 1942) During this period, additional advances in antibiotic treatments, biomedical equipment, and the development of critical care units within hospitals aided in decreasing the mortality rate of subsequent infections caused by influenza infection.

In 1957, the world was stuck with a new strain of influenza (H2N2) emanating from the Yunnan region of China. Somewhat unique in its nature, there was no known immunity in a large portion of the world's population under the age of 65 (Fukumi 1959). Although relatively mild in severity and lethality in modern societies, and limited speed of dispersion due to primarily

land-based transportation vectors, it still managed to cause widespread disruptions in schools and workplaces due to absenteeism. Known as the “Asian” flu, estimates of rates of infection were at levels of 50-60% of school age children, with work absenteeism in the 6%-8% range. Once again, the disparity of socio-economic conditions played a part on the spread and the disproportionate impact of the 1957 outbreak in Asia. China in particular, suffered greatly from this round of influenza, mainly due to severe famine and technological insulation, creating millions of individuals on the brink.

1968 brought the emergence of a sub-variety (H3N2) of the original “Asian” strain. Named the “Hong Kong” flu at the time, it represented an important shift in the way epidemiologists viewed influenza infection expansion. For the first time, the global spread was highly accelerated due to the abundance of intercontinental air travel. This was noted specifically within the United States as soldiers returning from combat in Vietnam were considered to be a primary vector of its initial spread in north America (Cockburn 1969). Mortality rates were low, and the economic disruption was mild in comparison to the Asian outbreak of 1957. Nonetheless, this episode represented a new dynamic in the considerations of public health officials worldwide, as the speed at which these infections could take hold on a global basis as a result of inexpensive air travel, had to come into the containment planning efforts.

With the global efforts towards vaccination, a better understanding of transmission vectors and a more vigilant medical observational reporting mechanisms in place, the known strains of human influenza had been limited in their ability to cause widespread mortality and economic disruption. Now relegated to a “seasonal” flu description, the world was somewhat unprepared for the next chapter of influenza infection that was about to occur. In 2003, a unique and deadly form of respiratory infection, labeled “SARS” (severe acute respiratory syndrome)

emanated from China. Within weeks, more than 30 nations had reported cases with a mortality rate of nearly 10% (Lee and McKibbin 2003). This marked a turning point in the world's approach to influenza and influenza-like contagious, as the realization that cross-species infections of Coronial viruses previously identified with birds, monkeys or small mammals could find their way into the human population stream. At the heart of this, was the presumption that deep exploitation of natural resources by developing countries was placing humans in contact with infected species more often, enabling these zoonotic viruses to mutate and become infectious to humans. SARS was quickly recognized and a serious health threat, and strict quarantine and infection control measures were enacted to slow its progression. These measures were largely successful, and the disease was essentially halted in 2004.

In more recent memory is the 2009 outbreak of what came to be known as the "Swine Flu", a recognition of its antecedent core virus DNA being associated with a strain of H1N1 influenza most often found in swine species. Here as well, the species-jumping aspect of the virus was of significant concern, as humans lacked any significant immune "experience" with such a virus variant and were at a heightened risk. Although the mortality rates were considered on par for seasonal influenza deaths, the quick spread and specific infection rates among different demographics of the global population became worrisome. Researchers found that between 11% and 21% of the world's population may have been exposed to the virus at a level capable of causing illness or immune response. (Peck et al. 2011)

As we look to the current pandemic, much of the health-related adversity in the global population could be reasonably predicted by a review of the impact of influenza over the last 100 years. Of particular note was the historical evidence of the differentiation of symptomatic response between young and old, as the various strains would spread. Current mortality rates also



seemed to follow the same curve. The lessons learned however, seem to have faded rather quickly as we once again are forced to retrench the necessity of isolation, hand washing and other infection control measures. But even these simple measures are often out of reach for a large portion of the world's population.

In nations where there are significant segments of society with low income, the luxury of being able to isolate, or stay out of the marketplace is unthinkable. Barely making ends meet on a day to day basis, with little to no savings, these communities are necessity-driven in their quest to provide the essentials for themselves and their families to survive and subsist, wherever and however they can. Those who cannot isolate because of the large, intergenerational nature of their family or the small size of the family living quarters are at specific risk.

In areas where there is a lack of clean water, handwashing becomes a choice between thirst and other hygiene needs, inequalities extending to access to soap and water becoming accentuated as well (Jiwani et al. 2020). The lack of adequate water is not an issue strictly associated with underdeveloped nations, as populations of native Americans in the United States southwest are suffering from the absence of sufficient potable water supplies in their battle against the COVID-19 virus. Coupled with this is the sparse and inadequate medical care afforded on a public basis, and the relative invisibility of these communities to rest of the world.

### **Subsistence Marketplaces**

Typically, in subsistence marketplaces, consumers make impossible trade-offs between making, buying, and foregoing, with the economic and the human being blurred, and with the social milieu blurring with marketplaces (Viswanathan et al. 2009). Moreover, also blurring are the roles of consumers and entrepreneurs, as these dual roles are often carried out by the same

individuals, i.e., two sides of the same coin (Upadhyaya et al. 2014). The spread of COVID-19 is affecting those with the least the most, as is typically the case (Baker, Farrokhnia, Meyer, Pagel, and Yannelis 2020; Dorn, Cooney, and Sabin 2020). Moreover, the extended nature of the impact should be contrasted with even disasters that last a shorter period of time with the tragic aftermath extending much longer. A parallel at the other end of the continuum is in refugee settlements and war-torn areas of the world (Viswanathan, Arias, and Sreekumar 2020).

Subsistence marketplaces have been characterized as being resource-poor materially, facing different constraints due to low income, low literacy, lack of exposure, and a host of other factors (Viswanathan and Rosa 2007; Viswanathan 2013). The lives of individuals, consumers and entrepreneurs alike, in these settings have been described in terms of day-to-day uncertainties and a systemic lack of any margin for error. Indeed, this stream is unique in unpacking the general effect of low literacy and related constraints to thinking, feeling, and coping (Viswanathan et al. 2005).

In particular, concrete thinking and pictographic thinking are two central tendencies observed in these consumers. The latter relates to reliance on the sensory mode, and goes beyond dependence on the visual or pictorial to using pictographic means for counting, “reading,” gauging magnitudes, etc. It is particularly pertinent in the face of an invisible virus. The former relates to difficulty with abstracting, and translates to understanding words representing notions (e.g., pandemic, virus, or even healthiness) in very concrete terms, having difficulty with forming a broader judgment from pieces of information (e.g., symptoms of a disease), understanding why (e.g., causal inferences between precautionary behaviors and safety), setting abstract goals (staying healthy versus wearing a mask), etc.

In the language of psychological distances, socially, temporally or spatially distant notions are more abstract and potentially more difficult to grasp. Therefore, a virus affecting people far away, outside one's immediate social circle, may be more difficult to grasp and rationalize than one more proximate. Relevant here is the invisible nature of the pandemic, in the arena of health with its complex interconnections that are difficult to grasp to begin with (Viswanathan et al. 2018). The understanding of the threat, and actions to mitigate it are forced upon subsistence marketplace communities, through policies and measures over which they have limited or no control: closure of workplaces, closure of schools, closure of worship spaces, reduced access to transportation, varying types of curfews, loss of business and income, forced requirements of physical distancing and personal protective gear. These restrictions are at best, challenging and at worst impossible, to adhere to. Subsistence marketplace communities have to endure at once the invisible pandemic that is still difficult to comprehend, and the stringent mitigation measures, with the latter being far more visible and palpable than the former. How do individuals with low literacy understand this threat in a cognitive sense, how do they react in an affective sense, and how do they cope in terms of actions? Depending on sensory modes of thinking, understanding of the threat is a daunting challenge, being as it is for anyone. In turn, the complex causal process is being uncovered over time with much uncertainty. How does someone with lower literacy even begin to understand the threat, manage the associated emotions, and act on different modes of prevention, in a fast-changing environment with conflicting information magnified by instantaneous modes of communication (e.g., WhatsApp messages)?

These issues with thinking that arise from low literacy are accentuated with lower income levels and the need to survive in the immediate term. Thus, acquiring basic necessities to survive

and so forth, at a time of dwindling or unreliable supply and disappearing income are material challenges that overlay the inherent cognitive and affective challenges. People are thrust in the midst of an invisible threat with the least of material resources, while also having constrained cognitive resources to interpret the dangers around them or the actions they can take to enhance their own safety. Overlaying the thinking facet is the affective or emotional dimension. Lacking literacy and income, even the most mundane of interactions have been argued to be involve self-esteem and challenge self-confidence (Viswanathan et al. 2005). With the spread of COVID-19, the range of emotions and mental states it has led to across the board is only accentuated for those in subsistence contexts.

In the social realm, consumers and entrepreneurs in these contexts can be relationally rich, in what have been described as 1-1 interactional environments (Viswanathan et al. 2012), social capital being critically important to survival in such settings. Marketplaces blur into the social milieu as do relationships across the social and the economic. Indeed, marketplace literacy in these contexts has been described as being socially embedded as consumers and entrepreneurs engage in fluid and responsive exchanges and multiply the value of small transactions through longer-term relationships (Viswanathan et al. 2009). The literature has also focused on the double-edged nature of rich social ties, such as carrying the social burden of being publicly humiliated when not making loan payments or being ostracized for not following tradition.

Of particular relevance here with the spread of COVID-19, and the need for isolation and social distancing, is what has been lost. The one facet of richness for such communities is often the relational that comes from physical proximity (Viswanathan et al. 2018). This is within the family and beyond, touching every communal action and activity. To lose this facet of life, to view one's own neighbor as a source of infection or to contemplate infecting one's own

neighbor, overlays survival in these contexts. It adds on to the constraints to understanding the complexities of the pandemic and the prevention of its spread, along with the emotional elements, such as fear.

Indeed, in these contexts, relationships sustain. As individuals survive in subsistence, relate to others and the environment, and aspire to grow or help the next generation grow (Viswanathan et al. 2014), the interconnected social facets of what these individuals' lives look like, from a bottom-up perspective, becomes clear. All three facets are deeply jeopardized and disrupted by the impact of COVID-19. With survival conditions bordering on the dire, the current state puts any sense of the future on hold. The generational gains made in the last 20 years in moving up the income ladder and in quality of life are substantially at risk.

### **Context**

Although the pandemic is global in nature, response varied to a great extent between countries, and even within countries. In this section we will give a brief review of the various measures taken by the Governments in the countries in which we conducted this study (IMF 2020). We also discuss how these measures and their implementation impacted communities, with a particular focus on subsistence marketplace communities and vulnerable demographic groups. The section is illustrative, not exhaustive, and an online appendix is provided with more detailed, country specific information as well as skepticism and the media (Online Appendix). Countries developed mitigation measures in an attempt to flatten the curve. Given that the health service capacity in the majority of these countries is substantially lower than those of the Europe and North America and certain countries in South East Asia, flattening the curve meant very restrictive measures very early on..

All the countries in this study had school and educational facilities closures in effect, from relatively early on. School closures were an important mitigation measure for, although children were perceived to be a demographic group with a diminished risk of developing complex clinical cases due to COVID-19, they were potentially important vectors of transmission of the virus across families. A ban on international travel was also a transversal measure across the countries. This limited the arrival of new potential cases from countries with a significantly higher number of confirmed cases. The degree of restriction of international travel varied from country to country and evolved as the number of cases across the world evolved too. At the time of the study, all the countries had important travel restrictions in place. Transportation and mobility at a national and local level was also severely impacted, varying in degrees of restriction of access to public transportation, semi-public transportation and private transportation. In general, countries would attempt to limit the spread of the disease by isolating the areas with greatest exposure to the areas with a lesser number of contaminated cases to reduce community level contagion. At times these restrictions were enforced to lock down entire neighborhoods because a single or limited number of cases were identified. At best these measures were a nuisance to people travelling within cities, in countries where public transportation was forced to follow social distancing rules and diminish the number of passengers per vehicle; or at worst, stranding migrant workers and travellers in cities with limited or no support provided.

There were requirements to use Personal Protective Equipment (PPE) in public spaces and keeping of social distancing. There were economic impacts of these measures felt particularly by subsistence communities. The cost of PPEs can represent a significant financial outlay for an entire family. Social distancing was at times impossible to enforce in communities

and informal markets, as these are often limited in space. The majority of countries also had restrictions on public gatherings including, with the exception of Tanzania, places of worship. Nighttime curfews were also very common, restricting hours of commerce and limiting all nighttime commercial activity. All non-essential commercial activity, or commercial activity that was identified as posing a greater risk of contamination, was also closed. These included closures of restaurants, bars, gyms, museums, and cultural events. Some countries had significantly more restrictive curfews, such as Honduras, where citizens were allowed to move according to specific days allocated according to the last digit of one's ID card. Other countries allowed citizens to move and conduct their business during the day, restricting movements only at nighttime. Governments were aware of the pressures their populations were going through during these periods, and those that could offered financial and in-kind support to mitigate the impact of these restrictions. Government security forces were responsible for enforcing these mitigation measures with varying degrees of success and resorting to different levels and mechanisms of enforcement.

When examined in abstract terms or at policy level, the impact of these measures is not particularly clear. But news and media outlets, and other sources of information make clear that the social and economic impact was substantial. The restrictive measures had a very positive impact in the limitation of the spread of the virus, but sometimes at a very high cost. In order to enforce such restrictive measures, the police resorted to very violent practices. In Uganda, until the 23<sup>rd</sup> of July, there had been a single death reported due to the corona virus. In contrast, there were at least 12 people allegedly killed by security officers while enforcing measures (Meenakshi 2020). These restrictions also evidenced and enhanced different forms of violence. In India, there was a recoded spike of domestic and sexual violence against women (Deshpande

2020). In a cultural context where there is a highly stigmatized view of divorce and broken families, the ability to visit and stay with parents or other family members was for women a possibility to avoid domestic violence. During the restrictions, with movements being impossible, and with the same biases noted by security forces, there was a spike in complaints to support services about domestic violence.

Structural and cultural biases also came to the fore during this unprecedented crisis, with minorities and other vulnerable groups being at greater risk and vulnerability. Ethnic minorities and other vulnerable groups were disproportionately affected by the pandemic. Informal and migrant workers were perhaps the greatest impact by the mitigation measures put in place by the government. In India, a country with over 40 million migrant workers in the large urban centers, there was a sudden announcement of a lockdown (4 hours' notice) leaving workers without economic means in the city, neither the possibility of travelling to their areas or origin. There were reports of thousands of people gathering around train stations when hearing about the possibility of services resuming, and millions who began their journeys back home walking on highways (Gopal Jayal 2020).

Informal economies were disproportionately affected by the mitigation measures. With limited safety security nets, and day to day earning and consumption patterns, the closure of transportation, markets, and decrease of economic transactions affected them greatly. The informal market, which represents a large proportion of economic activity (75% in Tanzania) has been severely impacted by the pandemic. Even formal but precarious employment, such as for factory laborers in India (Gopal Jayal 2020) and teachers at private schools in Tanzania (Kilimwiko 2020.) lost their income as their employees stopped being able to pay salaries due to lack of business. The closure of schools also affected women particularly, not only because of



the lack of access to education for their children, but because women take care of children who are no longer able to attend school, and hence lose access to employment and other income generating opportunities (Kilimwiko 2020).

With the decrease in transportation and movement, there was an increase in food security and nutritional security risks as it became harder for food to be transported internationally, nationally and regionally (Seguridad Alimentaria y Nutricional Honduras 2020). However, there were some positive developments in addressing the crisis. There was an increased demand for localized economies, with local food producers stepping to cover local food deficits (Seguridad Alimentaria y Nutricional Honduras 2020). There were innovative uses of technology that allowed for new ways of shopping, even of low technology such as phone calls or WhatsApp messaging, that allowed for trading and consumption to continue (Seguridad Alimentaria y Nutricional Honduras 2020). There was a surprising use of old technology, in innovative (or long forgotten) ways, with educational systems broadcasting lessons over TV or radio (Raluca et al. 2020)

In these trying times, there was also a spike in solidarity, led by communities and civil society. These allowed for food distribution through community kitchens and community-based organizations, and families making voluntary donations of food and other goods (Seguridad Alimentaria y Nutricional Honduras 2020). A lot of these initiatives will perhaps not receive media coverage, but they have been important support mechanisms at a local level.

## **METHOD**

We conducted unstructured interviews with low-income individuals in Côte d'Ivoire, Honduras, Uganda (in a refugee settlement), Tanzania, India, and USA. The interviews were mostly conducted in the first half of May, with the rate of infection and mitigation measures in the various countries changing rapidly, with a small subset of informants being interviewed again two months later. No informant at the time of the interview had been confirmed as COVID-19 infected. With relatively low numbers of confirmed cases in most of the countries at the time of the interviews (with the exception of the US), the first shock felt was not directly because of the disease affecting our interviewees or their family members, but rather due to the restrictive mitigation measures put in place by their respective governments. These measures included restrictions of movement in various degrees (this being felt by the actual closing down of some areas as in India, or very restrictive movements in Uganda and Honduras, to a reduced number of seats in public transportation, which hindered movement of people and goods); curfews, which limited the number of operational hours for many; a re-orienting of demand towards goods that were perceived to be more essential, such as basic food staples, personal protective equipment (PPEs); and an overall decrease in the availability of economic opportunities.

We used qualitative interviews to understand informants in their own voices (Seidman 2006) based on their experiences in a fast-changing situation, to reflect their "lived experiences" (Schwandt 1994 118). Informants were recruited in the following countries using purposive sampling method (Quinn Patton 2002), to reflect demographic differences (Goulding 2002). We conducted 40 interviews (Table 1). Interviews were conducted in English and translated by English speaking locals into the vernacular language as needed. We followed an interview guide, but informants were encouraged to elaborate on the related areas that they considered to be important, enabling us to acquire a fuller understanding of the perceived relevant issues.

Interviews were recorded for audio and lasted between 18 and 71 minutes and conducted virtually using Zoom, or WhatsApp. No physical interaction or travel was involved for our informants, translators, or interviewers.

Our interviews were organized to cover the past, present and future. After asking about life before COVID-19, our questions covered how informants heard about the virus, their perceptions, and what happened in its aftermath. The questions covered the consumption and entrepreneurship facets of life as well as broader life circumstances and perceptions about restrictions. A final set of questions focused on prospects for the future.

\*\*\*\*\* Insert Table 1 about here\*\*\*\*\*

## **FINDINGS**

Our findings are organized as follows: confronting unprecedented shock across domains of life and displaying extraordinary resilience. We then describe the consumer and entrepreneur domains within these aspects (Figure 1). Subsistence marketplace communities are amongst some of the most vulnerable groups at any given time, and this vulnerability is a constant element in their lives. Independent of the pandemic, our informants were facing challenges, such as entrepreneurs having been evicted from their workspace, farmers who had herded animals break in to their fields and eat over half of their rice production, women who were the main income earners in families against all odds, with partners and children suffering from alcohol addiction, health workers going through divorce and the problems that arise from dividing already meager resources, and refugees attempting to adapt to a resource constrained environment in a temporary settlement (Uganda).

“Life is constantly struggling on, constantly embracing the struggle” Dana (Female, 35, Health Worker, USA).

“Everyone is looking at COVID-19... and forget about other diseases like malaria” Mila (Female, 51, Occupation, Uganda).

\_\_\_\_\_ Insert Figure 1 here\_ \_ \_

### **Unprecedented Shock**

We discuss unprecedented shock in terms of the manifold uncertainties and the disappearing margin of error with lethal consequences. We also discuss the psychological and social impact, i.e., on thinking, feeling, and relating, in terms of grasping the invisible unknown, feelings of fear and stigma, fraying the relational (Figure 1).

#### *Manifold Uncertainties and No Margin of Error Across Realms of Life*

As noted earlier, subsistence contexts have been described in terms of uncertainty in day-to-day life and lack of margin of error (Viswanathan, 2013). Nevertheless, these large contextual elements are very germane here as the former is magnified and the latter decreased even more. The pervasive, global, and all-consuming nature of the pandemic is self-evident. Uncertainty is about the virus, its impact, precautions, governmental actions, and timeframe to name just a few aspects. Indeed, such uncertainty and the disappearing margin of error plays out across many domains of life – health, economic, and social to name a few. Other shocks may have their origin in one realm of life, such as health or the economic (e.g., demonetization in India), but COVID-19, although health-related, has been pervasive in impacting across all realms of life. In the realm of health is the very nature of the pandemic, precautions for preventions, ability to work, cost of medicine, access to healthcare and ailments (physical and mental) within the family. In the social realm is distancing, isolation, stigma, information flow, and disruption of

social interactions and traditions. In the economic realm, disappearing livelihoods and collapsing demand, are overlaid with governmental and other restrictions to mobility and access to markets, both as consumers and entrepreneurs. Individuals show great capacity to adapt, in circumstances so complex and challenging and where the consequences of action or lack of action can be lethal, placing the notion of “error” in stark light.

The temporal aspect is instructive in understanding what manifold uncertainties translate to in how people view the future, and how the calculations required to plan a return to a post pandemic future: “We will have to start a new life after COVID-19” (Hamaz, Male, 29, Miner, Tanzania). The temporal dimension, as with all other dimensions we found, has a mirroring duality in tension. In addition to the considerations for a future post , there are also the calculations for the survival in the present that need to be addressed, such as sustaining livelihoods by continuing the current course, or identifying viable alternatives

The social aspect is important to understand how subsistence communities engage with the relationally rich facet. The reliance on close family during these times was or some, the only mechanism available to address the shock.

“It has been my family, my husband and myself, that has been all the support we have received” (Rita, Female, Entrepreneur, Honduras).

Jacob (Male, 18), a young Honduran who used to work in food warehouses states the following.

“I have been searching for new jobs, filling applications, but because of COVID, it has been impossible to have a stable job. I get occasional work. I have worked on construction and making mud/adobe bricks. Right now, I am living with my mother, and she is the one who is giving me money to supply the basic needs.”

This relationship of co-dependence and support is not only felt at the family level but blurs the personal and professional. The responsibility for those dependent on individuals was prevalent across.

“This is a serious problem, I have no business, and I have 6 apprentices to feed, I really don’t know what to do. All the apprentices live with me at home” (Aalok, Male, Carpenter, Cote d’Ivoire).

At the same time, this relational web and the current pandemic can force individuals to re-assess, and re-interpret, what existing relations to individuals or institutions.

“I learnt about my employer... last ten years I have been doing hard work for him but he is not ready to support us in this pandemic situation ...” (Aryan, Male, 43, Machine Operator, India).

The economical dimension encompasses financial and other resources, such as access to food, access to education, mobility or credit. Individuals and families have to make a number of decisions; whether to access credit (if available) or not, as the uncertainty of the times proves loans to be a risk too high to bear. Restrictions to transportation and mobility forced families to make immediate choices on how much to consume, and weigh alternatives to accessing food.

The economic and temporal aspects come together in relation to savings and planning. Whereas there are informants who speak to the importance of savings, there are those who speak to why any of it matters when it can all get uprooted. Indeed, the fragile nature of subsistence marketplaces to begin with, is fully exposed in the face of a pandemic. Being oriented to the future does not seem to help when the shock is so pervasive and extended.

“If you have good saving that is also not useful to you...because you have to die then what is the use of your money? Treatment is common for all, then what is the use of

money so we won't need to save the money...this is (what) I learnt" (Yana, Female, 45, Housewife, India).

Most informants lived paycheck to paycheck which resulted in difficulties saving for the future. One informant, Roy (Male, 42, Uganda), is a businessman who owns a bar, shop, and farm.

"I had a little money saved in emergency account. but if it continues there will be problems." "Life is going on. We are trying to help my children learn right now."

On the other hand, informants also spoke to the importance of having planned over the long term. Usha (Female, 53, Entrepreneur) has had her own flower business in India for the last 25 years. Overcoming alcoholism among her immediate family, she is the sole breadwinner, now against all odds. She has sustained her family and got her daughters married at huge monetary cost and owns her home.

"Some of living in rental house some of them living in own house ...rental house people can blame the own house people, but everyone must save small things, this will definitely help them to overcome from this type of situation..."

"Two times from flood and cyclone (in the city of her residence)...third time God examined us very much."

### *Grasping the Invisible Unknown, Feelings of Fear and Stigma, Fraying the Relational*

With unprecedented shock, the psychological and social facets are critically important. In terms of thinking about the virus, individuals attempt to grasp the invisible unknown, when understanding of domains such as health are complex even in normal circumstances. The predilections toward concrete thinking and pictographic thinking and difficulties with abstraction

are challenged to the limit in grasping the invisible unknown. The very complex nature of COVID-19 accentuated cognitive constraints as individuals struggled with cause and effect and with grasping this invisible threat in an already complex domain of health.

School closure and one's own children brought some clarity for the informant quoted below.

“I heard about COVID about on the news, radio, and TV, and I heard about it for the first time this year. I think COVID is a serious illness that kills and that destroys. I began understanding it was a serious thing when my children came home from school and they said, now we cannot be too many people together, we have to wash our hands, we have to keep distance, etc. This illness COVID is so serious that they had to close the school. When did you ever see that, schools being closed? This is when I understood it was a serious problem” (Nora, Female, Farmer, Cote d'Ivoire).

The closure of schools was, for a few other people, the critical turning point in understanding the impact of the mitigation measures: deliberate school closures is an extremely rare event, with the exception of teacher strikes in some contexts, and a mitigation measure that forces families to rearrange their lives and productive activities to include the caring of their children, as mentioned below by Samantha (Female, 33), a health care worker in the US.

“I figured all that cleared out... not no big deal. But yeah, by the middle of February I was panicking! So I was like... OK, maybe it... maybe it is a big deal. And then, in March, I knew it was real because school's closing... and with our job, they trying to close. Then I knew it was it was pretty severe. So, then I'll start having anxiety.” In terms of feelings, with uncertainty and the nonexistent margin of error, fear and anxiety overwhelms as oneself or one's neighbor could be infected. Thus, a pervasive emotion is predominant fear of the unknown and uncertain.



“She feels scared, especially moving around. She is stressed about the whole situation” (Sahana, Female, 24, Homemaker, Tanzania).

“I'm feeling blocked and then I feel sheltered. There is no that freedom or values that's insecurity. So I'm feeling that I'm unsecured as a person, as a human being.” (Ben, Male, 20, Entrepreneur, Uganda).

“All of my plans changed. I feel sad, not free, I feel not living” (Eric, Male, 25, Photographer, Uganda).

The uncertainty, the fast-changing pace and tremendous change in routines, work, income, and day to day life cause fear, which, over extended periods of time become so prevalent and constant as to have a heavy toll in one's mental and physical health.

“At a personal level, this has created a lot of stress, I think. My quality of life has been affected, because I have a lot of stress, I am having sleeping problems... So all we can do is wait, and have faith in God so that this ends soon or if there is something that can help us, because continuing like this makes our life very difficult” (Julie, Female, 35, Grocer, Honduras).

New and changing information adds to uncertainty, fear and panic. More broadly, the immediate future is filled with uncertainty in every realm. Magnified uncertainty and a nonexistent margin of error translate not only to fear but to stigma attached to COVID-19. The “greatest enemy right now is not the virus. It's fear, rumors and stigma”(Ghebreyesus, 2020b). The direct consequences of this can be seen where families with members who have recovered from the disease are subject to scrutiny by their communities. This impact of was felt directly by several informants. Krish (Male, 46, Water Can Supplier, India), resides in a government-marked containment area. He explains that a man from a different area came to stay in his neighbor's

house. He stayed for only a week, but then contracted COVID-19. As a result of this one case, the government has shut down the entire area, directly impacting Krish's business and preventing him from distributing his products.

“I want to say one thing if the government doing like this that the people are not ready to say their disease because they are getting panic of quarantine, most of the people are not ready to tell their symptoms because they have fear about this type of quarantine.

Government staff take regular survey about corona symptoms but nobody is ready to tell the truth...because (of) panic about quarantine ... (when) normal fever affected people ...(they are) not ready to tell about this.”

Fear and stigma negatively impacted affect and emotional state, for subsistence consumers who have to overcome issues with self-esteem and self-confidence in even mundane marketplace interactions. Furthermore, magnified uncertainty and nonexistent margin of error also frays a singular facet that is usually a strength in subsistence contexts, the relational.

“I missed my friends...I am not able to go out...parents won't allow me even to go to shops...I can't enter into my aunt's home...they haven't allow me... even when I wear mask” (Dhara, Female, 18, Student, India).

“It created more stress in my mind ... it's similar to prison punishment...I can't see my friends...I can chat by phone only...even I am not able to go to next street...so it's a very difficult situation” (Aryan, Male, 43, Machine Operator, India).

This is all the more palpable in these settings as communities are materially poor, as well as constrained in thinking and self-confidence, yet relationally rich in a 1-1 interactional marketplace. COVID-19 strikes at the heart of this relational richness, as helping one's neighbor

or interacting with them in physical proximity is now feared. This is an impossible tension, between the social or relational richness that sustains individuals in the face of the utmost of challenges, and the fear of infection and death that could follow.

### **Extraordinary Resilience**

Our informants referred to a number of aspects in dealing with the enormous shock of COVID-19 – dealing with events far beyond even the normally uncontrollable realm and reiterating a higher power, while at the same time displaying humanity in the face of a catastrophe. These themes reflect how uncontrollable the circumstances are and the struggle to respond and cope.

#### *Beyond Uncontrollable - A Higher Power*

In the face of such immense and broad-based disruption of every realm of daily life, informants spoke philosophically – about a higher power (Figure 1). With normally so much beyond one's control due to lack of resources, the manifold uncertainties in various realms of life that COVID-19 led to amplified the power of nature for those in subsistence marketplaces. Indeed, people survive, subsist and relate to others and to the environment in a bottom-up view of sustainability in subsistence marketplaces. Here, relating to others is greatly restricted in physical proximity and relating to the environment is in the context of a global pandemic. People find solace in attributing events and their resolution to a higher power. Informants explained a higher power's influence on a variety of factors in the present time and when discussing the future, and one informant described the pandemic as sent by God. When Jacob (Male, 18, Student, Honduras) initially heard about the virus, he recalled discussing how a pandemic was forthcoming and the relation of the pandemic to prophecies found in the Bible. Olan (Male, 27, Agriculture, Honduras) expressed that when he learned about the virus, he knew things would

get worse based on what he had learned from the prophecies. Mila (Female, 51, Occupation, Uganda), who lives in the Nakivale Refugee Settlement, discussed faith in a higher power in the context of noncompliance with safety measures recommended by the World Health Organization.

“Refugees in general don’t care about protective measures like masks and hand sanitizer and washing hands. Sometimes they don’t even have money to buy that equipment. They just say “ah no, God will protect us” because measures are difficult to follow for them.”

When asked about how his perspective of health has changed as a result of the pandemic, Roy (Male, 42, Businessman, Uganda), also from the Nakivale Refugee Settlement, said the following.

“You should be healthy all the time because you never know what may happen, there may be another pandemic. But God is the one who protects us, we can try to help ourselves but God is the one in full control.”

An entrepreneur in India, Krish (Male, 46, Water Can Supplier, India), describes the short-term impact of COVID-19 on his livelihood. He resides in India where he runs a water can supplier business part-time. He is living within a containment area in Chennai which has hindered his ability to distribute his products, for which he is being helped by someone. He attributes keeping his business going to a higher power.

“Yes...God’s grace I didn’t lose my total business...till today I can supply water to the 50% (of) by the alternative person...without any extra expense...I promised that person that I will help him in future like this situation...and my shop(‘s) building-owner also helped me...he also supplied water on my behalf ...these (are) all God’s gift.”

Sam (Male, 40) is a coffee cart pusher in Côte d'Ivoire. He rents a cart each day and sells

Nescafé products. The closing of restaurants and other shops near the location where he sold his products have resulted in a large impact on his business. Compared to before COVID-19, he estimates his business is down. In terms of his outlook moving forward, he is simply “trusting God on this.” This outlook is a common sentiment for members of these subsistence marketplaces when predicting what the future holds. When looking into the future, Usha (Female, 53, Entrepreneur, India) describes her hopes saying “I pray (to) the local God to rectify the problem... and forgive the people...” while Will (Male, Farmer, Tanzania) expresses that he needs “God to help us through this COVID-19.”

### *Humanity in Catastrophe*

Extraordinary resilience runs through the entire set of findings as well as in facing unprecedented shock. Instances of humanity in catastrophe are among the best reflections of this resilience (Figure 1). There were several instances of informants bringing up their concern for the community as a whole. Some members of the community who were interviewed felt a “social responsibility” to use their education, background or skillset to help create awareness about COVID-19, directly assist them by creating masks, or just expressed an overall sense of sympathy for those in poverty.

“So we were five people who have studied to see how best we would support our fellow refugees when they come to know more about some preventive measures. And then we had to go and then from the little we had we distributed some soaps and then I'm passionate into tailoring so we did some face masks. So we had to distribute to 10 families. So that was our capacity and that time. ”

(Ben, Male, 20, Entrepreneur, Uganda).

For several informants, being relationally rich proved to be especially valuable during the pandemic. Due to the sudden and overwhelming societal impacts of the virus, many people around the world were left in dire financial situations due to a lack of savings, suspension of work, and difficulty finding new jobs. To survive through these difficulties, individuals leaned on these relationships for support. Some relied on familial ties and friends while others had support from other sources. Sia (Female, 42, Entrepreneur, India) found herself in this predicament. After her husband's passing in 2016, Sia took over the "street ironing shop on the cart" business that he had started in 1990. She became the sole breadwinner for her family and has supported her two children. However, after the pandemic disrupted her ability to continue working and there was a decreased demand for her services, the generosity of her customers shows how humanity persists in the face of catastrophe

"I got Rs.1000/- from govt...and my customers supporting me in this situation.

They gave cash support and some of them gave groceries...because my husband had been running this business 30 years...

... just for help me (not loan)...I don't want to repay this...

I don't have any savings... if I need anything I can ask my customers...because I have to pay fee for my son's studies..."

Several informants expressed that they wish that there was more that could be done for those living in poverty.

### **Consumer-Entrepreneur – Seeking Essentials While Being Essential**

Extraordinary resilience and faith in a higher power are the larger human facets within which the intertwined domains of consumption and livelihood occur – specifically, barely essential consumption and the livelihood one knows versus every viable alternative.

### *Barely Essential Consumption*

Despite barely making ends meet pre-Covid19, subsistence consumers have to cut back even more on consumption in order to survive. This is no starker than at a refugee settlement in Uganda where the monthly rations have been cut. Yoel (Male, 30, Entrepreneur) describes his experience in the Nakivale camp.

“Before COVID, we used to get 31,000 shillings per month for food. After, 22,000 shillings. It’s not easy to survive for a month.”

“22,000 is about \$6 (USD) a month. One kilo of rice is 4,000 of rice. Before it was easy to go search for what you want to do and easy to get a small job to raise your income, but now it’s not even possible. It’s difficult to explain how we survive.”

(What can you buy with the 22,000?)

“I just buy rice, beans-before COVID 1 kg was 1,500, now it is 2,500. , maize- 1kg is 2,000. Even if I buy maize it’s hard to eat it without beans or other stuff so it’s insufficient. In the last month, I am buying 5 kg maize, 2 kg beans, 20 mirita of oil- 1 litre is 9,000. Can’t even afford a full litre, buy half litre. And then no money left over to spend on other things.”

“We use charcoal, we need to buy that for 2,000 per day.”

Pooling resources with those around is mentioned as a response, resiliently using the relational in meeting bare essentials.

“Sometimes we organize ourselves, like a group of 4 people like neighbors, and we decide to cook once in a day and we share. For example, at night only, if someone buys half litre oil, so when we make food they can help us more than if we were one. We eat once a day.”

“5 days, 4 people every day, one meal a day.

For every 1 kg maize need .5 kg beans. If we cook as a group, we need (2,000 oil?)”

(Yoel, Male, 30, Entrepreneur, Uganda).

Being a subsistence consumer means in many ways that there is no clear-cut division between work and family. Access to food is one of the most drastic impacts loss of livelihood can have. Some informants rationed food. Ryan (Male, 40, Farmer, Honduras) decided with his family to have two meals a day, instead of three, when they saw such a drastic drop in flower sales. One of the health workers interviewed in USA said that she controls access to food more rigorously now, putting padlock on the fridge and pantries so that her children could not have food all the time. She also reduced the portions of food to ensure its availability during this time. Adding to constraints to consumption, transportation, already a daunting challenge in the refugee settlement, has been exacerbated by the virus.

“When you see there is this settlement a different condition of life, it is different from others because everyone here is living close together here ... But when they closed, they left the refugees alone, there is no transportation to get to hospital” Mila (Female, 51, Occupation, Uganda).

“Yeah. So like public transport is actually, you had like a sort of a mini bus ... It was allowed for bus to be like really full. I was not allowed to be cramped in the bus.

Everybody should have a seat. If you're not seated, you're not allowed to, board the bus.



So transport has become an issue because then, you have to wait longer or fight for a seat. And if you don't get ... you need to go down, get down and wait.” (Sahana, Female, 24, Homemaker, Tanzania).

“... people have to use their masks to cover them in the mouth and the nose ... Even if you want to jump on a semi-private...transportation vehicle or a bus or taxi or whatever, you have to use the cover of the masks. you can't greet people with your hands, of course, .... and you have to keep the government-regulated one-meter distance. Now if you don't get your mask, you're not allowed to go on to a bus. And the police is also verifying that, so, and they'll catch people on the bus, they'll issue (a) fine.”

#### *The Livelihood I Know/A Different Path Forward*

Consumer-entrepreneurs spoke of the many obstacles to their usual livelihoods, whether it be due to governmental restrictions, lack of access to markets, collapsing demand and so forth. Such entrepreneurs achieve goals through the most resourceful of means but COVID-19 placed them on the impossible knife-edge of staying the course or pursuing any viable alternatives.

“Because for planting and harvesting coffee, you need workers ... then you need to move and bring people to the villages. And right now with the district, with the restrictions, that is like kind of impossible because .needs human resources workers. Now, the problem is that if these things, ..gets worse hearing hundreds, eventually will not be able to sell because there are no jobs and people don't have money to buy this product” (Olan, Male, 27, Agriculture, Honduras).)

Consumer-entrepreneurs have to confront the crossroads of pursuing the livelihoods that sustained them to this point versus any viable alternative. Aalok (Male, N/A, Carpenter), owns a

carpentry shop in Abidjan, Cote d'Ivoire with six people working in it. When asked if he would consider changing his business, he stated that he could not, he has been doing this all of his life.

"...done this all life. brothers do ...this is the kind of work that has fed."

"(But) Furniture is "non-essential"

This is a serious problem, I have no business, and I have 6 apprentices to feed, I really don't know what to do. All the apprentices live with me at home. I have spent all of my savings keeping up the basic costs."

"am praying to God that this COVID 19 goes fast, so that I can go back to work and live normally."

In Honduras, one of the entrepreneurs has a bakery business running. She takes orders over the phone and delivers the cakes and other baked goods. Her husband is a moto-taxi driver, but because of the government ordinance and restrictions on movement, he can no longer work. As a result, the family now depends on the baking business.

"The business has not been very affected by COVID, sales have done down a little, but today, is Sunday and Mother's Day here in Honduras. All these holidays have helped me to increase sales, and this delivery system I have in place has helped increase the business. Everybody cannot go out, so they call, and I deliver.

My husband is a moto-taxi driver. He has not been able to work because of Government ordinance. He has been very impacted, so now we both depend on the bakery. We have lost around 40% in revenue during this time."

In their roles as entrepreneurs, some informants spoke of moving toward essentials, particularly when operating a business has become impossible due to the quarantine. All informants had to navigate these very peculiar and challenging circumstances. The contexts in

which our informants lived differed, in terms of mitigation measures put in place by governments, if nothing else. But there was a reading of the marketplace and opportunities available and constraints present, that forced all informants to change the means of their livelihoods to various extents.

In response to a market that was highly focused on basic consumption (Baker et al. 2020), a pattern that was also seen in the contexts we explored, subsistence marketplace consumer-entrepreneurs also shifted toward the provision of basic products and services. Roy (Male, 42) lives in a refugee settlement in Uganda but is not a refugee. He does some farming and also owns several businesses including a bar and a shop. He was not able to continue working during the pandemic. However, when asked about business alternatives he could pursue during the pandemic, he mentioned a small vegetable garden that he owns. He has grown vegetables in his garden to ensure food for the home but is considering keeping some of the produce and perhaps generating some revenue from selling the rest.

These calculations were forced upon all our informants, and only in the most desperate cases did we see people become despondent. Roy is also a former teacher turned entrepreneur working in the outskirts of the refugee community in Uganda.

“When people don’t have food and can’t do business people will commit suicide. This has taken a long time and people are really uncomfortable”.

He too was forced to look for a different path forward, for an alternative livelihood.

“I am not allowed to open my business [he owns a bar and a shop], we have just have been attending to our small gardens. There is no income right now. I plant things and go for harvest. I am planting everything. I have been waiting for potatoes and things during

quarantine but at least we are able to get some food. Any business alternative: Been thinking maybe sell stuff from the garden and keep a little for home too.”

## DISCUSSION

The Covid19 pandemic is a humanitarian crisis of global and historical proportions. In fact, we are hard-pressed to find other events in generational memory that have had such profound and pervasive impacts across the entire spectrum of human activity (Ghebreyesus2020a). As we focused our attention toward the highly vulnerable subsistence marketplace communities, we observed a cascade of interconnected misfortunes exasperated by an already tenuous existence and multiple varieties of environmental stressors. The overarching threat of the pandemic coupled with the collateral shocks to daily life in these communities, reveals an unpredictable and perhaps ominous view of what the future may hold. It also demonstrates extraordinary resilience, and the endless capacity for adaptation. Indeed, those with the least, also have to adapt the most.

Through our interviews, we witnessed the great capacity of people to leverage scarce economic and social resources to navigate extraordinary circumstances. We saw in all participants the capacity to understand their environment, constraints and opportunities, and, to various degrees of success navigate and adapt to these changing circumstances. Subsistence and survival were the key elements in guiding their individual agency. Relationally rich subsistence community entrepreneurs engaged their networks for livelihood support but also sustaining economic activity, pooled resources across families to optimize consumption, and made deliberate choices to spread consumption in order to ensure smooth access to critical resources, such as food.

The broadest implication for future research in consumer affairs in general and specific to subsistence marketplaces is the importance of studying large shocks, an aspect that is largely absent in the literature across multiple disciplines. These large shocks come in a variety of ways, whether being of short duration but with enduring impact (disasters) or extended by their very nature (refugee settlements) ( Viswanathan et al. 2020). They can originate in a variety of realms of life and pervade them as well. Unique to COVID-19 is not only its invisible and global impact but in that such impact is in all realms of life ( Baker et al. 2020; Nicola et al. 2020). This is all the more so in subsistence marketplaces.

This leads to another important implication for future research – that these different realms need to be understood holistically. COVID-19, while having a causal origin in the health realm, precipitated actions and reactions that pervaded all domains of life, bringing broad societies to a virtual standstill (Nicola et al. 2020). Again, this impact is accentuated for those living in subsistence marketplaces. Understanding the health domain, in concert with the economic and the social is vitally important. These realms are often blurred in such contexts, as between the social and the economic, the marketplace and the social milieu (Viswanathan et al. 2009). In this regard, the subsistence marketplaces stream with its unique microlevel bottom-up approach, provides important insights that relate to the cognitive and the emotional aspects involved, as well as unpacking poverty in terms of such factors as low literacy. Through this lens, the complexity of the proximate phenomenon is overlaid on cognitive constraints, and the impact of panic and fear overlaid affective elements such as self-confidence. In turn, such a micro-level approach also enables a fuller, more comprehensive understanding of the impact of COVID-19, as our findings suggest.

At a more granular level, COVID-19 caused manifold uncertainties across multiple realms of life, over and above the day-to-day uncertainties that subsistence consumers face. As an example, the imposition of curfews and travel restriction by governments diminished an already limited range of choices available to these consumers. When coupled with the disappearing margins of error, these externalities compounded the downside risk – beyond hunger or malnutrition to the immediacy of lethal consequences.

COVID-19 also strikes at the heart of the relational strength in these contexts, as a result of social isolation, distancing, and other restrictions to normal communal activity. There is little separation between the social and economic in these contexts characterized by 1-1 interactions. As such, isolation, lockdowns, and travel restrictions cause much more than temporary inconveniences affecting consumption and livelihood alike for the subsistence consumer-entrepreneur. Fear and stigma intensify the emotional aspect (Baker, Gentry and Rittenburg 2005; Fernandes, Mason and Chakrabarti 2019), where those at the bottom of society may lack self-confidence in the marketplace to begin with. Grasping the fast-changing, complex reality of intervention schemes while crafting appropriate preventive measures, can stretch the limits of cognitive predilections toward concrete thinking and pictographic thinking and difficulties with abstractions in these settings.

In terms of human-level responses, we found extraordinary resilience displayed in the face of catastrophe by both the consumer and the consumer-entrepreneur. As consumers were faced with shortages and restrictions, they utilized their relational strengths, along with any material savings, to navigate the stark unknowns of each day. They put in place a number of austere practices to conserve and preserve the limited levels of resources they had at hand. Given

the threats to livelihood, consumer-entrepreneurs negotiate the tight-rope between staying the course and seeking any available viable alternatives.

Our findings have a number of implications for practice in consumer affairs, although we present the latter with utmost humility, given the magnitude of the suffering. We note at the outset that the lessons here may be critically important in a variety of situations from natural disasters to war-torn contexts. In observing the consumer-entrepreneur roles, the huge restrictions to livelihoods by way of isolation, curfews, and lockdowns points to the importance of key delivery mechanisms to provide for family needs at a rudimentary level. The very ability to visit a marketplace to buy or to sell is endangered or completely restricted during a pandemic and lockdowns. Yet, the unequal but essential subsistence consumer-entrepreneur plays a central role in making supply chains work and getting important essentials to families in order to subsist. This extends up the value chain as well, as we see these micro-enterprises reaching into lower middle-class communities with their goods and services as well. Such essential entrepreneurs are the equivalent of emergency workers within these marketplaces and deserving of support before, during and after pandemics.

As bleak as the prospects might seem for the long-term survivability of those consumers in essential consumption mode or entrepreneurs with exhausted means, there was a marked resistance to capitulate. In the face of a pervasive shock far beyond anyone's control, the role of faith in a higher power points to the centrality of the psychological and the spiritual ethos to sustain (Bentley et al. 2020; Koenig 2020). Even the ability to practice one's faith has had to be balanced within the need for public health measures and restrictions, as it provides a powerful countermeasure in these circumstance against defeat and surrender. The humanity that people display is an aspect to celebrate, whether it be health workers or essential workers, or the

entrepreneurs supplying families to enable them to survive. Indeed, it reiterates the importance of governmental and other larger entities rallying people around a higher purpose while also addressing their dire needs, as those with the least may be willing to give the most.

Among the topics of importance are the communication of the nature of the virus, the clear guidance for prevention, and consumer and consumption related precautions including guarding against fraud that plays off fear and panic. Informational sources are often overwhelmed with misleading and false information. Thus, the role of social enterprises and governmental entities in creating and sustaining virtual channels to convey credible information is critical. They can go some way toward alleviating the cognitive and emotional aspects we discuss earlier. In terms of practice, the importance of using these virtual means (e.g., WhatsApp) to provide reliable sources of information that are clearly designed and intended for those with lower literacy levels is critical to ensuring public safety.

Whereas higher income communities have access to technology, people have to find ways to cope in subsistence contexts. Digital forms of transactions and commerce, their ubiquitous availability, and the opportunities for new livelihoods can potentially be created and sustained beyond the pandemic. These are important aspects of consumer affairs, and in this context, consumer-entrepreneur affairs. They can go some way toward alleviating the cognitive and emotional aspects we discuss earlier.

We close where we began and end – no single paper can come close to capturing the complexities and magnitude of the COVID-19 pandemic and its impact on those with the least. We have barely scratched the surface, and what we found was the relentless human spirit at its finest.



## REFERENCES

- Azmat, Fara, Ahmed Shahriar Ferdous, and Paul Couchman. 2015. "Understanding the Dynamics between Social Entrepreneurship and Inclusive Growth in Subsistence Marketplaces." *Journal of Public Policy & Marketing* 34 (2): 252–71. <https://doi.org/10.1509/jppm.14.150>.
- Azmat, Fara, Ramanie Samarantunge, and Ahmed Ferdous. 2020. "Consumer Well-Being and Social Responsibility of Subsistence Entrepreneurs in Subsistence Marketplace." In *Journal of Consumer Affairs*. Blackwell Publishing Inc. <https://doi.org/10.1111/joca.12308>.
- Baker, Scott R., R.A. Farrokhnia, Steffen Meyer, Michaela Pagel, and Constantine Yannelis. 2020. "How Does Household Spending Respond To an Epidemic ? Consumption." *NBER Working Paper No. 26866*, 1–35. <https://doi.org/10.3386/w26949>.
- Baker, Stacey Menzel, James W. Gentry, and Terri L. Rittenburg. 2005. "Building Understanding of the Domain of Consumer Vulnerability." *Journal of Macromarketing* 25 (2): 128–39. <https://doi.org/10.1177/0276146705280622>.
- Bentley, Jacob A., Farhiya Mohamed, Norah Feeny, Luul B. Ahmed, Kawther Musa, Abdirahman Mussa Tubeec, Dega Angula, Momin Hussein Egeh, and Lori Zoellner. 2020. "Local to Global: Somali Perspectives on Faith, Community, and Resilience in Response to

COVID-19.” *Psychological Trauma: Theory, Research, Practice, and Policy* 12 (S1): S261–63. <https://doi.org/10.1037/tra0000854>.

Brennan, Shirley, and Marie McHugh. 1993. “Coping with Recession: The Impact upon the Entrepreneur.” *International Small Business Journal: Researching Entrepreneurship* 12 (1): 70–75. <https://doi.org/10.1177/0266242693121005>.

Burrer, Sherry L., Marie A. de Perio, Michelle M. Hughes, David T. Kuhar, Sara E. Luckhaupt, Clinton J. McDaniel, Rachael M. Porter, Benjamin Silk, Matthew J. Stuckey, and Maroya Walters. 2020. “Characteristics of Health Care Personnel with COVID-19 — United States, February 12–April 9, 2020.” *MMWR. Morbidity and Mortality Weekly Report* 69 (15): 477–81. <https://doi.org/10.15585/mmwr.mm6915e6>.

Castaño, María Soledad, María Teresa Méndez, and Miguel Ángel Galindo. 2015. “The Effect of Social, Cultural, and Economic Factors on Entrepreneurship.” *Journal of Business Research* 68 (7): 1496–1500. <https://doi.org/10.1016/j.jbusres.2015.01.040>.

Cockburn, W. C., P. J. Delon, and W. Ferreira. 1969. “Origin and Progress of the 1968-69 Hong Kong Influenza Epidemic.” *Bulletin of the World Health Organization* 41 (3): 345–48. [/pmc/articles/PMC2427756/?report=abstract](https://pubmed.ncbi.nlm.nih.gov/12812812/).

Cucinotta, Domenico, and Maurizio Vanelli. 2020. “WHO Declares COVID-19 a Pandemic.” *Acta Biomedica*. Mattioli 1885. <https://doi.org/10.23750/abm.v91i1.9397>.

Davidsson, Per, and Scott R. Gordon. 2016. “Much Ado About Nothing? The Surprising Persistence of Nascent Entrepreneurs Through Macroeconomic Crisis.” *Entrepreneurship Theory and Practice* 40 (4): 915–41. <https://doi.org/10.1111/etap.12152>.

- Deshpande, Nikita. 2020. "What India's Lockdown Did to Domestic Abuse Victims - BBC News." BBC News. 2020. <https://www.bbc.com/news/world-asia-india-52846304>.
- Dorn, Aaron van, Rebecca E Cooney, and Miriam L Sabin. 2020. "COVID-19 Exacerbating Inequalities in the US." *The Lancet* 395 (10232): 1243–44. [https://doi.org/10.1016/s0140-6736\(20\)30893-x](https://doi.org/10.1016/s0140-6736(20)30893-x).
- Egan, Victor, and Prayoon Tosanguan. 2009. "Coping Strategies of Entrepreneurs in Economic Recession: A Comparative Analysis of Thais and European Expatriates in Pattaya, Thailand," *Journal of Asia Entrepreneurship & Sustainability*, 5 (3), 17.
- Fernandes, Josi, Katy Mason, and Ronika Chakrabarti. 2019. "Managing to Make Market Agencements: The Temporally Bound Elements of Stigma in Favelas." *Journal of Business Research* 95 (February): 128–42. <https://doi.org/10.1016/j.jbusres.2018.10.006>.
- Francis Jr, T., & Salk, J. E.. 1942. A simplified procedure for the concentration and purification of influenza virus. *Science (Washington)*, 499-500.
- FUKUMI, Hideo. 1959. "Summary Report on the Asian Influenza Epidemic in Japan, 1957." *Bulletin of the World Health Organization* 20 (2–3): 187–98. [/pmc/articles/PMC2537746/?report=abstract](https://pubmed.ncbi.nlm.nih.gov/15611121/).
- Ghebreyesus, Tedros Adhanom. 2020a. "WHO Director-General's Opening Remarks at the Media Briefing on COVID-19 - 27 July 2020." World Health Organization. 2020. <https://www.who.int/dg/speeches/detail/who-director-general-s-opening-remarks-at-the-media-briefing-on-covid-19---27-july-2020>.
- . 2020b. "WHO Director-General's Opening Remarks at the Media Briefing on COVID-

19 - 28 February 2020.” World Health Organization. 2020.

<https://www.who.int/dg/speeches/detail/who-director-general-s-opening-remarks-at-the-media-briefing-on-covid-19---28-february-2020>.

Gopal Jayal, Niraja. 2020. “How the Law Is Failing India’s Marginalized Groups During the Pandemic - Global Centre for Pluralism.” Global Centre for Pluralism. 2020.

<https://www.pluralism.ca/press-release/how-the-law-is-failing-indias-marginalized-groups-during-the-pandemic/>.

Goulding, Christina. 2002. *Grounded Theory: A Practical Guide for Management, Business and Market Researchers*. SAGE Publication.

Grantz, Kyra H., Madhura S. Rane, Henrik Salje, Gregory E. Glass, Stephen E. Schachterle, and Derek A.T. Cummings. 2016. “Disparities in Influenza Mortality and Transmission Related to Sociodemographic Factors within Chicago in the Pandemic of 1918.” *Proceedings of the National Academy of Sciences of the United States of America* 113 (48): 13839–44.

<https://doi.org/10.1073/pnas.1612838113>.

Humphries, M. O.. 2013. *The last plague: Spanish influenza and the politics of public health in Canada*. University of Toronto Press.

International Monetary Fund (IMF) Policy Tracker. 2020. <https://www.imf.org/en/Topics/imf-and-covid19/Policy-Responses-to-COVID-19#Merences>

Jayachandran, Seema. 2020. “Microentrepreneurship in Developing Countries \*.”

Jiwani, Safia S., and Daniel A. Antiporta. 2020. “Inequalities in Access to Water and Soap Matter for the COVID-19 Response in Sub-Saharan Africa.” *International Journal for*

*Equity in Health* 19 (1). <https://doi.org/10.1186/s12939-020-01199-z>.

Johnson, Nial Philip. and Juergen Muller. 2002. – Updating the accounts: global mortality of the 1918-1920 “Spanish” influenza pandemic. In *Bulletin of the History of Medicine*, 76(1), pp.105-115.

Kelly, Heath, Heidi A. Peck, Karen L. Laurie, Peng Wu, Hiroshi Nishiura, and Benjamin J. Cowling. 2011. “The Age-Specific Cumulative Incidence of Infection with Pandemic Influenza H1N1 2009 Was Similar in Various Countries Prior to Vaccination.” Edited by Esper Georges Kallas. *PLoS ONE* 6 (8): e21828. <https://doi.org/10.1371/journal.pone.0021828>.

Kilimwiko, Lawrence. 2020. “Covid-19 Has Badly Affected Informal Livelihoods in Tanzania, but the Impacts on the Entire Economy Are Harsh | D+C - Development + Cooperation.” *Development and Cooperation*. 2020. <https://www.dandc.eu/en/article/covid-19-has-badly-affected-informal-livelihoods-tanzania-impacts-entire-economy-are-harsh>.

Koenig, Harold G. 2020. “Maintaining Health and Well-Being by Putting Faith into Action During the COVID-19 Pandemic.” *Journal of Religion and Health*. <https://doi.org/10.1007/s10943-020-01035-2>.

Kuszewski, K., and L. Brydak. 2000. “The Epidemiology and History of Influenza.” *Biomedicine and Pharmacotherapy* 54 (4): 188–95. [https://doi.org/10.1016/S0753-3322\(00\)89025-3](https://doi.org/10.1016/S0753-3322(00)89025-3).

Lee, Jong-Wha, and Warwick J. McKibbin. 2004. “Globalization and Disease: The Case of SARS.” *Asian Economic Papers* 3 (1): 113–31. <https://doi.org/10.1162/1535351041747932>.

- Meenakshi, Padma. 2020. "Uganda - Where Security Forces May Be More Deadly than Coronavirus - BBC News." BBC News. 2020. <https://www.bbc.com/news/world-africa-53450850>.
- Nicola, Maria, Zaid Alsafi, Catrin Sohrabi, Ahmed Kerwan, Ahmed Al-Jabir, Christos Iosifidis, Maliha Agha, and Riaz Agha. 2020. "The Socio-Economic Implications of the Coronavirus Pandemic (COVID-19): A Review." *International Journal of Surgery*. Elsevier Ltd. <https://doi.org/10.1016/j.ijssu.2020.04.018>.
- Piacentini, Maria, and Kathy Hamilton. 2013. "Consumption Lives at the Bottom of the Pyramid." *Marketing Theory* 13 (3): 397–400. <https://doi.org/10.1177/1470593113489195>.
- Potter, C. W.. 2001. "A History of Influenza." In *Journal of Applied Microbiology*, 91:572–79. <https://doi.org/10.1046/j.1365-2672.2001.01492.x>.
- Prahalad, C K, and Allen Hammond. 2002. "Serving the World ' s Poor , Profitably." *Harvard Business Review* 80 (9): 48–59. <https://doi.org/10.1108/02756660710732611>.
- Quinn Patton, Michael. 2002. *Qualitative Research and Evaluation Methods (3rd Edition)*, Thousand Oaks, CA: SAGE Publications.
- Raluca, David; Pellini, Arnaldo; Jordan; Katy; Phillips, Toby. 2020. "Education during the COVID-19 Crisis: Opportunities and Constraints of Using EdTech in Low-Income Countries - The EdTech Hub." A Collaboration between the EdTech Hub and Digital Pathways at Oxford, Blavatnik School of Government. 2020. <https://edtechhub.org/coronavirus/edtech-low-income-countries/>.
- Schwandt, Thomas.A.. 1994., "Constructivist, Interpretivist Approaches to Human Inquiry," ,

*Handbook of Qualitative Research*, pp. 118-137.

Seguridad Alimentaria y Nutricional Honduras. 2020. "COVID-19 y Los Problemas de Seguridad Alimentaria." EUROSAN Occidente. 2020.

<http://www.eurosan.hn/2020/04/29/covid-19-y-los-problemas-de-seguridad-alimentaria-honduras/>.

Seidman, Irving .2006. "Interviewing as Qualitative Research: A Guide for Researchers in Education and the Social Sciences." Teachers College Press. (2006).

Smith, Wilson, C. H. Andrewes, and P. P. Laidlaw. 1933. "A VIRUS OBTAINED FROM INFLUENZA PATIENTS." *The Lancet* 222 (5732): 66–68. [https://doi.org/10.1016/S0140-6736\(00\)78541-2](https://doi.org/10.1016/S0140-6736(00)78541-2).

Sumner, Andy, Chris Hoy, and Eduardo Ortiz-Juarez. 2020. "WIDER Working Paper 2020/43- Estimates of the Impact of COVID-19 on Global Poverty." <https://doi.org/10.35188/UNU-WIDER/2020/800-9>.

Trujillo, Carlos A., Andrés Barrios, Sonia M. Camacho, and José Antonio Rosa. 2010. "Low Socioeconomic Class and Consumer Complexity Expectations for New Product Technology." *Journal of Business Research* 63 (6): 538–47. <https://doi.org/10.1016/j.jbusres.2009.05.010>.

Upadhyaya, Shikha, Richard J. Vann, Sonia Camacho, Courtney Nations Baker, R Bret Leary, John D Mittelstaedt, and José Antonio Rosa. 2014. "Subsistence Consumer-Merchant Marketplace Deviance in Marketing Systems: Antecedents, Implications, and Recommendations." *Journal of Macromarketing* 34 (2): 145–59. <https://doi.org/10.1177/0276146713504107>.

Viswanathan, Madhubalan, Anju Seth, Roland Gau, and Avinish Chaturvedi. 2009.

“Internalizing Social Good Into Business Processes in Subsistence Marketplaces: The Sustainable Market Orientation” *Journal of Macromarketing*, 29, 406 - 425.

Viswanathan, Madhubalan, Robert A. Arias, and Arun Sreekumar. 2020. Extreme Exclusion and Relative Deprivation in Subsistence Marketplaces: A Study in a Refugee Settlement in Nakivale, Uganda. *Journal of Consumer Affairs*. <https://doi.org/10.1111/joca.12296>

Viswanathan, Madhu, Ronald Duncan, Maria Grigortsuk, and Arun Sreekumar. 2018. “A Bottom-Up Approach to Understanding Low-Income Patients: Implications for Health-Related Policy.” *The Journal of Law, Medicine & Ethics : A Journal of the American Society of Law, Medicine & Ethics* 46 (3): 658–64.  
<https://doi.org/10.1177/1073110518804220>.

Viswanathan, Madhubalan, and Jose Rosa. 2007. “Product and Market Development for Subsistence Marketplaces: Consumption and Entrepreneurship Beyond Literacy and Resource Barriers,” in *Product and Market Development for Subsistence Marketplaces: Consumption and Entrepreneurship Beyond Literacy and Resource Barriers*, Editors, Jose Rosa and Madhu Viswanathan, Advances in International Management Series, Joseph Cheng and Michael Hitt, Series Editors, 1-17, Elsevier.

Viswanathan, Madhubalan, Jose Antonio Rosa, and James Harris. 2005. “Decision-Making and Coping by Functionally Illiterate Consumers and Some Implications for Marketing Management,” *Journal of Marketing*, 69(1), 15-31.

Viswanathan, Madhu, José Antonio Rosa, and Julile A. Ruth. 2010. “Exchanges in Marketing Systems: The Case of Subsistence Consumer-Merchants In.” *Journal of Marketing*. Vol. 74,



1-17

- Viswanathan, Madhu, Kiju Jung, Srinivas Venugopal, Ishva Minefee, and In Woo Jung. 2014. "Subsistence and Sustainability: From Micro-Level Behavioral Insights to Macro Level Implications on Consumption and the Environment" *Journal of Macromarketing*, 34(1)8-27
- Viswanathan, Madhubalan, Saravana Jaikumar, Arun Sreekumar, and Shantanu Dutta. 2020. "Marketplace Literacy Education and Coping Behaviors among Subsistence Consumer-Entrepreneurs during Demonetization in India." *Journal of Consumer Affairs*.  
<https://doi.org/10.1111/joca.12300>.
- Viswanathan, Madhubalan. 2013. *Subsistence Marketplaces*, eBookpartnership, eText, and Stipes
- Viswanathan, Madhubalan, Anju Seth, Roland Gau, and Avinish Chaturvedi .2009. "Internalizing Social Good Into Business Processes in Subsistence Marketplaces: The Sustainable Market Orientation" *Journal of Macromarketing*, 29, 406 - 425.
- Viswanathan, Madhubalan, Srinivas Sridharan, Robin Ritchie, Srinivas Venugopal, and Kiju Jung. 2012. "Marketing Interactions in Subsistence Marketplaces: A Bottom-Up Approach to Designing Public Policy," *Journal of Public Policy and Marketing*, 31 (2), 159-177.
- Viswanathan, Madhu, Srinivas Sridharan, Robin Ritchie. 2010. Understanding consumption and entrepreneurship in subsistence marketplaces. *Journal of Business Research*, 63(6), 570–581. <https://doi.org/10.1016/j.jbusres.2009.02.023>
- Walker, Patrick G. T., Charles Whittaker, Oliver J Watson, Marc Baguelin, Peter Winskill, Arran Hamlet, Bimandra A. Djafaara, et al. 2020. "The Impact of COVID-19 and Strategies for

Mitigation and Suppression in Low- and Middle-Income Countries.” *Science* 369 (6502): eabc0035. <https://doi.org/10.1126/science.abc0035>.

For Review Only

**TABLE 1**  
**Informant Name, Age, Sex, and Occupation Information**

### Cote d'ivoire

Informant <sup>a</sup>	Age	Sex	Occupation
Aalok	N/A	M	Carpenter
Amar	46	M	Mechanic
Claire	31	F	Juice Seller
Nora	50	F	Vegetable Garden Farmer
Paul	45	M	Café Stall Owner
Sam	40	M	Coffee Trolley

### Honduras

Informant <sup>a</sup>	Age	Sex	Occupation
Jacob	18	M	Student
Julie	35	F	Grocer
Liam	35	M	Agriculture
Olan	27	M	Agriculture
Rita	N/A	F	Entrepreneur
Ryan	40	M	Agriculture

### India

Informant <sup>a</sup>	Age	Sex	Occupation
Aryan	43	M	Machine Operator
Dhara	18	F	Student
Krish	46	M	Water Can Supplier
Milly	40	F	Housewife
Sia	42	F	Entrepreneur
Usha	53	F	Female Entrepreneur
Yana	45	F	Housewife

### Tanzania

Informant <sup>a</sup>	Age	Sex	Occupation
Evan	N/A	M	NGO Worker
Julian	N/A	M	Barber
Maria	25	F	Rice Shop Owner
Hamaz	29	M	Miner
Sahana	24	F	Homemaker
Tom	30	M	Farmer
Will	N/A	M	Farmer
Yaga	N/A	M	Farmer

### Uganda

Informant <sup>a</sup>	Age	Sex	Occupation
Avian	26	M	Entrepreneur

Ben	20	M	Entrepreneur
Eric	25	M	Photographer
Mila	51	F	-
Roy	42	M	Businessman
Sid	25	M	Taxi Man
Yoel	30	M	Entrepreneur

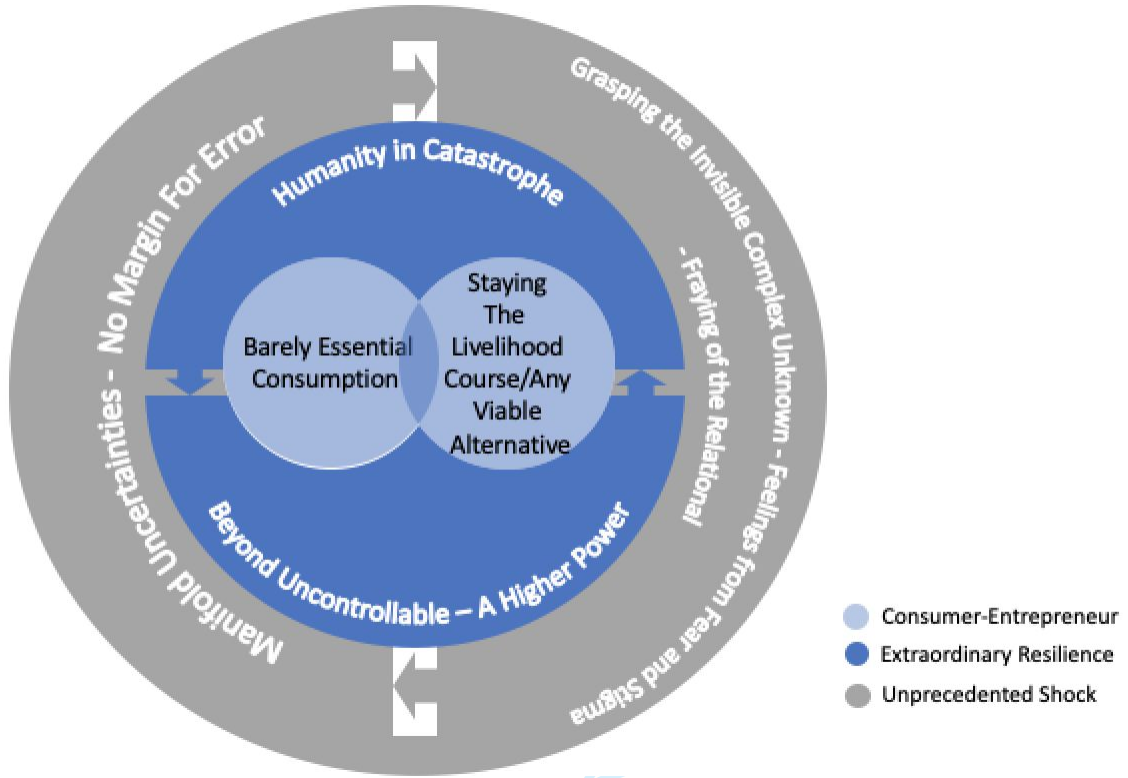
### United States

<b>Informant<sup>a</sup></b>	<b>Age</b>	<b>Sex</b>	<b>Occupation</b>
Dana	35	F	Healthcare Worker
Samantha	33	F	Healthcare Worker
Nick	38	M	Farmer
Scott	41	M	Healthcare Worker
Vicky	46	M	Healthcare Worker

<sup>a</sup>All informants' names are pseudonyms

For Review Only

FIGURE 1 – SUBSISTENCE MARKETPLACES DURING COVID-19



Only

## ONLINE APPENDIX – ADDITIONAL CONTEXT

We provide country-level information and a brief overview of skepticism about the pandemic.

	Cases 15/05	new cases	deaths	% new cases	% death
Honduras	2255	175	123	7.8%	5.5%
Côte d'Ivoire	1.971	59	24	3.0%	1.2%
Tanzania	509	0	21	0.0%	4.1%
Uganda	160	21	0	13.1%	0.0%
Kenya	758	21	42	2.8%	5.5%
India	81.970	3.967	2649	4.8%	3.2%
USA	1.361.522	21.424	82119	1.6%	6.0%
Source: Situation Reports 15/05 WHO					
<a href="https://www.who.int/docs/default-source/coronaviruse/situation-reports/20200515-covid-19-sitrep-116.pdf?sfvrsn=8dd60956_2">https://www.who.int/docs/default-source/coronaviruse/situation-reports/20200515-covid-19-sitrep-116.pdf?sfvrsn=8dd60956_2</a>					
Coronavirus disease (COVID-19)					
Situation Report – 116					
Data as received by WHO from national authorities by 10:00 CEST, 15 May 2020					

The interviews were mostly conducted in the first half of May 2020, and the rate of infection and mitigation measures in the various countries changed rapidly over short of periods of time. To provide a context of how COVID 19 and Government mitigation measures affected the individuals with which we spoke, we offer a snapshot of the situation on the 15<sup>th</sup> of May 2020 in countries where interviews were conducted.

## Honduras

On the 15<sup>th</sup> of May, Honduras has a total of 2,255 confirmed cases, with a total of 175 new daily cases registered (representing a 7.8% growth), and 123 deaths (5.5% of cases)<sup>1</sup>. The Government has imposed a lockdown since the 16<sup>th</sup> of March (with only 6 cases), with only essential services operating (food production and distribution, banks, pharmacies and production of medical supplies, energy, telecoms, and related transport activities). The Government has implemented a curfew according to which, access to retail stores had been restricted to the digit in ID numbers, meaning that only people with a last ID ending in 8 were allowed to go out on the day the Government allocated it. There was restriction of movement over the weekends for all citizens, except specific permission to do so.

Public transportation was closed from the 16<sup>th</sup> of March until the 30<sup>th</sup> of June, when buses with 30 seats were allowed to re-start operation<sup>2</sup>. During this period, private vehicles could circulate to provide access the basic services as determined by the government, but with only 2 people, and only one person at a time allowed to enter the shops or services<sup>3</sup>.

Re-opening of non-essential activities started from the 16<sup>th</sup> of April, with hardware shops, followed by restaurants for delivery (4<sup>th</sup> of May) and gradual re-opening of the maquila sector (industrial, mostly garment plants, using imported raw material and exporting the output)<sup>4</sup>.

On the 15<sup>th</sup> of May, the 1<sup>st</sup> page of the daily newspaper “La Prensa” mentioned the re-opening of shops in the Bahia Islands, after 2 months of confinement. The main feature of the paper was the reporting of a hotspot of contagion in a senior citizens home, with 3 deaths and 18 infected, in San Pedro Sula. There

---

<sup>1</sup>[https://www.who.int/docs/default-source/coronaviruse/situation-reports/20200515-covid-19-sitrep-116.pdf?sfvrsn=8dd60956\\_2](https://www.who.int/docs/default-source/coronaviruse/situation-reports/20200515-covid-19-sitrep-116.pdf?sfvrsn=8dd60956_2)

<sup>2</sup><https://www.prensa-latina.cu/index.php?o=rn&id=365800&SEO=capital-de-honduras-espera-reactivar-transporte-publico-en-junio>

<sup>3</sup><https://hn.usembassy.gov/covid-19-information/>

<sup>4</sup><https://www.imf.org/en/Topics/imf-and-covid19/Policy-Responses-to-COVID-19#H>

was an announcement of government support to micro, small and medium enterprises, “the source of employment to over 70% of the population”<sup>5</sup>.

### **Côte d’Ivoire**

Côte d’Ivoire had 1971 cases on the 15<sup>th</sup> of May, with 59 new cases registered on the day (3%) and 24 deaths (1.2%). The Ivoirian Government has taken important controlling measures, closing of all schools, churches and mosques, and quarantining suspected arrivals in the country (18<sup>th</sup> of March – with 6 cases confirmed), closure of restaurants and night clubs and the closing all terrestrial and air borders (22<sup>nd</sup> of March); imposing a national curfew between 9pm and 5am (24<sup>th</sup> of March), and restricting travel out of Abidjan to other areas of the country (25<sup>th</sup> of March). On the 7<sup>th</sup> of May the curfew was lifted outside of Abidjan, and on the 15<sup>th</sup> of May inside Abidjan, where, with the exception of night clubs and cinemas, all other establishments were allowed to operate. The gradual re-opening of schools and universities started occurring on the 25<sup>th</sup> of May.

The Government had allowed gatherings of up to 200 people, but when met with a rapid increase of the daily number of confirmed cases, reduced it once more to 50 people, on the 11<sup>th</sup> of June.

The Government owned daily newspaper, “Fraternité Matin”<sup>6</sup>, stated in its front page on the 16<sup>th</sup> of May, that although the restrictions of movement would occur across the country, social distancing and use of masks in public places continued to be mandatory. The opposition newspaper “Soir Info” warned about the important increase of new cases and deaths on the 15<sup>th</sup> of May<sup>7</sup>, the day when curfew was lifted in Abidjan.

### **Tanzania**

---

<sup>5</sup> <https://www.laprensa.hn/edicionimpresa/1379816-416/el-covid-ataca-en-asilo-de-sps-tres-muertos-y-18-infectados>

<sup>6</sup> <https://www.afriksoir.net/cote-divoire-titrologie-du-samedi-16-mai-2020/>

<sup>7</sup> <https://www.afriksoir.net/cote-divoire-titrologie-du-vendredi-15-mai-2020/>



Tanzania has, since the 8<sup>th</sup> of May, confirmed 509 cases, and this was the last time the country declared new cases. The first cases were reported on March 17<sup>th</sup>. There were 21 deaths reported, or 4.1% of cases. The authorities banned large gatherings, with the exception of religious ceremonies, suspended attendance to schools and educational institutions, cancelled international flights and mandated the use of masks in the capital city, Dar-Es-Salam. From the 18<sup>th</sup> of May, the authorities have lifted the suspension of international flights, and on June 1<sup>st</sup>, the authorities allowed the opening of upper-secondary and tertiary schools and allowed for the resuming of sports activities and events.

The Africa Report, an international online media outlet reported on the 12<sup>th</sup> of May<sup>8</sup> that the president had taken a very politized approach to managing the crisis. He had discredited the Nation's main lab by stating he had secretly sent samples from fruits and inanimate objects which came back positive for COVID-19. The Tanzanian government has not coordinated with any of its legislative members on the response to the COVID 19 virus, and this has led to some discomfort between his country's government and that of the 9 countries with which Tanzania shares borders. On the 13<sup>th</sup> of May, the US Embassy in Dar-Es-Salam issued a health alert, stating that "The risk of contracting COVID-19 in Dar es Salam is extremely high"<sup>9</sup>.

## **Uganda**

Uganda had a total of 160 confirmed cases on the 15<sup>th</sup> of May, with 21 cases declared that day (13.1%) and 0 deaths reported. On the 18<sup>TH</sup> of March the Ugandan government declared a strict lock down, with only medical personnel being allowed to circulate. Public gatherings, including places of worship, pubs, weddings music shows, rallies and cultural meetings were suspended. On the 23<sup>rd</sup> of March, public transportation was suspended, and only private cars were allowed to circulate on the road, with no more than 3 passengers<sup>10</sup>. Police forces enforced these measures, at times resorting to the use of force.

---

<sup>8</sup><https://www.theafricareport.com/27787/coronavirus-tanzanias-handling-of-pandemic-raises-eyebrows/>

<sup>9</sup><https://twitter.com/usembassytz/status/1260471445408415744?s=20>

<sup>10</sup> <https://www.monitor.co.ug/News/National/Photos-that-will-compel-you-cancel-your-journey-Kampala/688334-5505362-g3u0ib/index.html>

On the 15<sup>th</sup> of May, the Daily Monitor, an important independent newspaper outlet, stated that there had been an important surge to 160 confirmed cases, as 21 truck drivers tested positive. These truck drivers were Ugandan, Kenyan, Tanzanian and South Sudanese drivers entering the country<sup>11</sup>. Testing centres especially dedicated to truck drivers were set up at key border crossings<sup>12</sup>.

## Kenya

On the 15<sup>th</sup> of May, Kenya had registered a total of 758 confirmed cases to date, with 21 cases being identified on the same day (2.8 daily increase). Kenya had had 42 death (5.5%) due to the virus until then.

The government of Kenya had adopted certain containment measures such as enforcing of social distancing and closure of non-essential gathering; recommending teleworking where possible, cancellation of all passenger international flights, forcing a mandatory quarantine of 14 days for those returning from abroad, and limiting public transportation passenger capacity<sup>13</sup>.

On the 15<sup>th</sup> of May, the Daily Nation, a leading independent newspaper stated that curfew measures were set to be reviewed on the weekend, wondering if the government would ease or tighten them. Apart from the number of registered cases, and key political developments, the newspaper also stated that petrol prices were the lowest they have been in over a decade<sup>14</sup>.

	Cases 15/05	new cases	deaths	% new cases	% death
India	81.970	3.967	2649	4.8%	3.2%
USA	1.361.522	21.424	82119	1.6%	6.0%

<sup>11</sup><https://www.monitor.co.ug/News/National/Uganda-s-Covid-19-cases-jump-to-160-as-21-test-positive/688334-5553194-ojwarh/index.html>

<sup>12</sup><https://www.aa.com.tr/en/africa/covid-19-uganda-receives-mobile-testing-laboratories/1810142#>

<sup>13</sup><https://www.imf.org/en/Topics/imf-and-covid19/Policy-Responses-to-COVID-19#K>

<sup>14</sup><https://newsstand.nationmedia.com/Kenya/DailyNation/preview/100/1552020100952608/01>

## India

India had registered 81,790 confirmed cases by the 15<sup>th</sup> of May, with 3,967 new cases registered on the day (4.8%) and a total of 2,649 deaths (3.2%). The government had announced on March 24<sup>th</sup> that the entire country will go into lockdown, after the imposition of numerous containment measures had already been imposed, including restrictions on travel, school closures, closures of gyms and cultural activities such as museums and theatres, imposing a ban on mass gatherings and encouraging telework. On the 15<sup>th</sup> of April the government announced a series of measures to re-open the economy, measures such as relaxation of measures in geographical areas designated as non-hotspot (20<sup>th</sup> April); allowing inter-state movement of stranded people (29<sup>th</sup> April), and on May 12<sup>th</sup> the government announced a relief package of about 10% of GDP, including key direct-spending measures such as food distribution and cash transfers to lower-income households<sup>15</sup>.

On the 15<sup>th</sup> of May, the Times of India<sup>16</sup> stated that the Supreme Court had ruled that it was impossible for the courts to monitor or stop the movement of migrant workers across the country. It also mentioned that the states of Maharashtra and Tamil Nadu were experiencing surges of cases, which will lead to extensions of restrictions in place.

## United States of America

	Cases 15/05	new cases	deaths	% new cases	% death
USA	1.361.522	21.424	82119	1.6%	6.0%

The USA had reached 1,361,522 cases, with 21,424 new cases (1.6%) declared on that day. The US had also had 82,119 deaths, 6% of the total number of cases. The US had implemented a number of measures,

<sup>15</sup><https://www.imf.org/en/Topics/imf-and-covid19/Policy-Responses-to-COVID-19#>

<sup>16</sup><https://timesofindia.indiatimes.com/dailybrief/75759924.cms>

including travel restrictions, social distancing, declaring states of emergency, closure of schools and non-essential businesses, and increasing testing. The evolution of COVID 19 in the US had been heterogenous up to the 15<sup>th</sup> of May, and this led to progress on re-opening the economy to varied degrees across the country. The US had approved various measures to support the economy, including expanded unemployment benefits, a food safety net for the most vulnerable, and forgivable small business administration loans for businesses that retain workers.

The New York Times reported on Friday the 15<sup>th</sup> of May<sup>17</sup> that job losses were mounting, even as the economy was re-opening. An additional article, was mentioned that indicated how high-level health officials in New York did not consider that a closure of the economy in March, would reduce the number of cases. The closure of the economy due to the corona virus, using of personal protective equipment and social distancing; critical measures to stop the spread of the virus, have been a highly politicized in the United States.

### **Skepticism and the Media**

When the first reports were released about the virus, informants from countries with both lower literacy rates and those with higher literacy rates in Western countries did not view the virus as an imminent threat ([Poll: As Coronavirus Spreads, Fewer Americans See Pandemic As A Real Threat](#)). In an era of “instant information,” misinformation is an unfortunate, prevalent, and rampant issue. One factor that may have contributed to these informants’ views of the virus was the quality and accuracy of the information in the media ([Reporting on the Coronavirus: Spreading Truth, Not Panic](#)) ([Coronavirus crisis: India's low death toll sparks skepticism](#)). In the case of COVID-19, reports about the virus and its modes of transmission changed daily as scientists raced to understand the novel virus and the threat it posed. Thus, journalists in non-medical fields were forced to quickly understand and dissect the medical jargon while attempting

---

<sup>17</sup><https://www.nytimes.com/issue/todayspaper/2020/05/15/todays-new-york-times>

to tell a compelling story. Due to the flood of new findings, there was often mass confusion and conflicting information in the media about the spread of the virus, the proper usage of personal protective equipment, and the effectiveness of social distancing. Moreover, the disinformation made it more difficult for public health officials to cut through the noise.

In particular, early skepticism by the public about the severity of the virus may have been due in part to initial reports from the popular press that likened the COVID-19 virus to the same level of danger as seasonal influenza. Many Americans are concerned about the reporting occurring during the pandemic due to the potential exaggeration of downplaying of the threat in the media. ([Public Sees Harm in Exaggerating, Downplaying COVID-19 Threat](#))

The ubiquity of social media has made it the primary source of misinformation in the form of rumors and conspiracy theories throughout the course of pandemic ([Social media was used to spread, create COVID-19 falsehoods](#)). Many of the informants we interviewed learned about the virus and precautionary measures to take through the popular instant messaging application, WhatsApp, and the social media platform Facebook in addition to traditional news outlets. In an effort to contain the spread of misinformation on its platform, WhatsApp, a popular instant messaging app, attempted to prevent the forwarding of mass messages on the platform ([Coronavirus misinformation on WhatsApp is going viral, despite steps to combat its spread](#)). Additionally, the World Health Organization created a platform to distribute authoritative information about the virus ([WHO Health Alert brings COVID-19 facts to billions via WhatsApp](#)).

On the other hand, Facebook, who owns WhatsApp, was widely criticized for its lack of action in preventing the spread of false information through its platform ([Social media firms fail to act on Covid-19 fake news](#)) ([Facebook says removing viral COVID-19 misinformation video](#)

[‘took longer than it should have’](#)). Although misinformation can be due to honest mistakes, it holds large repercussions when it comes to health. In one case, this misinformation resulted in the preventable death of a man in the United States ([Man Dies, Woman Hospitalized After Taking Form Of Chloroquine To Prevent COVID-19](#)). Many Americans are concerned about the reporting during the pandemic due to the potential exaggeration of downplaying of the threat in the media. ([Public Sees Harm in Exaggerating, Downplaying COVID-19 Threat](#))

For many, the shift from skepticism to panic was abrupt. On March 11, 2020, the World Health Organization released a report officially classifying the coronavirus outbreak as a pandemic. The reality of the novel virus was brought home when schools, offices, and shops began closing rapidly globally and social functions came to a halt. Countries began enforcing mandatory self-quarantining, and these large changes to daily life caused a shift in behaviors that led many consumers to engage in behavior common in the face of disaster - panic buying.

Historically, “panic in epidemics is a part of the human condition”([An iatrogenic pandemic of panic](#)). Globally, consumers engaged in hoarding behaviors and stores experienced large shortages of basic goods ([Coronavirus: The psychology of panic buying](#)) Unsurprisingly, the demand for hand sanitizer skyrocketed along with its price and in some instances, the shortages led to price gouging. However, some products flew off the shelves more quickly than anticipated. In the US, the unusually high demand for toilet paper frequently made headlines as individuals began hoarding it and stores experienced mass shortages. In fact, hoarding became such an issue that grocery stores began posting signs limiting the number of items of a specific product that each customer could purchase.

Whereas specific behaviors may vary between countries and cultures, the psychological impacts of the virus are evident. One possible psychological explanation for panic buying is

scarcity, or the “perceived scarcity effect” ([Psychological underpinning of panic buying during pandemic \(COVID-19\)](#)). The constant sensational reporting of shortages in the media amplified this perception and witnessing community members and peers engaging in this behavior only exacerbates the fear of scarcity, further fueling a sense of urgency to engage in irrational stockpiling ([Coronavirus: The psychology of panic buying](#)).

The general public has no control over the policies created or the production of vaccines, relying on public figures and experts and leaving their own health and the health of their families’ in the hands of others ([Why we hoard: Fear at root of panic-buying, psychologists say](#)). This loss of control, coupled with uncertainty and amplified fear created through sensationalism in the media, has large impacts on mental health. Subsequently, individuals’ desire to assert control in an uncontrollable circumstance propels irrational behavior ([Psychological underpinning of panic buying during pandemic \(COVID-19\)](#)). The accumulation of these factors may explain the hoarding of toilet paper in the US and panic surrounding toilet paper in Japan ([Panic-buying of 'made in China' tissues and toilet paper erupts in Japanese cities](#)). Ultimately, stockpiling, subsequent shortages of goods, price gouging, and anxiety about acquiring these products at higher prices fuels a never-ending cycle of panic at a time of profound fear.