

Shocks from the COVID-19 Crisis in Ethiopia



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1 Introduction

The nation state is a complex system that is vulnerable to many types of shocks and stressors. These include natural hazards such as storms and sea-level rise, but also manmade phenomena, e.g., economic transformation and rapid urbanization. These disturbances have the potential to reverse years of socioeconomic development gains by increasing poverty and inequality in rural and urban communities. Nation states that hope to grow and thrive in the future will need to take precautionary steps to address these threats. Simply put, a resilient nation state can adapt to these changing conditions and withstand such shocks while still providing essential services to its people. By doing so, those that account for these pressures can continue to thrive and meet their long-term development goals despite these challenges. The world came to a standstill when the COVID-19 pandemic sprung out of Wuhan, China, quickly bringing human misfortune and huge economic harm around the world [1, 2]. As of August 8, 2022, there have been over 584,637,073 confirmed cases of COVID-19 around the world with 6,418,203 confirmed deaths attributed to the disease [3]. Clearly, pandemics can harm economic activities [4, 5]. Given the speedy unfolding of COVID-19, countries throughout the world have adopted several public health measures, inclusive of social distancing [6]. In Ethiopia, 492,412 cases were registered with 7569 passings—August 8, 2022 [3]. Numerous scholars have noted that the COVID-19 pandemic will continue to cause widespread increases in global poverty and food insecurity. Moreover, Barrett [7] underscored how the most vulnerable segments of the population, i.e., low and middle-income countries, are

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most susceptible to these negative impacts. Laborde et al. [8], Swinnen and McDermott [9], and Torero [10] estimate that due to the COVID-19 pandemic over 140 million people will fall into extreme poverty and suffer from food insecurity and hunger, with many of these individuals coming from sub-Saharan Africa. As such, disruptions to food systems and changes in farming and consumer prices could turn out to be major drivers of food insecurity [11–13]. Given the importance of agricultural prices for the income of farmers and food prices and the purchasing power of consumers, changes in agricultural prices are one of the main concerns policymakers in low and middle-income countries must consider when faced with a global economic shock [7, 14]. In this chapter, the economic shock of the pandemic will be explored by examining the macroeconomy, poverty and food insecurity, and social conditions of Ethiopia from 2019 (i.e., before the COVID-19 outbreak) to the end of 2021.

2 Macroeconomic Status: Pre- to Post-pandemic

Before the impact of COVID-19, the Ethiopian macroeconomy had massive imbalances in economic outputs, unemployment, and inflation [15, 16]. This is the result of structural factors and corrupted administrations that dominated from 1991 to 2018 before the modern-day high minister, Prime Minister Abiy Ahmed, took office on April 2, 2018. Varying efforts have been made to quantify the effect of COVID-19 on the economy of Ethiopia by using various scenario-driven approaches. By calculating the severity of the pandemic with ongoing trends in the Ethiopian and world economy, Cancedda et al. [17], the United Nations [18], the International Monetary Fund (IMF) [19], Beyene et al. [20], and Goshu et al. [21], have pinpointed the initial downfall at the beginning of 2020 and the rebound at the end of 2021. The unfolding of COVID-19 brought economic activities throughout the world to a near-standstill. According to the World Bank [22], global gross domestic product (GDP) in 2020, relative to 2019, fell by 5.9%, before jumping back up by 9.1% in 2021, i.e., 3.2% higher than pre-pandemic levels (Fig. 1). According to the Organization for Economic Co-operation and Development, as countries emerged from the most acute phase of the COVID-19 pandemic, “addressing structural inequalities, accelerating the green transition, and strengthening resilience in the face of future challenges” [23] was critical to best deal with the hardship for low-income people and the world’s poorest economies.

Before the start of COVID-19, Ethiopia’s government predicted economic growth between 2019 and 2020 at 9%. The World Bank and IMF revised this estimate to 6% at the onset of the pandemic and later lowered it again to 3.5% in June 2020, i.e., once the macroeconomic impacts of the pandemic began to reveal themselves [24]. Furthermore, IMF projected a macroeconomic growth rate of 4.4% in the stronger economies of the developed world (e.g., the USA, Japan, Germany, and the UK). Broadly speaking, their exceptional fiscal, monetary, and regulatory response helped to maintain disposable income, defend monetary flows for

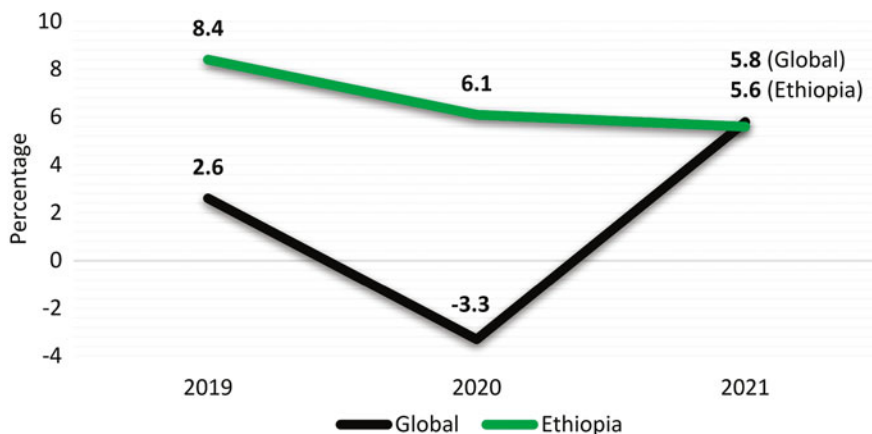


Fig. 1 Global and Ethiopia's annual GDP growth, 2019-2021. Source: World Bank [22]

enterprises, and assist in savings provisions [25]. The real issue on how a developing country with a weaker macroeconomic status such as Ethiopia has found it difficult to recover from the economic shock of COVID-19, largely, tells the story of an underdeveloped and underachieving economy. According to the United Nations Conference on Trade and Development, demand management is an important policy direction for the sustainable recovery of primary extraction industries which are tied to such commodity and mineral export revenues—a primary function of Ethiopia's developmental operability. The need for this revival is not only needed to recover from the global shock of the pandemic but it also dates back to the lingering effects of the global financial crisis of 2008 which still has a macroeconomic impact on Ethiopia's growth [26]. In terms of output gap, i.e., the percentage deviation of actual output from its potential level, Abebaw [27] pieced together important potential output and output gap research in Ethiopia from 1990 to 2018, i.e., pre-pandemic. Over the span of 29 years, key macroeconomic indicators that had an effect on the country's output gap included trade openness and lending rate (i.e., by way of a positive effect), and foreign direct investment (FDI) and inflation (i.e., by way of a negative effect). Abebaw [27] suggested that “augmenting domestic production and utilization capacity, avoiding unrestricted importation and, export diversification, lowering lending rate and increasing FDI inflow” would help reduce the overall output gap. Correspondingly, in 2017, Moller and Wacker [28] concluded that key drivers of Ethiopia's growth were “public infrastructure investment, restrained government consumption, and a conducive external environment.” In this research, the macroeconomic imbalances only moderately slowed some aspects of growth, explaining why economic growth quickly rose in Ethiopia up to the beginning of the start of the pandemic. Also, it has been suggested that since Ethiopia has somewhat properly focalized infrastructure development for some decades, this has outweighed “moderate shortcoming in the macro framework at early stages of [its] development” [28]. This can be confirmed by Gemechu [29] who looked at the

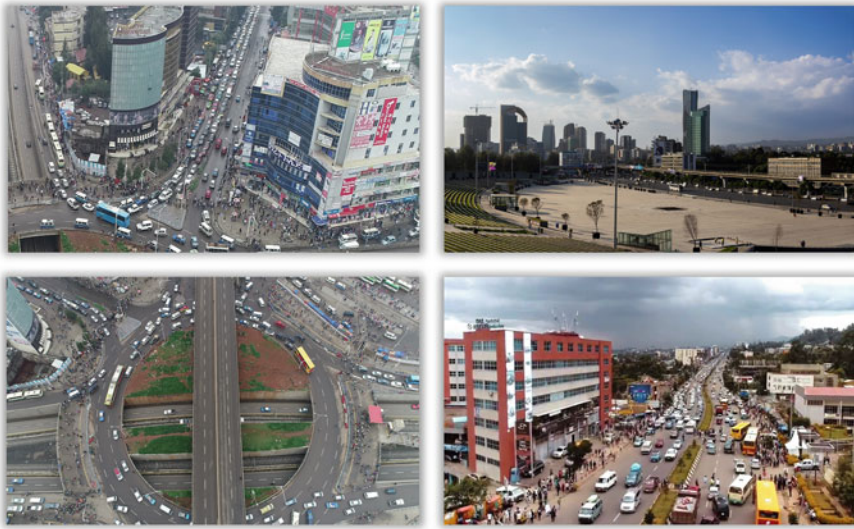


Fig. 2 Urban development in Addis Ababa, Ethiopia. Source: (*top left, bottom left, and bottom right*) Photographs by Solomon T. Abebe, July 27, 2022; (*top right*) photograph by Solen Feyissa on Upsplash, Creative Commons Public Domain, January 24, 2022

macroeconomic effects of fiscal policy shocks in Ethiopia during the period 2000–2015, and found that output, inflation, interest rate, and exchange rate had a positive influence on the economy. In Ethiopia, traditionally such government spending shocks have positively affected GDP and recurrent expenditure which have bettered actual output levels. As such, these moves, empirically, supported the macro development of Ethiopia pre-pandemic even if the country’s high debt burden—i.e., external debt stock at USD 27 billion or 28.1% of GDP and total debt at USD 54 billion or 56% of GDP [30]—in 2019 forced the government to restructure external debt to allow for some “breathing space” [31]. Currently, the economic recovery process has exhibited some positive signs of bouncing back from the “two-fold fiscal impact, pulling in opposite directions” [32], i.e., from the health side of the pandemic and from the economic shock side filtering through the economy. Significant urban institutional and infrastructure development have been seen as a result of the country’s post-pandemic fiscal redirection, e.g., Addis Ababa’s continued development of high-rises and road infrastructure in its city center [33–36] (Fig. 2). The macroeconomic big picture of Ethiopia indicates the need for investors and policymakers to mitigate the consequences of the pandemic by continuing to jumpstart GDP, employment, and inflation via a consumer price index revival [37] and constructive macroeconomic policy that will keep its people safe and secure. On that note, this chapter will now focus on the socioeconomic imbalances in Ethiopia by reevaluating how the pandemic shocked the poor and most vulnerable in society. Linkages between social and economic measures are considered, including how to best deal with the pandemic’s aftereffects and mitigate future shocks.

3 Socioeconomics and Inequality Shock: Rethinking Availability

Traditionally, people who have a lower socioeconomic status are more exposed to the risks of inflation, unemployment, and other difficulties associated with economic hardships [38]. Though COVID-19 is a transitory shock, it could have lasting negative socioeconomic impacts for Ethiopian households following the lockdown measures carried out by the government. The impact for citizens has already manifested in several ways, most notably, with regards to decreased salaries and non-labor incomes, increased living costs (e.g., imported goods and carrier disruptions), and suspension of schooling and food programs [39]. Data suggests that the economic costs of the COVID-19 lockdowns were worse felt by low profit, informal workers in cities who were unable to work from home and not covered by social security or any other form of social insurance [40]. The impact on such a large demographic group will be a challenge and could set off a slowdown effect in economic growth for the poor—i.e., potentially raising the poverty rate and prolonging a post-pandemic revival [41]. The latest poverty headcount estimate for Ethiopia is 23.5% based on the national poverty line and 27% based on the international poverty line. These figures are based on an adjusted daily purchasing power of USD 1.90 per day [42, 43]. In a World Bank survey, it was confirmed that about 18% of urban respondents lost their job since the pandemic began; however, it is worth noting that around 40% of these people attributed their job loss to non-pandemic reasons, instead stating the cause to seasonal or transient work environments [43].

In repeated studies by Harris et al. [39, 44], from August 2020 to August 2021, the common month-to-month earnings of Ethiopian households were found to increase over five cycles, from ETB 2016 (i.e., USD 39.00) in the first to ETB 3045 (i.e., USD 58.00) in the fifth. The share of households that pronounced the capacity to earn identical earnings to pre-pandemic levels was also elevated from 66% to 91%, respectfully. They observed that having an equal income, or having a reduced income, during the yearlong study, was due to variations in living and job type. As such, acquiring a sufficient amount of food still remained (and remains) the most necessary undertaking for the urban poor. Income inequality among Ethiopians suggests that the decline in the purchasing strength of the Ethiopian Birr affected their capacity to pay for the fundamental costs of food, shelter, and clothing. Notably, the pandemic created food insecurity since it was unaffordable due to the large and frequent price increases. Comparably, Dasgupta and Robinson [45] indicated that higher income households in Ethiopia were less likely to suffer from food insecurity due to the pandemic. They illustrated how households that were in a position to depend on their financial savings had a decreased likelihood of suffering from meals and food insecurity. In contrast, poorer households with no savings that had suffered an income loss had a reduced livelihood resilience and were more likely to go through meals and food insecurity even post-pandemic. In spite of this, Harris et al. [39, 44] found that the share of households who had a common of three

or more meals per day had gradually improved: 62.5% in August 2020, 74.4% in October 2020, 79.9% in November 2020, 83.8% in May 2021, and 85.4% for August of 2021. This revealed how in 1 year food security improved for Ethiopians by 22.9%. However, despite the gradual improvement throughout the five rounds, the result is still beneath the pre-COVID-19 period, when 94.2% of households consumed a common of three or more meals per day. To help alleviate some of this burden, the Urban Productive Safety Nets Program (UPSNP), established in 2016, covering eleven major regional cities in Ethiopia, aided in closing the socioeconomic gap by targeting the urban poor at risk and focusing on the homeless and underage. Other social protection initiatives included community-based health insurance, introduced in 375 districts between 2017-2018 covered 15% of all households—with an 80% target for 2020. Unfortunately, due to the COVID-19 pandemic, this target was not met. Thus, in 2020 temporary support of more than 550,000 additional households in 27 Ethiopian cities using UPSNP were provided by the government and the World Bank. This response initially lasted for 3 months before being topped up by the United Nations International Children's Emergency Fund for an additional 60,000 UPSNP households [46]. As a result, it is estimated that the beneficiaries of UPSNP will increase from 9 to 10–15 million people in the near future. Regrettably, this will increase the level of extreme poverty and continue to pressure vulnerable groups for a longer period post-pandemic.

4 Poverty and the Environment: Linkages to Better Understand How Ethiopia Fell Short During the Pandemic

According to the World Bank [47], with over 115 million people in 2020, Ethiopia has the second largest population in Africa after Nigeria. Despite the problems and economic slowdown from the pandemic, it still had the fastest-growing economy in the region with a 6.1% growth between 2019 and 2020. Ethiopia, however, concurrently is also one of the poorest countries in the world with a GDP per capita of USD 944.00 [48]. Over 24.2 million of its total citizens live in absolute poverty, i.e., when calculating ETB 20 (i.e., USD 0.40) per day per person as the poverty line. Moreover, when compared to the global poverty scale, over 80 million Ethiopians (i.e., 73%) are considered impoverished, living on less than USD 1.25 per day [15]. In Ethiopia, the majority of the population living in poverty are subsistent agriculturalists and farmers that live in rural areas and grow food crops to meet their (family and community) needs. Moreover, many working in the formal (and informal) sector in urban areas also live with insufficient funds. These two population groups are vulnerable to external shocks, such as droughts and outbreaks, which can push them further into life-threatening situations. The economic effect of COVID-19 in Ethiopia aggravated the challenge of poverty, especially for the urban poor [16] (Fig. 3). In any case, the focus on the rural poor should not be understated. In fact,



Fig. 3 Urban and rural poor in Ethiopia: (*top left*) dilapidated houses made up of wood, mud, and corrugated iron sheet, Arada sub-city district of Addis Ababa, (*top right*) crowded marketplace in northern Ethiopia, (*bottom left*) rural agriculture farmer plowing land, and (*bottom right*) rural woman using a donkey to collect water. Source: (*top left*) Photograph by Bedane S. Gemed, August 1, 2022; (*top right*) Photograph by Lesly Derksen on Upsplash, Creative Commons Public Domain, October 25, 2020; (*bottom left* and *bottom right*) photographs by dMz on Pixabay, Creative Commons Public Domain, April 11, 2019

since rural communities predominately grow and produce their own food, prioritizing rural communities and getting them back on their feet as quickly as possible will allow more resources to be then focused on urban settings, i.e., by using rural resources (e.g., food grown in the countryside) as an additional internal support mechanism.

In many parts of the Global South, the impact of the pandemic is more pronounced in urban areas where a large share of the population lives in poor, unsanitary conditions without electricity and water supplies [49]. In the face of the COVID-19 crisis, there was an increasing indication that existing gender inequalities in economic opportunities worsened across the globe [50]. As stated, female employees in had an elevated chance of experiencing a damaging effect from the pandemic when compared with men. Cancedda et al. [17] found that in three of the most affected sectors in Ethiopia, women represent more than 80% of the workforce, i.e., 74% in tourism, 80% in fabric and garment industries, and 85% in floriculture. Moreover, female-headed households had an excessive poverty persistence of 45%, suggesting that post-pandemic, it will continue to have an extreme impact on the welfare of Ethiopian women living in urban areas [41]. Similarly, in terms of youth, job losses continued for both the formal and informal sector. “A monitoring survey of 3107 households, conducted by the World Bank in April and June 2020, [indicated] that 38% of casual laborers have lost income or their job” [51]. This is

reported to be predominately from the services sector and secondary agriculture work such as street vendors and food processing facilities. Several studies showed that approximately one-fifth of Ethiopia still experiences a lack of food [51, 52] with affordability being the main concern. It is estimated, from pre-pandemic to the end of 2020, that food waste has increased by 11–15% and severe acute malnutrition unexpectedly increased by 10–15% [53]. This alone has cause for concern as severe interlinkage disconnects, i.e., on how Ethiopia has fallen short over that last 2 years, will make socio-ecological development and social protection harder to achieve and continue to create cyclic impoverishment at the human nature relations level [54].

4.1 Socio-Ecological Development and Environmental Degradation

Environmental concerns plague Ethiopia in terms of its ability to development in a sound and socio-ecologically manner. Keeping the country's development in-line with a sustainable, best practices approach will be challenging but crucial to people's well-being and the environment. In terms of the pandemic, the world lockdown slowed global travel, subsequently reducing the emissions of CO₂ and other pollutants. This predictively had a net positive impact on the environment [55, 56]. For example, in China, He et al. [57] illustrated how lockdown measures led to a bettering in air quality. They supported their argument by showing how the Air Quality Index and the satisfactory particulate count concentrations fell by 25% within a few weeks of the lockdown in China's colder, richer, and largest industrialized cities [57]. Similarly, Almond et al. [55] monitored air pollution and greenhouse gases in China in 2020 and discovered that, while NO₂ emissions fell precipitously, SO₂ emissions did not significantly decline. Also, for China as a whole, PM_{2.5} emissions fell by 22%, while O₃ concentrations improved by 40%. These variations exhibit that there is not always an unambiguous enhancement in air pollution due to a financial slowdown. In any case, the reduction could be attributed to less mobility options (e.g., fewer non-public vehicles in use) causing a decrease in harmful pollutants and emission levels [55]. In most cases, however, travel restrictions have significantly reduced NO₂ and CO₂ which are pollutants directly associated with the transportation sector [58–60]. In this same manner, as the pandemic swept across Ethiopia many people abandoned public transit, fearful of catching the disease on crowded buses and trains. The Ethiopian government, as a result, started a program to encourage its citizens to cycle and walk (Fig. 4). Officially known as the Non-Motorized Transport Strategy 2020–2029, the idea was launched by Dagmawit Moges, Ethiopia's Minister of Transport in 2020 [61]. Accordingly, Ethiopian cities have started planning streets to accommodate non-motorized transport which, if successful, should reduce the socioeconomic gap by aiding the urban poor with better mobility options and a cleaner, sounder urban lifestyle.



Fig. 4 Well-developed pedestrian walkways and road crossings in the Addis Ababa, Ethiopia. Source: Photographs by Solomon T. Abebe, August 1, 2022

Relatedly, since a clean environment is an essential part of human survival, it makes up the fundamental part for healthy living. Reducing environmental pollution, e.g., air, water, and soil polluted with contaminants and toxins harmful to human health, can reduce disease and cancer, among other problems. Water pollution, for instance, can lead to typhoid and diarrheal diseases, which can be harmful to a person’s mental and physical well-being [62–64]. Unfortunately, Ethiopia’s insufficient water supply can affect everything from personal hygiene to the country’s wastewater systems—in effect, suppressing the ability to adequately survive. Based on Harris et al.’s [39, 44] work from 2020 and 2021, the proportion of households that reported an incident of water shortage increased across Ethiopia—by 34% in August 2020, 32% in October 2020, 36% in November 2020, 50% in May 2021, and 39% in August 2021—compared to the average level from 2019. Though their study has some limitations, many impoverished Ethiopians were noted as unable to explore other non-COVID-19 related factors that may have influenced their livelihood and ability to better cope with the pandemic during this period. As such, important factors of well-being play an important part of environmental degradation in Ethiopia. Apart from the serious impacts of agriculture and farming which have been severe over the past 2 years, the increased vulnerability of many people to food and water insecurity, soil erosion, and land degradation combined with “population growth, intensive agricultural and pastoral use, the cultivation of marginal land, commercial timber-getting, high natural vulnerability to soil erosion, and inadequate soil conservation practices” [65], has become ever-increasingly challenging during the post-pandemic era. Key environmental issues for Ethiopians—that interlink with social and community well-being—need to consider the environmental costs of sound, clean transport; profitable and sustainable heavy and light industries; water and energy, i.e., via dam construction for electricity, to promote economic development and facilitate flood control; and agriculture development-led industrialization that can support how the majority of Ethiopians live [65]. Since Ethiopia is endowed with abundant natural resources and abundant land, many of its resources are still not properly “identified, well managed, and fully exploited” [66]. Natural resources under the influence of various connected factors, e.g., “population pressure, agricultural expansion, migration, rapid urbanization, resettlement, climate change, and

environmental pollution” [66], must better amplify the connection between development and environmental consequences [67]. In doing so, the country will better manage “diverse socioeconomic problems, political instability, marginalization, poverty, and recurrent natural hazards” [66]. To date, several steps to address these problems have been introduced with limited success [66, 68]. Since an innate relationship between environmental degradation and poverty exists, Ethiopian authorities are stressed to engage in environmental education to create a sort of “poverty alleviation strategy” [68] and social protection system as part of an eco-friendly resolve to its larger COVID-19 rebound plan.

5 Social Protection and Safety Net Structures

The greatest intervention to compensate people and households for income loss related to the COVID-19 measures were direct money transfers. To aid with the devastating effects on people’s ability to work, Fig. 5 illustrates the empty streets in Addis Ababa during the lockdown and the busy ones after the measures were lifted. According to the 151-country study by Gentilini et al. [42], social assistance in Africa accounted for 86% in which 50% of recipients received cash transfers. In Ethiopia, responses to COVID-19 accelerated towards humanitarian and social safety programs, i.e., from hard to reach urban areas to countrywide social protection [69]. The Ethiopian government developed the COVID-19 Multi-Sectoral Preparedness and Response Plan (MSPRP) in response to the pandemic [70]. A “vertical expansion” was applied in May 2020 in which money top-ups were presented by UPSNP direct support beneficiaries. The top-ups were, first, employed as meal plans for citizens struggling from the crisis and then used to cover electricity bills up to a maximum of 2100 watts per individual per day for 6 months. At the same time, a “horizontal expansion” by UPSNP was introduced to help, specifically, the urban population. The horizontal expansion focused on poor city households not previously registered in the eleven UPSNP cities and included 3 months of unconditional



Fig. 5 Street busyness in Addis Abada: (left) during the COVID-19 lockdown measures—December 19, 2020, and (right) no lockdown measures—July 27, 2022. Source: Photographs by Solomon T. Abebe

money transfers [53]. As part of MSPRP, a total of USD 635 million was allotted for emergency meals distribution to 15 million people in Ethiopia in which most of it was donor financed by other countries and associated humanitarian support [71]. Authorities in some Ethiopian cities such as Addis Ababa opened 1200 food banks—mobilized by the volunteers, community representatives, and non-governmental organizations—to help deliver the food and help combat hunger. As a result, COVID-19 showed the effectiveness of comprehensive, coordinated, and inclusive social safety structures of humanitarian interventions against such a shock. There is hope that the Ethiopian government will invest in constructing these systems permanently, i.e., to help empower residents, especially lower bracket earners and informal citizens protect their social safety rights and limit future shocks [69]. By enhancing the social protection system, individuals and their families will be better able to cope with crises and shocks by helping them find work, improve productivity, and invest in the health and education of their children.

In terms of personal health, previous research indicated that infectious outbreaks result in psychological problems consisting of anxiety, depression, and insomnia [72–74]. Mental health and psychological problems are most common in Ethiopia’s poor due to prolonged poverty, misery, and lack of resources. During the height of the pandemic, these problems increased in many countries from around the world. For instance, a significant wave of spiked depression cases was recorded from 2019 to 2020 in China from 20.1% to 48.3% [75–77], the USA from 8.5% to 27.8% [78], India from 14.1 to 41.9% [79, 80], and Egypt from 27.9 to 67.1% [81]. In an Addis Ababa study, the prevalence of depression among the urban community was reported to be 12.4% in 2020 [82]. This figure is lower compared to other countries mentioned, most probably, due to low reporting in medical centers. Consequently, depression most likely was higher as other research by Lemma et al. [83] reported unrecognized depression in Ethiopia at 15.9% from March to April 2019—right at the start of the COVID-19 outbreak. Since this touches on the core of one’s well-being, it is recommended that a future shock strategy determine the prevalence and associated factors on varying socioeconomic groups to include early depression screening carried out by health professionals [83, 84]. This will strengthen the social protection strategy and narrow the socioeconomic gap in the country. Furthermore, in the study by Kassaw [82], it was further outlined that gender, monthly income, educational status, number of family members, contact with COVID-19, and other health-related issues were significantly associated with depression. However, according to Harris et al. [39, 44], the share of respondents reporting a feeling of burden or fear with regards to COVID-19 diminished from 72% in August 2020 to 50% in August 2021. This alone could equate to an overall societal resilience and need to survive (i.e., move forward) regardless of the pandemic.

6 Rebounding from COVID-19: Recommendations

In all, Ethiopia's societal rebound must consider that nearly two-thirds of the losses from the services sector occurred because of the pandemic. Recovery scenarios by Aragie et al. [85] point out that resources can only help "if targeted in an efficient way towards sectors most affected by COVID-19, and further resources are mobilized to support strategic sectors—those with the highest economywide multiplier effects—and vulnerable communities." Utilizing a dual channel system of domestic and international impact to aid and better facilitate how direct, indirect, and economywide impacts affected Ethiopia and how the country might manage a recovery strategy is outline in Fig. 6.

Workable and precise policy recommendations in Ethiopia should first be prioritization for short-term relief measures. This should be via direct transfers to the most affected and vulnerable in which price subsidies on key consumption and intermediate commodities should be accommodated. Key targeted sectors should facilitate job creation and food security as well as severe budget constraints earmarked in an efficient way towards "sectors with the highest economywide multiplier effects and those most affected by COVID-19 related response measures" [85]. Recommendations to develop policy initiatives should allow an employment-led economic recovery to be intertwined with social partnerships for job creation, job quality, and job access in the short and long term. In terms of secondary responses, resources, intensified surveillance, and capacity building should be considered. A coordinated effort to mobilize domestic and international resources that support key macroeconomic variables is needed. Economics recovery policies should be divided into two branches. First, fiscal policies should focus on supporting the household level, unemployed, businesses and small and medium enterprises, and the health sector. Second, monetary policies should be collectively arranged to aid exchange rate and capital account management, interest rate cuts, liquidity reserve requirement ratio

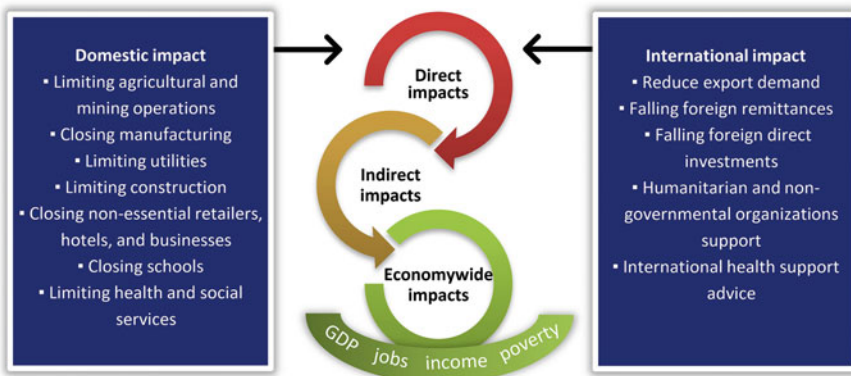


Fig. 6 Dual channel system of domestic and international impact to move forward from the COVID-19 pandemic in Ethiopia. Source: adapted from Aragie et al. [85]

cuts, and direct liquidity provision [86]. Also, on February 9, 2022, world leaders put together funding for the Access to COVID-19 Tools (ACT) accelerator to end the COVID-19 pandemic [87]. ACT should be considered as a partnership initiative for low and middle-income countries, like Ethiopia, for relief purposes. Finally, to accelerate structural change, in terms of agriculture transformation, industrialization, and digitalization [88], these sectors should be given a long-term ecologically-friendly priority as they can, consequentially, impact poverty reduction and improve human development and well-being.

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