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ADDIS ABABA UNIVERSITY

SCHOOL OF GRADUATE STUDIES

COLLEGE OF DEVELOPMENT STUDIES

CENTER FOR ENVIRONMENT AND SUSTAINABLE DEVELOPMENT

**THE EFFECT OF COVID-19 LOCKDOWN ON INCOME AND
FOOD SECURITY STATUS OF HOUSEHOLDS ENGAGED IN
INFORMAL SECTOR WORKERS IN WEREDA 07, GULELE
SUB-CITY ADDIS ABABA ETHIOPIA**

By

HILINA KIFLE

NOVEMBER, 2022

ADDIS ABABA, ETHIOPIA



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**A THESIS SUBMITTED TO CENTER FOR ENVIRONMENT AND
SUSTAINABLE DEVELOPMENT COLLEGE OF DEVELOPMENT STUDIES,
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ADDIS ABABA UNIVERSITY

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DECLARATION

This thesis entitled “The effects of COVID 19 lockdown on income and food security status of households engaged in informal sector workers in Wereda 07, Gulele Sub-City Addis Ababa Ethiopia” is my original work and has not been presented for MSc. degree in any other University and that all the sources and materials used for the Thesis have been properly acknowledged.


Declared By HilinaKifle

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Place: Addis Ababa University College of Development Studies, Center for Environmental development studies.

This is to certify that the above declaration made by the candidate is correct to the best of my knowledge as an advisor.

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This is to certify that the thesis prepared by Hilina Kifle entitled “The effects of COVID 19 lockdown on income and food security status of households engaged in informal sector workers in Wereda 07, Gulele Sub-City Addis Ababa Ethiopia and submitted in partial fulfillment of the requirement for the degree of master of science in Environment and development complies with the regulations of Addis Ababa University and meets the accepted standards with respect to originality and quality.

Signed by the examining committee:

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Abbreviations and Acronyms

AU	Africa Union
CSA	Central Statistical Agency
CSI	Coping Strategy Index
DPPC	Disaster Prevention and Preparedness Commission
DRM	Disaster Risk Management
DRMFSS	Disaster Risk Management Food Security Sector
DRR	Disaster Risk Reduction
ECA	Economic Commission for Africa
EPHI	Ethiopian Public Health Institution
FAO	Food and Agriculture Organization of The United Nation
FGD	Focused Group Discussion
HFIAS	Household Food Insecurity Access Scale
HDP	Human Development Plan
IDP	International Displaced Persons.
MoH	Ministry of Health
NDRMC	National Disaster Risk Management Commission.
NPC	National Planning Commission
PHEOC	Public Health Emergency Operation Center
RRC	Relief and Rehabilitation Commotion.
SSA	Sub Sahara Africa
WFP	World Food Program
WHO	World Health Organization

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Abstract

The COVID-19 pandemic put dents on every sector of the affected countries, and the informal sector was no exception. This study assessed the implications of the COVID19 pandemic lockdown on the income and food security status of households engaged in the informal sector in Wereda-7 Gulele Sub-city Addis Ababa Ethiopia based on both quantitative and qualitative analyses of the primary data of 192 informal workers to shed light on the impact of the pandemic lockdown induced economic crisis on this working class. The survey was conducted between 2021 and 2022. The analysis points out that about eighty-seven percent of these workers faced an income, eighty three of sampled households drop thire monthely food expenditure and totally eighty-nine percent of respondents were food insecure the result of COVID 19 lockdown. The effect was higher in males and respondents engaged in services and sales also in widowed households. The findings suggest that policy support is needed for the informal workers to face such a crisis

Keywords: COVID-19, Informal sector, lockdown, Food Security

CHAPTER ONE: INTRODUCTION

1.1. Background and Justification

The arrangement of food has continuously been a challenge confronting mankind. Universally, around 820 million individuals confront starvation every day and more than two billion individuals need imperative micro-nutrients, influencing their wellbeing and life hope (FAO, IFAD, UNICEF, WFP, &WHO, 2019). The root causes of food insecurity are complex and multidimensional. They are connected to an extent of closely related components, such as destitution and insufficiency of a few open approaches (Abdullah et al., 2019; Sriram&Tarasuk,2016). This distressing worldwide and territorial food insecurity picture will be compounded by the unfurling impacts of the Corona virus Disease (COVID 19) to begin with detailed in Wuhan City of China in December 2019 (Singhal, 2020), the infection quickly spread all through the world, and the World Health Organization (WHO) announced it a worldwide widespread in March 2020 (Cucinotta&Vanelli, 2020).The malady has since gotten to be a phenomenal open well-being emergency that has driven financial and social emergencies. Crown infection or COVID 19 has caused distinctive unsettling influences in our lives, jeopardized the well-being of billions of individuals, and the reason for the raised of the specter of a worldwide food emergency, all in fair several last months. physical separating is lovely much perfect way" the most perfect way to break the chain of transmission. Full or fractional lockdown measures were subsequently executed all around the world, influencing more than 5 billion individuals. The droop in a request for products and administrations coming about from the widespread and its concomitant prohibitive measures caused a misfortune of salary and occupations for households, whose business depends on consumption-driven financial exercises. There were a few major components behind the decreased request for utilization amid this emergency. To begin with, confinement on development caused the request for non-essential products to decrease. Moment, the lockdown and the widespread harmed peoples' gaining capacity, which decreased their utilization consumption (Onyekwena, C., &Ekeruche, M. A. 2020). Lockdowns have had a backhanded effect on food security due to the misfortune of occupations and working hours that result from them. Individuals utilized in divisions where social separation is troublesome are more likely to be influenced by constrained closures or limitations to check the spread of Covid-19. This may result in a diminishment of working hours and, in more extreme

cases, a changeless misfortune of employment. The Universal Work Organization (ILO) gauges that, universally, the widespread has come about within the misfortune of 255 million full-time identical occupations in 2020 (ILO, 2021). The misfortune of occupations and working hours has gone hand in hand with an increment in levels of destitution. It is assessed that an extra 119–124 million individuals was endure extraordinary destitution (living on less than \$1.90 per day) in 2020, up from 645 million in 2019 (World Bank, 2021). The Worldwide Food Approach Inquire about Established (IFPRI)'s worldwide CGE demonstrate gauges this number can be as tall as 140 million (Vos et al., 2020). The impact of COVID-19 on laborers incorporates work misfortune, wage misfortune, wellbeing dangers due to helpless working conditions, and decreased efficiency (ILO, 2020d). Firms in creating nations have tall liquidity imperatives, which compelled their capacity to pay their representatives amid the widespread.

The issue got to be extreme in family units that have lacking credit get to and are destitute sparing (Gerard et al., 2020). The segments that utilized a tall parcel of laborers within the informal sector and laborers that don't have social assurance and get well-being benefits are barely hit by the spread of the pandemic (ILO, 2020). Almost 1.6 billion specialists within the casual economy confronted turmoil due to COVID-19 [ILO (2020a)]. and 60% of them experienced an extreme drop down in their winning. In 2020, 6 out of 10 laborers. Familiarity concerns near to 9 out of 10 specialists in sub-Saharan Africa and Southern Asia. As of 22 April 2020, near to 1.1 billion informal sector workers live and work in nations in full lockdown with an extra 304 million in nations in fractional lockdown. These workers together represent for 67 percent of workers that engaged in informal sector (ILO, 2020). For them, halting work or working remotely at home isn't an alternative. Remaining at home implies losing their occupations and, for numerous, it has to implies losing their vocations. "To kick the bucket from starvation or the virus" is the all as well genuine problem confronted by numerous of those earning their living within the informal economy. The widespread incorporates a stunning impact on wages and jobs, as well as food security of laborers all through food supply chains in Africa (Lawson, Lartego & Cohen, 2020). (Devereux, et al., 2020) propose that disturbances to food systems from the widespread both related to the food generation side (generation and preparing) and request side (financial and physical get to nourishment) may contrarily influence food security. From a customer's point of view, the decreased wage may lead to less obtaining control over food, particularly among the helpless. Lockdowns may have driven wage misfortunes, the

seriousness of the compensations misfortunes remains to an incredible degree darken and lockdowns or limitations on development have changed altogether by country moreover the costs of food rise nearly promptly (Torero, 2020) and as a result, there has been impressive concern that destitution and food insecurity was raised and the wholesome status of helpless bunches was drop, as the far-reaching continues (Headey & Ruel, 2020; Laborde et al., 2020b). Concurring to (WHO, 2020) reports all-inclusive the widespread is likely to thrust 8115 million individuals into extraordinary destitution in 2020 and a third of these are from sub-Saharan Africa. Food accessibility was seriously influenced taken after by its accessibility compared to other food security measurements (Workie et al., 2020). The food security emergency may continue longer due to the widespread impact on the financial decrease, raised destitution, and food supply disturbance (Udmale et al., 2020). COVID-19 heightening stressing levels of starvation and underfood, which seem irritated as the widespread disturbed household vocation in Africa (Aborode et al., 2021).

Ethiopia as a sub-Saharan African nation endures food insecurity challenges since COVID -19. Information from Ethiopian Investment Commission (EIC) appears that speculation has made work openings for hundreds of thousands of Ethiopians over the final two decades since of the increased cost of crude materials or other development materials and the collapse of the advertising for trade such as cut blossoms, materials, footwear, minerals, and rural items, as most merchants have to been seriously influenced by the widespread and are encountering financial downturns most ventures and speculation in Ethiopia may have got financial emergencies and the widespread may result in colossal work cut in improvement ventures (Messay, 2020).

Another vulnerable division is the informal sector, counting road distribution, unimportant exchange, lottery offering, shoe-shining, taxi associates, and other, comparable exercises. The National Planning Commission (NPC) of Ethiopia is determining the economy to recoil by 2.8% to 3.8% due to the widespread, compounding extraordinary destitution and food insecurity (NPC, 2020). Building on such establishments, this paper was attempt to supply an outline of the impacts that the lockdown approach of COVID-19 widespread has had on food security status and encome of households engaged on informal secore in wereda 7 Gulele Sub-City Addis Ababa Ethiopia. This pre-post think gives important data on the impacts of the COVID-19

lockdown among a powerless populace of informal sector workers living in Addis Ababa Ethiopia.

1.2. Problem statement

The episode of COVID-19 widespread has caused a major disturbance to financial movement over the world, counting SSA. The World Bank wanders that money-related advancement within the locale was diminish from 2.4 percent in 2019 to -2.1 to -5.1 % in 2020 (WBP,2020). This result would be the essential subsidence that SSA has seen in a long time, with major impacts on destitution and food insecurity. Working environment and advertise closures, restrictions on versatility, the suspension of some works out, and the related decrease in a request for items and administrations have as of now come about in a hush era and caused a decrease in working hours and labor profit (Johan, 2020). The informal sector workers are more vulnerable division , counting road distribution, unimportant exchange, lottery offering, shoe-shining, taxi associates, and other, comparable exercises.

Several sources indicate that during the last few decades, the informal sector has been growing fast in urban areas of Ethiopia due to the influx of many young populations into the sector who come from rural areas of the country with the expectation of a better life in cities/towns. The informal sector is accepted to play a vital part in destitution decrease and household food security improvement. It gives occupations, diminishes unemployment, supports financial movement, and makes a difference lighten destitution. Agreeing to information gotten from the National Arranging Commission (NPC), informal sector workers in Ethiopia are assessed at almost 2 million, the tremendous lion's share of these living in urban zones and expected to be living on the day-by-day subsistence wage(NPC,2020). This bunch of individuals is at the chance of COVID-19 invasion in that they work in swarms and are nearly incomprehensible to preserve the social/physical removal safety measures set by the WHO. It appears that it is nearly similarly challenging for this bunch of individuals to remain domestic or work exterior for their everyday subsistence. They may have nothing to eat for themselves and their children if they remain domestic and may contract the infection if they work exterior. In this manner, the COVID-19 widespread may thrust a few millions of casual segment Ethiopians into intense destitution and food security in case the nation is bolted down owing to the widespread. On the other hand, the country's economy doesn't permit the government to fulfill the subsistence of the

existing tremendous informal sector workers during the lockdown. There have been many studies have inspected the impacts of COVID 19 lockdown on income and food security status of the household regarding informal sector workers (ILO, 2020; Nicola et al., 2020; Sumner, Hoy, & Ortiz-Juarez, 2020; UN-Habitat & WFP, 2020; WorldBank, 2020a) and there's a restricted data on how the widespread and related bolt down approaches, is influencing casual segment workers at the household level, Financial impacts of such a widespread excessively affect individuals of the society, depending on their socio-economic status, job techniques, get to markets, etc, hence it is vital to get it the household level impacts and back components that can be upgraded to guarantee wage smoothing. A few consider centering on the estimation of loss of employment within the casual division, a more coherent picture of the genuine enduring of informal workers was required and this study conducted to bridge the crevice to bring quantitative proof from the field on the effect of the widespread on these studies. This study recognizes the challenges informal laborers confronted and their adapting methodologies amid the widespread. As a major supporter of the economy, this research explore the challenges of the informal workers due to the COVID 19 lockdown and examination income, food expenditure and food security status amid the widespread utilizing a few parameters, such as sexual orientation personality, education, age, and sorts of work.

1.3. Objective of the study

1.3.1. General objectives

The general objective of the study is to assess the effects of COVID 19 lockdown on the income and food security status of households engaged in the informal sector in Wereda 7 Gulele Sub-City Addis Ababa Ethiopia

1.3.2. Specific objective

More specifically this study is intended to:

- Describe the effect of COVID 19 lockdown on household food security
- Analysis of income and food expenditure shortfall of the study households and increasing of food price due to the pandemic
- Describe household food security status in the study households and their coping strategy

1.4. Research Questions

1. What is the effect of COVID-19 lockdown on household food security at the study site?
2. To what extent has COVID-19 affected the income-generating activities of households and food price?
3. What is the household food security status in the study households and what coping measures have they implemented?

1.5. Significance of the Study

The study gives empirical proof that interfaces on the impacts of COVID 19 lockdown on informal sector workers. Primarily this consider involves information era as well as endeavors to create encourage commitment to the restricted already done inquiries about and can be utilized as source material for advance studies about within the range of the impacts of COVID 19 on income and food security, especially informal sector workers. In this respect, it is crucial to get it and donate accentuation on the impacts of COVID 19 lockdown on income as well as food security and gives a genuine consideration on the measurements of food security which are critical for this consider. This consideration will give profitable information and understanding

of the challenges and procedures by looking to evaluate workers who engaged in informal sectors vocation in Addis Ababa. It is expected that this investigation can be a great lesson to analysts concerning investigation strategies, speculations, concepts, and arrangement suggestions. In this manner, this inquiry isn't pointed to imitate or copy what has been done by others but to fill the holes that were not watched in other investigation works. They consider too has approach significance for both state and non-state on-screen characters to allow reaction and restore for the affected bunches of the society with the have nation as a reasonable arrangement.

1.6. Scope of the study

The study has accumulated point-by-point social-demographic and financial information, and food security status based on a test populace that portrays the target populace living in Woreda 07, Gulele sub-city of Addis Ababa, Ethiopia. The cross-sectional information is based on information collected, analyzed, and translated in Wereda 7, Gulele sub-city. The information comprises of the impacts of the COVID 19 widespread lockdown, its unfavorable impacts on informal sector workers households 'income and food security status with a ponder period between 2021 and 2022.

1.7. Limitations of the study

The research study was undertaken for academic purposes. It was limited to one wereda because of the area familiarity and near of the researcher, the researcher faced obstacles during the data collection period. One of the main problems was the inaccessibility to contact a few enumerators. This made the data collection period longer than planned. Additionally, Since COVID 19 is a recent phenomenon so the researcher faces challenges to get enormous studies conducted on the study topic.

1.8. Ethical consideration

The study had taken into consideration the ethics of the research concept. Before proceeding to conduct the study, the researcher obtained an official letter from Addis Ababa University College of Development Studies to provide the concerned bodies to get permission. Besides this, the contacted respondents got essential information about the study's purpose and benefits to the community. Finally, the respondent's full consent was first checked before starting the interview and they were informed that their information would be kept confidential and used for the study purpose.

1.9. Organization of the paper

The study was organized into five sections. The first section is the introduction section which consists of the background of the study, statement of the problem, the objective of the study, significance, scope, limitation, and ethical consideration of the study. The second section covers the concept and relevant literature review of both theoretical and emphatically literature and incorporates conceptual frameworks. The third section of the study describes the research methods and materials. It includes a study area, research design, sampling techniques, sample size, source of data, and analysis methods. The fourth section presents the result and discussions. Finally, the last section presents some conclusions, and recommendations were presented.

CHAPTER TWO: REVIEW OF RELATED LITERATURE

2.1. Theoretical Framework

2.1.1. Entitlement approach

Amartya Sen's 'entitlement approach', initially formulated for the examination of starvations, is well-suited to evaluating the food security results of COVID-19. Sen emphasized that food security isn't a supply-side issue, it is in a general sense around who gets to accessible food, which is around the dispersion of riches and assets. In 'Poverty and Famines', Sen (1981) distinguished four legitimate sources of food at the individual or household level: production-based, own-labor, trade-based, and exchange privilege. Analyzing these four categories uncovers that the effect of COVID-19 on financial get to food is likely to be profoundly unequally dispersed.

Lockdowns weaken own-labor privileges as they anticipate individuals from locking in wage work or working businesses. Formally utilized specialists, particularly in high-income nations, are typically relieved by either unemployment benefits or custom-made government programs that cover a few extents of workers' compensation for the length of the lockdown. Furthermore, a few specialists can work from domestic through web associations. To differentiate, informal sector and self-employed workers (e.g. day by day laborers and road dealers) don't have to get unemployment protection plans, they cannot be come to by pay security plans that target formal segment laborers, and their work cannot be attempted from domestic. For these family units, the impact of the lockdown is practically equivalent to breadwinners abruptly getting to be crippled – their wage drops to zero, and they have no protections, but they proceed to expend food and family assets.

Private exchanges of food or cash are too undermined by lockdowns. To begin with, family individuals who work somewhere else and send settlements domestic have seen they possess salaries collapse; the persuasive repatriation of Ethiopian vagrant laborers within the Center East is one case. Moment, in a few nations the money-related framework by which exchanges are made (banks, Western Union workplaces, and the like) have been closed making it physically troublesome to send or collect such installments. In places where a 'hard lockdown' and social removal are forced, informal bolster and other shapes of social capital at the community level are

assist influenced since neighbors and relatives are not permitted indeed to visit each other. Lockdowns have moreover influenced the working of open exchange instruments, such as school meals which can not be given in nations where schools have been closed.

2.2. Concepts and Definitions of basic terms

2.2.1. Household and Food Security

A household is a person or gathering of related or disconnected people who live together inside the same remaining units, who recognize one grown-up male or female as the head of the bunch, who share the same housekeeping courses of action, and who are considered as a single unit. Nourishment security may be a circumstance that exists when all individuals, at all times, have physical and monetary get to satisfactory, secure, and nutritious nourishment that meets their dietary needs and nourishment -slants for a dynamic and sound life.

The food security concept began in the mid-1970s amid the universal talk on the worldwide nourishment emergency. The introductory center of nourishment security thought was fundamentally on nourishment supply issues of guaranteeing the accessibility and to several degrees, the fetched solidness of fundamental foodstuffs at the universal and national level (FAO, 2005) subsequently, inside the 1970s the issue of nourishment security alluded to the national nourishment supply's capacity to meet the people vitality and supplement needs. The concept of family nourishment security has been caught on by various improvement workers as the availability of nourishment inside the world commercial center and within the nourishment generation framework of creating countries (Bedek, 2012).

Since the world food conference in 1974 due to food crises and major starvation inside the world, the term nourishment security was presented, progressed, made, and extended by differing requests - approximately. Nourishment security and vulnerability are terms utilized to depict whether or not families have got - adequate quality and the sum of nourishment. Nourishment security issues picked up obviousness inside the 1970s and have since been given significant thought. It is seen around the world, at national, family, and personal levels. Nourishment security at the around the world level doesn't guarantee nourishment security at the family or indeed the individual level (Duffour, 2010).

Food security is characterized as people having ‘access to adequate, secure and nutritious food which meets their dietary needs and food preferences for an active and healthy life’ (Pirani & Arafat 2016). The World Food Summit in 1996 characterized food security to exist when all people, at all times, have physical, social, and financial get to sufficient, secure, and nutritious food that meets their dietary needs and food preferences for a dynamic and healthy life (FAO, 2003). In light of the two definitions,(Conceição et al., 2016). Make conclusive remarks when they note that food security may be a central component of the human development and capability worldview. The researchers note that both food access and privilege are basic at reinforcing human capabilities.

Food security has four dimensions/pillars: accessibility to adequate nourishment, steady monetary and physical get to nutritious and secure nourishment, and water (Redder, 2011). Agreeing to(FAO, 2008), nourishment accessibility is almost the supply of nourishment and it is chosen by the level of nourishment generation, stock levels, and net trade; nourishment get to is centered on employment, utilization, markets, and costs in fulfilling nourishment security targets. Nourishment utilization: the accessibility and openness of nourishment are not sufficient for nourishment security accomplishment but individuals got to be assured of secure and nutritious nourishment and the nourishment devoured needs to give adequate vitality to empower the customer to carry out scheduled physical activities(FAO,2008).

Food insecurity is directly related to poverty. Poverty indicates those people who cannot fulfill/afford basic human needs like clean water, safe and nutritionally improved food, clothes, and shelter. Food insecurity is associated with poverty, income, and joblessness (Toit, 2011).

Food stability addresses the continuity of the three dimensions (availability, accessibility, and utilization of food) over time; adverse climate change, political volatility, or economic factors (joblessness, increasing food prices) may influence food security status (FAO, 2008).

Food Availability: It addresses the supply side or physical availability of food and determines by the level of food production, stock, net trade, and aid or all available food in the area it includes fresh as well as packaged foods. Many factors can affect the availability of food availability directly or indirectly. From this seasonal pattern of food production, the trading system, production system, food system, and infrastructure are among the main factors (Gregory, 2005).

Food Access: this dimension concerns the way people obtain the availability of food or economic access to bring an adequate supply of food. Normally, the way of accessing food is through a combination of means, including home production, use of leftover stocks, purchase, barter, borrowing, sharing, gifts from relatives, and provisions by welfare systems or food aid. Mainly determined by income, expenditure, market, and prices of food and negatively influenced by unemployment, lack of coping options, low income, and disasters (Daniel, Suresh & Steven, 2015).

Food Utilization: refers to how people use food. It is dependent upon several interrelated factors: the quality of the food and its method of preparation, storage facilities, and the nutritional knowledge and health status of the individual consuming the food. It is negatively influenced by components such as endemic infection, destitute sanitation, need for appropriate wholesome information, or culturally-prescribed taboos (frequently related to age or gender) that influence a certain group's or family member's access to nutritious food. Food utilization may moreover be adversely influenced if people have constrained assets for preparing food (WFP & UNICEF, 2009).

Food Stability: To be food secure, a populace, household, or person must have access to satisfactory food at all times. They should not risk losing access to Food as a consequence of sudden stuns (e.g. a financial or climatic emergency) or patterned events (e.g. regular nourishment frailty). The concept of stability can, therefore, refer to both the availability and access measurements of food security (Daniel, Suresh & Steven, 2015) According to the (FAO, 2020) indeed sometime recently COVID-19, 113 million individuals on the planet were already battling serious food insecurity.

2.2.2. Measuring household food insecurity

Based on the current definition and the multidimensional nature of food security researchers use different food security measurement techniques based on their objectives. But there are no single measurement techniques because it is influenced by different interrelated socioeconomic, physical, institutional, and political factors, it requires an understanding of the multidimensional context of the target area (Sesar et al, 2017).

The total extent of food security and starvation cannot be captured by any single indicator. Instead, a household level of food security or food insecurity must be decided by obtaining data

on an assortment of particular conditions, encounters, and behaviors that serve as pointers to the shifting degrees of seriousness of the condition. (Bickel et al., 2000). The household food security status was determined using a standard set of questions Household food insecurity access scale (HFIAS), which was composed of nine questions with dichotomous yes/no responses. They asked respondents to report experiences of food insecurity in the household with varying degrees of severity. Respondent food insecurity status was calculated by summing the scores from all nine questions that were practiced in the last seven days and categorizing them into one of four levels of food insecurity status, i.e. Food secure, Mild food insecure, Moderate food insecure, and Severe food insecurity (Cafiero, & Nord, 2018; FAO et al., 2015). While the validity was studied previously by FAO during the voice of the Hunger Project in the Ethiopian context (Ballard, Kepple, & Cafiero, 2013).

2.2.3. COVID-19

Coronavirus (COVID-19) is an infectious disease caused by a newly discovered coronavirus that spreads primarily through droplets of saliva or discharge from the nose when an infected person coughs or sneezes. More importantly, COVID-19 is a health crisis with multiple and widespread impacts on food systems, social systems, and economic development (WHO, 2019)

COVID 19 or CORONA virus was first discovered in Wuhan City China. It was initially reported to the WHO on December 31, 2019. On January 30, 2020, the WHO announced the COVID-19 flare-up a worldwide health emergency. The first COVID-19 case in Africa was reported in Egypt in February. And the first confirmed COVID-19 case in Ethiopia was recorded on 13 March 2020 a 48-year old Japanese citizen who had entered Ethiopia from Burkina Faso in early March. Now a day it causes wide-ranging and serious impacts across the country (WHO, 2020).

Infrastructure investments, poverty decrease, and a critical political opening gave Ethiopia advantages at the outset of the pandemic with plans in place for the country's first democratic elections in August 2020, which are presently postponed. Slowing financial development, rising obligation dangers, high expansion, high unemployment, large numbers of displaced people, and a woefully underfunded well-being system undermine reverse years of advance, especially for the poorest and most vulnerable among Ethiopia's 105 million people. Social unrest, activated by longstanding issues that could now be circulated in a more open civic and political environment,

had driven to conflict, the loss of lives and property, and, at final check, 1.7 million internally displaced persons,” the assessment, which can inform policies and programs pointed at making a difference Ethiopia recover, finds. The nation moreover comprises 26 refugee camps and tens of thousands of Eritreans displaced people, whose thickly populated living conditions make containing COVID-19 even more difficult (UNCT, 2020).

Even before the pandemic struck, Ethiopia was battling with a large-scale desert locust attack influencing near to 1 million people, meager rains disturbing the agricultural sector, high levels of food insecurity, and outbreaks of cholera, measles, and yellow fever—straining a health system whose status to deliver routine health services whose readiness to deliver routine health services was rated in 2018 at just 55 percent of what’s needed. Traditional practices and limited public awareness, compounded by poverty, could further worsen the trajectory of the pandemic significantly (FAO, 2020).

The socio-economic impacts being felt over Ethiopia as of now are wide-ranging and serious, with the potential to end up serious, depending on the combination of the pandemic’s trajectory, the effect of counter-measures, and basic and auxiliary factors (UNCT, 2020)

2.2.3.1. Health-related challenges

It is obvious that COVID-19 brings an extra strain to the health system of the countries. (Austin, 2020) This becomes more complicated for countries like Ethiopia whose health systems did not provide basic and regular health services adequately for their citizens in normal situations. In these countries, it is estimated that additional morbidity and mortality may occur among vulnerable groups like mothers and children (Robertson, et al., 2020).

The health professional to population ratio is 0.96 per 1000 populations (Haileamlak, 2018) which is much lower than the WHO recommended standards, (4.45 per 1000 populations) to meet the sustainable development goal health targets (WHO, 2016). This indicates that the health need of the country is not being addressed adequately and the addition of unplanned COVID-19-related needs worsen the problem.

Another bad scenario is that the health professionals, who are considered to be the pillars of the health systems, are among the high-risk groups for COVID-19 (Ng K, et al., 2020) and if a

significant number of them are going to be infected by coronavirus the health system may collapse.

2.2.3.2. Economy-related challenges

COVID-19 impacts the economy of the globe as a whole, countries, and individuals in several ways. The closure of the border is disrupting the global chain supply, tourism investment is decreasing, cost spent on health is increasing and the irrational increment of goods' price in the local market is leading to inflation (ILO, 2020).

In Ethiopia, people in lower economic classes like daily laborers are waiting for aid from the donors to get their daily bread, since the temporary contractual agreement between them and their employer organizations is canceled either partially or completely due to COVID-19; leading to an additional strain of unemployment to the country. Females are more vulnerable to this problem since they are the majority of the employees in the informal economy(Geda, 2020).

Lack of transportation access with other COVID-19-related measures is leading to income and wealth losses in countries(Goodell, 2020). In Ethiopia, the public and private transport service provider vehicles are forced to decrease the number of travelers by half from their regular loading capacity and travelers have to pay doubled cost for each trip. This also decreases the access of the people to routine economic activities.(Goshu, et al.,2020).

People staying at home are consuming what they saved in normal conditions and they are not replacing it. This is also the main challenge for the future economy of the country. In addition, unhealthy people, due to the direct or indirect effect of COVID-19 will not be engaged in income-generating activities. (Goodell, 2020).

2.2.3.3. Social life-related challenges

Strong social life is one of the main distinguishing features of an Ethiopian society but this is highly challenged by “social distancing”, one of the measures to reduce the person-to-person transmission of coronavirus (WHO, 2020).

Social institutions and events like edit, epub, maybe, mourning, wedding, worshipping and others are being practiced in groups in Ethiopia and the disruption of such practices may lead to a social

crisis in the future. Lack of participation in the aforementioned social activities can result in mental health problems like depression and anxiety.(Singh,2020).

2.3. Empirical Literature

COVID-19 has extremely disturbed our lives, jeopardized the well-being of billions of individuals, and raised the specter of a worldwide food emergency, all in fair many months. The gigantic effect anticipated on the world's economy and worldwide food security has been portrayed in emotional terms. The World Bank figures that the worldwide economy will shrivel by more than 5%, which would be the most profound retreat since the Second World War. IFPRI analysts appraise that, within the nonattendance of solid intercessions in creating nations, the number of individuals in extraordinary destitution might increment by up to 150 million. The World Food Program official chief, David Beasley, has cautioned that the world is “not as it was facing a worldwide wellbeing widespread but moreover a worldwide helpful catastrophe,” which, without activity, COVID-19 might lead to “multiple starvations of scriptural extents.” Lawrence Haddad, official chief of Pick up, deplored that the coming food and sustenance emergency isn't as it were scriptural but “on steroids, and over generations.” Why such critical expectations? COVID-19 may not be as dangerous as chronicled plagues or, more as of late, the 1918–19 Spanish flu or Ebola, but it is unusual and profoundly transmissible, counting by individuals who are asymptomatic but tainted. This makes it troublesome to control. Today's interconnected world has permitted the infection to spread with momentous speed. On January 9, 2020, China officially recognized the primary passing of COVID-19, and by early Walk, more than 100 nations were announcing cases. The number of formally detailed cases has kept on increment, topping 10 million after June.Lawrence Haddad, official chief of Pick up, deplored that the coming nourishment and nourishment crisis over this period, the infection epicenter has moved from China to Europe and the Joined together States, and presently numerous destitute nations and locales counting Africa, Latin America, and South Asia are confronting quickly rising disease rates and passing (Swinnen& Dermott, 2020).

More imperatively, COVID-19 could be a well-being emergency with different and far-reaching impacts on food systems, social frameworks, and financial improvement. They ought to alter everyday hones and schedules, numerous basic jobs, and the ensuing disturbance of associations at the neighborhood, territorial, and worldwide levels make the COVID-19 stun distinctive from

financial and climate stuns. And compared with past pandemics, the much more noteworthy interconnection of exchange and markets nowadays and the more complex nature of food, wellbeing, and financial frameworks are intensifying the potential of COVID-19 to exasperate destitution and disturb food frameworks. As a result, the impacts on well-being will be huge relative to illness mortality rates (WHO, 2020).

The infection diseases and open well-being reactions to control COVID-19 transmission have had serious financial results. In an exertion to control the illness, governments have forced lockdowns that have covered numerous businesses, limited travel inside nations, closed borders to human activity and exchange in a few nourishment items, and forced social separation necessities and curfews that disturb financial movement and drive businesses and schools to shut. The result has been a financial retreat, with spikes in unemployment, and a major disturbance of nourishment frameworks and supply chains, as labor, transport, and exchange are blocked (UNCT, 2020).

The combined effect of retreat and disturbance is particularly hindering for the destitute, who have been intensely influenced by misplaced or diminished earnings and settlements as the widespread has driven a serious financial retreat in numerous nations. Reenactments anticipated that the poorest bunches in society would see their relative earnings drop more than wealthier social bunches, and an early overview comes about from Ethiopia affirm these expectations. Destitute individuals, whose primary resource is their physical labor, have moreover endured the foremost from the impacts of lockdowns. The case thinks about China (interference of rural-urban relocation), Egypt (declining tourism), and Myanmar (intrusion of worldwide relocation) affirm that the financial and destitution impacts of the drop in settlements due to lockdowns and travel confinements are colossal. The disturbance of a few of the open programs they depend on has exasperated the differential impacts on the destitute. At the same time, be that as it may, numerous governments have reacted with the presentation of modern security net programs and extension of existing programs that can balance a few of the misplaced income (Goshu, et al., 2020).

Women are likely to endure more unfavorable impacts from the emergency. Wage stuns and lockdowns have changed family and community sexual orientation elements and expanded the impediments confronted by ladies. Since the potential for gender predisposition in government

arrangements reacting to COVID-19, it is significant that social security net programs unequivocally account for sexual orientation impacts in arrange to moderate negative results amid the crisis reaction period (Goodell, 2020).

The serious disturbance of food systems counting limitations on labor and intrusion of transport, preparing, retailing, and input dispersion undermines the food and food security of the destitute. COVID-19 has uncovered fragilities in nourishment frameworks, particularly in labor-intensive frameworks, such as those for new natural products and vegetables. The breakdown of supply chains due to the infection contamination itself and an assortment of arrangement limitations has caused customer costs to extend and maker costs to drop at the same time, expanding nourishment frailty for both urban and rustic destitute. Numerous destitute individuals too endured as their work in nourishment supply chains transporting, showcasing, and offering nourishment came to a stop. An arrangement of nation reenactments of the nourishment and financial division impacts of COVID-19 (beginning comes about are accessible for China, Egypt, South Africa, Myanmar, and India) appear that pay decreases in nourishment administrations and handling have been especially solid. Impacts on cultivating itself are to some degree less serious, as numerous little agriculturists depend on family labor. Be that as it may, it'll be vital to track the degree to which obliged get to key cultivate inputs and mutilated costs influences ventures in following years' production(ILO, 2020).

Early concerns over disturbances of worldwide supply chains centered on the presentation of a few exchange imperatives, in specific trade bans in rice and wheat markets, by major sending out nations. Such send-out bans and exchange confinements are debilitated to compound worldwide nourishment supply problems. Several of the first presented trade limitations have since been evacuated. Be that as it may, numerous other COVID-related government confinements are causing pointless issues, both for exchange between creating nations and nourishment showcasing interior creating nations. In a few nations, cover approach activities, such as showcase and exchange confinements and curfews, are obstructing nourishment supply chains, whereas other nations were able to maintain a strategic distance from these disruptions(WFP & UNICEF, 2009). COVID-19 disturbances have moreover had negative results for long-term and hard-won advances on sustenance. Disturbance of employment and nourishment supply chains implies diets have gotten to be less sound and nourishment programming for the destitute and

helpless has been hindered. Recreation focuses on noteworthy worldwide decays in more nutritious but more costly items such as natural products and vegetables and dairy items. The early study comes about from Ethiopia on the vegetable and dairy supply chains affirms these reenactment and master expectations. Utilization of solid eat-less fixings has declined and has declined most for the poorest bunches in society. In any case, nourishment specialists point to a few reasonable alternatives for moderating negative nourishment results and for activities to rush recuperation and a return to the long-term positive direction of the past decade (Aborode et al., 2021).

There are two other positive signs. Whereas numerous food frameworks have been altogether disturbed, others have been stronger, with food supplies moderately unaffected. Government reactions to the emergency have changed broadly, and a few reactions have had more positive impacts than others. Development is happening in numerous social programs and in NGO exercises to overcome the limitations made by government directions and wellbeing programs. Moreover, advancements and business in private nourishment supply chains are making a difference to overcome deterrents and make nourishment supply chains more versatile in the long term. One case is the utilization of data and communications innovation and e-commerce, which is developing at a much quicker pace than anticipated earlier to the COVID-19 flare-up. The nation thinks about too anticipating a noteworthy financial bounce back in a few nations once the lockdown measures are evacuated (FAO, 2020).

Looking forward, a captivating address is around the following pandemics. In the later past, plague/ widespread illnesses have emerged from Asia, but in the future illness, the rise is likely to gotten to be more common and more troublesome in Africa as populace densities, normal asset misuse, and financial and social integration increment significantly. The lessons we learn from COVID-19 ought to offer assistance to us to plan superior arrangements and construct more versatile and comprehensive nourishment frameworks that restrain the effect of future pandemics. This collection of brief papers gives a reasonably comprehensive diagram of where we are and what we know about how COVID-19 is influencing nourishment security and vocations at the six-month check. More particularly, they give a nitty gritty see at arrangement reactions over the globe and how successfully they are working, together with proposals for advanced developments. Within the coming months, modern study information, show

reenactments for more nations, and superior experiences on the spread of the infection, arrangement impacts, and advancements in open and private components of food frameworks will no question upgrade our understanding. The IFPRI COVID-19 web journal arrangement will proceed to report on modern bits of knowledge and on developing issues, such as nation approach reactions and adjusting their impacts on wellbeing and economies; ventures in brief- and long-term reactions to COVID-19 and their impacts; reshaping nourishment exchange and supply chains within the recuperation stage to oversee proceeding COVID dangers; and advancing impacts on destitute and helpless populaces and how these can be observed and mitigated(IFRI,2020).

Destitution and food insecurity may develop significantly as COVID-19 spreads agreeing to Cases of COVID-19 around the world are developing exponentially, with major impacts on worldwide staple food markets and destitution and starvation. On Walk 10, the number of diseases had fair passed 110,000 with approximately 4,000 passing. Within the taking after month, the number of individuals with COVID-19 expanded 20-fold (to over 2 million), and the number of passing more than 30-fold (to over 135,000). The epicenter of the widespread moved from China to Europe and after that to the Joined together States. The coronavirus is presently spreading quickly in moo- and middle-income nations, numerous of which need vigorous wellbeing frameworks or solid social security nets that can mollify the pandemic's open well-being and financial impact (Laborde, Martin, & Vos,2020).

More than half of the world populace is right now beneath a few frames of social separation to contain the wellbeing emergency. As a result, millions of businesses have had to shut shop. The Universal Work Organization anticipates that 200 million laborers might be tossed into unemployment. Within the Joined together States alone, essentially overnight, 22 million individuals misplaced their employment in early April. Governments in Europe and the Joined together States have guaranteed uncommon monetary and money-related jolt measures to compensate for the salary misfortunes of businesses and laborers and to contain an inescapable financial emergency. But the help reactions of moo- and middle-income nations have in this way distant been more constrained. With COVID-19 and its financial aftermath presently spreading within the poorest parts of the world, numerous more individuals will be gotten to be destitute and food-insecure. A worldwide well-being emergency might in this way cause a major food

emergency unless steps are taken to supply uncommon financial crisis help. Whereas impressive instability encompasses the result, the world is exceptionally likely to confront a profound retreat in 2020 at the slightest as extreme as the one taking after the worldwide monetary emergency of 2008–2009. A so-called worldwide financial downturn has already set in. Indeed expecting a solid bounce back within the moment half of the year on the back of exceptional financial jolt measures within the Joined together States and Europe, the financial harm in major created nations for 2020 is likely to surpass that of the Awesome Recession(WHO,2020).

COVID-19 is disturbing economies and food frameworks all over, but the destitute will endure the most noteworthy chance of food emergency. Based on demonstrated expectations, early observational proof, and lessons from past emergencies, it is obvious that the hazard of expanded food security depends on the level of financial improvement. As work and salary openings drop for the destitute, the crevice between the wealthy and destitute is developing. Among the destitute, urban destitute and ladies are particularly powerless (Swinnen,2020).The poor's food and nutrition security will be disproportionately

1. The global economic recession will have larger effects on poor people's incomes.
2. The poor spend a larger share of their income on food.
3. Among productive assets, physical labor is poor people's principal asset that will be most affected by COVID-19.
4. COVID-19 will cause more disruptions in private sector value chains in poor countries.
5. COVID-19 will cause disruptions in public sector programs for food, nutrition, health, and poverty, which are more important for poor people.
6. The poor have less access to sanitation facilities and healthcare.
7. Poor countries have lower economic capacities to compensate for declining incomes.

Financial models foresee that beneath current conditions moderately tall nourishment stocks, great harvests, moo oil costs, and declining request worldwide nourishment costs are not planning to rise. In any case, calculated issues in gathering and transport will put upward weight on food prices in a few regions of the world. Incomprehensibly, the foremost imperative cause of rising food costs may be storing behavior by shoppers and governments instead of advertising

conditions. Despite a few master reports and financial counsel not to rehash the same blunders made amid the 2007–2008 food emergency, numerous governments early on presented exchange imperatives for foods (IFPRI, 2020).

However, indeed truant a major rise in food costs, the food security circumstance of destitute individuals is likely to decrease essentially around the world. Falling salaries and food and food security. The worldwide subsidence, caused by lockdowns and other limitations on commerce action to control COVID-19, leads to diminishment in food utilization and decreases in sustenance status, particularly among the destitute. Whether through rising food costs, falling earnings, or both, individuals have a less genuine salary to pay for their food and was alter in like manner. This impact plays out more emphatically the less pay one has, meaning more hardship for the destitute. Worldwide models anticipate that for each rating point of worldwide financial lull, the number of individuals living in destitution would increment by 2% to 3% or approximately 14 to 23 million around the world. Be that as it may, well-being and financial impacts may be much more articulated in creating, instead of created, nations with related more noteworthy suggestions for destitution and hunger. (WHO, 2020) An early think about by (Rozelle et al., 2020) affirms these impacts on provincial family units in China. Isolated from their wage sources as COVID-19 travel confinements avoided them from working in urban wage employments, specialists endured gigantic pay misfortunes totaling more than \$100 billion. These families cut back essentially on sustenance. The lion's share of villagers is lessening investing on nourishment, buying more grains and staples in bulk at moo taken a toll rather than more costly products like meat and create. Other early proof affirms the unbalanced effect on the destitute. (Hirvonen et al., 2020) discover that noteworthy decays in salaries were most prominent among the destitute in Ethiopia; and (Tsfaye et al., 2020) discover that the decrease in nutritious nourishment in Ethiopia was too more imperative among the destitute. COVID-19 impacts the poorest especially difficult since it straightforwardly influences their most imperative, in some cases as it were, profitable resource: labor, particularly physical labor. Wealthier individuals ordinarily have a portfolio of profitable resources, such as capital and arrive, and their labor is regularly of diverse quality. Even whereas bolted down the interior of a townhouse or a city loft, they can work through a computer over the web, investing their beneficial hours on mail and Zoom. Typically not the case for destitute individuals with moo abilities who's as it were source of wage is likely to involve clearing out domestic to do manual work. Inside the gathering of “the

poor,” ladies and urban shoppers especially appear to endure more. (Quisumbing et al.,2020) distinguish a few reasons for the gendered effect of COVID-19. An arrangement of later nation ponders by IFPRI analysts, summarized in (Thurlow,2020), appears how urban destitute who have misplaced their employments and confront the same or higher nourishment costs are especially contrarily affected.

Another gather of destitute individuals that are among the hardesthit by COVID-19 limitations is those who got to travel for work. Considers appearing expansive negative impacts for transient laborers in a few categories: rural-urban (as in China see Rozelle et al. 2020), worldwide (as in Egypt see Breisinger et al. 2020, and Myanmar see Diao and Wang 2020), or rural-rural (as in India, where landless specialists travel to work in regular employments such as harvesting see Dev 2020). It is as well before long to evaluate the complete financial impacts that COVID-19 lockdowns will have on creating nations. But early investigation shows that numerous African economies are essentially affected which poorer families are battling (IFPRI,2020) is conducting an arrangement of the nation thinks about, in collaboration with neighborhood and government accomplices, that utilize economy-wide models to appraise the impacts of lockdowns, evaluate the presentation of nourishment frameworks, and recognize helpless populace bunches. According to (Thurlow,2020) three clear findings are emerging:

- Developing countries are shouldering substantial economic costs.
- Food supply chains are exposed, despite being largely exempted from lockdowns.
- Non poor urban households face the largest income losses, but poverty is rising sharply.

Developing nations are carrying considerable financial costs discoveries from a few nations consider appear that the current emergency is driving much bigger and more fast withdrawals of financial movement than seen in past emergencies, counting the worldwide nourishment emergency of 2007–2008 and the 2009 retreat. In expansion, not at all like in past emergencies, it is household approaches, instead of worldwide stuns, such as exchange disturbances and diminished settlements that are forcing most of the financial costs, at slightest for presently. (James Thurlow,2020) findings are alarming: In Nigeria, Africa’s largest economy gauged a 38% drop in GDP amid the five-week lockdown from late Walk to the conclusion of April. South Africa shows up to be encountering a similar-sized stun. Impacts are too huge in Ghana,

where GDP fell by 28% amid that country's three-week lockdown. The gigantic financial costs of the lockdowns are making it troublesome for governments to preserve back for these arrangements. But any facilitating of confinements must adjust the financial significance of different segments with the dangers postured to those who work in them. IFPRI is working with governments to get these trade-offs and maintain a strategic distance from disturbances to national nourishment systems.

2.3.1. Unemployment and COVID-19

During the primary quarter of 2020, COVID-19 brought about 155 million full-time work misfortunes all-inclusive (ILO, 2020b), which expanded to 495 million full-time employment misfortunes within the moment quarter of 2020 (ILO, 2020c). The widespread altogether influenced youth, especially ladies within the labor advertise (UN, 2021). Over 75% of youthful individuals utilized within the casual economy are hugely uncovered to the emergency. The COVID-19 widespread seriously influences youthful individuals in three measurements: (1) disturbances to instruction, training, and work-based learning; (2) broadened stresses for work searchers; and (3) work and wage misfortunes, along with the declining quality of work (Lee et al., 2020). Thus, youthful individuals confront the torment of existing work misfortune and stress around future work look forms (Crayne, 2020). Maintaining trade operations are too troublesome for little and medium endeavors, which essentially debilitate casual and casually utilized workers' wage (ILO, 2020a).

The strict lockdown and school closures extremely disturbed work on paid and unpaid economies (Casale&Posel, 2021). The school closures in SSA for the most part influenced the salary of private school instructors, open transport, and urban administration laborers (Teachout& Zipfel, 2020). The widespread raised unemployment, primarily among lower-skilled laborers persevering most of the financial emergency (Chitiga-Mabugu et al., 2020). The effect of COVID-19 on South Africa's labor advertise come about in a 36.8% unemployment rate within the last quarter of 2019 (ILO, 2020f). South Africa's work posting within the travel industry declined by 14% to begin with two weeks of Walk 2020 (Willem, 2020). Wage profit decreased by 30%, lower taught workers' profit fell by over 40% in South Africa (Arndt et al., 2020). Sex disparities have developed within the labor showcase as the widespread extremely influenced ladies than men specialists (Casale&Posel, 2021).

The widespread decline of unemployment in Nigeria considerably decreased government income, and escalate destitution (Oruonye& Ahmed, 2020). In expansion, the isolate measures in Somalia lead to a financial burden for most of the populace depending on everyday paid occupations (Gele, 2020). Work in Kenya would have dropped by 11.9% yearly (Nechifor et al., 2021). The impact of COVID-19 widespread on SSA nations for which unemployed labor drive is more prominent than 10% is displayed in Figure 3. The rating increment in unemployment of the whole labor drive was biggest in South Sudan (5.6%), South Africa (1.8%), and Cape Verde (1.2%) separately, due to the widespread compared to some time recently COVID-19.

2.3.2. COVID-19 policy measures in Ethiopia

The first COVID-19 case was confirmed in Ethiopia on 13 Walk 2020. By 23 Admirable, more than 757,057 research facility tests had been conducted out of which 40,671 were positive (5 percent of all tests). These positive tests have been inside the capital city of Addis Ababa (. By 30 Prominent, there had been 678 passing in Ethiopia credited to the infection (MoH& EPHI, 2020). The essential approach measures to restrain the spread of COVID-19 in Ethiopia were reported on 16 Walk, just three days after the primary affirmed case. The government of Ethiopia closed schools, disallowed all open get-togethers and wearing exercises, and energized physical removal. Travelers from abroad were put into a required disconnect, bars were closed until assist notice, and travel through arrival borders was denied. Many territorial governments constrained confinements on open transportation and other vehicle development between cities and rustic zones.

A government-level State of Emergency was articulated on 8 April. Arrive borders were closed, but for cargo. Facemasks need to be required in open spaces. Limitations on cross-country open transportation and city transportation were as well pronounced; for case, the carrying capacity of open transportation providers was limited to half of their standard capacity. The government in addition disallowed managers from laying off their laborers and property proprietors from evacuating their inhabitants or expanding rents amid the State of Crisis. A few definitive districts took stricter measures by closing eateries and restricting development between provincial and urban regions. Adherence to these measures and other proposed infection anticipation hones were allegedly tall (Decrease et al., 2020; Brauw et al, 2020; Hirvonen, et al., 2020a).

In any case, in separating from many other countries inside the locale, Ethiopia never went into a full lockdown that greatly limited development constrained curfews, or closed all borders. A full lockdown was not forced to secure the monetarily most helpless sections of the people (France-24, 2020). As of July, an advancement over territorial states was permitted and helpful organizations were permitted to operate without confinements (UNOCHA, 2020). Official swelling gauges suggest that nourishment costs have risen amid the widespread but not at an inquisitively fast rate relative to general development (Hirvonen, 2020). The foremost social assurance response to COVID-19 in Ethiopia has come through the Profitable Security Net Program which works in urban and country ranges. Impelled in 2005 in food-insecure nation zones and 2017 in chosen urban zones, PSNP is managed by the Government of Ethiopia and is for the foremost part-financed by a consortium of around the world organizations and improvement accomplices. The PSNP gives month-to-month cash or nourishment trades against labor-intensive open works that construct community resources. Qualified family units with restricted labor capacity get unlimited cash trades. Due to the broad widespread, the need for open work was postponed and thus all beneficiaries directly are getting unrestricted trades. At the beginning of the widespread, beneficiaries too got three months of installments in progress (Gentilini, et al., 2020). In the expansion of the PSNP, a few smaller-scale activities have been propelled to support destitute and feeble families, counting nourishment banks set up by city organizations, community reinforces, and NGO programs (Kalle&Gashaw, 2020).

2.3.3. COVID- 19 effects on food security in the Ethiopian case

The root cause of nourishment frailty in creating countries is the failure of individuals to choose up and get nourishment due to destitution. Though the rest of the world has made basic progress toward destitution mitigation, Africa, in particular Sub-Saharan Africa, continues to slack behind. Projections show up that there will be an increase in this affinity unless preventive measures are taken. Numerous components have contributed to this inclination counting the tall predominance of HIV/AIDS, COVID 19, respectful war, endeavor, and destitute administration; visit dry spells and starvation; and agrarian reliance on the climate and environment. Nourishment security on the landmass has compounded since 1970 and the degree of the malnourished masses has remained interior the 33 to 35 percent expansion in Sub-Saharan Africa. The prevalence of lack of healthy sustenance interior the landmass changes by locale. It

is most diminished in Northern Africa (4 percent) and most essential in Central Africa (40 percent), (Angelas, 2020)

Ethiopia was as of presently one of the foremost food-insecure countries in the world, in fact indeed although it has made pivotal advancement picks up over the past two decades by decreasing destitution and growing speculations in fundamental social organizations. Agreeing to the 2020 Compassionate Improvement Arrange (HRP), uprooted people (IDPs), had to take of their homes due to distress or characteristic stuns (HDP,2020).

The COVID-19 widespread may result in colossal work cuts in formative ventures to relieve the spread of the infection through social separation. Directly, the National Arranging Commission (NPC) of Ethiopia is determining the economy to recoil by 2.8% to 3.8% due to the widespread, worsening extraordinary destitution and nourishment frailty (NPC,2020).

To show, securing food in Ethiopia is the foremost troublesome errand within the nation since of the tall populace, climate change, political insecurity, uprooting of individuals from their homes, grasshopper assault, and, at this time, the coronavirus widespread influencing the economy of the nation. Since this, the take toll of food is ceaselessly expanding from time to time and low-income individuals, indeed administrative workers, are at hazard. Agreeing to (Cochrane, 2018) one in five Ethiopians required a food bolster in 2015/16 and a tall level of nourishment frailty happened due to the dry season and tall populace.

2.4. Conceptual framework

COVID-19 undermines food security both specifically, by disrupting food systems, and in a roundabout way, through the impacts of lockdowns on household incomes and physical access to food. COVID-19 and reactions to the widespread may undermine food production, processing, and marketing, but the foremost concerning impacts are on the demand-side financial and physical access to food. From a consumer point of view, the diminished income may lead to less purchasing power for food, especially among the informal sector workers. Lockdowns may have driven income losses, the severity of the salaries losses remains to a great extent obscure and lockdowns or restrictions on movement have changed significantly by nation additionally the costs of food rise almost immediately (Torero, 2020) and as a result, there has been considerable

concern that poverty and food insecurity will rise and the wholesome status of vulnerable groups will drop, as the widespread proceeds (Headey & Ruel, 2020; Laborde et al., 2020b).

Standard conceptual systems of food security, ordinarily related to the Food and Agriculture Organization, have four pillars: availability, access, utilization, and stability (FAO, 2008). Being food secure requires stability in the other three pillars over time Food access is debilitated by increments in food costs and reduction of household income also resulted from food insecurity.

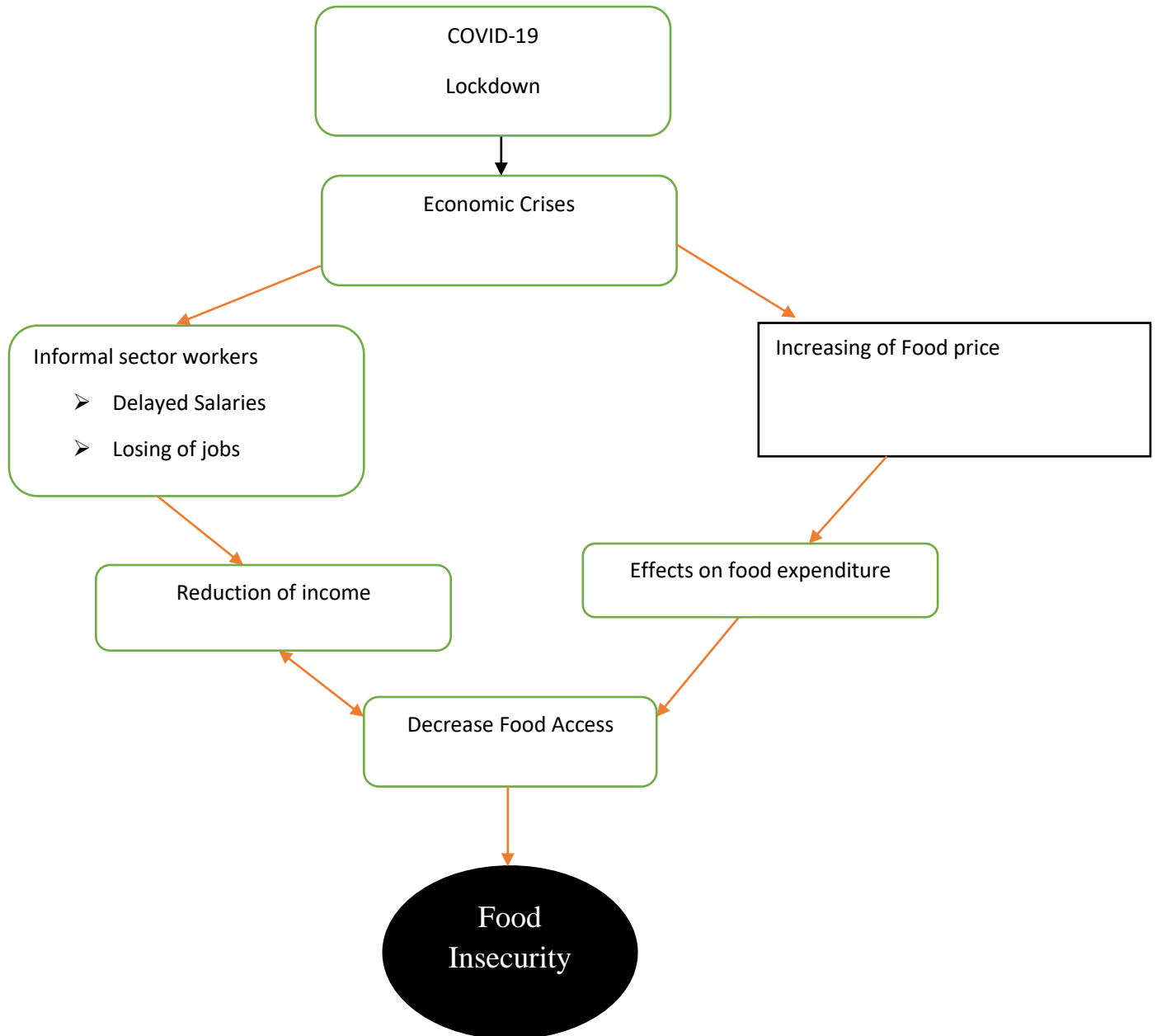


Figure 2.1. Conceptualizing the effects of COVID-19 lockdown on income and food security status of households who engaged in the informal sector.

CHAPTER 3: DESCRIPTION OF THE STUDY AREA, RESEARCH DESIGN, AND METHODOLOGY

3.1. Description of the study areas

Addis Ababa was established in 1886 and it is the third diplomatic hub worldwide following Geneva and New York. It is the seat of the African Union (AU) and Economic Commission for Africa (ECA). It is also one of the largest and oldest cities in Africa (UN Habitat, 2008). Though the urbanization rate in developing countries remains low, when compared to developed nations, developing countries are observing a rapid rate of urbanization. Where Addis Ababa is no exception. According to (Feyera&Tefere, 2011), the population of Addis increased by more than half a million from 1994 to 2007, with an annual growth rate of 2.1%. In recent years the rate kept on increasing by 3.8%. In 2016, the estimated population of Addis Ababa was 3.8 million (CSA 2018b) out of which 16.8 percent had levels of consumption below the official poverty line (CSA 2018a). According to World Bank, United Nations, and GeoNames, Addis Ababa has a surprisingly diverse economy for a city that struggles with poverty officially government statistics show that some 119000 people work in trade and commerce,113,00 work in manufacturing and industry, 80,000 are homemakers, 71000 are in civil administration and 50,000 in transport and communication.

Addis Ababa lies at an elevation of 2,355 meters (7,726 ft.) and is a grassland biome, located at 9°1'48"N 38°44'24"E. The city lies at the foot of Mount Entoto and forms part of the watershed for the Awash.

Data from 2016 Demographic and Health Survey show a co-existence of under- and over-nutrition in Addis Ababa (CSA and ICF, 2016). Nearly 15 percent of children under five years of age in the city are chronically undernourished (stunted; short for their age). Meanwhile, 13 percent of women and 18 percent of men between the ages of 15 and 49 years are thin with a body-mass index (BMI) of less than 18.5 kg/m², even as 29 percent of women and 20 percent of men are overweight or obese with a BMI above 25 kg/m².

The city is divided into 11 boroughs, called sub-cities (Amharic:kifleKetama), and 99 wards (Amharic:ketena). The 10 sub-cities are: Gulele sub-city is one of the 10 sub City in Addis

Ababa that total population is about 284,865 and it covered the area of 647sq.km(World bank,2015).

Gulele sub-city is one of 11 sub-city in Addis Ababa with a total population of 327,426 and covered about 31.1 KM² and is classified into 10 werdas (CSA,2019).The sub-city is bordered by Oromiya regional state in the north, Arada and Addis Ketema sub-cities in the south, KolfeKeranio in the west, and Yeka sub-city in the east.It is estimated that more than 55% of the total population in the sub-city is engaged in the informal sector (GSC, 2019).The study was conducted in wereda7 based on wereda administration office information the total population is about 50,508(male 24,244 and female 26264).Wereda -7 covered about 470 h andwas classified into 10 clusters and 32 blocks.

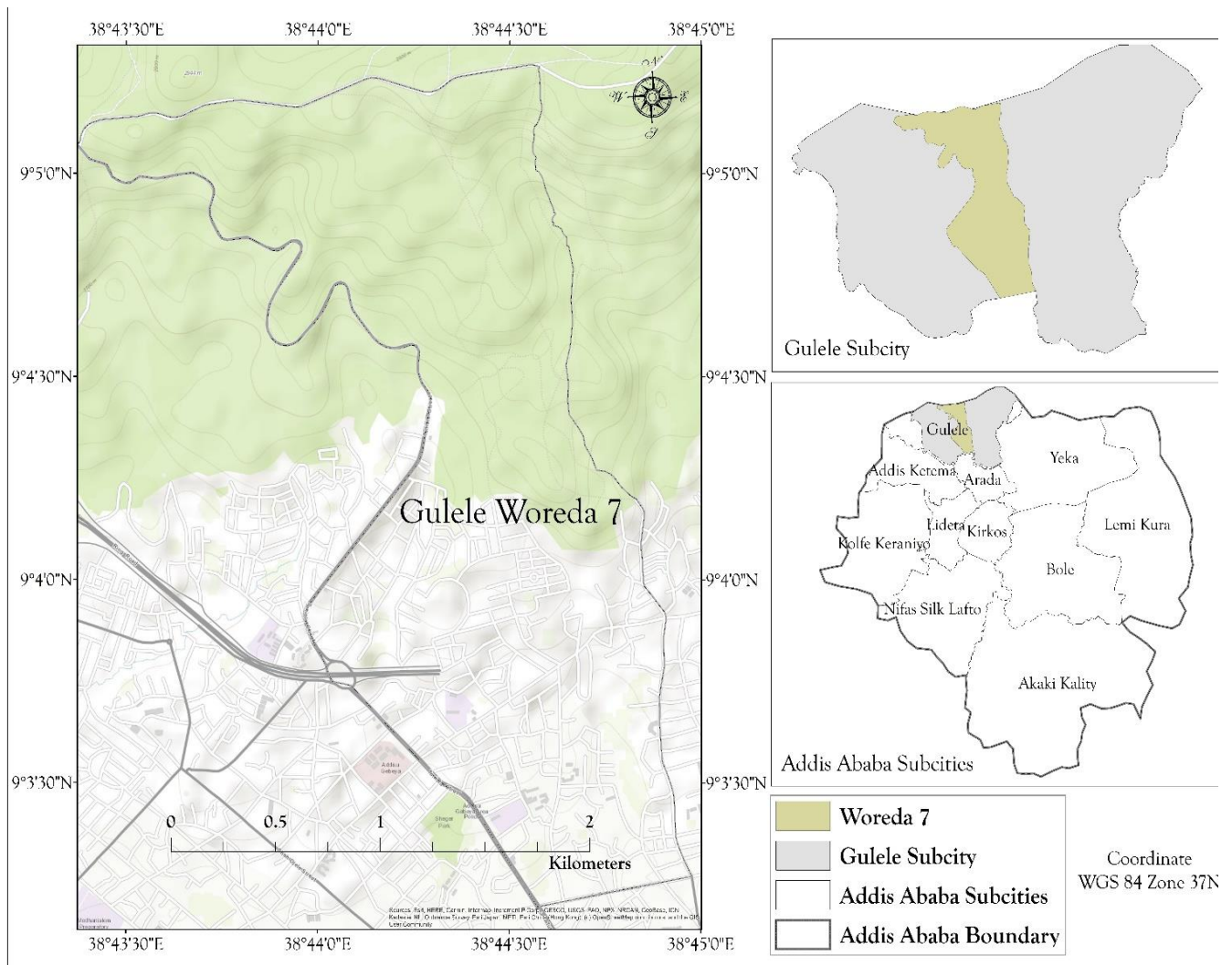


Figure 3.1 Map of the study area

3.2. Study design

In this research, a descriptive research design was applied to govern the research activities and processes. Accordingly, mixed research (qualitative and quantitative) approaches were used to assess the situation of sample households' food security, the effect of COVID-19 lockdown on income, and the food security status of households engaged in the informal sector in wereda-7 Gulele Sub-city Addis Ababa. Accordingly Data on household food security, data were collected from various sets of respondents of informal sector worker households living in wereda 7 and about 321 sampled households were selected purposively but data was gathered only from 192 respondents because unwillingness of the respondents and the study focus on households that engaged on the informal sector such as pity street vendors, daily wage earners, and temporary migrant workers. The purposive sampling in this study provided an opportunity to include diverse participants in terms of sex, age, education, occupation, and residence.

3.3. Study period, Sampling technique, and Sample Size Determination

The study was conducted from the beginning from March (2021) to September (2022). Households engaged in the informal sector were the sample frame for this specific analysis. Gulele Sub-City was selected purposely due to the concentration of informal sector workers residents as well as the familiarity of the researcher. The total of 10 weredas of Gulele Sub-City wereda-7 was selected purposively and carefully based on the number of targeted households, the researcher's closeness to the main road, and familiarity with the study area. To substantiate the response gathered from the qualitative approach the researcher gathered numerical data from the households in the study area. The researcher takes 1613 informal sector workers households in the area as of the information obtained from the wereda Social relation administrator office data. According to Yamane (1967:886), a simplified formula to calculate sample sizes was used in this research with a 95% confidence level and a 5% precision level recommended to obtain a sample size required, which represents a true population. Hence, a total number of 321 households were selected and allocated to the study area.

sampled households were made to enhance their perception regarding the objectives of the study, the content of the questionnaire, and amendments had been made to grasp vital facts essential for the study. The following primary data instruments were used in this study

A survey was conducted through the development of a structured questionnaire to generate qualitative and quantitative on household food insecurity status, and their coping strategy toward food insecurity. HFIAS and CSI were adopted and modified contextually to collect data to see the food security status (access) and coping stratify of the food insecure individuals. It was administered on what has happened in the past 30 days and 7 days respectively (Coates et al, 2007 & Maxwell and Caldwell, 2008). For the convenience of data collection during the survey, the questionnaire was translated into the Amharic language. Data collection was carried out by enumerators who have a degree and were familiar with the study area. Accordingly, five well-trained and experienced enumerators who are familiar with the geographic and socio-cultural characteristics of the study areas were recruited and used for data collection. To ensure data collection quality, a half-day orientation workshop was organized and discussed the tools with the enumerators

Individual Key Informant Interview: Semi-structured interview questions were conducted as a method of data collection. This tool was used to triangulate and strengthen research findings gathered through a quantitative approach to understanding more about the challenges faced during COVID 19 that resulted in food insecurity in households. A total of sixteen Key Informant Interview (KII) was carried out by Woreda as human resource administration officers, wereda society involvement manager expertise, wereda expertise on Ethiopian safety net program, wereda food health and safety expertise, and charity representative. A key interview was conducted by the researcher to come up with the real feeling and perceptions towards the issue.

A Focus group discussion helps to identify important and significant issues related to a given topic (Bryan, 2004).it was under taken to get more information from households. There were two group discussions with 6 participants for each group by kipping distance and wearing face masks among participants

Secondary data was collected by reviewing various sources of government documents available in wereda, by reviewing research done by some scholars concerning COVID 19 impacts and food security, and other global document like WHO and FAO documents.

3.5. Method of data analysis

The researcher analysis both qualitative and quantitative data collection from primary and secondary sources. Qualitative data collected through focused group discussion, key informant interviews, and personal observation were subject to contextual analysis.

Quantitative data collected from the household survey through structured questionnaire The quantitative data generated from the household survey were coded and entered into the computer for analysis. Hence, quantitative data were analyzed using computer software, Statistical Package for Social Sciences (SPSS). The data that was entered into the program were analyzed using descriptive statistics such as frequencies, descriptive, and cross-tabulation, and also this study was initiated with bivariate and graphical illustrations. Few parametric tests (independent t-test, paired t-test, ANOVA) were performed to check the association between the income and food expenditure gaps (January to June) and the socio-economic covariates. Data obtained by guidelines for assessing COVID-19 prevention, controlling methods, and Practices and the information generated by the HFIAS was used to assess the prevalence of household food insecurity (access component) and to detect changes in the food insecurity situation of a population over time for the study area analyzed quantitatively.

3.5.1. Food security and coping strategy analysis

Household food insecurity access scale (HFIAS)

HFIAS was used in this study to distinguish respondents' status of food insecurity after the occurrence of Covid-19. It has 9 generic questions and each of the questions is asked with a recall period of four weeks (30 days). The respondent is first asked an occurrence question that is, whether the condition in the question happened at all in the past four weeks (yes or no). If the respondent answers "yes" to an occurrence question, a frequency-of-occurrence question is asked to determine whether the condition happened rarely (once or twice), sometimes (three to ten times), or often (more than ten times) in the past four weeks (Coates, Swindale and Bilinsky, 2007). But if the respondent said no to the first question no need to go to the second. At first, the

date should be coded frequency-asked-questions as 0 for all cases where the answer to the corresponding occurrence question was no and then the score is calculated for each individual by summing up the codes for each frequency-of-occurrence question. If the individual response to all nine frequency-of-occurrence questions was “sometimes” the code would be 2.

The maximum score for the individual response is 27 and the minimum is 0 and that is when the individual answer „no” to all the questions therefore, the higher the score the more food insecure (access) the individual is, and the lower the score, the less food insecurity (access) the individual experienced. Household Food Insecurity Access Scale (HFIAS) The results of the analysis based on HFIAS were examined using four indicators, namely: Access-related conditions, domains, scale, and prevalence (Guyu,2015).

Table 4.1: Household Food Insecurity Access Scale (HFIAS) questionnaires

No.	Questions
For each of the following questions, consider what has happened in the past 30 days. Please answer whether this happened never, rarely (once or twice), sometimes (3-10 times), or often (more than 10 times) in the past 30 days.	
1.	Did you worry that you would not have enough food?
2.	Were you not able to eat the kinds of foods you preferred because of a lack of resources?
3.	Did you eat just a few kinds of food day after day due to a lack of resources?
4.	Did you eat food that you preferred not to eat because a lack of resource to obtain other types of food?
5.	Did you eat a smaller meal than you felt you needed because there was not enough food?
6.	Did you eat fewer meals in a day because there was not enough food?
7.	Was there ever no food at all in your house because there were not resources to get more?
8.	Did you go to sleep at night hungry because there was not enough food?
9.	Did you go a whole day without eating anything because there was not enough

Source: Coates, Swindale, and Bilinsky, 2007

Coping strategy index

This method is a qualitative approach used to understand the severity of food insecurity and the food coping strategy of the households. In this research coping strategy index was employed to capture the severity of household food insecurity situation and household food coping strategy during a certain time.

The results of processed data were presented in tables and charts/graphs. Qualitative data obtained through the interview and FGD were analyzed through narration by describing and interpreting the real situation in detail. The presentation and organizational framework of both qualitative and quantitative data followed the sequence of specific objectives of the study.

Table 4.2: Modified CSI questions

Behaviors: In the past 7days, if there have been times when you did not have enough food or money to buy food, how many days has your household had to:	Frequency: Number of days out of the past seven: (use no 0-7 to answer the number of days; use NA for not applicable)
a. Rely on less preferred and less expensive foods?	
b. Borrow food, or rely on help from a friend or relative?	
c. Purchased food on credit?	
d. Use money that you saved for emergency or any other purpose?	
e. Go to eat somewhere?	
f. Consider begging?	
g. Limit portion size at mealtime?	
h. Reduce number of meals eaten in a day?	
i. Skip entire days without eating?	

Source: Maxwell and Caldwell, 2008

3.6. Data quality assurance

Data quality was ensured during collection, coding, entry, and analysis. Orientation was given to the data collectors and supervisors to prevent any confusion and have a common understanding of the study. Before the start of data collection, a Pretest was conducted on 10% of our sample size to ensure the validity of the questionnaire. Each questionnaire was checked for its consistency, provision of full information, and completeness. Supervision of data collectors included observation of how the data collectors were collecting the data and was done by supervisors. The filled questionnaires were checked for completeness by data collectors, supervisors, and Principal Investigator (PI) daily. Consequently, any problem encountered was discussed and solved immediately. Incomplete questionnaires were discarded and counted with non-respondent

CHAPTER FOUR4: RESULT AND DISCUSSION

This chapter presents the result and discussion of the study and contains two parts. The first part deals with the summary of the characteristics, income and food expenditure of sampled households by using explanatory variables. The second part discusses the food insecurity status of the households.

4.1. Characteristics of the study population

The survey was conducted on a total of 192 households engaged in the informal sector consisting of 48% female and 52% male-headed households. The age of respondents ranged from 18-45+years and the age group above 45 consisted of 17% of the respondents. Most of the respondents (47 %) were married and the family size of households ranged from two to eight. About 58% of households' family size was five or more. The Majority Of the respondents, 34 % of households, had a primary school level education. Higher education (above secondary level) in the informal working class was low (8%); plant and machine operators had the lowest representation (5%) in the sampled data.

Table 4.3: Socio-economic data of the respondent.

Variable	Category	Frequency (f)	Present (%)
Gender	Male	100	52
	Female	92	48
Age	>18	4	2.08
	18-45	156	81.25
	45+	32	16.67
Marital status	Single	9	4.69
	Married	90	46.88
	Divorced	42	21.88
	Widowed	34	17.71
	Separated	17	8.84
Level of education	No school	53	27.38
	Primary	66	34.38
	Secondary	57	29.69
	Above secondary	16	8.33
HH size	1-4	81	42.2
	5-8	111	57.8
Profession	Service and sale	35	18.23
	Craft and Trade	64	33.33
	Plant and machine operators	9	4.69
	Elementary Occupation	84	43.75

Source: computed from survey data, 2022

When forming education categories for modeling purposes, workers who reported they cannot read have been categorized as “No schooling”; workers who can read and studied up to grade 5 as “Primary”; workers who studied beyond grade 5 but below higher secondary level as “Secondary”, and those with above secondary education as “Above secondary.”

Beauty parlor and salon workers, workers in shopping malls, grocery stores/tea stalls, and sex workers have been grouped under the “Service and sales workers” category; carpenter/mason, sanitation workers/plumbers, tailor, and handicraft workers have been grouped under “Craft and related trades workers”; drivers of CNG/auto rickshaw have been grouped under “Plant and machine operators and assemblers”; construction workers, rickshaw/van pullers, hotel/restaurant workers, and hawkers have been grouped under “Elementary occupations”.

4.2. Informal sector households' income and food expenditure with related to some socio-economic characteristics

Table 4.2 displayed the income downfall was highest (in percentages) in the age group below 18 years. About 81.25% of the workers belonging to the age group 18–45 years, had an average income drop of ETB 706.36. Male workers had a larger reduction of income in terms of absolute value compared to that of the females. The average decrease in income for the males was about ETB 741, whereas for the females it was around ETB 626. The reduction of males' income in June (2022) compared to that in December (2021) was significantly higher than that of females at a 1 percent level of significance. Interestingly, while the percentage changes are considered, female workers loss about 69% of their income and whereas male worker loss about 61% of their income. ANOVA test showed a significant difference in mean income for different professions and educational qualifications. In terms of income downfall, the percentage was higher for the workers without schooling (67%). Workers engaged with service and sales faced the highest income decrease both in amount (ETB 1055.38) and in percentages (68%). When considering marital status separated and widowed households are the highest income decrease both in amount (ETB 908.25 and 872.1) and in percentage (67% and 68%).

Table 4.4. Distribution and association of socio-economic characteristics and income downfall

Variables	Frequency (Percentage)	Average income drop in ETB	Rate of income drop (percentage)	Test, p-value, decision (income drop from December(2021) to June (2022)
Age				
>18	4(2.08)	375.56	67.47	ANOVA test, F-statistics =4.92, P-value<0.01 All means are not equal.
18-45	156(81.25)	627.11	64.64	
45+	32(16.67)	706.36	64.16	
Gender				
Male	100(52)	741.41	60.79	t-statistics =4.66,P-value <0.01, male > female
Female	92(48)	626.32	68.85	
Education				
No school	53(27.38)	831.7	66.83	ANOVA test, F-statistics = 14.53, P-value<0.01 All means are not equal.
Primary	66(34.38)	730.59	64.95	
Secondary	57(29.69)	575.76	63.96	
Above secondary	16(8.33)	415.33	63.16	
Marital status				
Single	9(4.69)	861.57	66.34	ANOVA test, F-statistics = 16.42, P-value<0.01 All means are not equal.
Married	90(46.88)	529.73	62.18	
Divorced	42(21.88)	743.83	66.43	
Widowed	34(17.71)	872.1	67.36	
Separated	17(8.84)	908.25	68.49	
Profession				
Service and sale	35(18.23)	1055.38	67.58	ANOVA test, F-statistics =38.45, P-value<0.01 All means are not equal.
Craft and Trade	64(33.33)	576.59	63.84	
Plant and machine operators	9(4.69)	677.7	63.12	
Elementary Occupation	84(43.75)	616.94	64.12	
HH size				
1-4	81(42.2)	658.71	60.51	ANOVA test, F-statistics = 14.53, P-value<0.01 All means are not equal.
5-8	111(57.8)	706.36	68.24	
Overall		686.26	64.61	

Source: computed from survey data, 2022

Table 4.3. Demonstrated that the average food expenditure decrease was ETB 68, about a 28% decrease, between December (2021) and June (2022). The age group 18–45 years had the maximum food expenditure drop both in amount (ETB72) and percentage (29%). Workers with no schooling had the lowest amount and percentage of food expenditure reduction. Informal workers inservice and sales could hardly afford a 31% lesser food budget in June(2022) than that of December(2021) period.

Table 4.5. Distribution and association of socio-economic characteristics and food expenditure.

Variables	Frequency (Percentage)	Average food exp. drop in ETB	Rate of food exp. drop (percentage)	Test, p-value, decision (food exp. drop from December(2021) to June (2022))
Age				
>18	4(2.08)	40	27.62	ANOVA test, F-statistics =6.17, P-value<0.01 All means are not equal.
18-45	156(81.25)	72	28.85	
45+	32(16.67)	39	24.65	
Gender				
Male	100(52)	60.1	26.35	t-statistics =4.26,P-value <0.01, male > female
Female	92(48)	75.39	30.06	
Education				
No school	53(27.38)	59.24	26.16	ANOVA test, F-statistics = 13.54, P-value<0.01 All means are not equal.
Primary	66(34.38)	69.46	27.43	
Secondary	57(29.69)	72	30.26	
Above secondary	16(8.33)	68.7	30.25	
Marital status				
Single	9(4.69)	65.96	28.42	ANOVA test, F-statistics = 14.52, P-value <0.01 All means are not equal.
Married	90(46.88)	64.48	32.15	
Divorced	42(21.88)	63.62	26.34	
Widowed	34(17.71)	66.38	30.4	
Separated	17(8.84)	90	32.53	
Profession				
Service and sale	35(18.23)	121.11	30.65	ANOVA test, F-statistics =5.64, P-value<0.01 All means are not equal.
Craft and Trade	64(33.33)	89.16	27.89	
Plant and machine operators	9(4.69)	87.67	25.33	
Elementary Occupation	84(43.75)	26.33	27.32	
HH size				
1-4	81(42.2)	39	25.87	ANOVA test, F-statistics =8.46, P-value<0.01
5-8	111(57.8)	88.24	29.94	

				All means are not equal.
Overall		67.43	28	

Source: computed from survey data, 2022

Table 4.4 revealed that most of the informal workers (87%) faced an income drop in June(2022) compared to December(2021). Males headed showed a bit higher rate of income decline for the lockdown.

Table 4.6 Frequency and percentages of the income gap between December (2021) and June (2022) according to gender.

Income gap December (2021) and June (2022)	Gender		Total
	Female	Male	
Increase	2(2%)	3(3%)	5(3%)
Decrease	78(85%)	90(90%)	168(87%)
No change	12(13%)	7(7%)	19(10%)
Total	92	100	192

Source: computed from survey data, 2022

Table 4.5. This shows that 83% of the informal workers had to cut their food expenditure due to the pandemic. However, for 24% of the workers, food expenditure increased in June (2022) compared to that of December (2021).Male workers had a higher drop in food expenditure compared to that their counterparts.

Table 4.7. Frequency and percentages of the food expenditure gap between December (2021) and June (2022) according to gender.

Food expenditure gap December (2021) and June (2022)	Gender		Total
	Female	Male	
Increase	14(15%)	10(10%)	24(13%)
Decrease	76(83%)	84(84%)	160(83%)
No change	2(2)	6(6%)	8(4%)
Total	92	100	192

Source: computed from survey data, 2022

4.3. COVID-19 lockdown effects on food price and food security among informal sector worker households in wereda-7 Gulele Sub-city Addis Ababa.

What is the major consequence of COVID-19 lockdown and what action was taken to reduce the effect in the wereda -7 context? The key informant had the following to say

“COVID-19 lockdown is a reason for loss of job for many people and in the case of wereda 7, there were 200 female-headed informal sector worker households that totally lost their jobs and have no income and many others unknown households may be in a similar situation, in addition of it many western countries close their border to control the pandemic expansion this cause closing of many investments and small enterprises income reduced and also the reduced number of their employee as well. By assessing and isolating most affected households and donating food properly

One of the social workers reported, Consequence those who have money, are not affected much and have not experienced hardship but for poor people, it is accursed on them.

This idea was supported by some participants from low socioeconomic backgrounds who stated

“Construction sites are closed, factories are reducing the number of employees and there are no other works available. Daily wages laborers from the poorer families are the most affected.”

(Participant, 42 years, Female)

A participant from block-9 who was a daily wage worker expressed his experience as,

“Initially, people thought this crisis would only last for a few months but later it extended for years and people started facing a food crisis we were most affected by this, as we lost our job. There was no income normally we have 5 and more than 5 members in our family to feed so there was a problem of food scarcity in our families. We were poor even before the COVID-19 crisis and our situation has become more critical after the lockdown. We have to borrow money or take a loan from rich people in to survive this crisis.”(Participant, 45years, Male)

Besides the loss of remittance and financial constraints, most of the participants cited that the increase in food prices was one of the main reasons leading to food insecurity amongst families from low socioeconomic conditions in the community, especially due to limited affordability of food.

“The sudden hike in food price shall be led to food shortages for example: before lockdown 1 liter of oil cost was 60 ETB but after lockdown, the price rose to 150 per liter. Shopkeepers used to say that they cannot do anything all prices have increased in big markets and therefore we have to increase the prices. Before lockdown it was easy to buy foods, even people use to go the long distance to buy foodstuffs at cheaper prices but that is not possible now due to lockdown.”

(Participant,40 years, Male)

Almost all participants agreed that the effects of COVID-19 more affected poor households in the community and the effect will continue and permanent action has to take to solve the problem. Most participants felt anxious about COVID-19 due to the loss of income, which has directly affected their physical or mental health situations.

“People are worried about the virus, they have lost jobs due to the lockdown, Expenses have increased and there is no alternative income source so we are facing an economic crisis. Mental problems are increasing in every household Wages-based laborers like us are very depressed now and poor families are vulnerable to increasing mental health problems.” (Participant32, 40Years, Male)

To study the effect of COVID 19 on food security the study considers assessing the food value chain that has two implications for the food security of a country, namely, the food supply, and the source of income that determines households’ purchasing power. A resilient food system involves not only food but also the robustness of a country’s currency and market, its dependence on imports and exports, and the social security system. In the case of Ethiopia, due to its dependency on imports and exports, the price surge in imported staple foods, fuel, and agricultural input caused by the depreciation of ETB has put greater pressure on both producers and consumers.

According to Ethiopian Statistical Services' Consumer Price Index data(CPI,2022) the average food price that stood at 23.2 % in 2020 rose to 31.3 % in 2021 and to 42.4 % during the first five months of 2022 (Jan-May).

Based on Gulele Sub-City buyer affiliation and Commerce and Shopping extension group information in June 2022 the price was increasing in all types of food materials but in some types of foods like Oil, vegetation, fruit and bread, the potential impacts of the rise in the indices of three food categories are discussed below. The index for fats and oils had been the most stable component of the food index that showed little volatility over the past several months.

In June 2022, the price index of oils spiked by 89 % from the corresponding value in December 2021 and by 5.1 % from the previous month. Sunflower oil, which sold for 106 Birr per liter in December 2021 in Addis Ababa market shot to 200 Birr per liter in June, 2022. The index for Wheat rose by 20.32 % month-on-month. The price indices for vegetables and fruits hiked by 39.7 percent and 26.5 %, respectively, in June 2022, compared to prices in December 2021. Other common types of food like Teff, Maize and Beef the result appears that the cost of Teff expanded by 45%, the cost of Maize expanded by 36.63%, the cost of Beef expanded by 73.46% in June 2022 compared to December 2021.

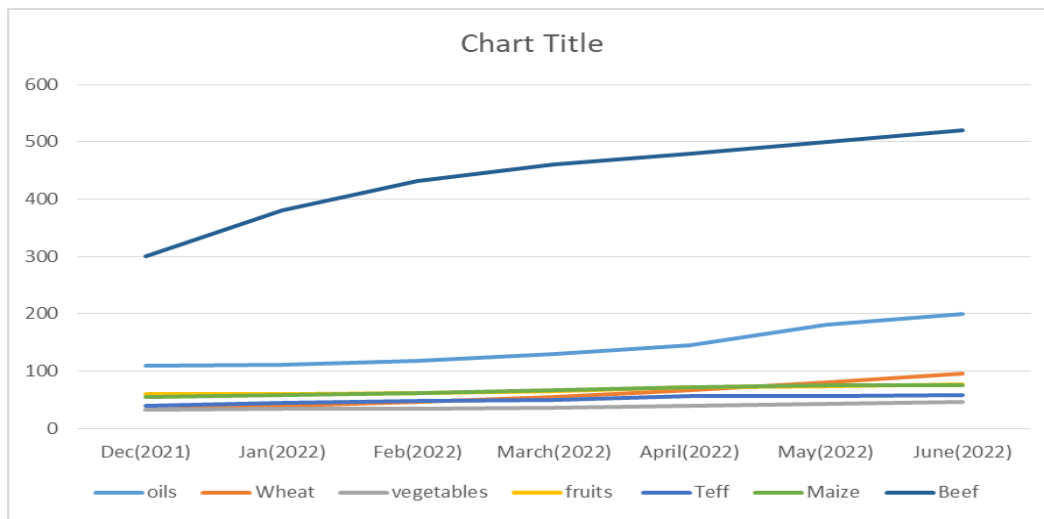


Figure 4.2: Commodity price trend in Wereda-7 Gulele Sub-City Addis Ababa Ethiopia

Source: Wereda-7 Gulele Sub-City buyer association and Commerce and shopping expansion team.

4.4. Food security status of households

4.4.1. Household food insecurity access scale-based food security assessment

The analysis of the access-related conditions based on the 9 generic questions indicated that 12% of the total sampled households had never been worried about having food but 41% of the households often worried about food. 4% of the respondents never ate the food that they not preferred and 48% of them often ate the food that doesn't prefer. About 2% of the households always ate a different variety of food but 51% of the sample often ate few varieties of food, 15% of the total sample never ate the food that they didn't want but 20% of the sample often ate the food that they didn't want. 5% of the respondent never reduced their meal and 43% of the reduced ate smaller meals than before, 10% of them often ate fewer mail than before. 15% of the sampled households often didn't have food to eat, and 15% also often slept hunger at night. About 6% of households often went hungryhole days.

The current study from Table 4.7. Also indicated that only 2.08 % of households were food secure and 8.84 % of them were mildly food insecure, while 64.58% and 24.5% of them were moderately and severely food insecure.

Table 4.8: HFIAS of the respondent in the past four weeks

Number & Percent of Households by Frequency							
	HFIAC		Never	Rarely	Sometimes	Often	Total
1	Worry Enough Food	No	23	32	58	79	192
		%	12	17	30	41	100
2	Unable to eat preferred meal	No	8	22	70	92	192
		%	4	12	36	48	100
3	Ate just a few varieties of food	No	4	16	74	98	192
		%	2	8	39	51	100
4	Ate foods really didn't want	No	29	43	82	38	192
		%	15	22	43	20	100
5	Ate a smaller meal than felt	No	9	12	88	83	192
		%	5	6	46	43	100
6	Ate fewer meals per day	No	43	42	87	20	192
		%	23	22	45	10	100
7	No food to eat	No	68	54	55	15	192
		%	35	28	29	8	100
8	Slept hungry at night	No	43	64	58	27	192
		%	22	33	30	15	100
9	Went hungry a whole day	No	89	68	24	11	192
		%	46	35	13	6	100
	Total Score (Out of 1728 scores)	No	316	353	596	463	1728
		%	18.29	20.42	34.5	26.79	100

Source: based on Ballard, Coates, and Deitchler, August 2007

Table 4.9: Classification of household heads based on household food insecurity access scale (HFIAS) during COVID-19 lockdown in the study area

Category	%	Total in number
Food secure	2.08	4
Mildly food insecure	8.84	17
Moderately food insecure	64.58	124
Severely food insecure	24.5	47

Source: based on Ballard, Coates, and Deitchler, August 2007

4.4.2. Coping strategies index-based food security assessment

The Coping Strategies Index (CSI) is an indicator of household food security that is relatively simple and quick to use, straightforward to understand, and correlates well with more complex measures of food security (Maxwell & Caldwell, 2008). A series of questions about how households manage to cope with a shortfall in food for consumption results in a simple numeric score. In its simplest form, monitoring changes in the CSI score indicates whether household food security status is declining or improving. The CSI is based on the many possible answers to one single question: “What do you do when you don’t have adequate food and don’t have the money to buy food?” It is constructed on the immediate and short-term adjustment (7 days) of consumption arrays rather than the longer-term situation an individual experiences. To do the coping strategy index, the researcher used the respondent’s HFIAS food insecurity scores so that it will be easy to identify the legible individuals for the CSI analysis. The table below shows the category of households that are legible to coping strategy index questionnaires. Thus, it has been identified in this study that 21 (assuming mildly food insecurity as a food secured in addition to food secured households) individuals were found to be food secure and the rest 171 out of 192 respondents were food insecure at different levels as shown on the table below and the previous subsection.

The researcher explored the common different coping strategy that practiced by Gulele sub-city Wereda -7 community households when they did not have food to eat and did not have much to buy food in the past seven days. Fig 4.8. Indicated that an average of 9.36 % of households out of 171 used all the coping strategies all days within the past weeks. 9.36 % of households in the survey uses strategic six days from the seven days asked, 10.53% and 12.87 % of households used coping strategy five and four days from seven days. Of the total respondents about 14.62 % use three days,17 % use two days, and only 12.28 % use one day CS from the past weeks or seven days.

Table 4.10: Household Coping strategy index score

Strategy	CSI responses (number of days per week)							
	0	1	2	3	4	5	6	7
Less preferred/less expensive	0	6	10	12	18	31	45	49
Borrow	0	8	28	42	34	29	21	9
Buy on credit	2	16	31	41	30	18	21	12
Used emergency saving	12	16	27	26	22	21	27	20
HH members eat elsewhere	20	38	35	28	22	12	9	7
Beg	100	35	28	0	0	4	2	2
Limit portions	8	12	30	25	32	24	22	18
Reduce meals	4	16	34	19	32	17	23	26
Skip days	77	47	11	30	6	0	0	0
Average	24	21	29	25	22	18	16	16
Percentage (%)	14.03	12.28	17	14.62	12.87	10.53	9.36	9.36

Source: computed based on Maxwell & Cardwell (2008) and field survey data

4.4.3. Status of food security based on socio-economic characteristics of household

Table 4.9 below showed that some socio-economic characteristics of the respondents had associations with the food security status of households because the significance values were less than 0.005. (Oyetund&Olagunju,2019) suggested that younger households are less vulnerable to food insecurity (Arena &Anyaeji,2010), and (Abdullah, et.al.,2019) points out that HH with older heads tends to experience food security, hence there is no clear consensus. In the case of the study, the households having more aged household heads were more affected by food insecurity.

According to (Delvaux& Paloma,2018) and (Abdullah, et.al.,2019), male-headed households are less prone to food insecurity but the current study shows that male-headed households were more food insecure than that female-headed households.

Educational status is one characteristic of the respondent which directly associated with food insecurity in the households in the study the more educated households are the more food secure (Millck& Rafi,2010), and (Ngema et al.,2018) agreed that the educational status of the households head has been found to have a significant effect on household food security, improving in educational attainment positively influence the ability to earn wages or income required to access food.

A married person is expected to have a comparative advantage over those unmarried, and marital status is considered viable (Becker,1974), similarly the study suggested that married households more food secure than unmarried, divorced, or widowed households.(Arena & Anyeaji,2010),(Delvaux& Paloma,2018), (Negima.et al.,2018), and (Nwaka,2019) already suggests that increases in household income are associated with an increasing livelihood of food security and the other characteristics of households that are associated with household food security were the family size of the households in this study the household with big family size was more vulnerable to food insecurity,some scholars suggested that the family size of the households have been recognized as factors that influence food security(Delvax& Paloma,2018) and (Walfson& Laung,2020).

Table 4.11. Cross tabulation result of food security status of informal sector workers' households related to their education status, age of respondents, Family size, gender, and profession

Variables		Percentage distribution of food security and insecurity		Chi-square test value	Significance value
		Food insecure (%)	Food secure (%)		
Gender	Male	88	12	139.629 ^a	0.001
	Female	84.8	15.2		
Age	>18	25	75		
	18-45	92.31	7.69		
	45+	81.25	18.75		
Marital status	Single	44.4	55.6	101.249 ^a	.001
	Married	88.89	11.11		
	Divorced	92.85	7.15		
	Widowed	97.06	2.94		
	Separated	88.23	11.77		
Level of education	No school	98.11	1.89	74.184 ^a	.001
	Primary	92.42	7.58		
	Secondary	91.23	8.77		
	Above secondary	37.5	62.5		
HH size	1-4	82.71	17.29		
	5-8	93.69	6.31		
Profession	Service and sale	91.43	8.57	136.732 ^a	.001
	Craft and Trade	92.19	7.81		
	Plant and machine operators	44.4	55.6		
	Elementary Occupation	90.47	9.53		
Total					

Source: computed from survey data, 2022

CHAPTER FIVE: CONCLUSION AND RECOMMENDATION

5.1. Conclusion

The households facing food insecurity have been hit more adversely by the far-reaching impact of the COVID-19 pandemic. The pandemic affected the livelihood mainly derives from global lockdown and the consequences that the subsequent loss of income and less purchasing power or increase in food prices had on food security. The effect however varied with gender, level of education, type of work, and marital status of the informal sector workers in Wereda-7 Gulele sub-city Addis Ababa. Lower educational status, Widowed, and households engaged in service and sales are more food insecure than that other sampled households. The 87% of households had decreased monthly income and also 83% of sampled households reduced food expenditure from December (2021) to June (2022) due to the COVID-19 pandemic lockdown. Households with more family members and lower-income families experienced more food insecurity. In response to the income shocks, households adopted several coping strategies to cope with food insecurity caused by the COVID-19 lockdown. Another finding of this study was the pandemic increased food prices (sample of seven items mainly used by sampled households) by 69.83 % from December (2021) to June (2022). Of the sampled households in this study, 89 % of the sampled households were food insecure.

5.2. Recommendation

- There got to be urgent policies that have to be started projects and programs to supply the uncovered populace with the assets to attain prominence and satisfactory food for their households.
- Policymakers ought to reexamine the existing programs and take activities and change such programs so that the foremost affected are focused on and advertised the proper kind of support.
- The government has to boost employment-oriented arrangements instead of the center only on the growth-oriented approaches to receive within the post-COVID 19 era.
- An appropriate database, Government-NGO-based combined social safety net, and mobilizing the micro-finance founded are required to encourage the casual division specialists to manage future trouble.

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Appendices

Appendix-1 Interview

Dear respondent,

The main objective of this interview is to gather primary information on the perception towards COVID-19 as well as food insecurity and their correlation and also to collect data about weredas stakeholder's action to resolve the disaster (food insecurity).

Your response to the question is available and any information provided is strictly confidential and will not be relayed on a third party or used for any other purpose other than making this academic report for this study.

Interview section-1

Applies to Wereda-7 authorities in charge on COVID-19 and food insecurity such as Woredas human resource administration, society involvement manager ,wereda SAFTINATE management, wereda health office ,wereda food health and safety and 4 individuals from different charity.

What are the effects of COVID-19 in your wereda?

Did COVID-19 Cause food insecurity in your wereda?

What preventive action have you take before COVID-19 discovered in your wereda?

Which part of the community mostly affected food insecurity (that caused by COVID-19) in your wereda and why ?

Do you listed and identified the household who affected in your wereda?

If yes to the above question what action taken by your wereda to reduce the effect?

How many HH do you help to rehabilitate them self from food insecurity?

Do you think donation of food materials permanent solution ?

What is your future plan to reduce food insecurity in your wereda?

Interview section-1

Applies to Households

What do you understand about COVID-19 and its lockdown policy?

What happen to your households after COVID-19?

Did COVID-19 affect your income? How?

What was your income on December 2021 and on June 2022?

What was your food expenditure price on December 2021 and on June 2022?

What is the major effects of COVID-19 in your community and home?

Appendex-2: Questionnaires''

Section 1.

DEMOGRAPHIC CHARACTERISTICS

1. sex

a. male b. Female

2. age: _____

3. Marital status:

a. Single [] b. Married [] c. Divorced [] d. Widowed [] f. separated []

4. Family Size: _____

5. Occupation:

a. Service and sale b. Craft and Trade c, Plant and machine operators d. Elementary Occupation

6. Education status

a. No school b. Primary c. Secondary [] d. Above secondary []

7. Do you save money from your income?

a. Yes b. No

8. Do you have access of credits if you get food insecurity challenges?

a. yes b. No

9. If the answer of question 14 is yes where will you get your credit?

SECTION 2: Household Food Insecurity Access Scale (HFIAS) Generic Questions

Each of the questions in the following table is asked with a recall period of four weeks (30 days).

The first asked an occurrence question – that is, whether the condition in the question happened

At all in the past four weeks (yes or no) and second the frequency-of-occurrence question is asked to determine whether the condition happened rarely (once or twice), sometimes (three to ten times) or often (more than ten times) in the past four weeks. The above question asked both before and after COVID 19 to compare the situation.

Using (x) on the statement regarding this issue

The rating for occurrence is

0 =NO

1= YES

The rating for frequency is

1 = rarely (once or twice in the past four weeks)

2 = Sometimes (three to ten times in the past four weeks)

3 = Often (more than ten times in the past four weeks)

በሰንጠረዥ ውስጥ ያሉትን ጥያቄዎች ከዚህ በላይ በተሰጠው ምሳሌ መሰረት መስራት ይቻላል። ጥያቄዎቹ የምግብ ዋስትና ሆነው ባለፉት 30 ቀናት ስለጋጠመዎት ሁኔታ ይሆናል። ጥያቄዎቹ መልስዎት አዎ ከሆነ ሁለተኛውን ጥያቄ ይመልሱ። መልስዎ አይ ከሆነ ወደ ሚቀጥለው ጥያቄ ይላፉ። ከአንደኛው ጥያቄ ቀጥሎ የሚመጣው ለምን ያህል ጊዜ የሚል ይሆናል። ጥያቄ ካሉት አብረን እንሞላለን። ስለትብብሮት እናመሰግናለን።

No.	Questions
<p>For each of the following questions, consider what has happened in the past 30 days. Please answer whether this happened never, rarely (once or twice), sometimes (3-10 times), or often (more than 10 times) in the past 30 days. (ለሚከተሉት ጥያቄዎች ምን ያህል ጊዜ እንዳጋጠመህ/ሽ ያጻፍ)</p>	
1.	Did you worry that you would not have enough food?(ምግብ እንሰህ ተጨንቀህ ታውቃለህ/ሽ)
2.	Were you not able to eat the kinds of foods you preferred because of a lack of resources?(ገንዘብ ስለጣህ የምትፈልገውን ምግብ ሳትመገብ ቀርተህ ታውቃለህ/ሽ)
3.	Did you eat just a few kinds of food day after day due to a lack of resources?(የምትገዛበት ገንዘብ በማጣት በየቀኑ ተመሳሳይ ምግቦችን ተመግበህ ታውቃለህ/ሽ)
4.	Did you eat food that you preferred not to eat because a lack of resource to obtain other types of food?(ምግብ መግዛት አቅም ስለሌለህ መመገብ የማትፈልገውን ምግብ ተመግበህ ታውቃለህ/ሽ)
5.	Did you eat a smaller meal than you felt you needed because there was not enough food?(በቂ ምግብ ስለሌለህ መመገብ ከሚገባህ ብታች ተመግበህ ታውቃለህ/ሽ)
6.	Did you eat fewer meals in a day because there was not enough food?(በቂ ምግብ ስለሌለህ በጣም ትንሽ መጠን ያለው ምግብ ተመግበህ ታውቃለህ/ሽ)
7.	Was there ever no food at all in your house because there were not resources to get more?(ምግብ መግዛት ሳትችልና ምንም አይነት ምግብ በቤትህ ውስጥ አተህ ታውቃለህ/ሽ)
8.	Did you go to sleep at night hungry because there was not enough food?(ምንም አይነት ምግብ ቤትህ ውስጥ ባለመኖሩ እየራበህ ተኝተህ ታውቃለህ/ሽ)
9.	Did you go a whole day without eating anything because there was not enough food? (ምንም አይነት ምግብ ቤትህ ውስጥ ባለመኖሩ ቀኑን ሙሉ ምግብ ሳትመገብ ውለህ ታውቃለህ/ሽ)

Section ;3 House hold coping strategy questionnaires

ይህንን ጥያቄ የሚሞሉት ባለፉት 7 ቀናት ያጋጠመዎትን የአመጋገብ ሁኔታ በተመለከተ ይሆናል። ጥያቄዎቹን ከ 0 እስከ 7 ያለውን ቁጥር በመጠቀም ይሙሉ። በተጠቀሰው ጥያቄ ከተስማሙ ወይም መልስዎ ላለፉት ሰባት ቀናት ሙሉ ካጋጠመዎት 7 ከዛካነሰ ለስንት ቀን እንደሆነ ቁጥሩን ብቻይጻፉ። ስለፈቃደኝነትዎ አመሰግናለዉ።

Behaviors: In the past 7days, if there have been times when you did not have enough food or money to buy food, how many days has your household had to:	Frequency: Number of days out of the past seven: (use no 0-7 to answer number of days; use NA for not applicable) .(ለሚከተሉት ጥያቄዎች ለምን የህል ጊዜ እንዳጋጠመህ ያፍ/ፊ)
a. Rely on less preferred and less expensive foods?(ዋጋቸው የሚቀንስ ምግቦችን በመግዛት እጠቀማለው)	
b. Borrow food, or rely on help from a friend or relative?(ከጓደኛ ወይም ከቤሰብ ምግብ እበደራለው)	
c. Purchased food on credit?(ተበድሬ ምግብ እገዛለው)	
d. Use money that you saved for emergency or any other purpose?(ለድንገተኛ ችግር ወይም ለተለያዩ ነገሮች ያጠራቀምኩትን እጠቀማለው)	
e. Go to eat somewhere?(ዘመድ ቤት በመሄድ እመገባለው)	
f. Consider begging?(መንገድ በመውጣት እለምናለው)	

g. Limit portion size at mealtime?(መመገብ ከሚገባኝ መጠን በታች እመገባለሁ)	
h. Reduce number of meals eaten in a day?(የምመገብበትን ሰዓት እቀንሳለሁ)	
i. Skip entire days without eating(ሙሉ ቀን ሳልመገብ እውላለሁ)	

If you had other coping strategy pleas list and the frequency (ተጨማሪ ሀሳብ ካለህ/ሽ ግለጥ/ጪ) _____