Productivity *Analysis*

Socioeconomic Disparities: Mitigating Impacts of the COVID-19 Pandemic in Thailand

Dr. Ruttiya Bhula-or

Asian Productivity Organization

The Asian Productivity Organization (APO) is an intergovernmental organization committed to improving productivity in the Asia-Pacific region. Established in 1961, the APO contributes to the sustainable socioeconomic development of the region through policy advisory services, acting as a think tank, and undertaking smart initiatives in the industry, agriculture, service, and public sectors. The APO is shaping the future of the region by assisting member economies in formulating national strategies for enhanced productivity and through a range of institutional capacity-building efforts, including research and centers of excellence in member countries.

APO members
Bangladesh, Cambodia, Republic of China, Fiji, Hong Kong, India, Indonesia, Islamic Republic of Iran, Japan, Republic of Korea, Lao PDR, Malaysia, Mongolia, Nepal, Pakistan, Philippines, Singapore, Sri Lanka, Thailand, Turkey, and Vietnam.

SOCIOECONOMIC DISPARITIES: MITIGATING IMPACTS OF THE COVID-19 PANDEMIC IN THAILAND

JULY 2021 | ASIAN PRODUCTIVITY ORGANIZATION

PRODUCTIVITY ANALYSIS
Socioeconomic Disparities:
Mitigating Impacts Of The COVID-19 Pandemic In Thailand June

Dr. Ruttiya Bhula-or served as a volume editor.

First edition published in Japan
by the Asian Productivity Organization
1-24-1 Hongo, Bunkyo-ku
Tokyo 113-0033, Japan
www.apo-tokyo.org

Designed by Convert To Curves Media
Cover photo: Norbert Braun / Shutterstock.com

CONTENTS

AUTHORSHIP

This paper is the result of a joint endeavor by the following contributors:

Dr. Ruttiya Bhula-or
Assistant Professor/Associate Dean
College of Population Studies; and
Key Coordinator
Collaborating Center for Labor Research
Chulalongkorn University
Thailand

Dr. Attakrit Leckcivilize
Research Fellow
Health Economics Research Unit
University of Aberdeen
UK

EXECUTIVE SUMMARY

The COVID-19 pandemic has highlighted existing socioeconomic inequalities and widened gaps in Thailand. Inequalities can multiply during the COVID-19 pandemic. The poor are more likely to suffer a larger portion of income loss as a result of quarantine and other measures. The pandemic has sunk the economy, reduced household domestic consumption, and increased household debt. The objective of this paper is to investigate the impact of the COVID-19 pandemic on socioeconomic divides and possible factors widening socioeconomic gaps. It also provides recommendations to bridge the gaps.

The Thai economy had faced an economic slowdown prior to the pandemic, and the outbreak has worsened the situation. Key challenges of Thailand, an upper middle-income country with 69.3 million people, is the impact of population aging compounded by the number of poor people. The informal workers are the most vulnerable to external shocks due to their lack of income security and exclusion from comprehensive social protection measures. Many Thais have been forced into involuntary unemployment in both the formal and informal sector. The pandemic also disproportionately impacts household members and specific areas, resulting in wider disparity.

The Thai government has implemented a set of measures and restrictions to slow the spread of infection which were announced in several phases. All measures have worked well. However, as a side effect of the measures to supervise and control the situation, many aspects of life were impacted.

Recommendations are proposed in this paper to enhance productivity and design job creation policies using community-based approaches with access to upskilling and reskilling programs. Support through population-targeted policies, and special educational policies to enable inclusive growth in a sustainable manner is another approach for the government to pursue.

INTRODUCTION

Thailand was the second country in the world to detect COVID-19. On 13 January 2020, the Thailand Ministry of Public Health (MOPH) reported an imported case of COVID-19, the first detected outside PR China. The Thai response has demonstrated strong public health interventions, community engagement, and effective governance that limited community-based transmission [1]. The remarkable degree of public cooperation enabled a national response to COVID-19, successfully flattening the epidemic curve by mid-2020. However, a second wave of outbreaks started in December 2020 and is likely to constrain the recovery in the near term. As of 15 January 2021, 11,450 cases and 69 deaths had been reported [2].

The COVID-19 pandemic has highlighted existing socioeconomic inequalities and widened gaps. The Thai economy had faced an economic slowdown prior to the pandemic, and the outbreak has worsened the situation. Key challenges of Thailand, an upper middle-income country with 69.3 million people, is the impact of population aging compounded by the number of poor people. In 2019, 6.7 million people had monthly expenditures below the poverty line, with daily income lower than USD5.50 per person. In addition, the Thai labor market has a large share of informal workers, whose employment is neither protected nor regulated by the social security system, accounting for 54.3% of total employment in 2019 [3]. These informal workers are the most vulnerable to external shocks due to their lack of income security and exclusion from comprehensive social protection measures.

The Thai government has implemented a set of measures and restrictions to slow the spread of infection which were announced in several phases. The first phase came into effect on 26 March 2020 with the declaration of a National State of Emergency. Regulations to close businesses prone to the transmission of the disease were announced, including most restaurants, stores, and entertainment venues but excluding food delivery services, supermarkets,

restaurant delivery service providers and food markets, drugstores, convenience stores, banks, etc. It was suggested that people refrain from or delay nonessential cross-provincial travel and work from their habitual residences. Provincial governments were empowered to institute measures as necessary.

Followed by the regulation for state quarantine in an isolated place to monitor travelers issued on 3 April 2020, all international passenger flights to Thailand were banned from 6 April 2020. The Thai government prohibited conducting certain activities and put a night curfew in place from 22:00–04:00 on 3 May before gradually easing restrictions from 17 May, including relaxing prohibitions or limitations on conducting/carrying out certain activities as well as relaxing the night curfew. Since 1 June, businesses and activities such as fitness centers, sports facilities, public zoos, tourist spots, some businesses (including amulet shops, beauty clinics, and cinemas) can reopen with appropriate precautions for crowd management [4].

All the above measures have worked well. The COVID-19 infection rates have been relatively low with slow spread. As of 22 June, the total number of cases reported in Thailand was 3,151. Of those infected, about 96% (3,022) had recovered, 2% (58) had died, and 2% (71) were still receiving treatment [5].

However, as a side effect of the measures to supervise and control the situation, many aspects of well-being and inequalities were impacted. The objective of this paper is to investigate the impact of the COVID-19 pandemic on socioeconomic divides and possible factors widening socioeconomic gaps. It also provides recommendations to bridge the gaps.

CONCEPTUAL FRAMEWORK

Framework

A framework to assess the socioeconomic impacts of COVID-19 was developed and depicted in Figure 1. The socioeconomic impacts demonstrated linkages between income and work, as work is the best safeguard against exclusion and for generating income. However, labor markets are not always equally accessible, resulting in different impacts on differently vulnerable groups.

The COVID-19 pandemic affects the private sector as well as financial markets through a reduction in global consumption and demand, resulting in falling exports, lowered production, and a nosedive in the tourism sector. The lower demand for consumer goods and services has caused supply chain disruptions domestically and internationally. As a result, the demand for labor is decreasing. COVID-19 itself also necessitates a new normal, involving the adoption of new ways of thinking, living, and working with physical distancing and a greater health-oriented approach. The production of goods and services must be in line with the dynamic demands of the labor market. Ways of producing goods and services are more likely to employ technology, machines, and artificial intelligence (AI) to reduce costs and health risks.

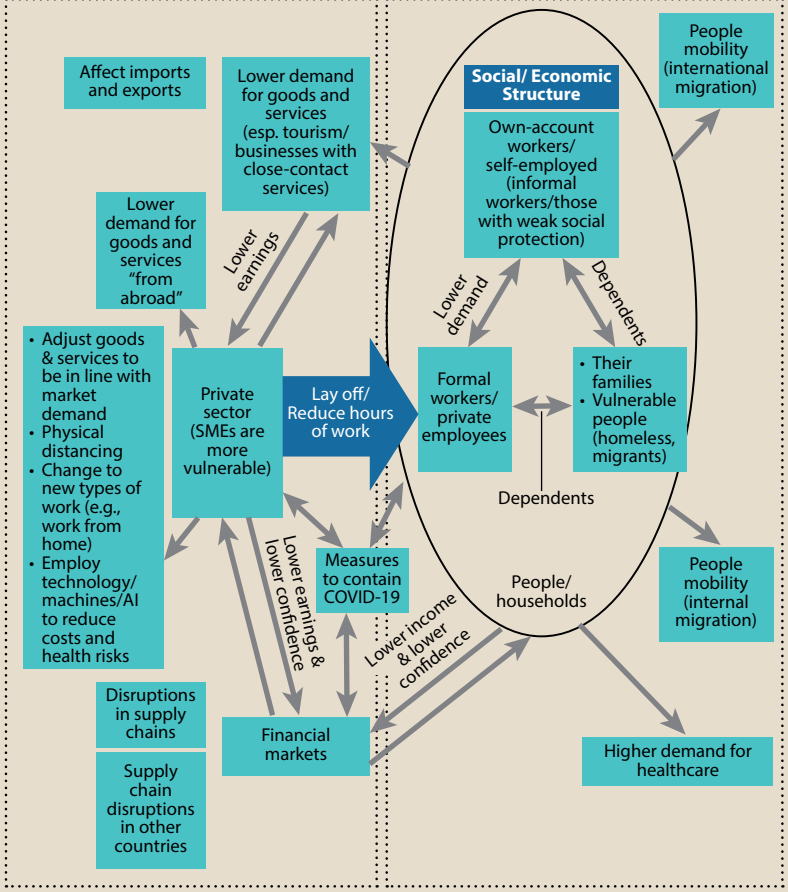
The social-oriented impacts are a result of loss of individual and household incomes. Employed persons and their families are affected on different levels, depending on the socioeconomic structure. In addition, a number of migrant workers have had to return home, while Thais working abroad are facing reduced demand for labor. The situation also affects the families of employed people, with consequences that could crush vulnerable groups in communities and society as a whole.

Methodology

A desk review was carried out to identify issues raised by the COVID-19 pandemic and its socioeconomic impacts on Thailand. This paper reviews the

FIGURE 1

FRAMEWORK TO ASSESS THE IMPACT OF THE COVID-19 PANDEMIC ON SOCIOECONOMIC INEQUALITIES.



Source: Bhula-or R. [6].

available quantitative and qualitative emerging evidence on incomes, poverty, and inequality. The materials include national government documents, academic articles, studies of international organizations, and the latest releases of national datasets. The desk review was limited to materials available in Thai and English. We also applied a method used previously [7] to assess the impact of the COVID-19 pandemic on the population, using linkages of workers to their family members. It should be noted, however, that this paper does not analyze

the impact of the pandemic from a health perspective. For example, we did not examine increased stress among family members which might lead to domestic violence. The socioeconomic impacts referred to in this report are in the short to medium term with the focus on how the pandemic affects different vulnerable groups and factors that could potentially widen socioeconomic divides.

We utilized the input-output (IO) table 2015 for 58 sectors compiled by the National Economic and Social Development Council of Thailand [8]. The IO table shows how outputs in one industry were used as intermediate inputs for other industries and to satisfy final demand. By using the IO table, the Leontief production function is held, i.e., each sector uses a fixed proportion of inputs from other sectors. In turn, a reduction in final demand in one industry affects not only the demand for products in that industry but also the demand for intermediate inputs from other industries.

In order to link the changes in outputs from each sector to the labor market, the paper further assumed that the proportion of decreases in working hours in each industry is the same as the estimated percentage of a reduction in the total output of that industry. We then estimated the potential impacts on workers and their households based on the labor market structure across industries from the most recent Informal Employed Survey (IES) conducted by the Thai National Statistics Office (NSO) in July–September 2019.

Data

We used two datasets, the IO table and IES. The IO table, produced by the National Economic and Social Development Council, provides a national transaction matrix of the distribution of the total output of one industry that contributes to all other industries as inputs and for final demand. As the IO table offers a static relationship, the most recent dataset of the table is thus preferable to minimize discrepancies from structural change due to technological progress at the time of interest. It must be noted, however, that the assumption that a fixed proportion of inputs (including labor) is required for the production of output regardless of the size of production is restrictive because industries could modify their demand for labor differently between small and large shocks. Moreover, this study utilized the IO table 2015, the most recent dataset available. Further, the results shown are the estimated impacts for 2020.

The other dataset is the IES conducted by the NSO. The IES compiles nationally representative data on the labor market in Thailand, conducted in the third quarter every year. The data include, for example, population by age, sex, educational attainment, occupation, marital status, in/not in the labor force, number of employed persons by occupation, industry, work status, work hours, income and other fringe benefits, formal/ informal status, and accidents at work.

IMPACTS OF COVID-19 ON SOCIOECONOMIC DISPARITIES

Sharp Decline in GDP

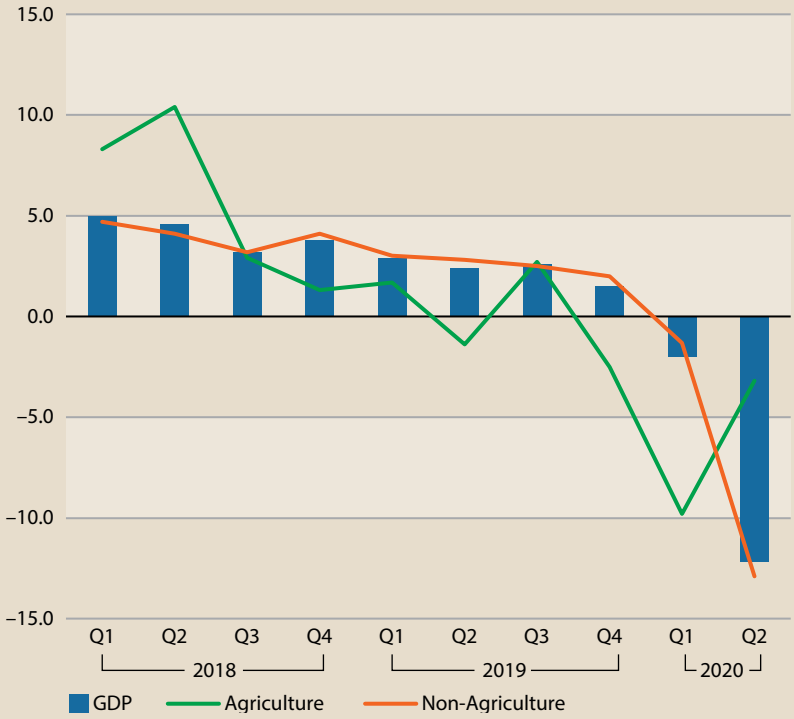
The COVID-19 pandemic shrunk the GDP considerably from 2.0% in quarter 1 to –12.2% in quarter 2 in 2020. It slightly improved to –6.6% in the following quarter [9]. Before the pandemic, the global growth slowdown led Thailand's growth decreases in 2019. The value of merchandise exports was forecast to decrease in line with a drop in global trade volume and trading partners' economic growth. After COVID-19 hammered the economy, revenues in the nonagriculture sector dropped due to the decrease in private demand and exports and imports of goods and services. On the other hand, revenue in the agriculture sector decreased mainly due to drought conditions. Nonagricultural production decreased by 12.9% due to the COVID-19 pandemic, and domestic and international measures to prevent and control the spread of the virus (Figure 2). In quarter 3 2020, GDP remained negative, although signs of recovery were seen.

It is clear that in terms of GDP in the second quarter of 2020, tourism-related sectors were the most severely affected due to the declaration of an emergency, temporary ban on all international flights imposed by the Civil Aviation Authority of Thailand, and measures restricting dining in restaurants and visiting entertainment venues. Such hard-hit sectors included accommodation and food services; arts, entertainment, and recreation; and transport and storage.

Household domestic consumption shrank due to the pandemic. COVID-19 has impacted daily activities, including traveling, buying consumer goods/services, and daily personal care like haircuts, exercising, and medical services [10]. In line with the decrease in household consumption expenditure, revenue from administrative and support services, other services, private household, and wholesale and retail trades dropped dramatically. Furthermore, the manufacturing sector declined by 14.4% in response to domestic and external

FIGURE 2

AGRICULTURE VS. NONAGRICULTURE GDP GROWTH (REFERENCE YEAR = 2002; YEAR-ON-YEAR GROWTH RATES).



Source: National Economic and Social Development Council [9].

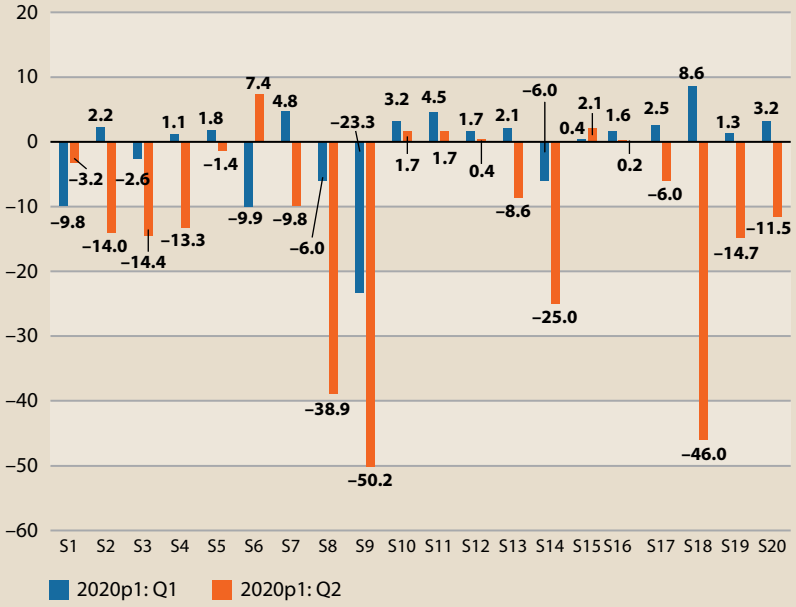
demand. Electricity, gas, steam, and air-conditioning supply contracted by 13.3%, resulting from measures to control COVID-19, work-from-home policies, and reduction of work on production lines (Figure 3).

The UN Conference on Trade and Development (UNTAD) estimated the potential impact of the decline in the tourism sector [11]. Using computable general equilibrium models in the moderate scenario, Thailand would be among the most heavily affected countries with a loss in GDP of 9% (Figure 4).

The share of household debt to GDP increased from 78.4% in 2019 quarter 1 to 80.1% in 2020 quarter 1 [8]. The economic contraction and COVID-19

FIGURE 3

GDP GROWTH BY ECONOMIC SECTOR (REFERENCE YEAR = 2002; YEAR-ON-YEAR GROWTH RATES).



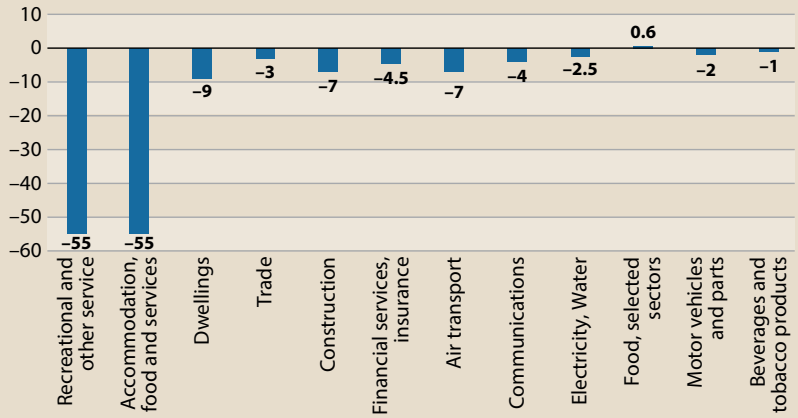
Note: Agriculture, forestry, and fishing; mining and quarrying; manufacturing; electricity, gas, steam, and air-conditioning supply; water supply; waste management; construction; wholesale and retail trade; transport and storage; accommodation and food services; information and communication; financial and insurance; real estate; professional activities; administrative and support services; public administration; education; health and social work; arts, recreation; other service activities; and private households.
Source: National Economic and Social Development Council [9].

pandemic affected household confidence and income. Nonperforming loans (NPLs) are bank loans that are subject to late repayment or are unlikely to be repaid by borrowers. The NPL-to-GDP ratio increased from 2.75 in 2019 quarter 1 to 3.23 in 2020 quarter 1 (Figure 5).

The impact of COVID-19 on the most vulnerable is likely to have been severe. According to the World Bank projection [12], in 2020 an additional 1.5 million people will be under the poverty line (daily income lower than USD5.50/ THB165 per person). The total number of the poor in 2020 is projected to be 5.2 million people, making the poverty rate 8.8% (Figure 6).

FIGURE 4

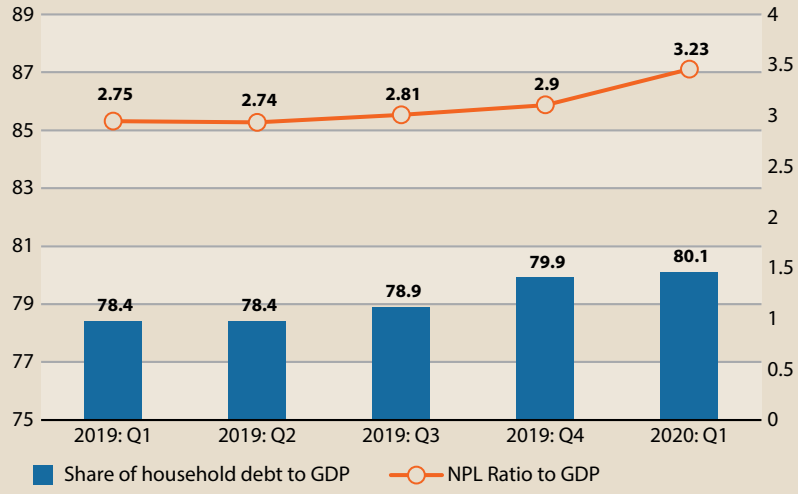
SECTORAL OUTPUT IMPACT UNDER THE MODERATE SCENARIO OF UNTAD (2020) (% CHANGES).



Source: United Nations Conference on Trade and Development [11].

FIGURE 5

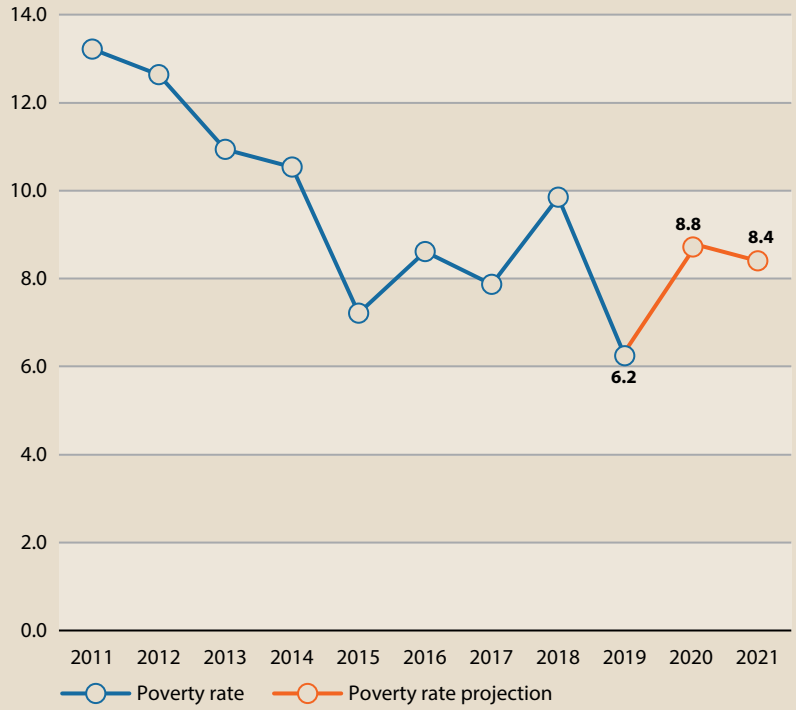
HOUSEHOLD DEBT IN THAILAND, 2019 QUARTER 1 TO 2020 QUARTER 1.



Source: National Economic and Social Development Council [8].

FIGURE 6

POVERTY SHARE AND POVERTY SHARE PROJECTION.



Note: Based on the upper middle-income class poverty line of USD5.50/day/person (2011 PPP).
Source: 2011–2019, National Economic and Social Development Council [13]; 2020-–2021, World Bank projection [12].

Disproportionate Impacts by Economic Sector and Working Arrangements

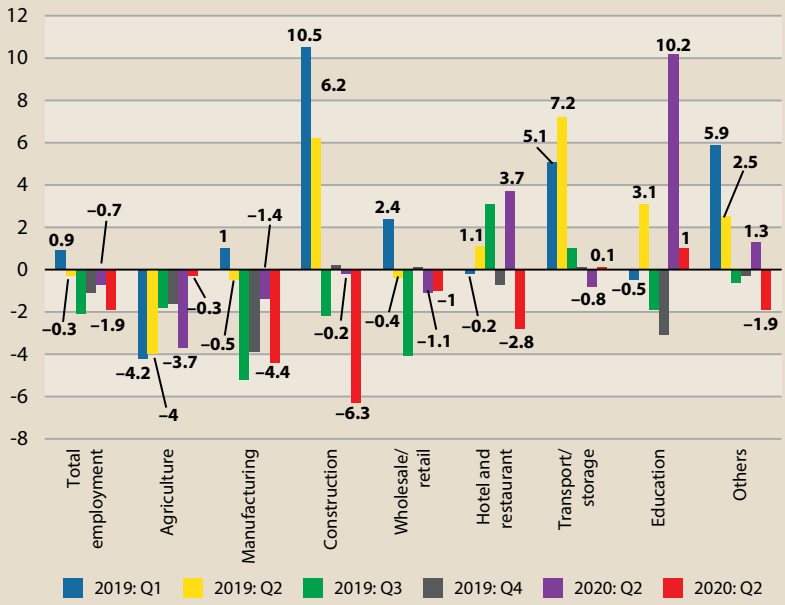
Unemployment Rate

The number of unemployed persons in 2020 quarter 2 increased significantly by a total of 0.75 million, representing 1.95%, which was double than that in the previous period [9]. In 2020 quarter 1, employment in the agriculture sector decreased by 3.7%, followed by a 0.3% drop in quarter 2 which was affected by a severe, continued drought since mid-2019 [9]. The average working hours in the private sector had been reduced to 40.2 hours/week from 46.4 hours/week in the same period in the previous year [9]. Negative employment and wage effects were the highest in tourism, construction, manufacturing, hotels

and restaurants, and other services. Some sectors did not show much change, yet the dynamics of employment were apparent. For example, the transport and storage sector was facing a reduction in passenger transportation, yet enjoyed an increase in parcel and food delivery as the platform "economy" was expanding. Employment in education was higher compared with the previous year, as the number of employed people increased (Figure 7).

FIGURE 7

CHANGE IN EMPLOYMENT (REFERENCE YEAR = 2002; YEAR-ON-YEAR GROWTH RATES).



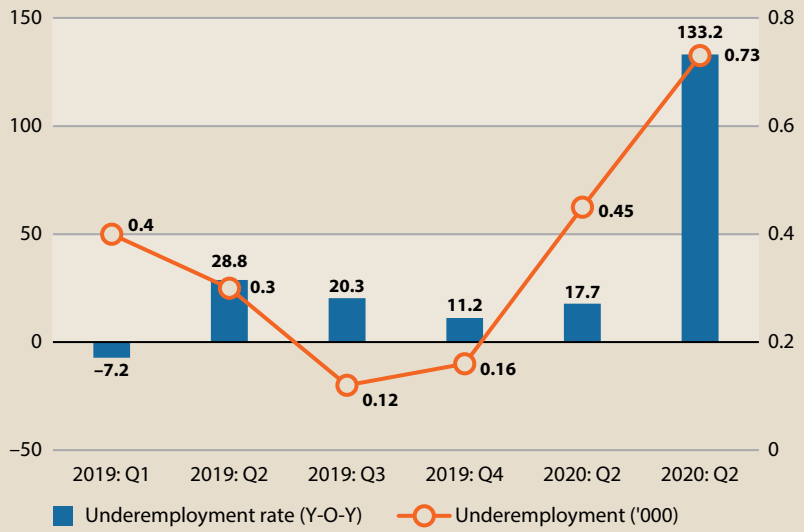
Source: National Economic and Social Development Council [9].

The unemployed who had worked within the previous three months before being unemployed made up around half of the total jobless, especially from hotels and restaurants and wholesale and retail trades. Among those who became unemployed during the previous three months, 33.8% were over 40 years old and 59.1% graduated from high school and lower. With older age and lower education, they were less likely to find new jobs in a more competitive environment.

It is clear that underemployment, indicating the unutilized skills, experience, and availability to work, is on the rise (from 0.3% in 2019 quarter 2 to 0.73% in 2020 quarter 2) (Figure 8) [3]. Changes in earnings and in labor market conditions are the keys to drive income inequalities due to changes in the distribution of gross wages and salaries [14].

FIGURE 8

UNDEREMPLOYMENT (YEAR-ON-YEAR GROWTH RATES).



Note: Underemployment means those who are working less than 10 hours/week and need additional hours of work or are waiting for seasonal employment.
Source: National Economic and Social Development Council [9].

Working Conditions and Wages in Involuntary Nonstandard Employment

Workers in informal employment are likely to work in inferior conditions, lack protection, and earn low wages [15]. This is true not only for employment in the informal sector but also for other workers who may be working in formal enterprises but without formal jobs. Holding a job is a means to escape poverty, but it is not a guarantee of working and making a substantial income for a decent living.

Many Thais have been forced into involuntary employment. Many were laid off from the formal sector and had to work in the informal sector, without either a contract or salaried position. There is a growing divide among workers with

regard to the type of jobs. Nonstandard jobs, which tend to be associated with lower job quality, lower earnings, and higher levels of labor market insecurity, have tended to increase. More than half of the employed in Thailand's workforce are in vulnerable employment, including own-account workers and contributing family workers. As the Thai labor market comprises a high share of informal employment and numerous smaller enterprises and family businesses, COVID-19 will have a disproportionately negative impact on the bottom 50% of the workforce, who are already vulnerable due to their lack of regular income. Those workers report higher exposure to physical health risks at work [3].

Disproportionate Impacts on Households

The COVID-19 pandemic disproportionately impacts household members and specific areas. We [16] assessed the impact of the COVID-19 pandemic on workers and families in Thailand.

The scenarios were developed under two perspectives: different levels of impacts (e.g., on consumption or investment); and the duration of the impact [8]. The present report gives three of the eight scenarios, the best case, moderate case, and worst case. The shocks in aggregate demand were translated into shocks in demand for labor in each industry through the use of the I-O table 2010 for 58 sectors as determined by the National Economic and Social Development Council of Thailand [9]. The assumptions of those scenarios are summarized as follows:

- **Best-case scenario:** Inbound tourism from PR China drops by 95% for four months; inbound global tourism drops by 95% for four months; inbound tourism returns; domestic tourism drops from 41.7 million to 15 million; private consumption declines by 1.5%; government consumption increases by 2.6%; private investment declines by 4.3%; public investment increases by 5.8%; exports decline by 8.8%; and imports decline by 15.0%.

- **Moderate-case scenario:** Inbound tourism from PR China drops by 95% for eight months; inbound global (excluding Asia) tourism drops by 95% for eight months; inbound (Asian) tourism drops by 95% for eight months; private consumption declines by 2.0%; government consumption increases by 2.6%; private investment declines by 4.3%;

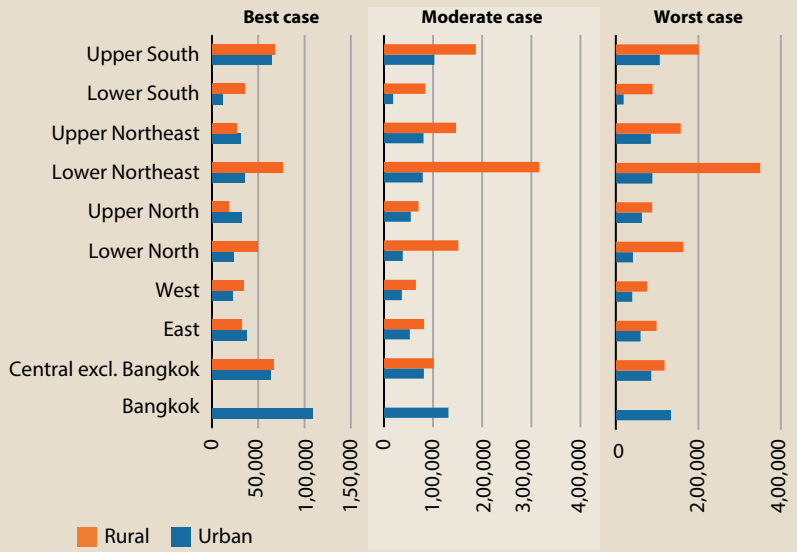
public investment increases by 5.8%; exports decline by 24.9 %; and imports decline by 21.7%.

- **Worst-case scenario:** Inbound tourism from PR China drops by 95% for 22 months; inbound global tourism drops by 95% for 22 months; private consumption declines by 2.0% in the first year and by 2.5% in the second year; government consumption increases by 2.6%; private investment declines by 4.3% in the first year and by 10.8% in the second year; public investment increases by 5.8%; exports decline by 36.2%; and imports decline by 31.5%.

The results of the estimates indicate that in the short term (the best case), the pandemic will have greater impact on families of informal workers in urban areas. On the other hand, young dependents will be more affected in rural areas (the worst case). The most severely impacted area will be the lower northeastern area (Figure 9 and Figure 10).

FIGURE 9

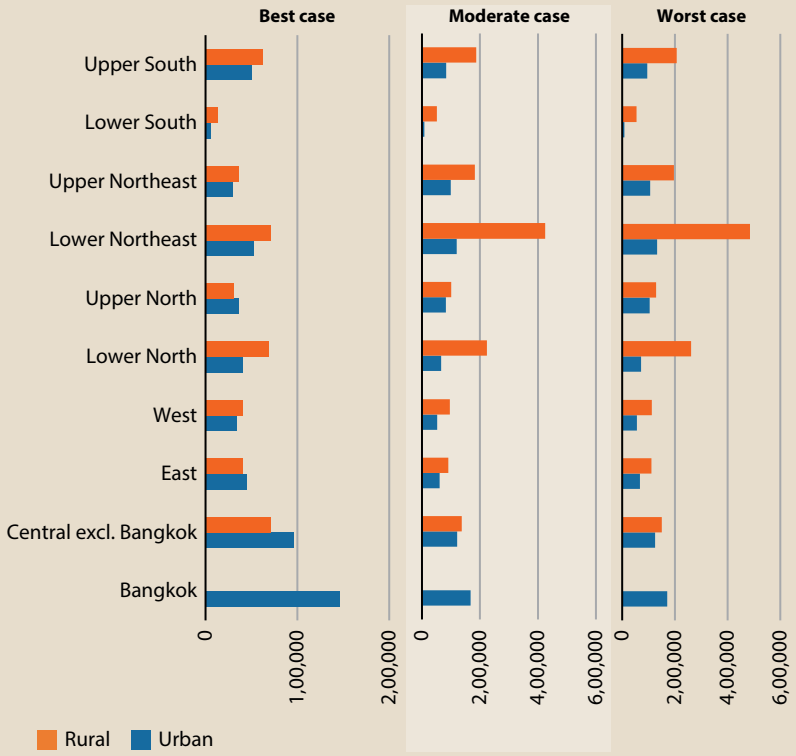
NUMBER OF CHILDREN AGED 0–4 YEARS IN FAMILIES WITH INFORMAL WORKERS AFFECTED BY A 10% OR GREATER REDUCTION IN WORKING HOURS.



Source: Leckcivilize and Bhula-or [16].

FIGURE 10

NUMBER OF PERSONS AGED 70 YEARS AND OLDER IN FAMILIES WITH INFORMAL WORKERS AFFECTED BY A 10% OR GREATER REDUCTION IN WORKING HOURS.



Source: Leckcivilize and Bhula-or [16].

Disproportionate Impacts on Gender

Informal female workers are estimated to lose a higher proportion of their working hours than their male counterparts (Figure 11). The impacts on women range from 13–18% in the best-case scenario to 25–30% in the worst-case scenario. The differential effects by age-group are not as pronounced as the gender aspects. This might simply reflect the fact that women work more in the informal sector and service industry than men. Furthermore, the high working-hour losses among females aged 15–24 indicate a potential increase in gender disparties due to COVID-19 in the future.

FIGURE 11

PERCENTAGE OF POTENTIAL REDUCTION IN WORKING HOURS OF INFORMAL WORKERS DUE TO SHOCKS BY GENDER AND AGE-GROUP.

Source: Authors' estimates.

Disproportionate Impacts on Migrant Workers

Before the COVID-19 pandemic, the number of migrant workers in Thailand accounted for approximately 7–10% of the total workforce. More than 90% of migrant workers in Thailand were from neighboring countries working in low-skilled, low-paid jobs [17]. Working in low-paid jobs forced them to live in slums or crowded accommodations and made it difficult to engage in social distancing. Similar to all low-income workers, self-quarantining means no work and no pay for at least two weeks. Also, they lack funds to pay for places where they can isolate safely and hence have low incentive to do so. Moreover, with a significantly declining level of income due to the loss of employment and overtime, they are likely to suffer from mental health disorders.

Thai internal migrant workers usually send remittances back to family members, or internal migration is used as insurance against risk for the family as a whole [18]. Yang [19] evidentially found that in the context of Thailand remittances help to redistribute income toward poor areas and reduce inequalities in household incomes. Studies of Thai emigrant workers indicate that remittances are mostly used for daily living expenses [20]. The shift of the unemployment rate in the destination area results from the return of migrant workers to their hometowns and a net income reduction of returned migrants and their families. Such a drop in remittances reduces the total income, especially among poor families and households with primary and middle-school educations.

Widening the Educational Divide

During and after the COVID-19 pandemic, access to all levels of education may be difficult, especially among poor families. Children from middle-class and wealthy families are more likely to have access to digital tools and infrastructure as well as medical supplies, as they are equipped with better opportunities. Less-educated families and the poor are more likely to be in worse health than those in more favorable socioeconomic situations. Children whose parents have less education perform worse than others on average, and children with better-educated parents do better [21].

In Thailand, more than 30% of 15-year-old students do not have private rooms or quiet spaces for studying or doing homework. Only 55% of the poorest group have personal space to do their homework. Poor households are more likely to be burdened by policy action because they have more school-aged members on average than wealthy families [21]. Children in migrant families who must move frequently are also at risk of limited educational access.

POLICY RESPONSES TO MITIGATE IMPACTS OF THE COVID-19 PANDEMIC

The Thai government implemented a set of policies to contain and mitigate the adverse health and socioeconomic effects of COVID-19. This section summarizes major policy measures aiming to curb the socioeconomic impacts. The policy responses can be classified into three key areas. The first is the public health and social measure (PHSMs) to control the spread of the disease. The PHSMs described in this paper focus only on lockdown-related policies that impact socioeconomic dimensions. The second policy area is the economic policy response, aiming to stabilize and stimulate the economy. Finally, the social assistance responses help support income security and access to basic services.

Public Health Measures

PHSMs include measures or actions by individuals, institutions, communities, local and national governments, and international bodies to slow or stop the spread of COVID-19. The measures include detecting and isolating cases, contact tracing and quarantine, social- and physical-distancing measures including for mass gatherings, international travel measures, and vaccines and treatments.

Overall, the public measures have worked well as Thailand implements Universal Coverage for Emergency Response. The COVID-19 infection rates were relatively low with slow spread until mid-December 2020. The second wave was originated from the center of the seafood market in Samut Sakhon province. As of 15 January 2021, the total number of cases reported in Thailand was 11,450. Of those infected, about 72.4 % (8,288) had recovered, 0.6% (58) had died, and 27% (3,093) were still receiving treatment [2].

This section describes the PHSMs that have impacts on socioeconomic disparities in three key domains: temporary closure of high-risk venues; physical distancing; and human mobility restrictions. These three key domains directly affect socioeconomic disparities.

First, the temporary closure of high-risk venues reduces the incomes of workers and businesses in supply chains. The income loss has significant impacts on low-wage earners and informal workers. Numerous internal and international migrant workers returned home. During that time, a number of unfair labor practice cases were revealed. Second, physical-distancing measures promoted work-from-home practices, reduced consumer demand, and increased demand for online services compared with that for offline services. Finally, human mobility restrictions also reduced household incomes and remittances. At the same time, the restrictions led employers to increase the utilization of machines and automation while there was a temporary shortage of labor in migrant-intensive sectors (Table 1).

TABLE 1

OVERVIEW OF PHSMS.

Public health measures	Details (selected key measures)	Socioeconomic impacts
Temporary closure of high-risk venues	• The temporary closure of high-risk venues came into effect on 26 March 2020 with the declaration of a National State of Emergency. Regulations to temporarily close businesses prone to the transmission of the disease were announced, including most restaurants, stores, and entertainment venues but excluding food delivery services, supermarkets, restaurant delivery service providers and food markets, drugstores, convenience stores, banks, etc. Easing started on 3 May with opening of low-risk businesses • Closure of public venues by Bangkok Metropolitan Administration from 29 April 2020 • Containment measures for the resumption of businesses and activities were gradually lifted, starting from 3 May, 17 May, 1 June, and 15 June 2020	• Income reduction, causing big impacts on low- wage earners and informal workers • Returned workers from urban areas and from abroad • Unfair labor practice cases revealed

Continued on next page

Continued from previous page

Public health measures	Details (selected key measures)	Socioeconomic impacts
Physical distancing	• The Thai government prohibited conducting certain activities and put a night curfew in place before gradually easing restrictions • Promoting work-from-home and work rotation to reduce the number of commuters • Suggesting hand hygiene, wearing face masks in closed spaces	• Work-from-home practices • Reduction in consumer demand • Higher demand for online services
Human mobility restrictions	• The first human mobility restrictions came into effect on 26 March 2020 with the declaration of a National State of Emergency. It was suggested that people refrain from or delay nonessential cross-provincial travel and work from their habitual residences • Followed by the regulation for state quarantine in isolation to monitor travelers issued on 3 April 2020, all international passenger flights to Thailand were banned from 6 April 2020 • In response to the second wave, as of 5 January 2021, risk zone divisions are currently in place: maximum control (dark red) zone provinces; high monitoring (yellow zone) with very low numbers of cases of COVID-19; and green zone provinces where there is no reported case of COVID-19 for a certain period	• Reduction in individual incomes • Reduction in remittances • Increased utilization of machines and automation • Temporary shortages of labor in migrant-intensive sectors

Source: Public health measures compiled by the authors from the Center for COVID-19 Situation Administration of Thailand: http://www.moicovid.com.

Economic Policy Responses

The pandemic has caused a slump in economic growth and employment. A series of stimulus measures has been put in place by the Thai government since February/March 2020 through fiscal and monetary policy responses (Table 2).

Fiscal measures focused on extra spending to boost demand for the local economy and some tax reductions (e.g., reducing the property tax rate temporarily and extending the deadlines to pay personal and corporate income taxes). The government approved an emergency decree to borrow up to THB1 trillion off-budget to fund cash transfers, the medical response, and economic and social rehabilitation until the end of the 2021 fiscal year. The purposes of the loan were to mitigate the impacts on workers, businesses, and vulnerable groups and to strengthen the economy and society as well as create new jobs. This extra budget was partly spent on measures to support the labor market and strengthen the social safety net as discussed below.

Some interesting programs are, for example, the "We Travel Together" campaign that provides co-payments to domestic tourists for accommodation, food, and flight fares. In addition, a 50–50 co-payment scheme was designed to subsidize citizens' spending at small local businesses. The latest co-payment scheme has been implemented from January to March 2021. Participants can buy food, drinks, and other products at small shops and the government subsidizes 50% of their payment, limited to THB150 per day for a total of THB3,500. Recipients are required to put money in an assigned e-wallet and spend it at registered sellers. The recipient pays half of the expenses, while the government pays the remainder directly to the sellers. Overall, the scope of government emergency budgets and loans focuses mainly on mitigating the immediate challenges and supporting the economy through the COVID-19 pandemic.

On the other hand, the Bank of Thailand (BOT) in cooperation with government-owned special-purpose and private banks implemented measures to ensure stability in the financial market and ease financial tensions for private companies effective from February 2020. For example, the BOT set aside extra loans to support good-rated corporate bonds that could not roll over their debts due to uncertainties in the market. Also, the BOT changed several regulations to facilitate commercial bank help for business and individual borrowers by suspending principal and interest repayments for a few months, extending debt

repayment periods, and debt restructuring. Further, government-owned and private banks provided various emergency and soft loans to support affected employees, the self-employed, farmers, and SMEs through relief packages. The World Bank [12] addressed the challenges of achieving the goal of the program by providing soft loans to SMEs and revising programs to expand coverage beyond the prior targeted sectors, address credit risk issues, and extend the program duration.

TABLE 2

OVERVIEW OF COVID-19 ECONOMIC AND MONETARY MEASURES.

	Details (selected key measures)
Fiscal policies	**Phase 1 (10 March 2020)** 1. THB20 billion (USD0.64 billion) to assist people affected by COVID-19 from the central fund **Phase 3 (7 April 2020)** 2. THB1 trillion (USD30 billion) to fund the government's relief cash transfers, healthcare services, and economic and social rehabilitation One Trillion-baht Emergency Decree (until the end of FY2021) 2.1. THB45 billion (USD1.35 billion), healthcare measures 2.2. THB555 billion (USD16.65 billion), relief measures for households, farmers, entrepreneurs For example, THB5,000 cash transfers to informal workers for 3 months (No-one Left Behind); farmers' assistance of THB5,000 for 3 months; THB1,000 cash transfers to state welfare cardholders for 3 months; THB1,000 cash transfers to vulnerable groups for 3 months; THB500 top-up of state welfare cardholders for 3 months; THB15,000 cash transfers to formal workers by Social Security Office 2.3. THB400 billion (USD12 billion), recovery and rehabilitation measures For example, "We Travel Together" program; upgrading large agricultural plots with new technology and market integration; co-payment program; promotion of employment of new graduates in public and private sectors; other approved measures

Continued on next page

Continued from previous page

	Details (selected key measures)
Monetary policies	3. February–May 2020, the Monetary Policy Committee (MPC) cut the policy rate from 1.25% to 0.5% 4. July–December 2020, the MPC held the policy rate at 0.5% **Phase 1 (10 March 2020)** 5. THB150 billion (USD4.8 billion) to provide financial assistance to SMEs by Government Savings Bank (GSB) (announced on 7 April 2020: allow GSB to allocate soft loans to nonbank financial institutions) 6. THB30 billion (USD0.96 billion) to provide soft loans to SMEs in promoting employment by Social Security Office 7. THB20 billion (USD0.64 billion) to assist people affected by COVID-19 from central fund **Phase 2 (24 March 2020)** 8. THB40 billion (USD1.28 billion) to provide emergency loans for self-employed without collateral by GSB and Bank for Agriculture and Agricultural Cooperatives 9. THB20 billion (USD0.64 billion) to provide special credit facilities for employees with collateral from GSB (later revised to provide a grass-roots empowering loan and loan scheme to support the recovery of the tourism industry and SMEs in other sectors) 10. THB2 billion (USD0.06 billion) to provide soft loans for low-income groups to the Office of the Government Pawnshop by GSB 11. THB10 billion (USD0.32 billion) to provide soft loans to support SMEs in tourism-related businesses from the Small and Medium Enterprise Development Bank (later revised to extend soft loan applications by six months and allow loans to companies listed on the Market for Alternative Investment) **Phase 3 (7 April 2020)** 12. THB500 billion (USD15 billion) to promote SME liquidity by providing soft loans through commercial banks and specialized financial institutions 13. THB400 billion (USD12 billion) to stabilize the financial market by setting up the Corporate Bond Liquidity Stabilization Fund
Expenditures for mitigating impacts of COVID-19	14. THB40.33 million (USD1.29 billion)

Note: The measures do not include the benefits of tax relief, lower utility bills, and benefits to formal workers.
Source: National Economic and Social Development Council [13], Budget Bureau, Fiscal Policy Office, Bank of Thailand, and World Bank [12].

Social Assistance Responses

Thailand has a number of social assistance and social insurance programs. However, in terms of coverage, non-Thai residents are excluded from social assistance schemes. The social security insurance mainly covers workers in the formal sector as it is a compulsory scheme, while only a small number of informal sector workers participated in the noncompulsory social security insurance scheme.

As mentioned previously, this paper focuses on socioeconomic impacts. This section thus covers three key elements: 1) social safety net and immediate responses; 2) employment and livelihood responses; and 3) education responses. The first section demonstrates the immediate responses to support household incomes and reduce household expenditures. The second section shows work-related assistance. The education response impacts on the long-term individual returns and losses in human capital are covered in the third section.

Social Safety Net and Immediate Responses

Social safety net programs include cash, in-kind transfers, social pensions, public works, and school feeding programs targeting poor and vulnerable households to fight poverty (Table 3).

The Ministry of Social Development and Human Security was responsible for providing extra support of THB1,000 for three months from May to July 2020 to vulnerable populations, which are children from birth to 6 years of age in poor households, people with disabilities, and the elderly as well as the registered poor. However, there was a delay in transferring the money from May to July 2020 due to underallocation of the budget for the number of eligible receivers.

To help reduce the cost of living, state enterprises in charge of supplying electricity and water reduced the tariffs and decided to refund deposits taken as collateral to use their services from all users. There are some administrative hurdles for some users to lodge requests to receive their deposit returns.

As for Internet and telecommunication services, the regulator (through providers) supported 10 GB of free data from 10–30 April 2020 as well as 100 minutes of free calls for every phone user from 1–15 May 2020. Although these measures can be viewed as ways to support workers who had to work from home and students who needed to study online, they did not fully cover

periods when the schools and universities were closed. In January 2021, the regulator cooperated with providers to improve the speed of fixed broadband and issued a new unlimited data package to support people who had to work or study from home due to the new outbreak.

TABLE 3

OVERVIEW OF COVID-19 SOCIAL ASSISTANCE MEASURES.

Social assistance measure	Details (selected measures)
Extra support of THB1,000 from May to July 2020 to vulnerable populations	• Providing extra support of THB1,000 for 3 months to vulnerable populations
Reducing the cost of living	• State enterprises in charge of supplying electricity and water reduced tariffs and allowed to deposit refunds • Supported 10 GB of free data from 10–30 April 2020 and 100 minutes of free calls for every phone user from 1–15 May 2020

Source: Authors' compilation.

Employment and Livelihood Responses

As stated above, the Thai economy was hard hit by slumps in domestic consumption, exports, and international tourism. Several government policies aimed to mitigate such impacts on losses of jobs and income (Table 4). For formal workers under the social security system, support measures included periods of reduced contribution rates and extra unemployment benefits in terms of higher rates and longer covered periods. Different rates of unemployment benefits covered employment termination by employers, resignations, and unforeseeable situations particularly when the government imposed lockdowns and restrictions. Moreover, employers received small reductions in their social security contributions as well.

The government supported informal workers (e.g., self-employed, unpaid family workers, and employees outside the social security system) through direct transfers of THB5,000 for three months from April to June 2020. However, those who wanted to participate in this program needed to register mainly via a website and have a bank account to receive the money. Still more than 22 million people attempted to register but only roughly 15 million passed

the screening criteria and received transfers due to vague eligibility criteria and limited access for people with no Internet connections or low digital literacy. A policy of a similar nature albeit with smaller transfers will be implemented in early 2021 to mitigate the impacts of the new outbreak in late 2020. Similarly, the Ministry of Agriculture supported farmers with direct transfers of THB5,000 for three months from May to July 2020 via the Bank for Agriculture and Agricultural Cooperatives. In addition, the Ministry of Labor provided soft loans to support businesses in job creation. It also created part-time jobs and short-term employment. For foreign workers, the ministry pardoned overstay fines and allowed them to extend their work permits.

TABLE 4

OVERVIEW OF COVID-19 LABOR MARKET AND EMPLOYMENT ASSISTANCE MEASURES.

Labor market and employment assistance	Details (selected measures)
Maintain and support workers to stay in the system	
Wage subsidies	• SMEs can deduct three times the cost incurred by salary payments from April to July 2020 for employees who are members of SSO and receive salaries of up to THB15,000/person/month
Social security contributions	• Reduction in the rate of monthly contributions to the Social Security Fund for monthly salaried employees from a rate of 5% to 1% of wages and for employers from a rate of 5% to 4% of wages (March–May 2020) • Reduction in the rate of monthly contributions to the Social Security Fund for monthly salaried employees from a rate of 5% to 2% of wages and for employers from a rate of 5% to 2% of wages (September–November 2020) • Reduction in the rate of monthly contributions to the Social Security Fund for monthly salaried employees from a rate of 5% to 3% of wages and for employers from a rate of 5% to 3% of wages (February–March 2021)
Mitigate impacts from lower demand for labor	
Promoting job creation	• Soft loans to support businesses in job creation
For informal workers	• Direct transfers of THB5,000 for 3 months from April to June

Continued on next page

Continued from previous page

Labor market and employment assistance	Details (selected measures)
Public employment scheme	• Public employment through governmental organizations, e.g., Department of Employment, Ministry of Higher Education, Science, Research and Innovation
Unemployment benefits	• Formal workers covered by social protection funds receive increased unemployment compensation of up to 50% of salary • Employees furloughed because of the COVID-19 outbreak were eligible to receive 62% of daily wages up to THB15,000 from the Social Security Fund for up to 90 days
Skill development	
Skill development	• The Department of Skill Development opened courses for both formal and informal workers

Source: Authors' compilation.

Education Responses

The direct impacts of COVID-19 on the education sector through mitigation measures, including school closures and lockdowns, led to the necessity for online learning (Table 5). Remote learning facilities are a combination of existing and new digital television programs for preprimary, primary, and lower secondary students. These programs are supplemented by online learning materials and teacher interactions through the OBEC platforms for upper secondary students. Materials were prepared between 7 April and 17 May and made available from 18 May for a trial and feedback period leading up to 1 July. In Thailand, more than 30% of 15-year-old students do not have private rooms or quiet spaces for studying or doing homework. Only 55% of the poorest group have personal space to do their homework [21].

While a large number of students do not have computers, notebooks, or tablets at home, a full online system is impossible, especially for schools in remote areas. The quality of learning materials for young children at preprimary and early primary levels is evaluated as poor. For secondary school students, many online resources are in English rather than Thai, and resources in Thai often use traditional pedagogy, with limited interaction and effectiveness [21, 22]. Without prior preparation, the majority of teachers have never received training

on using technology to deliver remote education. With the economic impact on poor households, student dropouts are predicted along with impacts of income reduction stress on children.

TABLE 5

OVERVIEW OF COVID-19 EDUCATIONAL MEASURES.

Educational measures	Details (key measures)
School closures	• Lockdown measures necessitated online learning methods • The beginning of the new 2020 academic year was postponed from 16 May to 1 July
Equitable Education Fund	• The Equitable Education Fund was approved (1 May 2020): THB2.04 billion to support the cost of living for more than 750,000 children from the most vulnerable families impacted by the COVID-19 pandemic

Source: Oxford Policy Management and United Nations Thailand, July (2020) [23].

POLICY RECOMMENDATIONS TO MITIGATE SOCIOECONOMIC DISPARITIES

The COVID-19 pandemic affects various population groups disproportionately, especially low-income households, vulnerable groups, and women. Socioeconomic inequality existed before the pandemic but has widened. The pandemic increased the threat from automation to all types of worker, especially low-skilled, person-to-person service workers. While the government has attempted to supervise and control the situation, with a priority on people's health and saving lives, well-being and inequalities were affected. Addressing disparities in the pandemic era requires a range of policy reforms both to prevent disease spread and to provide equitable access to basic needs and economic recovery measures.

This section provides recommendations to mitigate the disparity gaps. The following recommendations address the key points in ensuring that no one is left behind and discriminated against in the course of the COVID-19 response and recovery. Productivity shifts and job creation policies using green community-based approaches could generate inclusive growth in a sustainable manner.

Promote Access to Upskilling and Reskilling Programs in Fiscal Stimulus Packages, Focusing on Vulnerable Groups

Enhance Access to Digital Tools and Related Literacy for Vulnerable Groups and Their Families to Promote Employability and Entrepreneurship

Digitization and automation have changed occupational structures significantly and will continue to alter how existing jobs are carried out. Low-skilled workers are facing a higher risk of automation [24]. The group prone to job risks in the future are the more vulnerable, including women and those with low levels of education. In addition, vulnerable employed people are those normally working in the traditional sector, not the production sector, and are slow in technological adoption. Increased automation raises the risk of job loss among that group who have low or limited social security.

The transformation process was progressing rapidly before the arrival of the COVID-19 pandemic, which only accelerated it. Many firms are rethinking their production processes and willing to invest in equipment to reduce the risk of COVID-19. Work-from-home arrangements are reshaping job norms [25]. The polarization of labor demand between high-skilled nonroutine jobs and low-skilled nonroutine jobs is being expedited. Automation could exacerbate existing disadvantages faced by vulnerable workers.

As the use of digital tools is likely to increase, disparities in accessing and using ICT tools can deepen socioeconomic disparities, particularly between socioeconomically advantaged and disadvantaged children and between rural and urban residents. The digital divide can reduce participation in work and political power for population groups left behind.

In 2017, only 3% of poor households with an average monthly income of less than THB16,667 (USD510) owned computers with Internet connections, while 19% of higher-income households did [22]. This limits opportunities to use technology to work from home and/or to supplement income by engaging in the platform economy. It is also important for policies on job creation to generate inclusive growth.

Besides the accessibility to digital tools, digital literacy and digital infrastructure are also important. As measures to prevent the spread of COVID-19 encourage staying at home, online shopping has increased, with double-digit growth. However, there has also been an increase in online complaints. During January–July 2020, the complaints were mostly about seller reliability and fraud, while the majority of victims mostly had low levels of education or were not familiar with the platforms. Therefore, digital literacy and infrastructure are crucial to enable people to use the Internet and integrate digitalization.

Greater attention should be paid to the necessary conditions to develop knowledge and shared competence to achieve a more inclusive digital economy. Along with the digital literacy and digital infrastructure, it is also important to promote the accessibility to own or access to the digital tools among poor households for work and for education.

These recommendations should be the responsibility of the central government as they require collaboration, innovative incentive systems that facilitate cross-sectoral action, and shared accountability across different ministries,

agencies, businesses, and nongovernmental stakeholders. For example, the potential organizations in developing digital infrastructure can be the Ministry of Digital Economy and Society [26], in collaboration with other public organizations and the private sector. The implementing programs can be designed in line with the fiscal stimulus packages, i.e., offering financial support to vulnerable groups with a requirement to upskill/reskill for better employability in the new normal.

It must be noted that upskilling and reskilling programs must promote employability and entrepreneurship through public–private–academic employment services. Programs provided should match personality traits and previous work backgrounds and reduce skill mismatches for long-term growth.

Enhance Lifelong Learning and Entrepreneurship

Participation in training activities reflects inequalities. That participation is particularly low among relatively unskilled adults. Those with higher levels of basic skill proficiency are five times more likely to attend adult learning activities than low-skilled individuals. Learning channels should be easily accessible including online training platforms, which can be continuously implemented in the long run so that workers will be familiar with lifelong learning and able to survive in an era of high uncertainty.

Based on a survey by the Thai National Statistical Office in 2020 [26], around 7.9% of the total population was interested in skill development. The biggest share of people hoping to develop themselves was at the primary level, followed by those with secondary and university educations. The COVID-19 pandemic, however, posed challenges in providing skill development activities, especially for those with low incomes.

Provide Assistance and Support Using Population-targeted Policies to Mitigate Losses

The COVID-19 pandemic is expected to worsen inequality given that vulnerable population groups have more limited coping mechanisms and tend to be less reliant on employment. High-income employees are more likely to work in sectors with more flexibility to work remotely and less physical proximity at the workplace, thus facing less loss of earnings compared with other groups [27]. The people hardest hit are individuals and families who face significant

preexisting inequalities and are low-income workers. Thus, population-targeted policies will help to mitigate their losses, reduce inequality, and promote inclusive growth in the recovery phase.

Special Public Employment Services for Vulnerable Groups

The important issues of concern for informal workers are related to their lack of secure status. Although Thailand has a universal basic income for older persons (THB600–1,000 per month per person), it is insufficient to cover all expenses and affects the quality of life of the older poor. This will affect financial sustainability in the long term, especially when Thailand is facing an aging society that will increase in the future. Many people do not apply for insurance under a voluntary scheme, meaning that they remain outside the social protection network. The integration of all mechanisms would help to strengthen Thailand's social protection. Supporting the power of social networks in local organizations such as community savings cooperatives would build up the community economy.

Disparities are also evident in terms of general health status. People in the highest income quintile report being in better health than those in the lowest quintile. There are also large disparities by socioeconomic status for diseases and risk factors that are major causes of disability and lower quality of life. Higher proportions of people with low education are in older population groups with chronic health problems. People with low education levels often have poorer nutrition, are more likely to be obese, and engage in risky behavior (for example, drinking and smoking).

People with disabilities or preexisting health conditions, those living in institutional care settings, and the elderly are at higher risk of coronavirus infection, developing severe complications, or higher mortality rates for many reasons. In addition, people with disabilities face greater attitudinal, environmental, and institutional barriers and discrimination. These may be exacerbated by multiple intersecting forms of discrimination faced by women, children, older persons with disabilities, and persons with disabilities in situations of risk and humanitarian emergencies. There is a need to develop disability-inclusive local, national, and global responses requiring cooperation, investment, and direct support from all stakeholders, including the private sector [28].

Organize a Committee and Provide Humanitarian Assistance and Employment Services to Foreign Migrants during the Pandemic

Migrant workers are among the most vulnerable groups during the COVID-19 pandemic. Circumstances that increase migrant workers' vulnerabilities include higher health risks. In addition, they face greater job insecurity as factories close after drops in demand, necessitating mass layoffs. Migrant workers are often the first to be laid off. As their residential status is linked to employment status, migrant workers in Thailand are extremely vulnerable.

Furthermore, when migrant workers do not speak the local language, they are unlikely to understand information materials disseminated. A rapid assessment of the impact of the COVID-19 pandemic on migrant workers in several countries, including Thailand, during April–May 2020 found that 32% reported work-related problems or abuse. The rapid assessment also found that 33% had insufficient personal protective equipment [29]. Thus, organizing a committee and providing humanitarian assistance and employment services appropriate to foreign migrants during the pandemic will help mitigate their losses, while reducing the risk of COVID-19 infection among both migrants and local people.

Promote Special Educational Policies to Tackle the Educational Divide

During and after the COVID-19 pandemic, access to all levels of education may be difficult, especially among poor families. Children from middle-class and wealthy families are more likely to have access to digital tools and infrastructure as well as medical supplies, as they have better opportunities. Less-educated families and the poor are more likely to be in worse health than those in more favorable socioeconomic circumstances. Children whose parents have less education perform worse than others on average, and children with better-educated parents do better. Poor households are more likely to be burdened by policy actions because they have more school-aged members on average than wealthy families. Children in migrant families who must move frequently are also at risk of limited educational access. The recovery plan for education must aim to provide effective, high-quality education that is easily accessible to all. Special assistance should go to children in poor households, and programs should be offered to reduce children's potential dropout rates.

ACKNOWLEDGMENTS

We are thankful for the support from Chulalongkorn University through the Collaborating Center for Labor Research at Chulalongkorn University (CU-Collar) (763008) under the Ratchadapisek Sompoch Endowment Fund.

REFERENCES

[1] World Health Organization and Ministry of Public Health. Joint Intra-Action Review of the Public Health Response to COVID-19 in Thailand, 20–24 July 2020. Accessed online: https://www.who.int/docs/default-source/searo/thailand/iar-covid19-en.pdf.

[2] World Health Organization. WHO Thailand Situation Report: Coronavirus disease 2019 (COVID-19) Geneva, WHO; 2021. Accessed online: https://reliefweb.int/sites/reliefweb.int/files/resources/2021_01_15_THA-SITREP-125-COVID19.pdf.

[3] National Statistical Office of Thailand. Thai Informal Employment Survey. Bangkok: National Statistical Office; 2018.

[4] Department of Disease Control, Ministry of Health. The Coronavirus Disease 2019 News Release. Special Announcement of COVID-19, 30 May 2020. Accessed online: https://ddc.moph.go.th/viralpneumonia/eng/file/news/news_no126_300563.pdf.

[5] World Health Organization. Accessed online: https://www.who.int/docs/default-source/thailand/2020-06-22-tha-sitrep-93-covid19.pdf?sfvrsn=64772e5c_0.

[6] Bhula-or R. COVID-19 and its impact on Thai labour market and migration trends. In: Proceedings of the Social and Economic Impacts of COVID-19 to East and Southeast Asia, online workshop, 8 June 2020 (adapted from UNESCAP. The Impact and Policy Responses for COVID-19 in Asia and the Pacific, Fig. 1 Channels of COVID-19's impact on economies); 2020.

[7] Leckcivilize A., Bhula-or R. The Impact of COVID-19 on workers and their families in Thailand. Unpublished manuscript; 2021.

[8] National Economic and Social Development Council. Gross Domestic Product: Q2/2020. Bangkok: National Economic and Social Development Council; 2020.

[9] National Economic and Social Development Council. Thailand's Social Situation and Outlook of Q2/2020. Bangkok: National Economic and Social Council; 2020. Accessed online: https://www.nesdc.go.th/ewt_sl_link.php?nid=5491&filename=socialoutlook_report.

[10] National Statistical Office of Thailand, Thailand Development Research Institute, IHPP, United Nations Data Group. Online survey, 13–19 April 2020.

[11] United Nations Conference on Trade and Development. COVID-19 and Tourism; 2020. Accessed online: https://unctad.org/en/PublicationsLibrary/ditcinf2020d3_en.pdf.

[12] World Bank. January 2021: Thailand Economic Monitor—Restoring Incomes; Recovering Jobs; 2021. Accessed online: http://documents1.worldbank.org/curated/en/236271611069996851/pdf/Thailand-Economic-Monitor-Restoring-Incomes-Recovering-Jobs.pdf.

[13] National Economic and Social Development Council. Poverty indicators and income distribution of the Kingdom of Thailand, 1988–1999. Data from the household socioeconomic survey, National Statistical Office, compiled by the Division of Data Development and Social Indicators. Accessed online: http://social.nesdc.go.th/SocialStat/StatReport_Final.aspx?reportid=694&template=1R1C&yeartype=M&subcatid=71.

[14] OECD. Divided We Stand: Why Inequality Keeps Rising. Paris: OECD Publishing; 2011. Accessed online: http://dx.doi.org/10.1787/9789264119536-en.

[15] International Labour Organization. Measuring Informality: A Statistical Manual on the Informal Sector and Informal Employment. Geneva: ILO; 2012.

[16] Leckcivilize A., Bhula-or R. The impact of COVID-19 on workers and families in Thailand. In: Proceedings of the Social and Economic Impacts of COVID-19 to East and Southeast Asia, online workshop 8 June 2020 (adapted from UNESCAP. The Impact and Policy Responses for COVID-19 in Asia and the Pacific, Fig. 1 Channels of COVID-19's impact on economies); 2020.

[17] Chalamwong Y. Management of cross-border low-skilled workers in Thailand: An update. TDRI Quarterly Review 2011; 26(4): 12–20.

[18] Bhula-or R. Migration and sustainable development in Thailand. Asian Education and Development Studies 2019; 10(1): 83–94. Accessed online: https://doi.org/10.1108/AEDS-02-2019-0036.

[19] Yang L. Unequal provinces but equal families? An analysis of inequality and migration in Thailand. In: Essays on the Determinants and Consequences of Internal Migration, PhD thesis, Department of Economics, University of Chicago; 2004.

[20] Osaki K. Migrant remittances in Thailand: economic necessity or social norm? Journal of Population Research 2003; 20(2): 203–222.

[21] OECD. PISA 2018 Results (Volume II): Where All Students Can Succeed. Paris: OECD Publishing; 2019. Accessed online: https://www.oecd-ilibrary.org/docserver/b5fd1b8f-en.pdf?expires=1598889144&id=id&accname=guest&checksum=7D894C1D9854EB4F7602CC5B6E171FB6.

[22] National Statistical Office of Thailand. Household Survey on the Use of Information and Communication Technology. Bangkok: National Statistical Office; 2017.

[23] Oxford Policy Management and United Nations Thailand. Social Impact Assessment of COVID-19 in Thailand. Bangkok: United Nations Thailand; 2020. Accessed online:

https://www.unicef.org/thailand/media/5071/file/Social%20Impact%20Assessment%20of%20COVID-19%20in%20Thailand.pdf.

[24] Chang J.-H., Phu H. ASEAN in Transformation: The Future of Jobs at Risk of Automation. Bangkok: International Labour Organization; 2016.

[25] Thaibuplica. Thai labour market after COVID-19 (1). (ตลาดแรงงานไทยหลังยุคโควิด-19 (ตอน 1): กลับสู่ภาคเกษตร-ถูกทดแทนด้วยเทคโนโลยี ไม่จ้างเด็กจบใหม่); 2020.

[26] National Statistical Office of Thailand, Ministry of Digital Economy and Society. The Skill Development Survey 2020. Bangkok: National Statistical Office; 2020.

[27] Warn N., Piyapromdee L., Piyapromdee S., Porapakkarm P., Wasi N. On Covid-19: New Implications of Job Task Requirements and Spouse's Occupational Sorting. PIER Discussion Paper 133, Puey Ungphakorn Institute for Economic Research; April 2020.

[28] World Health Organization. Disability-inclusive Response to COVID-19—Towards a Better Future for All. Geneva: WHO; 2020. Accessed online: https://www.un.org/development/desa/disabilities/wp-content/uploads/sites/15/2020/05/Joint-statement-Disability-inclusive-response-to-COVID-19.pdf.

[29] International Labour Organization. COVID-19: Impact on Migrant Workers and Country Response in Thailand. Geneva: ILO; 2020. Accessed online: https://www.ilo.org/wcmsp5/groups/public/---asia/---ro-bangkok/---sro-bangkok/documents/briefingnote/wcms_741920.pdf.

LIST OF TABLES

LIST OF FIGURES


1.015