

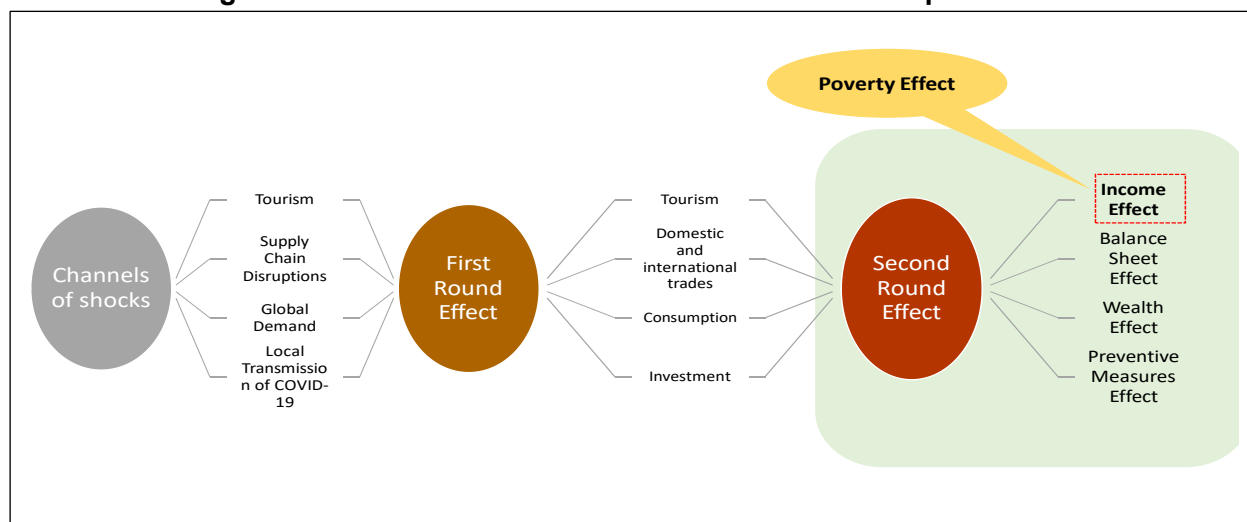
ASSESSMENT ON POVERTY AND UNEMPLOYMENT

A. Overview

1. Thailand was the second country in the world after the People's Republic of China (PRC) to be affected by the coronavirus disease (COVID-19) pandemic. Initially, the number of infected individuals was very low. However, from mid-March 2020 till late May 2020, the rate of infection accelerated. To curb the infection rate, the government implemented several restrictions, including closure of non-essential businesses, banning the entry of foreign travelers, imposing curfews within provinces and travel restrictions between provinces. Government measures. Attempts to curb the outbreak have caused substantial disruptions in business and productivity, which have inevitably affected the economy and the economic welfare of the people.

2. **The COVID-19 pandemic is having a catastrophic effect on working hours and earnings.** Beyond the urgent concerns about the health of workers and their families, the virus and the subsequent economic shocks will impact the employment in several sectors.¹ Figure 1 provides an illustration of the transmission mechanism of the COVID-19 pandemic. The pandemic passes through 4 channels: tourism sector is initially impacted due to travel restrictions/ban, supply chain disrupts as a result of manufacturing shut down in the PRC, global demand becomes weaker, and local transmission puts higher risks to the economy. Negative shocks through all channels cause a slowdown in overall economic activities (first-round effect), which then impacts financial performance in business sector, lost incomes of households, wealth reduction, and changes in individual's behavior to avoid infection (second-round effect). As a consequence, poverty incidence may rise as a result of income reduction.

Figure 1: Transmission mechanism of the COVID-19 pandemic



Source: ADB.

3. **Impact on employment and underemployment.** As experienced in the previous crises, the shock to labor demand is likely to translate into significant downward adjustments in employment and wages (footnote 1). The decline in economic activity and constraints on people's movements is impacting both manufacturing and services. The most recent data shows that the total value added of industrial enterprises in the PRC declined by 13.5% during the first two

¹ International Labor Organization. 2020. *How will COVID-19 impact the world of work?*

months of 2020.² Global and regional supply chains have been disrupted. The services, tourism, travel, and retail sectors are especially vulnerable. In the case of Thailand, the Bank of Thailand forecasted international tourist arrivals to drop by 62% in 2020, which would place number of jobs at risk, particularly hotel and accommodation, restaurant, and wholesale and retail trades.³ Manufacturing sub-sectors that relate to tourism will be affected. Lower demand will result in lower production. Thus, employers in affected sectors may cut their employee work hours, but not lay them off. In sum, the rate of employment in manufacturing sector is not expected to decline significantly.

4. **Implications for labor income and poverty.** Labor supply is expected to decline because of the quarantine measures and a fall in economic activity. Shorter working hours, pay cut, and lay-offs imply large income losses for workers. Poverty is also likely to increase. The strain on incomes resulting from the decline in economic activities will devastate people who are living close to or below the poverty line.

5. **This assessment analyzes the impacts of the COVID-19 on poverty in Thailand and** focuses on the second-round effect (figure 1). As the pandemic is still ongoing with uncertainty on the duration and the magnitude, it is difficult to have an accurate estimate of the impact of COVID-19 on poverty. The assessment, therefore, relies on a simple, but rigorous approach by making inferences from historical analysis of Asian financial and global financial crises. The assessment also involves construction of counterfactuals: poverty scenarios in 2020 and 2021 by using economic growth projections with and without the COVID-19 pandemic.

6. **There are three caveats to this assessment.** First, as the assessment relies on economic growth projections, errors and biases in the projections will carry over to the results. Second, this assessment estimates the aggregate impacts of the COVID-19 pandemic, not the impacts at the household level. Last, the non-income dimensions of poverty, such as education, health, and gender issues, have not been considered in this assessment.

B. COVID-19 Employment Impact

7. **According to labor force survey, the number of employed persons has declined over the past 5 years.** In 2019, the average number of employed persons was at 37.6 million, dropping by around 400 thousand persons from 2015. The main factors of the decline include economic slowdown (resulting in lowered labor demand) and growing number of elderly people.⁴ Regarding employment by sector, the majority of employed persons are in service sector, accounting for 51.58% of total employed persons, of which 17% work in wholesale and retail trade, 8% work in accommodation and restaurants, and 3% work in transportation and storage. Meanwhile, the unemployment rate and the portion of seasonal inactive labor force have remained very low, which could reflect the tightness of labor market in the country (Table 1). The informal sector is also important in Thailand. The latest informal employment survey revealed that about 21 million workers, or 55.3% of the total employment, were engaged in the informal sector (55.2% male, 44.8% female).⁵

² National Bureau of Statistics of China.

³ Bank of Thailand. 2020. Monetary Policy Report March 2020.

⁴ Economic Intelligence Center of Siam Commercial Bank (2020), Note on COVID-19 impact on the labor market.

⁵ The National Statistical Office of Thailand (2018), Informal employment survey.

Table 1: Labor market in Thailand

(Unit: Thousand persons)	2015	2016	2017	2018	2019
Population 15 years and over	55,238.46	55,610.14	55,957.27	56,279.01	56,575.26
Labor Force	38,548.23	38,266.59	38,099.81	38,433.59	38,178.04
Employed persons	38,016.17	37,692.65	37,458.25	37,864.55	37,613.44
Agriculture (% of total employed persons)	12,271.91 (32.28)	11,746.62 (31.16)	11,783.27 (31.45)	12,168.29 (32.14)	11,820.89 (31.21)
Manufacturing (% of total employed persons)	6,453.60 (16.97)	6,288.51 (16.67)	6,107.54 (16.30)	6,258.59 (16.53)	6,124.72 (16.17)
Service (% of total employed persons)	19,148.27 (50.37)	19,512.79 (51.77)	19,416.74 (51.84)	19,291.33 (50.95)	19,531.57 (51.58)
Unemployed persons (% of unemployed)	340.56 (0.88)	377.46 (0.99)	450.67 (1.18)	404.28 (1.05)	373.40 (0.98)
Seasonal inactive labor force (% share of total labor force)	191.50 (0.50)	196.48 (0.51)	190.90 (0.50)	164.76 (0.43)	191.21 (0.50)

Source: National Statistical Office of Thailand.

8. The government's attempts to slow the transmission of the virus impact employment and wages. Some workers suffer directly through illness, while some are indirectly affected through income losses.⁶ Thus, the unemployment rate in Thailand is projected to increase. Real wages are expected to drop further in 2020, after posting low growth already in 2019.

9. Disruption of economic activities is expected to cause a dramatic decline in employment. ADB estimates the number of unemployed persons will surge to 1.4-3.1 million persons, recording the highest unemployment figure in Thailand's history.⁷ This is because the impact is more widespread in tandem with a sudden stop of various economic activities. Workers in tourism-related sectors are at the highest risk, with 400,000 to 700,000 persons projected to lose their jobs because of the pandemic. Meanwhile, farmers are much less likely to lose their jobs, but they are expected to experience significant income losses because of prolonged drought since 2019 and weaker external demand for agricultural products. Hence, agriculture sector may not be able to absorb unemployment from other troubled sectors like in the past. In the manufacturing sector workers particularly in export-oriented businesses will also be affected by the pandemic. However, the employment rate in manufacturing sector will decline only slightly as employers are more likely to cut work hours than laying off employees (Table 2).

10. **Workers employed in economic sectors affected by COVID-19 will face an elevated risk of falling into poverty.** Workers in tourism-related sectors, account for 20% of the nation's employed workforce and are at most risk to fall into poverty (Figure 2). Sixty one percent of those who work in tourism sector are self-employed and will be seriously affected by the virus as they may be less protected by conventional social protection mechanisms and other forms of income smoothing.⁸

⁶ The World Bank (2020). East Asia and Pacific in the time of COVID-19.

⁷ Unemployed persons amounted to 1.5, 0.5, and 0.4 million in 1998, 2008, and 2009, respectively.

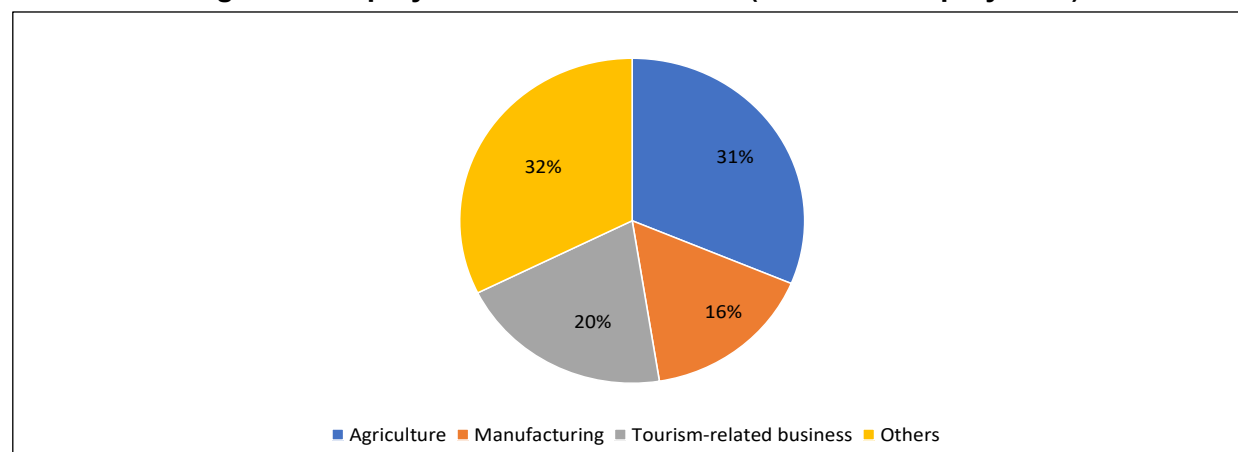
⁸ National Statistical Office of Thailand (2019), Labour force survey. Bank of Thailand (2020), Corporate survey during February to March 2020.

Table 2: Employment Impact of COVID-19 in Thailand, by Sector

Sector	Degree of Risk*	Employment elasticity (2011-2019) ⁹	Employment in 2020 (million persons) **			Number of Job losses (million persons)
			Without COVID-19	With COVID-19 (shorter containment)	With COVID-19 (longer containment)	
Agriculture	Low-medium	-1.07	11.5	12.4	13.0	-0.9 to -1.5
Manufacturing	High	0.59	6.2	6.0	5.8	0.2 to 0.4
Services						
Wholesale and retail trade	High	0.19	6.3	6.2	6.1	0.1 to 0.2
Transportation and storage	Medium to high	1.34	1.3	1.2	1.1	0.1 to 0.2
Accommodation and restaurant	High	0.70	2.9	2.8	2.6	0.2 to 0.3
Arts, entertainment, and recreation	Medium to high	0.41	0.27	0.26	0.25	0.01 to 0.02
Financial Intermediation	Medium	0.97	0.6	0.5	0.4	0.1 to 0.2
Real estate	High	2.31	0.2	0.18	0.16	0.02-0.04
Total (average)		0.68	38.3	36.9	35.2	1.4-3.1

Note *International Labor Organization (ILO)'s assessment of real-time and financial data and ILOSTAT baseline data on global estimates of sectoral distribution of employment (ISIC Rev. 4). **The estimation is based on ADB economic growth projections.

Source: ILO, National Statistical Office of Thailand, Office of the National Economic and Social Development Council, and staff estimates.

Figure 2: Employment structure in 2019 (% of total employment)

Source: Labor Force Survey, calculated by the Bank of Thailand

Note: Tourism-related businesses comprise of hotel and restaurant, retail, transportation, as well as arts, entertainment and recreation.

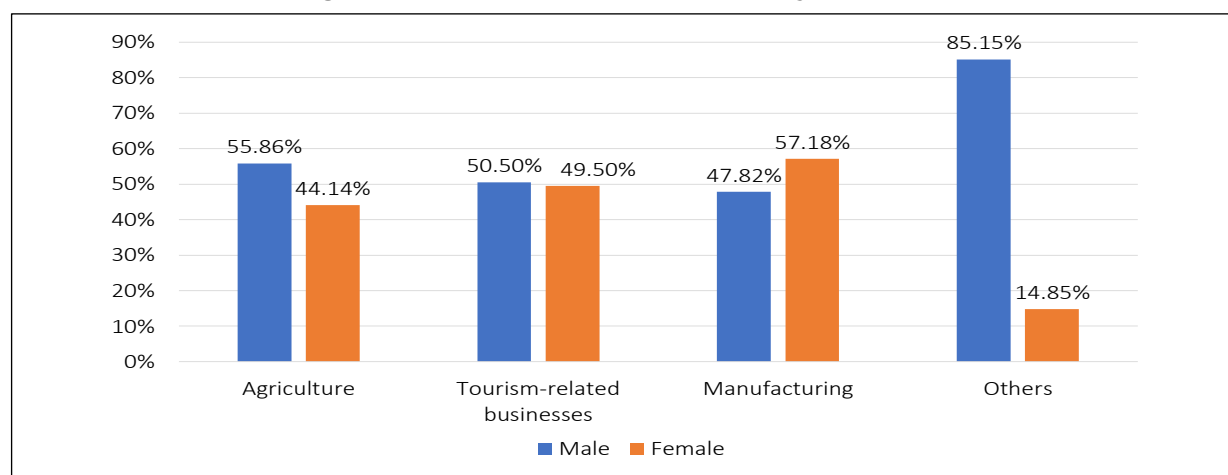
⁹ Point elasticities are obtained as follows: $\ln(E_i) = \alpha_i + \beta_i \ln(GDP) + \varepsilon_i$

For each sector $i = 1, 2, 3, \dots, n$, the estimated elasticities (coefficients β_i) are used to obtain the projected impact of covid-19 pandemic on employment by sector. For more information on point elasticities, refer to Kapsos (2015), *The employment intensity of growth: trends and economic determinants*.

11. Prior to the onset of the COVID-19 pandemic, the tourism sector was expected to remain robust.¹⁰ However, the COVID-19 pandemic reversed the positive outlook of the tourism sector. In March 2020, foreign tourist arrivals dropped by almost 70% from the same period last year.¹¹ The 3-month advance booking rate dropped nearly 40% from the previous year to only 1% nationwide.¹² All Thai airlines suspended both domestic and international flights. Most hotels closed and nationwide occupancy dropped to about 1%. ADB forecasted that tourism sector would lose \$12 billion in revenue (2.4% of GDP).¹³

12. In terms of gender, 61% of females aged 15 and over are in labor market, of which 30% work in tourism sector.¹⁴ Female and male workers seem to face equal risks of losing incomes and/or jobs in tourism sector (Figure 3). However, within tourism-related businesses, female workers are the majority in the accommodation and restaurant sectors, representing 64% of total employment. Given their closures across the country, female workers tend to have a higher chance of job displacement. At the same time, e-commerce is on the rise as people avoid going out, male workers who are the majority of transportation sector (83%), can switch their jobs to provide delivery service during this time.

Figure 3: Labor force participation by sector (%)



Source: National Statistical Office of Thailand.

13. Younger and older workers are also likely to suffer from economic slowdown as witnessed during the global financial crisis. Fresh graduates typically have more trouble finding and maintaining employment due to falling labor demand. Older workers could be found to be more likely than prime-age individuals to experience higher unemployment and underemployment rates, as well as decreased working hours.¹⁵

C. Poverty Impact Analysis Framework

14. **Methodology.** The assessment will analyze the overall impact of COVID-19 on poverty through two steps. First, the assessment looked at the overall impact of COVID-19 on gross

¹⁰ ADB. 2020. Asian Development Outlook 2020: Thailand chapter. Manila.

¹¹ Ministry of sports and tourism (2020). Reports on international tourist arrivals.

¹² Bank of Thailand (2020). Monthly economic conditions report. February 2020.

¹³ For more information see Supplementary Document 20 Impact of COVID-19 on Thailand's Tourism Sector

¹⁴ The National Statistical Office of Thailand (2019). The summary of women's work in Thailand 2018.

¹⁵ International Labor Organization (2020), How will COVID-19 impact the world of work?

domestic product (GDP) growth. Second, from the GDP forecasts, the assessment will further estimate the poverty rate.

The COVID-19 pandemic's impact on income.

15. This assessment used the latest International Monetary Fund's (IMF) GDP growth projections for 2020 and the ADB's projections for 2021¹⁶ which represents the income scenarios with the COVID-19. Baseline GDP projections for 2020 and 2021 (income scenario without COVID-19) are those forecasted before the spread of COVID-19 in Thailand. The differences between the baseline and the latest projections are taken as the estimates of the income shock due to the COVID-19 pandemic. Table 3 represents the income shock from COVID-19.

Table 3: Real GDP growth and income shock due to the COVID-19 pandemic

	Baseline Projections		Revised Projections*		Difference (Income shock)	
	2020	2021	2020	2021	2020	2021
Real GDP (% annual change)	2.7	4.0	-6.7	3.5	-9.4	-0.5
GDP per capita (% annual change)	4.9	5.0	-6.9	4.1	-11.8	-0.9

Source: IMF's World Economic Outlook, April 2020, Asian Development Outlook Supplement (2020), staff estimates.

Note: The revised projections presented on table 3 are only shorter containment scenario. It is expected that the pandemic will be contained by 6 months, starting in late January 2020.

The COVID-19 impacts on poverty

16. ADB estimated that if economic contraction in developing Asian countries is deep, it would result in 20% reduction in annual per capita consumption expenditure, which would imply a staggering 185 million and 399 million extra poor.¹⁷

17. For Thailand, this assessment adopted the concept of elasticity of income with respect to poverty. To obtain the poverty elasticity of income, GDP per capita data from the World Bank's World Development Indicators (WDI) and inequality and poverty headcount ratio from the World Bank's Povcalnet were used. Based on growth projections of Table 3 and the poverty elasticity estimates in Table 4, two sets of poverty estimates were generated: (i) using baseline growth projections which yield poverty headcount without COVID-19; and (ii) using latest growth projections which yield poverty headcount with COVID-19. The difference between the two sets is interpreted as the poverty impact of COVID-19.¹⁸

Table 4: Poverty elasticity of income from 1998 to 2018¹⁹

	The poverty elasticity of income
1998–2006	-1.3
2007–2011	-0.7
2012–2018	-0.3

Source: Staff estimates.

¹⁶ IMF. 2020. World Economic Outlook. Washington D.C.; ADB. 2020. Asian Development Outlook Supplement, June 2020. Manila.

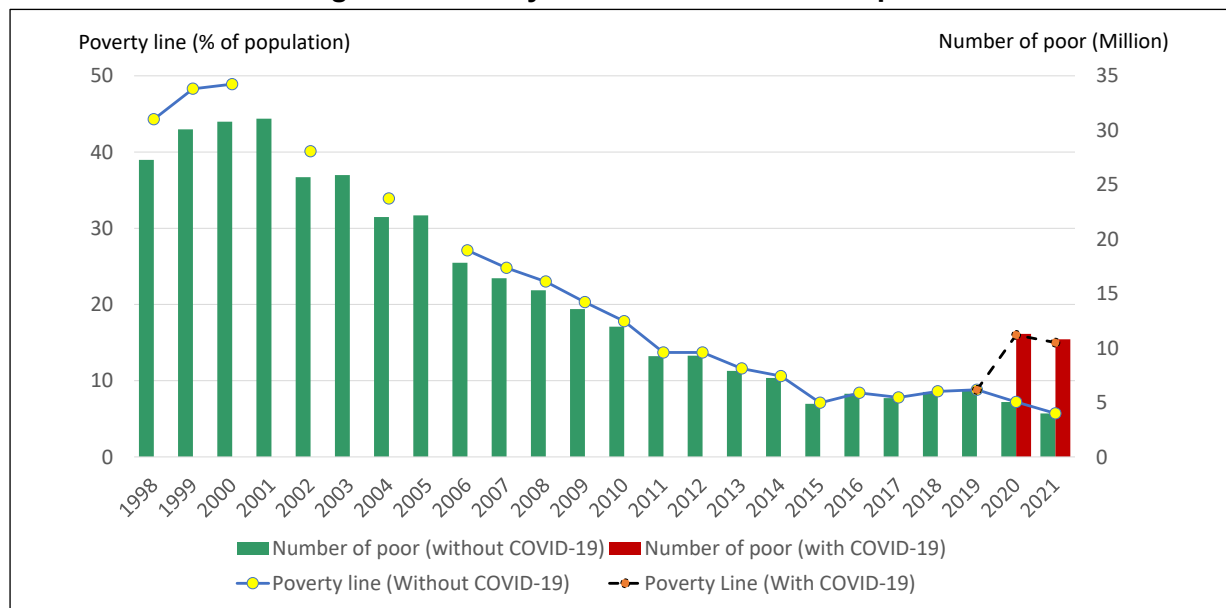
¹⁷ ADB (2020), COVID-19 and Poverty: Some Scenarios Based on Grouped Distribution Data on Household Consumption

¹⁸ ADB. 2009. [How is the Global Recession Impacting on Poverty and Social Spending?](#). Manila.

¹⁹ The Box-Cox model is adopted to estimate the poverty elasticity of income for Thailand to allow for nonlinearity. Poverty is based on \$5.50 a day, using 2011 purchasing power parity.

18. The average poverty elasticity of income during the global financial crisis and flood crisis in Thailand (2007–2011) was used to estimate the poverty incidence in 2020 and 2021 as the impacts on the economy then were similar to that of COVID-19. The poverty elasticity of income is estimated to be -1.6 at the \$5.50 per person per day (2011 PPP) poverty line, meaning that every 1% increase in income will lead to 1.6% drop in the poverty headcount ratio. The slower income growth would result in slower poverty reduction, while negative growth means increases in poverty incidence. Compared to the baseline scenario, in 2020, the poverty incidence is projected to increase to 16%, which equates to 5.2 million additional poor people.

Figure 4: Poverty rate and the number of poor



Source: Staff estimates.

Notes: Poverty rate measured using a poverty threshold of US\$5.50 per person per day (2011 PPP).

19. **The COVID-19 pandemic will adversely affect poverty reduction in Thailand.** The poverty incidence is estimated to increase from 8.8% to 16% in 2020. In contrast, the poverty incidence in Thailand could have been reduced in both 2020 and 2021 under the baseline scenario without COVID-19. However, the estimates presented in this section were obtained under the assumption of distribution-neutral growth and that the pandemic would be under control within 6 months. If the situation prolongs, the actual poverty incidence may be higher than these results suggest.

D. Conclusion

20. The COVID-19 pandemic is found to negatively affect employment, income, and poverty. The pandemic could push almost 6 million people into poverty, the number of poor would then increase to the same level as it was during the global financial crisis. Meanwhile the number of poor would reduce close to lowest level in 2015 in the absence of COVID-19.

21. The pandemic also slows progress of poverty reduction, even as the Thai economy is expected a V-shape recovery in 2021. The poverty incidence is not likely to improve quickly. The poverty rate in 2021 will remain higher than in the past 7 years.

22. Workers and families related to tourism sector will be hardest hit. Female workers tend to face more difficulties than male as their job function cannot switch easily. Moreover, as the agriculture sector is also affected by the virus, it will not be able to absorb labor force from service sector. Fresh graduates will have trouble finding jobs, while older workers will be at increased risk of losing their jobs.

23. In sum, the magnitude of potential impacts is quite significant and calls for urgent action. The findings of this assessment point towards the importance of an expansion of social safety nets in Thailand. The policy responses should give much greater attention to the impact of COVID-19 pandemic beyond the first-round impact as the pandemic could adversely affect economic and social sustainability in longer-term.