

INCLUSIVE AND SUSTAINABLE GROWTH ASSESSMENT

1. The Thai economy has faced several challenges since the Asian Development Bank (ADB) implemented its previous country partnership strategy (CPS) during 2013–2016. Thailand experienced severe droughts, subdued exports, political unrest, and reduced global demand, all of which affected growth. Against this backdrop, however, the government managed to preserve fiscal stability, and introduced accommodative policies that enabled moderate economic expansion, averaging 3% during 2013–2019. During this period, the manufacturing sector was productive (despite decreased competitiveness in certain subsectors) and Thai firms integrated successfully into global value chains. International tourist arrivals also surged, leading to higher employment and reduced incidence of poverty. However, the economy was heavily dependent on exports, making it reliant on global demand and vulnerable to external shocks. Despite modest economic growth, investments during 2013–2019 stagnated and were insufficient to enhance Thailand’s global competitiveness, particularly in target growth areas such as high-tech manufacturing. The labor market also struggled, due in part to the country’s transition to an aging society and skills shortages associated with an outdated education system. As Thailand balances the need to respond to the coronavirus disease (COVID-19) pandemic with longer-term development goals, its focus is turning to socioeconomic inclusion and sustainable growth.

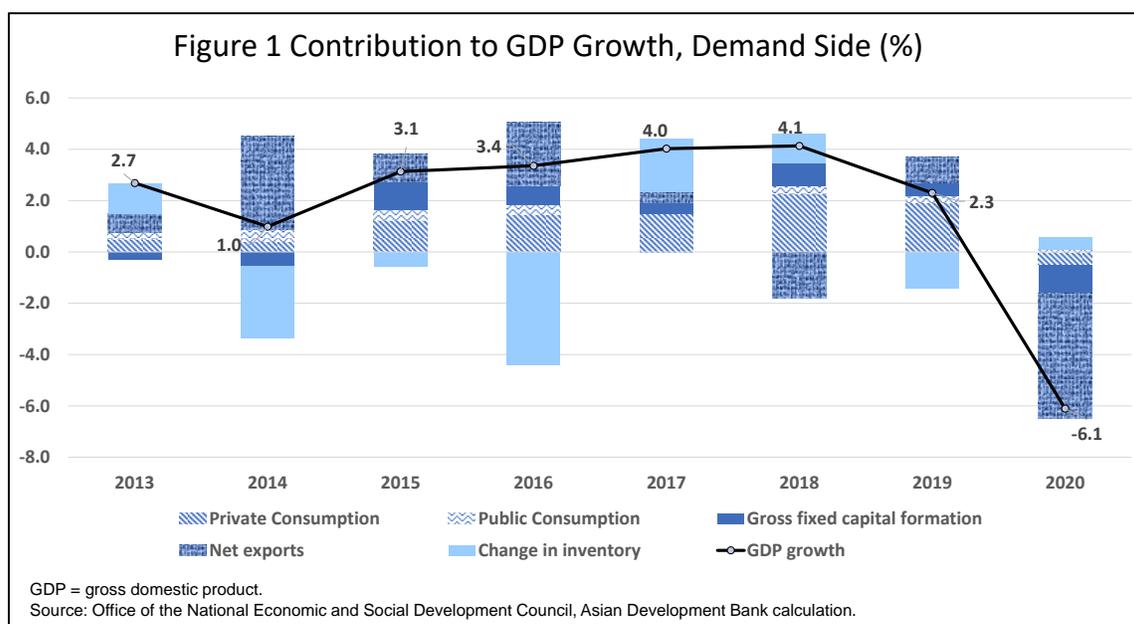
2. Thailand has made steady progress to reduce poverty and inequality, with the national poverty rate decreasing by 7% during 2013–2019. In 2019, access to primary education and health services was almost universal, though quality varied between regions. Thailand has also made progress narrowing gender gaps, raising its Human Development Index rating to *high*, and bringing its Sustainable Development Goal ranking to 40th globally, comparable to countries in the Organisation for Economic Co-operation and Development. However, income disparities persist, especially between urban and rural populations, and there are remaining pockets of poverty in the agricultural northern, northeastern, and southern provinces. Thailand’s long coastlines and fragile agriculture system emphasize its vulnerability to the effects of climate change and natural disasters. While the country has scaled up renewable energy in support of its nationally determined contributions, more work remains to modernize energy systems.

3. Crucially, COVID-19 has had severe impacts on the Thai economy, disrupting key growth sectors and placing disproportionate burdens on the country’s vulnerable groups. The pandemic shocked the economy, especially in the second quarter of 2020, and has led to widespread job losses in the services and manufacturing sectors, particularly affecting low-income households, workers with lower levels of education, and migrant workers. Micro, small, and medium-sized enterprises (MSMEs) are struggling to maintain cash flow, and businesses of varying sizes are expected to delay technology spending amid liquidity shortages and market uncertainty. COVID-19 impacts threaten to reverse Thailand’s development gains in terms of labor market development and poverty and inequality reduction. The impacts further threaten to erode Thailand’s fiscal stability and slow its transition to providing high-value goods and services.

4. ADB is uniquely positioned to support Thailand in responding to the immediate challenges of COVID-19 while helping build fundamentals for lasting growth. ADB will continue to work closely with Thailand through sovereign and nonsovereign finance and technical assistance in areas that the country cannot fulfill on its own. ADB will continue its engagement in the energy and transport sectors, and expand support in noninfrastructure areas to address emerging socioeconomic issues, including Thailand’s aging society, environmental pressures, and limited innovation capacity. ADB will help Thailand to increase its competitiveness to achieve prosperous, inclusive, resilient, and sustainable growth.

A. Recent Growth, Poverty, Inequality, and Environmental Dynamics

5. **Economic performance.** Thailand achieved upper middle-income country status in 2011, and the economy enjoyed an average annual growth rate of 3% during 2013–2019. However, growth during this period was heavily dependent on exports, and the tourism and agriculture sectors in particular (Figure 1). During the same period, merchandise exports slowed because of weak international demand, with annual growth in merchandise exports averaging only 0.6%, compared to double-digit expansion in the early 2000s. Despite modest expansion during 2013–2019, Thailand’s economic growth has slowed against historical averages, and the COVID-19 pandemic has severely impacted key growth sectors. The country has enjoyed considerable success managing domestic resources amid global uncertainty, and will need to continue this trend to drive more inclusive and sustainable growth in the wake of COVID-19.



6. **Fiscal standing and COVID-19 response.** Thailand’s fiscal policy has consistently accommodated growth, despite external pressures. The budget deficit rose from 1.9% of gross domestic product (GDP) in fiscal year (FY) 2013 to 5.2% of GDP in FY2020.¹ The increasing deficit during FY2013–FY2019 was primarily to support the economy amid a global slowdown in trade, while more substantial widening in FY2020 was attributable to government responses to COVID-19. Government revenue collection to GDP ratio declined from 16.8% in FY2013 to 15.0% in FY2020 (12.3% below the official target) as COVID-19 disrupted economic activity and affected business and personal incomes. Public debt during FY2013–FY2019 remained low and mostly domestic, averaging 42.1% of GDP against the 60.0% cap in Thailand’s fiscal sustainability framework. Public debt–GDP increased from 41.10% at the end of FY2019 to 49.34% at the end of FY2020, in line with borrowing to support the economy during the pandemic. Despite increased debt and falling revenue, Thailand managed to preserve fiscal stability during 2020 because of responsive measures. For example, the government reallocated its 2020 fiscal budget to mitigate the impacts of COVID-19 and drought on the economy and required all government agencies to lower spending by 10% to create a central pool for emergency use. The government anticipates

¹ Thailand’s fiscal year runs from 1 October to 30 September.

a \$20.14 billion deficit in FY2021 (or 3.7% of GDP and a 32.8% increase against the FY2020 deficit) to support economic recovery. Government revenue in 2021 is also expected to fall in line with a weak economic outlook, and if the pandemic persists, fiscal stability is at risk of deteriorating in the medium term.

7. **Monetary performance.** The Thai central bank has implemented accommodative monetary policies to support the economy during slowdowns, both prior to and during the pandemic. The policy interest rate, 1-day bilateral repurchase rate, has remained relatively low, falling from 2.75% at the beginning of 2013 to 1.25% at the end of 2019, while the inflation rate averaged a modest 0.8% during 2013–2019. In 2020, the central bank cut the policy rate by 0.25 basis points on three separate occasions (in February, March, and May) to alleviate pandemic impacts. The policy rate stood at 0.5% in February 2021, maintaining the decision in May 2020 to preserve the limited policy space which is close to zero lower bound. The current account balance recorded a surplus during 2014–2020, with the current account–GDP ratio increasing from 2.9% in 2014 to 5.3% in the third quarter of 2020. Meanwhile, the financial account recorded a deficit over the given period as Thai investors moved funds abroad to diversify their portfolios, following relaxed capital outflow regulations. The balance of payments during 2013–2019 was mostly in surplus, and the level of international reserves remains sufficient to cover all short-term external debt and import payments, and to allow for volatility of capital outflows.

8. **Financial market stability.** Overall, Thailand’s financial system has also remained sound. At the end of 2020, the gross nonperforming loan ratio was 3.12% of total loans, which was only a slight increase from 2.98% at the end of 2019, mainly because of the default of a large airline corporation. Short-term money market rates and the cost of commercial finance stabilized at low levels close to the policy rate. Long-term government bond yields rose slightly in the third quarter of 2020 as the government relaxed COVID-19 containment measures and investor risk sentiment eased. However, if pandemic impacts persist, the possibility of defaults by businesses and households may increase significantly.

9. **New engines of growth.** The Thai economy is undergoing a structural transformation, and despite relative success in preserving sound fundamentals amid global turbulence, the country will need to implement crosscutting reforms to achieve its sustainable and inclusive growth ambitions. In 2018, the government launched Thailand 4.0, which promotes innovation and value-based industry, to propel the country to upper income status. Thailand 4.0 focuses on 10 business clusters and seeks to bring long-term economic growth to a stable 5%–6% while distributing the benefits of growth more evenly.² The government is also promoting increased trade and innovation by deepening partnerships with other Association of South East Asian Nations (ASEAN) member countries. In February 2018, the Thai Parliament approved the Eastern Special Economic Zone Act to support objectives outlined in Thailand 4.0.³ The Eastern Economic Corridor will develop the three eastern provinces of Chachoengsao, Chonburi, and Rayong into new hubs for technological manufacturing and services, leveraging their strong land, sea, and air connections to ASEAN neighbors.

10. Thailand is seeking to increase the value of its goods and services by focusing the economy on innovation. Doing so can make socioeconomic growth more inclusive and sustainable but will require significant investments in human capital and support to help

² Royal Thai Embassy. 2020. [What is Thailand 4.0?](#) Washington, DC.

³ Government of Thailand, Eastern Economic Corridor Office. 2018. *Eastern Special Development Zone Act B.E. 2561 (2018) English version*. Bangkok.

businesses weather the immediate impacts of COVID-19. As Thailand seeks to reposition its economy around high-value goods and services, it will need to address core structural challenges, including (i) labor market constraints and lack of investment in new production technologies which have limited its international competitiveness; and (ii) export dependence on agriculture and tourism, which heightens exposure to environmental hazards and fluctuating international demand. Thailand will also need to improve logistics performance and remain alert to external risks, such as increased trade protectionism among major trade partners, which could further affect demand for Thai exports. Scaling up investments and human capacity in target sectors will be essential to achieving long-term growth objectives.

11. Gradual economic recovery after relaxation of containment measures. The Thai economy has gradually started to recover following severe pandemic impacts in the second and third quarters of 2020. However, economic activities are still lower than prepandemic levels. Signs of recovery have been observed in merchandise exports and manufacturing in several product categories, in line with smaller contraction in most trading partner economies. Exports of services have continuously declined as a result of international travel restrictions. Private consumption has gradually picked up but remains lower than prepandemic levels because of falling household income, weak consumer confidence, and rising household debt. Private investment remains low in line with subdued business confidence.

12. Investments and international competitiveness. Recent investment levels have been too low to increase Thailand's competitiveness, particularly in the manufacturing sector where growth in total investment averaged only 1.7% per annum during 2013–2019. Private investment during this period stagnated, with the share of nominal private investment to GDP falling from 20.2% in 2013 to 16.9% in 2019. As a result, and in contrast to growth trends in the 1980s and 1990s, Thailand's economy experienced deindustrialization, or a shrinking share of manufacturing in the economy.⁴ Investment in the manufacturing sector during this period focused on replacing depreciated assets as opposed to enhancing productivity. At the same time, rising production costs in Thailand, linked to increasing wages and low productivity gains, have led foreign firms to begin relocating existing plants to neighboring countries with lower production costs. Furthermore, lingering trade conflicts slowed the world economy, weighing on demand for Thai exports. The decline in domestic and external demand caused substantial contractions in private investment during 2020, which are expected to persist in the short term. Thailand faces the dual challenges of needing to attract investment amid global market stagnation from COVID-19 while also needing to increase international competitiveness.

13. High domestic logistics cost. Thailand has high and growing logistics costs, with the ratio of logistics costs to GDP at 13.7% in 2019, compared to 7.6% in the United States. Since 2010, annual average logistics costs have increased in the areas of transportation (3.7%), inventory holding (4.1%), and logistics administration (1.5%). In 2018, the World Trade Indicators Index ranked Thailand's logistics performance 32nd out of 160 countries. Although this was an improvement from its 45th place ranking in 2016, Thailand's logistics ranking has improved at a slower rate than its regional neighbors. Mobility constraints are a major barrier to efficient logistics. Thailand still relies heavily on road transportation, which accounted for 78.3% of total commodity transportation in 2019. Reliance on road networks, paired with heavy traffic and the concentration of distribution systems in urban areas, slows the movement of goods and increases costs.⁵ Overall, traffic congestion; lack of connectivity between urban transport modes; and inefficiencies

⁴ Bank of Thailand. 2020. [A Study of Deindustrialisation and Its Implications on Thailand's Private Investment](#).

⁵ Office of the National Economic and Social Development Council. 2020. [Thailand's Logistics Report 2019](#).

in the supply chain, warehousing, and inventory carrying cause higher logistics costs than in other countries.⁶ Improving connectivity can strengthen logistics performance and increase Thailand's international competitiveness.

14. Slow progress in technological and industrial innovation. The Thai economy remains technologically dependent on multinational firms, and technology transfer to domestic firms is not taking place at a satisfactory rate. Thailand's export basket is significantly less complex than those of regional peers, even though it has become a top exporter of high-tech products, notably automobiles and electronics.⁷ Although the government has established a system of innovation through science parks, research grants, and public research institutions to promote technology advancement, the impact of these efforts has been limited.⁸ For instance, domestic firms have invested less in innovation than regional peers, and research and development has led to limited patents. Accordingly, Thailand's World Economic Forum Global Competitiveness Index ranking dropped from 38th out of 141 economies in 2018 to 40th in 2019. Limited innovation capacity appears to be a core hurdle to Thailand's global competitiveness and its transition toward a high-income economy.

15. Accelerated digital transformation. Digital technologies have moved quickly from a strategic priority to an operational imperative in the wake of COVID-19. Containment measures caused sharp increases in the adoption of digital channels in Thailand, especially for spending on essential items. Several businesses shifted from offline to online to offer their products and services using new platforms and technologies in order to strengthen and expand their existing customer bases, and to keep employees engaged. Meanwhile, the government also navigated through the new environment by creating digital platforms to mitigate the spread of the disease and to stimulate the economy, such as through cash handouts for informal workers and agriculture families, a domestic tourism stimulus program, and a program to evaluate the hygiene of shops. Jobs in information and communication technology (ICT) such as information security analysts, business intelligence analysts, web developers, and computer systems engineers and architects have been the least affected by the pandemic. However, there are acute skills shortages in the ICT subsector, which may require the introduction of retraining programs for workers.⁹

16. Low labor productivity. Thailand lags behind peers in terms of human capital.¹⁰ In 2017, Thailand's Human Capital Index score was 0.6 out of 1.0, which suggests that a child born in Thailand in 2017 would be only 60% as productive as a future worker compared to a global benchmark. Labor productivity in the industry sector grew at an average rate of only 0.5% during 2008–2018, compared to 3.4% during 1998–2008, and labor productivity in the services sector is lower than in the industry sector.¹¹ Although the services sector has created significant new employment and become the main engine of economic growth, many of the new jobs are in low-wage areas, such as repair and personal services. Thailand's global competitiveness has stagnated in recent years and the country has lost competitive advantage because of high labor costs. The incremental capital to output ratio has increased since 2009, and is higher in Thailand than among peers, leading to a decline in efficiency and investment return.¹²

⁶ ADB. 2011. [Thailand: Transport Sector Assessment, Strategy, and Road Map](#).

⁷ ADB. 2018. [Asia's Industrial Transformation: The Role of Manufacturing and Global Value Chains \(Part 2\)](#).

⁸ ADB. 2015. [Thailand Industrialization and Economic Catch-Up: Country Diagnostic Study](#).

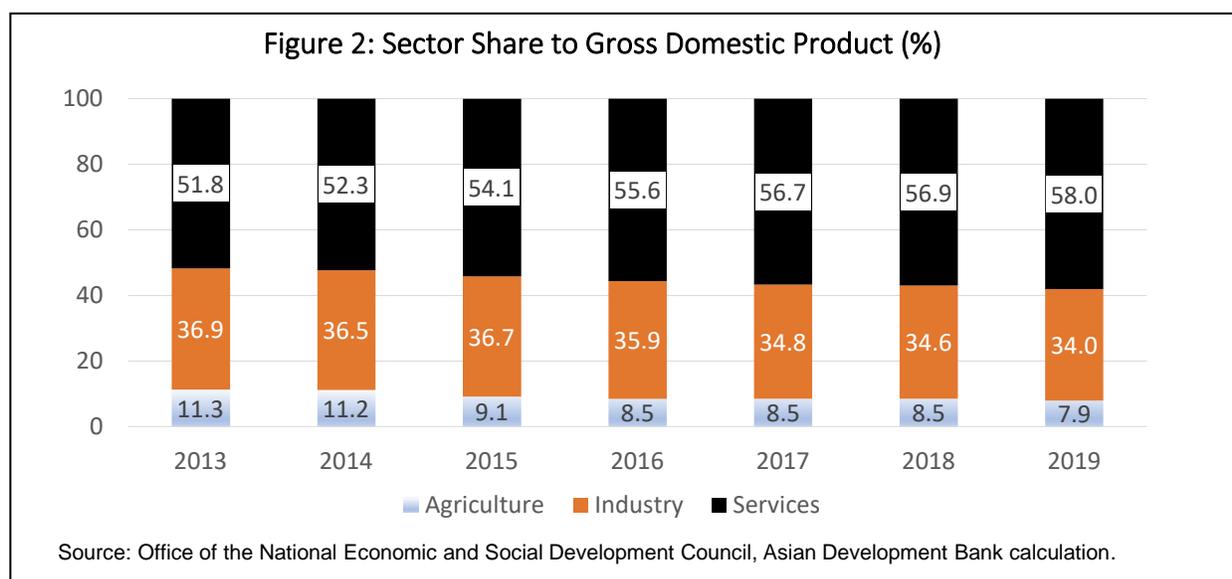
⁹ W. Theanvanichpant. 2020. Big data to keep Thai workers afloat. [Bangkok Post](#). 26 August.

¹⁰ The accumulated knowledge from education and experience, skills, and expertise an average worker possesses.

¹¹ World Bank. 2020. [Thailand Manufacturing Firm Productivity Report](#).

¹² World Bank. 2020. [Thailand Economic Monitor: Productivity for Prosperity](#).

17. **Tourism and the impacts of COVID-19.** In contrast to the shrinking contribution of the manufacturing sector to the Thai economy, the services sector, and tourism in particular, has expanded significantly. International visitor arrivals surged from 26.6 million in 2013 to 39.9 million in 2019, with travelers from the PRC comprising the largest share of visitors (27.5%) in 2019. Accordingly, the services sector has played an increasingly dominant role in the Thai economy, with its share of GDP rising from 49.5% in 2010 to 58.0% in 2019 (Figure 2). Growth in the services sector has not required large investment, as tourism businesses have concentrated on low value-added services. However, the pandemic has had severe impacts on the services sector as Thailand closed its borders to international tourists in the second and third quarters of 2020. The Tourism Council of Thailand reported that about 10% of tourism businesses had closed, resulting in job losses for almost 540,000 workers in the tourism sector alone. Of the operators that remain open, 13% have reduced their employee headcount by 30%. Tourism operators in the southern and central regions are the most affected as they rely heavily on foreign tourists.¹³ Although the government introduced a Special Tourist Visa in October 2020, quarantine requirements continue to hinder arrivals and the number of foreign visitors during the last quarter of 2020 remained small, at 10,822 arrivals, or a 99.9% year-over-year decline.



18. **Labor market and unemployment trends.** A ranking by the World Bank in 2018 revealed that Thailand's unemployment rate of 1.1% was the ninth lowest out of 233 countries.¹⁴ However, the low unemployment rate and World Bank ranking may not reflect deeper structural issues in the labor market. For example, workers that are considered employed may have unstable jobs or may be underemployed, while other individuals may have stopped seeking jobs and would therefore be excluded from unemployment statistics. The labor market also has a relatively high rate of unemployed youth, despite a declining youth population (para. 36). Youth unemployment reached about 5% in 2019, against 1% for adults. Further, most workers in the agriculture sector (nearly one-third of the labor force) are self-employed and not covered by the social security system. Crucially, Thai businesses are struggling to find skilled workers because of labor

¹³ D. Worrachaddejchai and A. Wangbunyen. 2020. TCT says 10 of firms have closed. [Bangkok Post](#). 1 October.

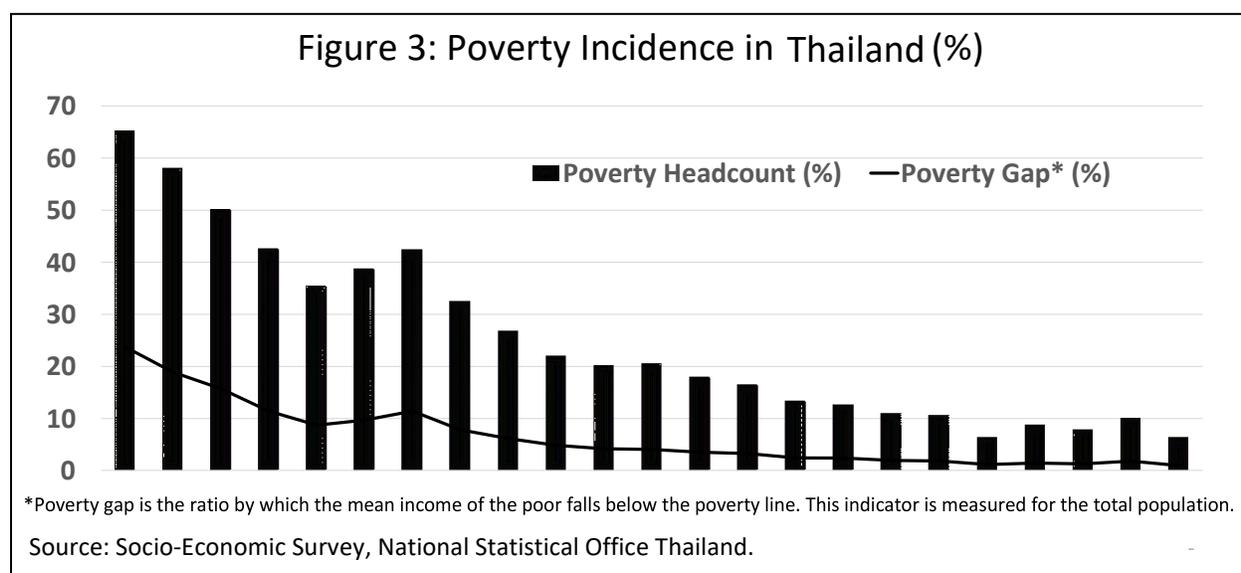
¹⁴ [World Bank Database](#): Unemployment, total (% of total labor force) (modeled International Labour Organization estimate).

shortages and skill mismatches, and shortages may become more pronounced as the population ages and the economy demands more specialized skills.

19. **COVID-19 threatens to exacerbate labor market challenges.** From December 2019 to December 2020, the unemployment rate went up from 0.96% to 1.50%. Global supply chain disruptions and weakening demand placed downward pressures on working hours and wages in supply chains and manufacturing sectors. On the recruitment side, the number of job openings dropped from 315,000 in 2019 to 95,000 in 2020, which will place particular pressure on new graduates.

20. **Inclusive growth.** Thailand has been largely successful in promoting an inclusive and sustainable development agenda. In 2019, Thailand was ranked 40th globally in terms of Sustainable Development Goal indicators, giving it a comparable ranking to countries in the Organisation for Economic Co-operation and Development.¹⁵ It was also ranked *high* on the Human Development Index.¹⁶ However, there are remaining pockets of poverty and inequality for Thailand to address as it seeks to become an upper-income country.

21. **Poverty reduction.** Thailand has made steady progress in reducing poverty. Although the poverty rate increased marginally in 2016 and again in 2018, it decreased by an overall 7% during 2013–2019.¹⁷ In 2016, the increase was attributable to a temporary decline in the agriculture sector, particularly in the north, while in 2018, a boating accident in Phuket led to a reduction in tourism receipts for nearly a year. The broader national poverty rate declined from 10.94% in 2013 to 6.24% in 2019, though it may increase due to economic slowdown in 2020 (Figure 3).¹⁸



¹⁵ United Nations. 2019. *The Sustainable Development Goals Report 2019*. New York.

¹⁶ United Nations Development Programme. 2019. *Human Development Report 2019: Beyond income, beyond averages, beyond today: Inequalities in human development in the 21st century*. New York.

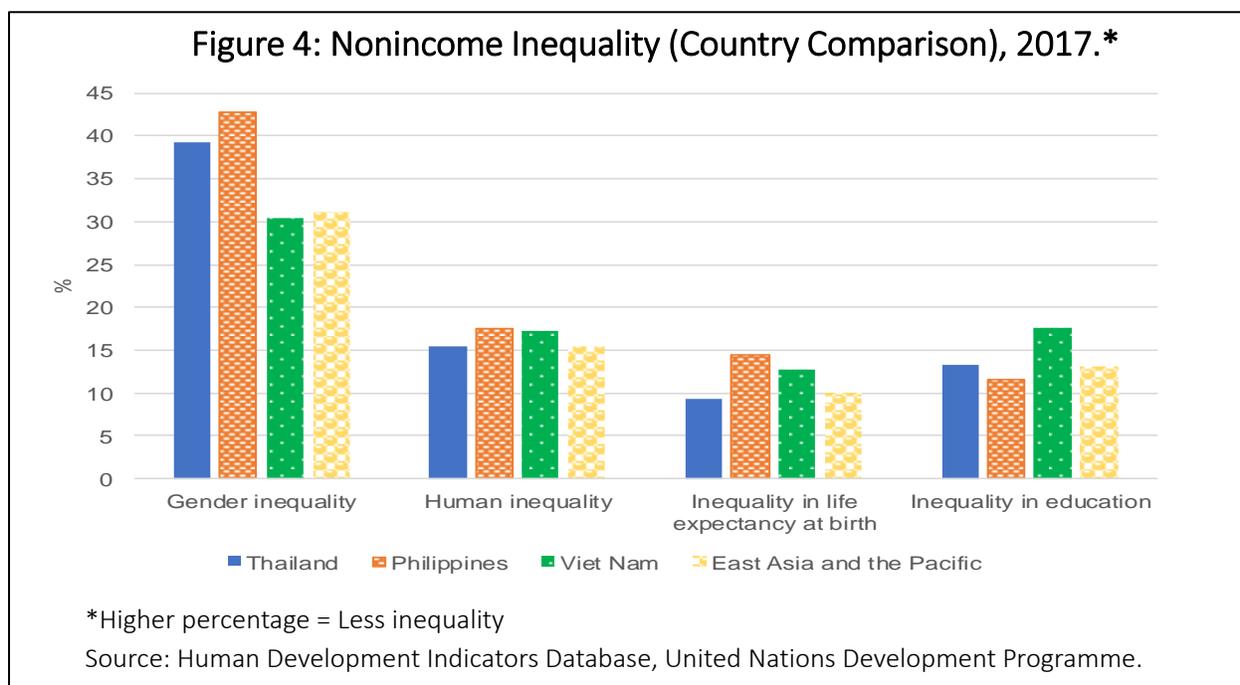
¹⁷ The poverty rate is the proportion of the population living below the national poverty line as Thailand defines.

¹⁸ Government of Thailand, Office of the National Economic and Social Development Council. 2019. *Poverty and Inequalities Report*. Bangkok (no English version; only available in Thai).

22. Thailand's success in reducing poverty is attributed to sound macroeconomic conditions, openness to trade and investment, inbound labor migration, increased regional integration, and policies to promote inclusive economic growth. Despite overall progress, however, there continue to be pockets of poverty in the northeastern and northern provinces and in Thailand's three southernmost provinces. The poorest groups are concentrated in the agriculture sector and typically in the informal workforce, comprising part-time employees, self-employed households, informal MSMEs, and landless laborers.

23. **Income inequality.** Income inequality in Thailand has declined over the year 1990 to 2019 because of economic transformation and corresponding wage increases. Thailand's GINI coefficient on the expenditure side fell from a peak of 0.48 in 1992 to 0.35 in 2019.¹⁹ However, the national distribution of wealth continues to be uneven, with more than half of the country's land belonging to 10% of its landowners. Given the high share of informal employment (55.3% of total employment) and the large number of MSMEs (more than 95% of Thai enterprises), COVID-19 will have a disproportionate impact on the bottom 50% of Thailand's workforce, who are already vulnerable because of their lack of regular income and productive assets. Furthermore, the pandemic is also expected to increase poverty as workers lose jobs and sources of income. ADB estimates that the poverty incidence in Thailand will increase from 8.8% to 16.0% in 2020, and gradually taper down in 2021 in line with economic recovery.

24. **Nonincome inequality.** Overall, nonincome inequality remains higher in Thailand than in the Philippines and Viet Nam, but on par with the average for East Asia and the Pacific (Figure 4). Thailand has reduced its gender gaps, improved the quality of health care, and supported equal access to health services. Further progress remains to be achieved in terms of closing socioeconomic gaps and improving the quality of education.



¹⁹ The Gini coefficient is a measure of inequality of a distribution. It is based on the comparison of cumulative proportions of the population against cumulative proportions of income they receive, and it ranges between 0 in the case of perfect equality and 1 in the case of perfect inequality.

25. **Education.** Thailand's education system underperforms when compared with other countries in Asia, and domestic access to high-quality education is imbalanced. Small schools, especially those in rural areas, are falling behind, and education equality gaps widened substantially during 2017–2018. Poor citizens in rural areas of Thailand have less opportunity to receive a high-quality education than those in big cities like Bangkok, Chiang Mai, and Khon Kaen, and so are less able to contribute to modern work opportunities envisaged in Thailand 4.0. Results from the 2018 Programme for International Student Assessment exam placed the Thai education system below global and regional averages in all subjects.²⁰ The exam also indicates that socioeconomically advantaged students in Thailand outperformed disadvantaged students in all subjects, with high-performing students often clustered in certain schools. Girls outperformed boys on test scores across demographic groups. Furthermore, many Thai students, and disadvantaged groups in particular, displayed low ambition or self-confidence. For example, about 17% of high-performing, disadvantaged students did not expect to complete tertiary education, only 20%–30% of high-performing students wanted to work as science or health professionals, and less than 5% of high-performing students expected to work in ICT.

26. **Gender equality.** In 2019, gender gaps in Thailand's education and health sectors were relatively small, but there remained considerable gaps in terms of job opportunities and access to decision-making roles. Although women and men in Thailand receive similar education, men hold the majority of leadership positions in business and politics and are more active in the labor force. Women also make less money than men and represent the majority of the informal workforce, partly because they tend to leave work earlier than men to care for children, ailing family members, or the elderly. Despite gender gaps in the workforce, women's participation on corporate boards is increasing, which is a good sign that job promotion is increasingly based on performance with decreasing bias on gender. Thailand's global ranking on the Mastercard Index of Women Entrepreneurs improved from 19th place in 2018 to 14th in 2019 as female entrepreneurship and the number of businesses owned by women increased.²¹

27. **Health care.** Thailand has significantly reduced equality gaps in the health sector and has improved national health since implementing universal health coverage in 2002.²² Life expectancy at birth rose from 71.8 years of age in 2001 to 76.9 years in 2018, while infant mortality dropped from 101.0 deaths per 1,000 live births in 1960 to 7.7 deaths per 1,000 live births in 2019. Thailand's universal health coverage entitles all citizens to essential health services, regardless of age or income, and has reduced the burden of catastrophic health care expenditures, particularly for poor people and vulnerable groups. Well-coordinated district health systems across the country enable individuals to seek care or referral at health units close to home. However, there remain disparities in access to well-equipped medical facilities. The Bangkok Metropolitan Region has a number of super-tertiary hospitals providing high-end care (in part, catering to medical tourists) and, overall, has a higher concentration of medical equipment than the national average and all other provincial areas. Actual health impacts of COVID-19 have been manageable, with the country having one of the lowest infections and death rates in the world. To date, Thailand has experienced two waves of the outbreak. The first wave lasted from March to May 2020 and comprised approximately 5,000 cases. The second wave started in mid-December

²⁰ Organisation for Economic Co-operation and Development. 2018. Programme for International Student Assessment 2018 Results (Volume III) Thailand – Country Note. Paris [PISA 2018- Thailand Country Note](#). Test subjects are math, reading, and science.

²¹ Mastercard. 2019. [Mastercard Index of Women Entrepreneurs 2019](#).

²² Sumriddetchkajorn, et al. 2019. Universal health coverage and primary care, Thailand, [Bulletin of the World Health Organization](#). 2019;97:415–422.

2020 and brought the cumulative number of confirmed cases to 23,252 as of 29 March 2021, with the death rate consistently below 1%. The low death and infection rates are attributed to Thailand's strong national health care system, significant experience in managing previous pandemics such as severe acute respiratory syndrome (SARS) and avian influenza, and the government's ability to act early and effectively to minimize infections.

28. **Climate change and environmental pressures.** Climate change has increased the frequency and severity of floods, droughts, extreme weather events, sea-level rise, and temperature fluctuations. Thailand is considered one of the 16 countries in the *extreme* risk category and most vulnerable to climate change impacts over the next 30 years.²³ Intensified climate variability has already begun impacting Thailand's agricultural output. Since the remaining pockets of poverty are concentrated in Thailand's agriculture sector, the effects of climate change pose disproportionate threats to poor and vulnerable groups. Air pollution is another crucial environmental problem for the country. Thailand's Air Quality Index, a daily measure of six major air pollutants, has consistently reached 150–200, which is defined 'unhealthy' by the Pollution Control Department.²⁴ The high level of pollution is largely attributable to energy combustion from vehicles and factories.

29. **Increased role of green financing.** Thailand has started issuing sovereign sustainability bonds to fund green infrastructure projects.²⁵ The Ministry of Finance issued two taps of sustainability bonds totaling B50 billion (\$1.65 billion) in August and November 2020, with ADB support through the ASEAN Catalytic Green Finance Facility. These were a first-of-a-kind issuance by a sovereign in Southeast Asia. The proceeds have both green and social components, financing green infrastructure through the Mass Rapid Transit Orange Line (East) Project, as well as social impact projects for COVID-19 recovery such as public health measures, job creation programs, and local public infrastructure development with social and environmental benefits. The National Housing Authority of Thailand also developed a social bond framework and issued social bonds worth B6.8 billion (\$227 million) in September 2020 to raise funds to build homes for low- and middle-income earners.

30. **Regional cooperation.** Thailand is located at the center of the Greater Mekong Subregion (GMS) and its role as a regional logistics and trading hub is expected to further strengthen following the creation of the ASEAN Economic Community in 2015. Its central role in ASEAN was in part because of its comparatively decent infrastructure, good transport connectivity, and strong relationship with ASEAN countries. Thailand has also become a fundraising hub for neighboring countries, in line with growing regional demand for finance. The Thai capital market has well-equipped infrastructure, with open architecture and interoperable platforms including payment systems, a mutual fund distribution platform, and a digital identity system; high market liquidity; and a supportive regulatory environment. Thai regulators, including the Ministry of Finance, the Bank of Thailand, and the Securities and Exchange Commission, have regulations in place to facilitate qualified companies based in Cambodia, the Lao People's Democratic Republic (Lao PDR), Myanmar, and Viet Nam to raise funds in the Thai capital market. Furthermore, Thai investors have a robust understanding of financial markets, which enables them to diversify their portfolios to cover instruments of various credit risk levels.

²³ Government of Thailand. Office of Natural Resources and Environmental Policy and Planning. 2015. [Submission by Thailand Intended Nationally Determined Contribution and Relevant Information](#).

²⁴ Government of Thailand, Pollution Control Department. 2019. [Air Quality Report 2019](#).

²⁵ ADB. 2020. [Green Finance Strategies for Post-COVID-19 Economic Recovery in Southeast Asia](#).

31. **Spillover effects on neighboring countries.** Partly because of the centrality of the Thai economy in Southeast Asia, Thailand's economic downturn is causing disruptions of regional value chains for agricultural products, electronics, and automobiles, affecting regional employment and job creation. Within Thailand, foreign workers are expected to remit less money in line with economic impacts of COVID-19. In 2019, remittances from 3.9 million foreign workers in Thailand to Cambodia, the Lao PDR, Myanmar, and Viet Nam totaled \$2.8 billion, and are expected to decline significantly during 2020. Furthermore, more than 500,000 migrant workers lost their jobs in Thailand in 2020, and the International Organization for Migration estimates that at least 300,000 people migrated back to Cambodia, the Lao PDR, and Myanmar.²⁶

B. Key Impediments to Inclusive and Sustainable Growth

32. **Disruptions from COVID-19.** Prior to COVID-19, the Thai economy was expected to pick up speed in 2020, in line with improved external demand as trade conflicts between the United States and the PRC stabilized. However, the pandemic has slowed the anticipated growth path, with direct impacts on two of Thailand's largest economic sectors—tourism and manufacturing. The most severe impacts will be on MSMEs, low-income households, and workers with lower levels of education, including migrant workers. The pandemic is highlighting how vulnerable Thailand's socioeconomic systems are to external shocks, with impacts threatening to reverse labor market development and efforts to reduce inequality. Unlike past recoveries, including from the Asian financial crisis, export-driven growth resulting from exchange rate depreciation and global demand are unlikely in the wake of COVID-19. Thai firms will be encouraged to invest in higher value-added activities, using higher skills and knowledge to move the economy away from low-cost labor activities. However, Thailand may need to stick to labor-intensive industries in the short term because of unemployment and bankruptcies, especially among MSMEs. Policy makers need to balance the need for social safety nets of the most vulnerable with the need to reskill and upskill workers to strengthen the labor market to drive more inclusive and sustainable growth.

33. **Elevated household debt.** Elevated household debt can be a large drag on future economic growth because it cuts back on consumption as perceptions of permanent income and wealth are reduced. At the household level, high debt also exacerbates issues of poverty and inequality. The COVID-19 crisis has driven up household debt in Thailand, and at the same time job losses and falling income are weakening repayment capacity. The percentage of household debt–GDP surged from 79.9% at the end of 2019 to 86.6% in the third quarter of 2020, reflecting the growing financial vulnerability of households. The Office of the National Economic and Social Development Council projects that household demand for loans will continue to grow and that households may generate more informal debt, including for the consumption of goods, as signs of economic recovery remain unclear.²⁷

34. **Infrastructure gaps.** Infrastructure investment in Thailand averaged around 3% of GDP during 2016–2020, which was around 2% below the country's infrastructure investment needs.²⁸ While Thailand's infrastructure gap is narrower than the 3.8% Southeast Asian average, the

²⁶ International Labour Organization. 2020. [COVID-19: Impacts on migrant workers and country response in Thailand](#).

²⁷ Government of Thailand, Office of the National Economic and Social Development Council. 2020. *Thailand's Social Outlook of Q3/2020*. Bangkok.

²⁸ ADB. 2017. [Meeting Asia's Infrastructure Needs](#) For Southeast Asia countries, including Thailand, a 5% GDP growth would result in increased demand for infrastructure services that in turn would require investment amounting to about 5% of GDP.

country continues to experience infrastructure constraints in transport, clean energy, and ICT. Thailand's ongoing infrastructure investment program will be a key engine of growth in the post-pandemic period, with public-private partnerships (PPPs) supporting improved service delivery across the pipeline of 92 PPP projects worth \$33.39 billion during 2020–2027. In the energy sector, Thailand's public and private sectors may benefit from support to integrate more renewables into its energy mix. Improved connectivity can boost Thailand's economic competitiveness but will require a more systematic approach to environmental management and land acquisition in the transport sector. In particular, port capacities and connectivity have not improved equally over the years, and there are emerging issues in terms of efficiency and quality of services.²⁹ Regarding ICT, which is essential for economic growth, internet penetration in Thailand is currently 52.9% of the population, which is below that of Singapore (84.4%) and Malaysia (80.1%).³⁰ There is a need to improve internet access, especially to help MSMEs expand and increase revenue.

35. Lack of access to finance for micro, small, and medium-sized enterprises. More than 95% of Thailand's total firms are MSMEs. They create jobs for 12 million people, or 75% of the national workforce, and contribute almost 50% of GDP. However, the Thai business environment is dominated by large firms, with about 60% of all profit of registered companies going to a few large corporations. This imbalance makes it difficult for MSMEs to become the main engine of growth and to survive economic downturns. Thai MSMEs lack access to finance and the resources they need to expand. Key barriers for MSMEs to access commercial finance include insufficient assets to post as collateral for loans; and limited business attributes to lower borrowing costs, such as reliable financial documents, business plans, and relevant experience as business owners.³¹ MSMEs have become increasingly vulnerable during COVID-19 because of liquidity shortages and increasing debt, while also experiencing unprecedented income shocks. Nearly half of MSME owners indicated that their business was highly vulnerable to closing down permanently, and the majority of MSMEs have experienced a decline in income (this applies to 99% of tourism businesses and 90% of manufacturing businesses).³² Moreover, MSMEs will have to contend with intense competition amid meager demand in the short term. Cash-flow-based financing, new technologies for banking and finance, and appropriate competition policies can support Thai MSMEs to survive the pandemic and grow in the medium term and increase Thailand's aggregate productivity.

36. Demographic challenges of an aging society. The share of the Thai population aged 65 and over rose from about 7.0% in the early 2000s to 12.4% in 2019. This demographic transition poses a number of potential challenges to socioeconomic development, including (i) increased demand for health care services against limited human and financial resources, (ii) growing economic burden for the government to provide social assistance, and (iii) heightened need for younger portions of the population to provide unpaid care. The government has made progress in establishing infrastructure and social protection networks to cope with these challenges but will require further support as the population continues to age. There are significant gaps in access to and utilization of health care services. Elderly people that rely on carers or

²⁹ ADB. 2017. [Meeting Asia's Infrastructure Needs](#); and World Bank. 2016. [East Asia and Pacific Enhancing ASEAN Connectivity Monitoring and Evaluation](#).

³⁰ Economic Research Institute for ASEAN and East Asia. 2020. [E-Commerce Connectivity in ASEAN](#).

³¹ Moenjok, et al. 2019. [Gaining from digital disruption: The Thai financial landscape in the digital era](#).

³² The Asia Foundation. 2020. <https://asiafoundation.org/wp-content/uploads/2020/09/Enduring-the-Pandemic-Covid-19-Impact-on-Thailand-Livelihoods-Sept-2020.pdf>

relatives to bring them to health care facilities experience limited access, which is compounded by lack of public or affordable transportation, particularly in rural areas. Thailand has started to face difficulties providing care for elderly citizens because of the increased outmigration of adult children. The government currently provides three elderly care services at the community level—senior citizen centers, subdistrict health-promoting hospitals, and subdistrict administration organizations. However, there is an insufficient number of qualified and skilled home care volunteers, and there is an unequal distribution of health personnel within Bangkok and across health centers in urban and rural areas nationwide.³³ Regarding financial assistance, the old-age allowance is noncontributory and comes solely from the government. As the aged population increases, so program costs and long-term security for the aged may suffer because of mounting government budget deficits.³⁴

37. Human capacity and lack of innovation. According to the National Strategy (2018–2037), Thailand’s workforce lacks the innovation and creativity needed to develop into a modern, inclusive, and sustainable society. The Government of Thailand attributes lack of competitiveness, in part, to an outdated educational system. Although Thailand’s universities produce enough graduates to work in various sectors, more than 43% of firms in the private sector point out that domestic graduates do not have sufficient basic and technical skills.³⁵ Furthermore, there appear to be incongruencies between target growth sectors outlined in Thailand 4.0 and dominant fields of study in Thai universities. For example, the percentage of graduates from science, technology, engineering, and mathematics programs in tertiary education is 27.9%, compared with 29.3% in the Republic of Korea, 39.2% in Malaysia, and 33.5% in Singapore, indicating a shortage of engineering and science graduates, which is crucial for innovation and greater productivity. Hence, Thailand will need to upgrade its skills pool to achieve development ambitions and meet growing business needs. As education plays an important role in producing a skilled and high-quality workforce, Thailand will need to overcome education sector gaps to foster a more knowledge-based economy, improve its competitiveness, and drive inclusive socioeconomic growth.

38. Migration patterns. The high cost and complexity of formal migration between Thailand and neighboring countries influences workers to migrate informally, with formal or regular migrants paying an average of \$572 to migrate and informal migrants paying only \$247. Although Thailand has implemented a number of policies to reduce irregular migration, their effectiveness has been relatively low. The prevalence of informal migration creates safety issues and inefficiencies for migrant workers and the broader economy, including (i) lack of access to social protection (such as minimum wage and insurance), (ii) limited protection under labor laws and legal aid, and (iii) lack of access to skills development and training. Informal women migrants are particularly restricted in terms of job opportunities and may work in occupations not covered by labor agreements with neighboring countries, including in the agriculture and entertainment sectors. Given that migrant workers are employed across sectors and contribute to the international competitiveness of the Thai economy, it is important for Thailand to strengthen enforcement of labor laws and protection, and to foster higher productivity by investing in skills for migrant workers.³⁶

³³ P. Wongboonsin, Y. Aunguroch, and N. Hatsukano. 2020. *The Ageing Society and Human Resources to Care for the Elderly in Thailand*. In Y. Tsujita and O. Komazawa, eds. *Human Resources for the Health and Long-term Care of Older Persons in Asia*. Jakarta: ERIA, pp.104–35.

³⁴ ISEAS Yusof Ishak Institute. 2019. *Managing Thailand’s Ageing Population*.

³⁵ World Bank. 2008. *Thailand Investment Climate Assessment Update*.

³⁶ International Organization of Migration. 2019. *Thailand Migration Report 2019*.

39. **Environmental pressures and sustainable growth.** Mounting environmental pressures from air and water pollution, environmental disasters, and climate change are the biggest barriers to a sustainable and green economy in Thailand. Air quality in large urban areas (and especially in Bangkok) frequently exceeds national and World Health Organization standards for particulate matter (PM 2.5 and PM 10) and ozone, and creates health risks. In cities, the main sources of pollutants are traffic and construction, while in some provinces industrial and traffic-related sources are seasonally exacerbated by forest clearance fires. Statistics on pollution prepared by Thailand's Pollution Control Department indicate that the quality of fresh water resources such as rivers and coastal waters is improving.³⁷ However, this is a gradual process and not uniform across the country. Agriculture is the primary water-consuming sector, though the industry sector is placing increasing pressure on water resources. The increased frequency of flooding and drought in some provinces is a growing concern. There is a risk of mounting pressure on water storage facilities, including for hydro power, which will affect land use and aquatic ecosystems. Increasing the use of renewable energy can help address domestic environmental pressures, and Thailand is aware of growing opportunities in the areas of renewable energy, digital technologies, electric vehicles, and clean energy. The challenge is how to evolve and harmonize renewable energy integration and secure an affordable and reliable supply of electricity for the country.³⁸

C. Implications for ADB Country Engagement

40. Although Thailand currently has strong economic fundamentals in place, its core growth sectors are severely threatened by the impacts of COVID-19, and the country requires support leveraging existing resources to drive more inclusive, sustainable, and high value-added growth. ADB's CPS, 2021–2025 will be selective and align with ADB's Strategy 2030 as well as with Thailand's national strategy. ADB will tailor its strategy under the CPS, 2021–2025 to support Thailand in transforming its economy, coping with the COVID-19 crisis, and creating a conducive environment for inclusive and sustainable growth. In recognition of Thailand's upper middle-income country status and comparatively well-established domestic resources and capacity, ADB will focus on adding value in areas where Thailand specifically requests support. ADB will focus on enhancing (i) competitiveness and connectivity, and (ii) resilience and sustainability. ADB will support Thailand to leverage resources across the public and private sectors to strengthen growth fundamentals including in infrastructure and human capital.

41. **One ADB approach to collaboration.** To align with Strategy 2030's approach to supporting upper middle-income countries, ADB operations in Thailand will feature integrated One ADB solutions that encourage collaboration between its sovereign and nonsovereign operations, synergy in knowledge activities between operations and nonoperations departments, and integrated solutions through collaboration across sector and thematic groups.

- (i) **Priorities for sovereign engagement.** To support economic transformation, the country will require substantial investments in physical and human capital as well as policy and regulatory reforms. ADB's sovereign support will prioritize strengthening institutions, predominantly upstream engagement to address the country's gaps, through policy advice, capacity building, and other knowledge support to address development issues that are progressing slowly, such as waste management, financial inclusion, gender, health, and education. Subnational institutions are included in ADB's scope of support, particularly when it relates to strengthening urban

³⁷ Government of Thailand, Ministry of Natural Resources and Environment, Pollution Control Department. 2018. [Booklet on Thailand State of Pollution 2018](#). Bangkok.

³⁸ ADB. 2019. [International Conference on Energy 4.0: Designing the future of Thailand's Power Sector- Event Summary](#).

- infrastructure and services and helping subnational governments gain access to credit for investment activities.
- (ii) **Priorities for nonsovereign engagement.** Since the private sector will play a vital role in driving the economy forward, ADB will extend its support to create an enabling environment for the private sector to expand its role in Thailand's economy. ADB can add unique value by helping implement and promote PPPs through a range of innovative and flexible financial instruments, and by combining sovereign and nonsovereign approaches to support private-sector-led growth. ADB's nonsovereign engagement will focus on increasing access to finance, developing capital markets, improving productivity, and connecting technology solution providers to potential corporate users. Beneficiaries will include informal businesses and MSMEs, who may gain better access to finance through ADB's work in the microfinance and financial cooperative subsectors. ADB support will address barriers to the participation of women, youth, and other disadvantaged groups in the economy, which will help nurture equitable, inclusive, and market-ready human capital. ADB may also provide technical support to help develop ecosystems for sustainable capital market development and unlock financing for priority green infrastructure projects. ADB support to Thailand's private sector will also include regional entry points such as the ASEAN Capital Markets Forum to develop ASEAN asset classes and investor base; increase the regulatory capacity of the regulators; and deepen stakeholder interaction, cooperation, and coordination.
- (iii) **Priorities for adding value in ADB programs.** In an increasingly competitive investment environment, it is crucial for ADB's private sector operations to provide compelling products and services. Thailand has a sophisticated finance sector and the most developed capital markets in the Mekong region, and Thai commercial banks are experienced in medium- and large-scale corporate finance. ADB has a unique advantage in being able to combine sovereign and nonsovereign approaches and instruments. For instance, ADB can provide technical assistance to address current government interests related to private sector infrastructure development. ADB can also draw on a range of flexible financial instruments, including concessional financing (e.g., from the Clean Technology Fund), local currency financing, and political risk insurance. Regional cooperation and integration is important to Thailand as a policy priority and important to the region because of Thailand's position as an economic hub and its leadership role in initiatives such as the GMS program. Initiatives like the GMS Business Forum provide the opportunity for GMS countries to partner and engage with the private sector in order to attract investment to meet their development challenges.
- (iv) **Priorities for sector engagement.** ADB will continue its engagement in the transport and energy sectors, given significant opportunities to leverage these sectors to help achieve CPS objectives related to competitiveness and connectivity, and resilience and sustainability. However, compared to the previous CPS, ADB will emphasize (a) adding value to Thailand's domestic capacity to address climate change, urbanization, and regional cooperation; (b) supporting the government and private sector to strengthen innovation and technologies in economic areas prioritized by Thailand 4.0 including the digital economy, agriculture and biotechnology, aviation and logistics, and automation and robotics; and (c) improving connectivity both within the country and across neighboring countries to increase business efficiency, as well as to better facilitate flows of trade, services, and knowledge which can lead to more inclusive and sustainable growth.