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A NEW PARADIGM
FOR GREEN GROWTH
IN THAILAND

REDESIGNING
THAILAND'S SOCIAL
PROTECTION SYSTEM
: LEAVING NO ONE
BEHIND



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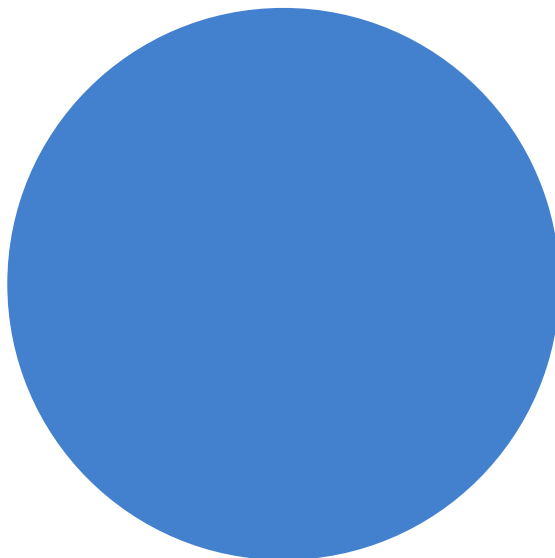
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**REDESIGNING
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A NEW PARADIGM FOR GREEN GROWTH IN THAILAND*

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1. FUTURE CHALLENGES AND IMPACTS ON THE THAI ECONOMY

As Thailand will face novel risks in the future, such as climate change and changes in trade rules and regulations, conventional ways to drive the economy using intensive resources without

consideration of environmental impacts will not lead to sustainable growth. Concerns about risks from climate change are not limited to Thailand, however; these concerns are shared by business leaders all over the world. A study by the World Economic Forum, entitled “World Economic Forum’s Global Risks Reports 2020: Long-term risk outlook,” revealed that climate change-related risks, including extreme weather events, natural disasters, biodiversity loss, climate action failure, and human-made environmental disasters, are among the most pressing risks facing businesses. This means that, in order to drive economic growth, climate change and other environmental issues cannot be overlooked.

The Sixth Assessment Report by the Intergovernmental Panel on Climate Change (IPCC) AR6 Working Group 1¹ emphasized the influence of human activities on climate change, especially the change in global surface temperatures (Figure 1). Figure 1 shows a significant increase in the global surface temperature following the beginning of the Industrial Revolution in the middle of the eighteenth century, resulting in major impacts, such as extreme heat and heavy precipitation events (Figure 2). Figure 2 reveals that several regions around the world are more likely to experience such events, especially Southeast Asian countries which are at risk of both extreme heat and heavy precipitation. Furthermore, climate models show that global surface temperatures are at risk of increasing by almost 5 degrees Celsius by the end of the twenty-first century under high carbon dioxide (CO₂) emission scenarios (Figure 3).

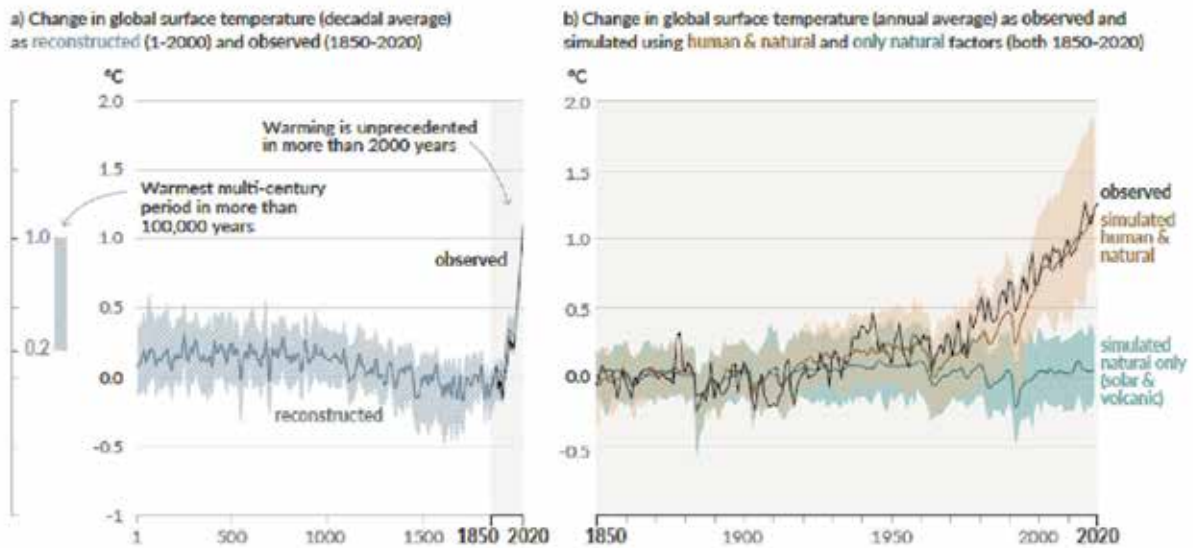
* *Proceeding of TDRI Public Virtual Conference on November 2, 2021.*

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¹ <https://www.ipcc.ch/report/sixth-assessment-report-working-group-i/>

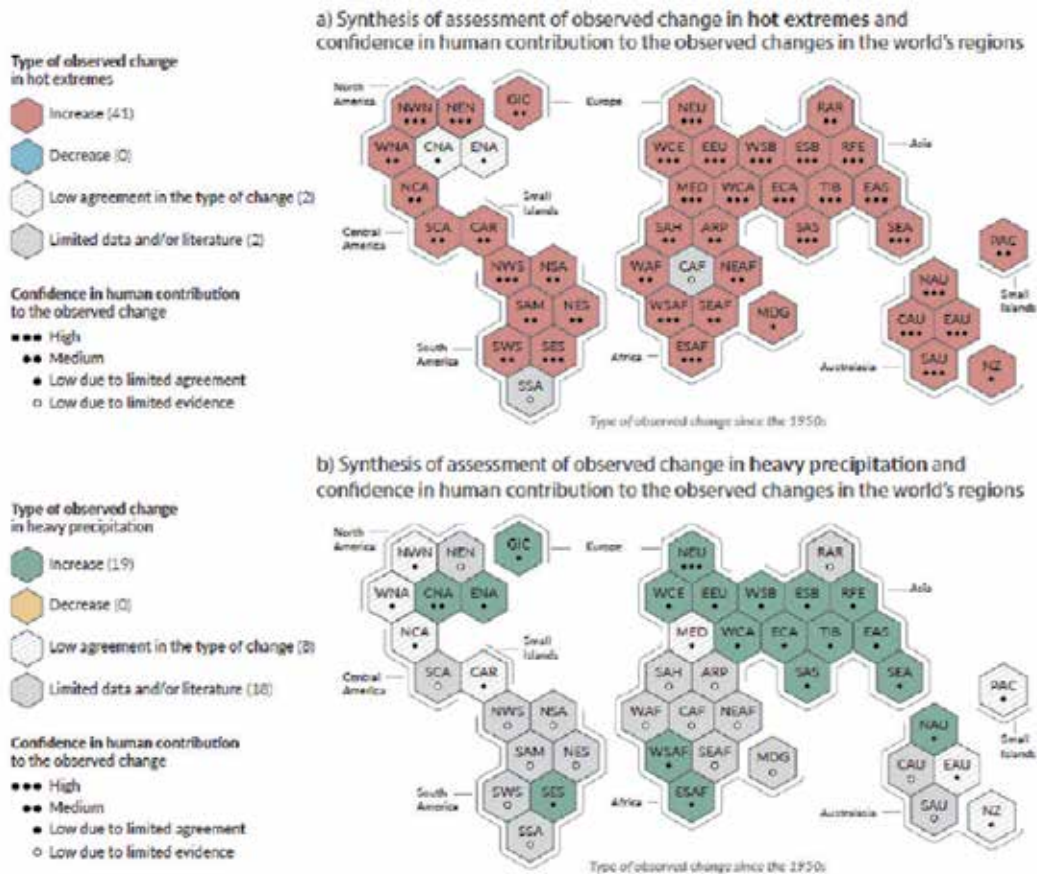
Figure 1: Changes in global surface temperature relative to the period 1850-1900

Changes in global surface temperature relative to 1850-1900



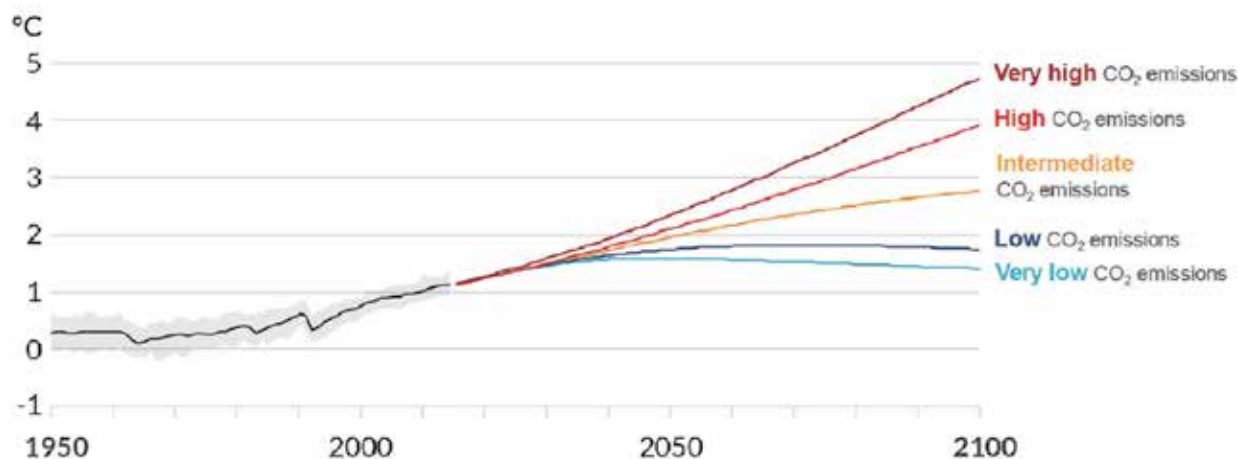
Source: IPCC AR6 Working Group 1.

Figure 2: Observed changes in hot extremes and heavy precipitation events



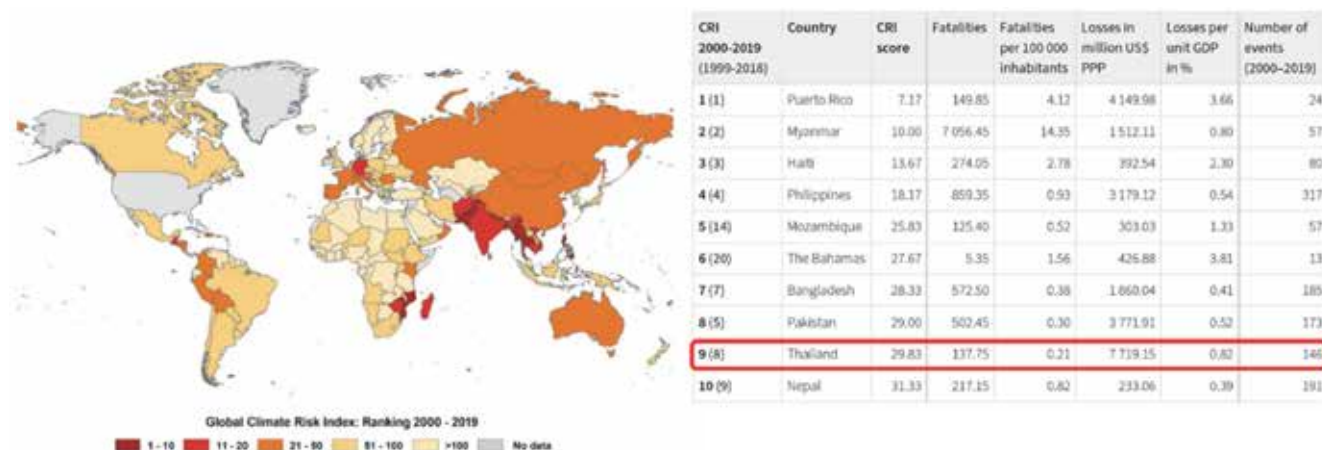
Source: IPCC AR6 Working Group 1.

Figure 3: Global temperature predictions under different carbon dioxide emission scenarios



Source: IPCC AR6 Working Group 1.

Figure 4: Ranking of countries suffering the most impacts from climate change, according to the Global Climate Risk Index



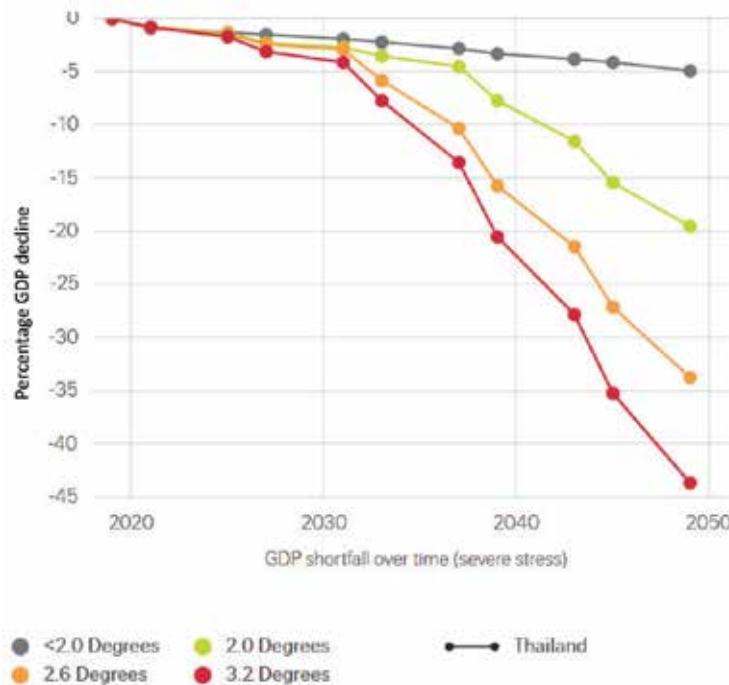
Source: Global Climate Risk Index.

Thailand has suffered severe impacts from climate change, including floods and droughts. The Global Climate Risk Index (CRI) ranks Thailand as one of the top countries most affected by climate change since 2017, with high impacts in both the number of deaths and economic loss. In 2021, Thailand ranked ninth in the world for countries at the highest risk from climate change (Figure 4). Furthermore, in 2021 the Swiss Re Institute estimated

that, under the most severe scenario, where global temperatures would rise by 3.2 degrees Celsius, the Thai economy may shrink by up to 44 percent in 2050² (Figure 5).

² <https://www.swissre.com/dam/jcr:e73ee7c3-7f83-4c17-a2b8-8ef23a8d3312/swiss-re-institute-expertise-publication-economics-of-climate-change.pdf>

Figure 5: Scenarios for impacts of climate change on the Thai economy



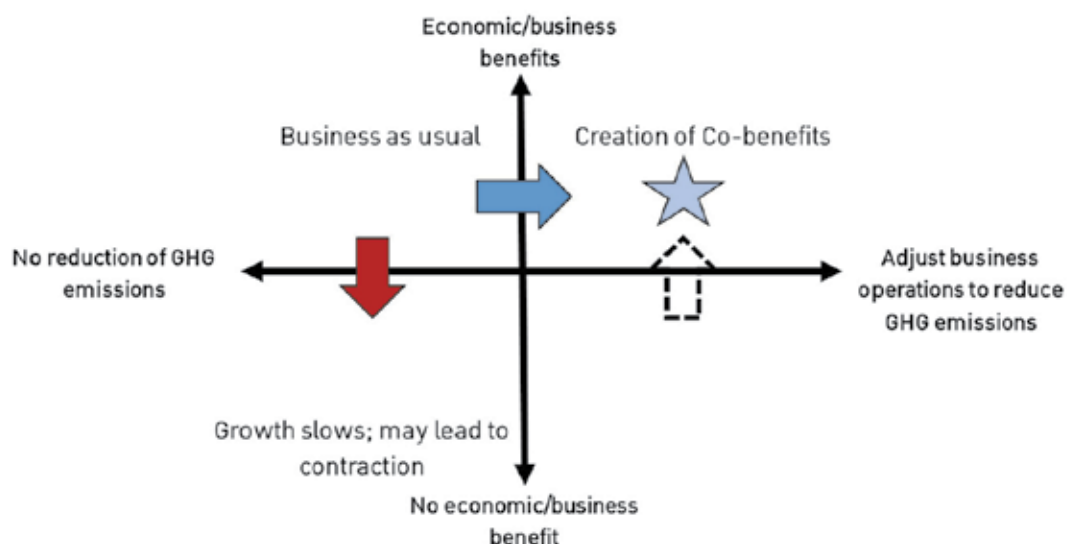
Besides problems posed by climate change in the near future, Thailand may face additional challenges from changes in global trade rules and regulations. The European Commission has proposed the Carbon Border Adjustment Mechanism (CBAM), which would adjust prices of goods to reflect the true amount of carbon released during their production process. CBAM is one of the tools that the European Union is incorporating to achieve its carbon neutrality goal by 2050, according to the European Green Deal. This policy will directly affect Thai businesses which export to the region, especially industries with high greenhouse gas (GHG) emissions, such as cement, aluminum, iron, steel, fertilizer, and coal. While CBAM will initially be focused on those industries, other industries must also adapt to these measures because other countries or regions may integrate greenhouse gas emissions

into their future trading conditions.

The duty of solving the climate crisis does not fall on any individual country, as the atmosphere is a non-exclusive, non-rival, global public good. This brings about the issue of economic “free riders.” Thailand, therefore, should not ignore the issue and instead be an early mover in alleviating the problems and building new opportunities. During the 2021 United Nations Climate Change Conference (COP26) held in Glasgow, United Kingdom, Thailand announced its plans to achieve net zero greenhouse gas emissions by 2065³ under the condition that enhanced international supports on finance, technology, and capacity-building

³ At COP26, Thailand set a target to achieve carbon neutrality by 2050 and a target to achieve net zero greenhouse gas emissions by 2065.

Figure 6: Concept of “decoupling” under the green growth model



would be provided. To achieve this goal, related sectors, including businesses, must play a role in driving ambitious targets to reduce greenhouse gas emissions.

2. GREEN GROWTH THROUGH THE USE OF TECHNOLOGY TO INCREASE PRODUCTIVITY

To handle the aforementioned new challenges in the future, Thailand should shift its current economic development model to focus on resilience and green growth in the long term. This is an economic model that emphasizes co-benefits: generating economic growth while considering the environment and societal well-being (Figure 6). Technology is key to total factor productivity growth and to driving more efficient resource use and creating new business opportunities.

Total factor productivity (TFP) can be enhanced in two ways, namely using technology

to increase efficiency of resource use and developing product innovations to create value for products and services. Although the two ways could potentially drive economic growth, the former option poses lower risk to businesses, i.e., businesses are quite likely to benefit from enhanced efficiency in the utilization of resources. The development of product innovations, meanwhile, carries a higher risk in terms of the return on innovation investment.

3. OPPORTUNITIES FOR USING TECHNOLOGY TO DRIVE GREEN GROWTH IN THE THAI CONTEXT

As discussed in the previous section, using new technology to drive green growth not only creates new business opportunities, but also increases resource use efficiency. This section presents examples of how technologies have been used to reach both of these ends.

3.1 Using technology to create new business opportunities

This section provides three examples of businesses using technology to create new opportunities and drive economic growth, as follows:

Technology for generating electricity from clean energy: The key drivers for clean energy include the energy sector's goal to attain carbon neutrality by the period 2065-2070, according to the National Energy Plan (NEP), increasing trends toward a digital society, the demand for clean energy, and consumers who have taken up the role of producing energy (becoming "prosumers"). Companies in Thailand that use such technology include the solar producers SPCG, BanpuNEXT, and BGrimm Power.

Technology for pollution-reducing electric vehicles: The key drivers for the transition to electric vehicles include (a) policies to use 100 percent zero-emission vehicles (ZEV) in many countries; (b) Thailand's goal to produce 100 percent ZEV by 2035; and (c) the national targets to reduce greenhouse gas emissions and air pollutants. A joint venture between PTT and Foxconn, a Taiwanese electronics producer, is one of the promising businesses, focusing on the development of end-to-end production platforms to produce a complete range of electric vehicles for various car brands around the world.

Technology for producing environmentally friendly packaging: The key drivers for environmentally friendly packaging include increasing consumer interest in more environmentally friendly products, measures to promote reduction of

single-use plastics by the government, increasing the use of food delivery services, especially during the current COVID-19 pandemic, and the high growth in the market for environmentally friendly packaging. An example of a Thai company that uses such technology is Gracz. The company supplies food containers and packaging produced from different types of natural plant pulp, such as bagasse, bamboo, and rice straw, which are naturally biodegradable, useful in everyday life, and safe for health.

Although technology helps create new business opportunities as mentioned above, there are problems and obstacles that still need to be addressed. For the clean energy businesses, the government must speed up the adjustment of regulations that are not conducive to electricity trading, carry out grid modernization to better support a decentralized power generation system, and accelerate the promotion of research and development of renewable energy technologies to reduce costs in order to make renewable energy technology more competitive and accessible.

For electric vehicles, the main obstacles include the lack of clear measures by the government to incentivize consumers to use electric vehicles, and the lack of clear guidelines for the management of used batteries. Therefore, the government must quickly create a framework for promoting the electric vehicle industry and investing in the necessary infrastructure, such as charging stations and facilities to deal with used batteries.

For environmentally friendly packaging businesses, an important obstacle is that the cost

per unit is still high compared with conventional packaging, making the packaging unattractive to consumers. Therefore, the government should raise awareness of the benefits of environmentally friendly packaging, and create a clear pathway for banning packaging that are harmful to human health or the environment in order to help environmentally friendly packaging become more competitive.

3.2 Using technology to increase resource use efficiency

Aside from using technology to create new business opportunities, technology can also be used to increase the efficiency of resource use, such as energy and water. In this section, three examples of businesses that use technology to increase resource use efficiency are provided, namely livestock farming, green hotels, and green buildings.

For the example of livestock business, Betagro uses biogas technology to convert greenhouse gases into electricity. This reduces electricity usage on farms by approximately 30-50 percent, reduces the average carbon dioxide emissions by 10 tCO₂e/day (tons of CO₂ equivalent per day), and saves an average of 2 million baht in electricity costs per year. Furthermore, the treatment and reuse of wastewater increase water savings by more than 19 percent, and improvements in machine efficiency result in energy savings of more than 300,000 megajoules.

In the green tourism business, technology is used to support hotels' resource use efficiency. For example, Sivatel Hotel adopted end-to-end

food waste management, starting from the food menu design process to the procurement of local raw materials. Aside from food waste management, Sivatel runs the "Golden Waste Bank" project, and saves electricity by switching to LED lighting and using split air-conditioning units. The shift to reusable glass water bottles instead of single-use plastic ones has reduced plastic bottle waste by more than 200,000 pieces per year. In addition, the shift from small plastic containers for toiletries to large reusable bottles helped the hotel save on operating costs.

For green commercial and residential buildings, cost savings can be achieved through more efficient resource management. For example, the Siam Cement Group's "100-year building" has switched to LED lighting, generates electricity from solar power, treats and reuses wastewater, and utilizes water-saving toilets. These actions save 250,000 kWh of electricity and produce 99,000 kilowatt hours of electricity from solar energy per year, save up to 74 percent of water by reusing wastewater, and save up to 30 percent of water by using water-saving toilets. In addition, residential green buildings also benefit from increasing consumer demand for sustainable living, as highlighted in the latest Thailand Consumer Sentiment Study H2/2021 produced by DDproperty; it showed that 93 percent of surveyed consumers value sustainable living.

Even though the technologies described in the present article can increase total factor productivity with relatively low risk through enhanced resource use efficiency, there are still



problems and obstacles that must be overcome to support businesses. For livestock farming, one of the challenges is that small farmers do not have access to the technologies needed to increase resource efficiency. Therefore, the government should accelerate research and development of technologies that reduce greenhouse gas emissions and increase resource efficiency without affecting overall productivity. Also, the government needs to ensure that farmers have appropriate support to access necessary funds and technology.

For green commercial and residential buildings, the main challenge is the higher cost, especially the cost of acquiring green building certifications, and the lack of serious government support. Therefore, the government could provide support by using tax measures to help reduce the cost burden for green businesses. Similarly, for green hotels, the cost of obtaining green hotel certification is a major deterrent. The government could help ease this burden through tax measures, such as by allowing hotel operators to use this expense to further reduce their corporate income tax. In addition, the government should support green hotels through green procurement policies, such as choosing a green hotel as a venue for organizing governmental meetings.

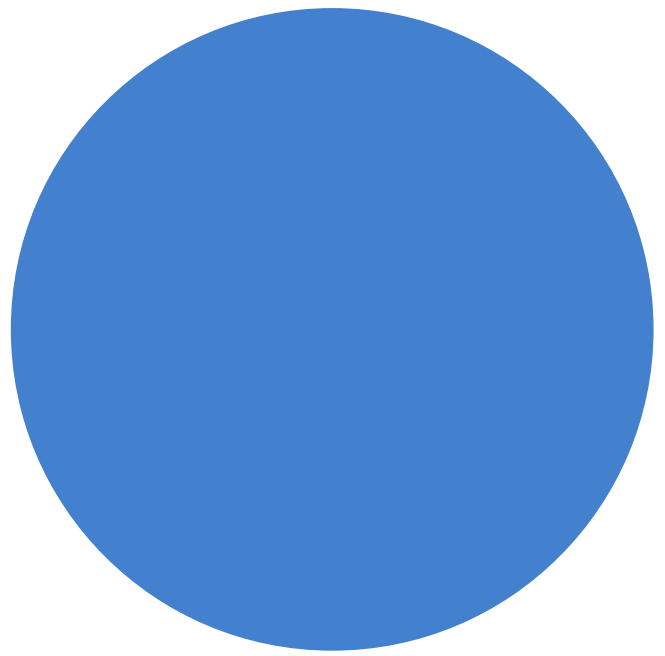
4. CONCLUSION: NEXT STEPS FOR GREEN GROWTH

Thailand can change its approach to economic growth by adopting technology to increase

total factor productivity. However, all sectors must work together to overcome obstacles and create real, meaningful green growth.

For the public sector, the government must be a role model for other sectors and lead by example to support green growth, especially in green procurement. Furthermore, the government must get rid of inflexible regulations, such as regulations on the purchase of electricity from renewable energy producers. The government should also communicate the impacts of climate change and new business opportunities to all relevant sectors. The government cannot drive green growth by itself, and therefore should work with the private sector and communities in bringing technology, innovation, and new ideas to drive environmentally friendly business models. There must also be simultaneous development of skilled labor to support the growth of environmentally friendly technology.

The business sector plays an important role in contributing to climate change solutions and mitigation. They may implement the “4 Ps” guideline, namely (a) Pledge: making commitments and setting clear goals; (b) Plan: planning to achieve short, medium and long-term goals; (c) Proceed: focusing on specific actions to achieve commitments, such as policy adjustments, investing in new equipment or technology, and modifying business models and operations; and (d) Publish: enhancing transparency and accountability by disclosing progress toward achieving the goals set, providing clear information on reductions in greenhouse gas emissions and offsetting activities.



Aside from this guideline, the financial sector is an important mechanism for providing funding supports for businesses and entrepreneurs of all sizes to access green technologies, such as through green loans or green bonds.

The public can also contribute to achieving green growth and reducing greenhouse gas emissions by changing consumption behavior to support environmentally friendly products and services.



REDESIGNING THAILAND'S SOCIAL PROTECTION SYSTEM: LEAVING NO ONE BEHIND*

Phakphum Jatupitpornchan

Trisorn Thirachiwanon

Supachai Sompol

*Nitchakarn Kaewbuadee***

A social protection system is an essential element to the economic and social development of a nation. One distinctive feature of social protection is that it enhances development by using a human-centered approach, by protecting people from various risks, promoting their potential to grow, and helping those in vulnerable situations. Many key issues in Thailand — inequality, population aging, and the middle-income trap — can be directly linked to failures in human development and can thus be solved by improving the social protection system. We believe that Thailand cannot afford to delay

** Summarized from a presentation by Dr. Somchai Jitsuchon (Research Director, Inclusive Development Policy, TDRI) and Dr. Boonwara Sumano (Senior Research Fellow, Social Development Policy, TDRI) at the TDRI Annual Public Virtual Conference on November 9, 2021.*

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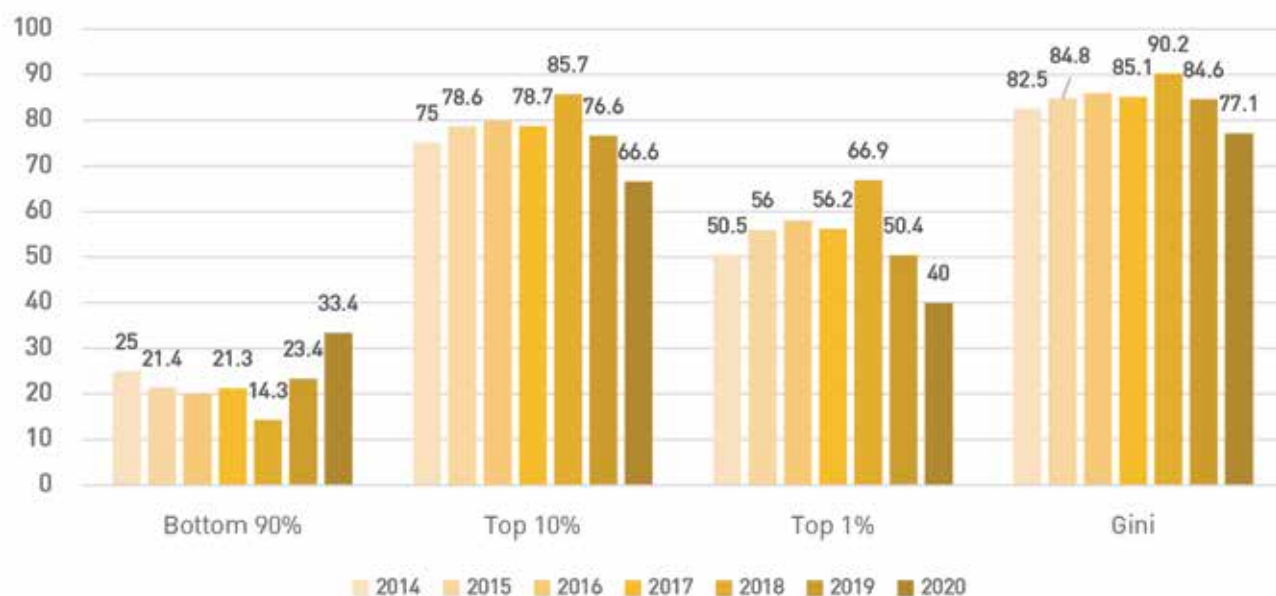
reforming its social protection system any longer as the aforementioned issues have been crippling Thailand's development for too long.

For human-centered development to be effective, one basic principle is that not one person should be left behind by the social protection system, which seems not to be the case in Thailand as the current social protection system continues to have a significant level of exclusion error, meaning that many Thais are still being left behind. Additionally, the COVID-19 pandemic has increased the need for reform, as the pandemic has exacerbated the issue of chronic poverty and left an education scar on the young generation. If these “scars” are left unattended, progress in human development will be further impeded. The arguments are elaborated and supported with evidence below.

THE IMPORTANCE OF HUMAN-CENTERED DEVELOPMENT IN THAILAND

Inequality is a very serious problem in Thailand. As may be observed in Figure 1, the richest 10 percent of the Thai population owns 70-80 percent of the total wealth in Thailand, and just the richest 1 percent account for more than half of the country's total wealth. Without question, these figures represent a serious problem of inequality in this country. While there are many explanations for this level of inequality, we argue that the problem is linked to human development because inequality in wealth distribution arises largely from inequality in opportunities among the people.

Figure 1: Percentage wealth inequality in Thailand, 2014-2020



Source: Global Wealth Databook, covering period 2014-2021, Credit Suisse.

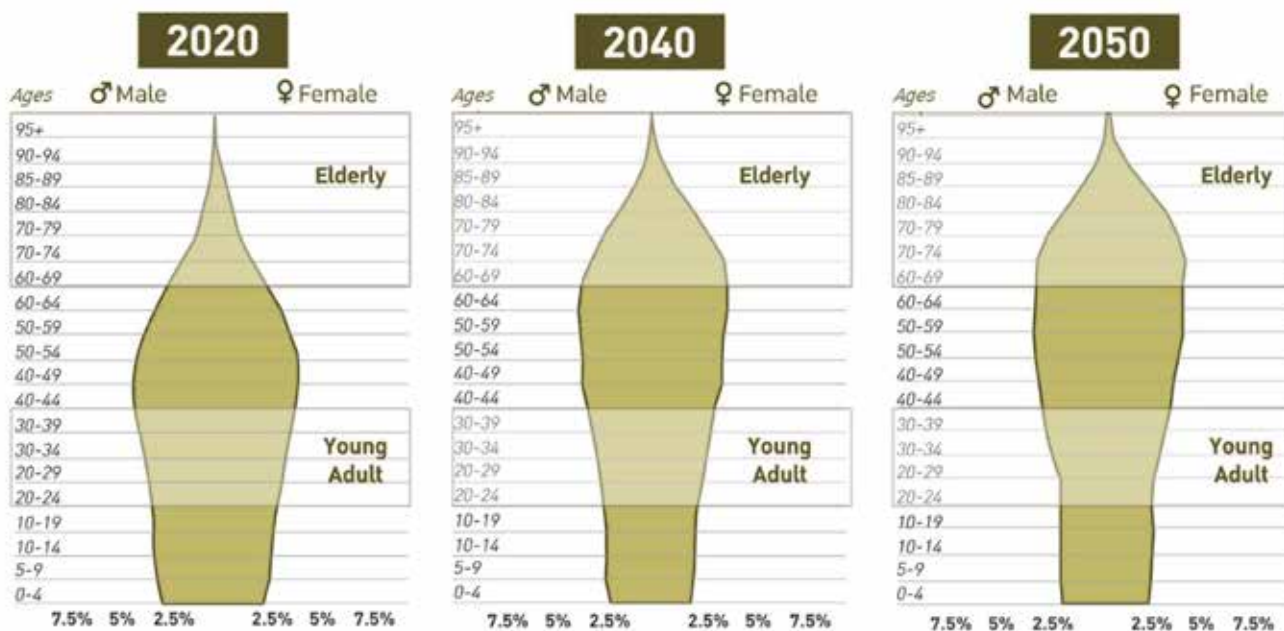
The second key problem is population aging, which is a process involving a shift in the distribution of a country's population toward older ages. The Thai population is aging more rapidly than that of many other countries with the same level of economic development. There is going to be a significantly smaller young generation, in both absolute terms and in proportion, in Thailand over the next 20-30 years (Figure 2). A serious consequence is the likely lower economic growth rate due to a shrinking labor force. Furthermore, the young generation, who will be at the center of the country's development process, will have to face a higher tax burden to finance expenditures related to old age, both through public and private channels. Hence, it is of utmost importance for Thailand to ensure that its human resources are nurtured and reach their highest potential. The challenge to achieving this

goal, however, is that a very large proportion of the young generation is living in the poorest 40 percent of households (Figure 3), which means that they are at risk of not receiving opportunities to develop to their full potential.

Furthermore, more than 61 percent of the Thai population are also at risk of not being able to participate in economic development and being left behind in the future. These people are at risk because they may not be able to catch up in terms of the future of work due to their low educational attainment (less than high school). This can be seen in Table 1. It will be more serious for older workers (older than 40 years) as they have less opportunity, and less capability, even if presented with such opportunities, to acquire new skills.

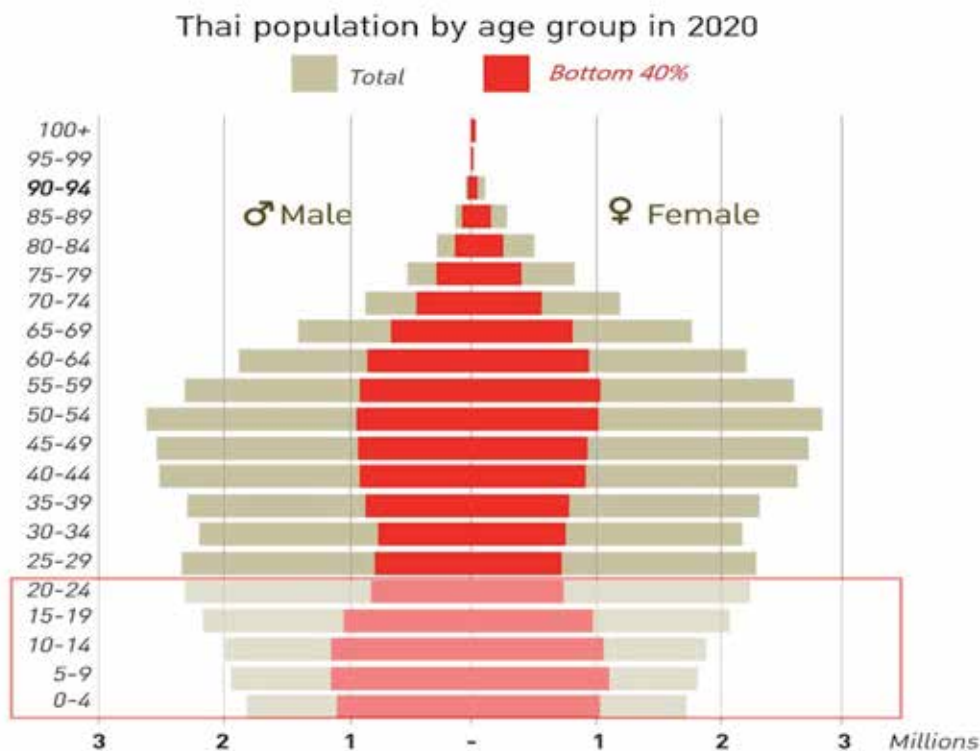
The previously mentioned lower opportunity and capability may be reflected in the recent trend

Figure 2: Thai population distribution, by age group, in 2020, 2040, and 2050



Source: World Population Prospects 2015, United Nations.

Figure 3: Thai population, by age group, in 2020



Source: Calculated by authors using the 2020 Household Socio-Economic Survey.

Table 1: Percentage of population, by age and level of education

Age group (years)	Less than high school	High school	Vocational	Tertiary	Total
15-19	1.6	0.3	0.1	0.0	2.0
20-29	8.6	3.9	2.7	4.0	19.2
30-39	9.8	3.9	2.9	5.7	22.2
40-49	15.6	3.1	1.7	4.0	24.4
50+	26.0	1.9	1.4	2.8	32.1
Total	61.7	13.1	8.8	16.5	100.0

Source: Calculated by authors using the 2018 Labor Force Survey.

Figure 4: Percentage of the population out of the labor force in each age group



Source: Calculated by authors using the 2018 Labor Force Survey.

of more people leaving the labor force over the past several years (Figure 4) than in the past, including even the young generation. Failing to participate in Thailand's economic development causes economic loss not only to themselves, but also to the country. One possible reason for this issue is the lack of human capital. Such people may not be able to find employment due to poor health or their low level of education. Hence, this is another reason why the government should invest more in people.

More importantly, all the above issues — inequality, population aging, and the lack of human capital — are actually the root causes of the middle-income trap in Thailand (Egawa, 2013; Jitsuchon, 2012). Thailand has been stuck in this trap for quite a while. Before the 1997 Asian financial crisis, the average growth rate of the Thai economy was around 7 percent per year, but after that crisis, the average growth rate fell to 4 percent per year, and it has never since recovered to the original path.

For Thailand to get out of the middle-income trap, it is important to shift the growth model to become more human-centered.

INTEGRATING THE CONCEPT OF LEAVING NO ONE BEHIND INTO THE SOCIAL PROTECTION SYSTEM

The World Bank (2012) defined “social protection” as systems, policies, and programs that help individuals and societies manage risk and volatility and protect them from poverty and destitution. The International Labour Organization (2017) defined “social protection” as the set of policies and programs designed to reduce and prevent poverty and vulnerability throughout the life cycle. Therefore, it can be clearly seen that social protection is closely tied to the concept of human development.

We group the elements in the social protection system into four categories as follows:

1. **Social service** – programs aimed at nurturing and enhancing people’s potential, such as education, basic healthcare, and upskill and reskill programs. These programs should be offered to everyone, that is, they should be universal
2. **Social insurance** – public insurance programs that provide protection against various economic risks (e.g., unemployment, illness, disability)
3. **Social assistance** – programs that are aimed at assisting poor or vulnerable individuals

4. **Labor market policies** – policies that promote decent employment, which includes labor market regulation and active labor market policy

There are usually various aspects to be discussed about improving social protection. In this article, however, the main focus is on extending the coverage of social protection to the point that no one is left behind. The urgency imposed by the problems of aging, inequality, and the middle-income trap dictates that there is no time left to miss the chance to nurture all Thais.

A large exclusion error might lead to the phenomenon called “Lost Einsteins,” which is characterized by a loss to society when those with high potential fail to realize their innate capability. Bell et al. (2019) concluded in their study about the determinants of innovation that, if children from low-income or minority backgrounds in the United States were given more opportunities, there would be many more inventors and higher economic growth in that country. We believe Thailand has numerous Lost Einsteins as well.

Unfortunately, this urgency is not properly felt by policymakers. For those who might share this view, they might not adequately understand how to implement measures such that no one is actually left behind. This is evident in the current government’s pursuance of poverty-targeting in many policies without full understanding that such a strategy will inevitably suffer from substantial “exclusion error” (people who should have received the benefit but

Table 2: Pros and cons of different approaches

Cons of targeting approach	Pros of universal approach
Large inclusion and exclusion errors, especially of those left furthest behind	Covers most eligible beneficiaries, including the most vulnerable
Leaves people in poverty traps	Prevents people from falling into poverty
Disincentives work	Encourages people to work
Penalizes honesty when the beneficiary's life situation has improved	Fair and transparent
Creates tension within communities	Popular with communities and can contribute to greater cohesion
Promotes corruption and clientelism	Limited scope for manipulation of the scheme by local elites
Stigmatizes beneficiaries	Empowers beneficiaries as benefits are entitlements
Administratively complex and expensive	Easy to administer
Supported by elites as it is associated with lower taxes	Enjoys wide political support

Source: ESCAP (2018), Table 1.

are excluded), and hence leave behind many of the poor and vulnerable.

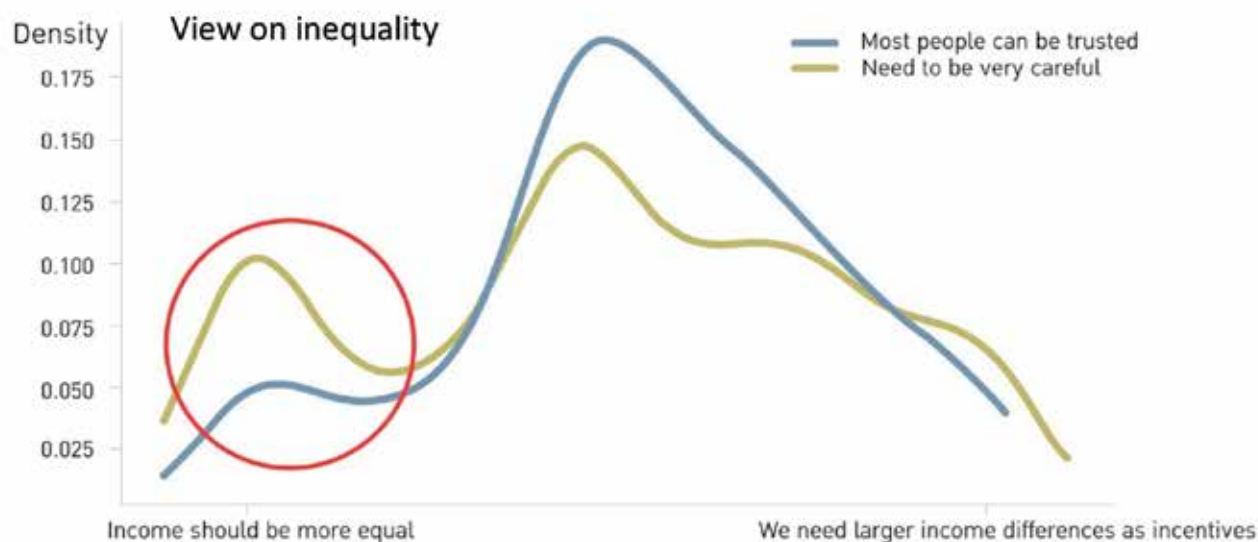
One might argue that the targeting mechanism could be improved such that the exclusion error could be eliminated or greatly reduced. However, evidence suggests otherwise, as even the most successful targeted schemes have exclusion errors of more than 40 percent (ESCAP, 2018). The exclusion error in Thailand's targeted schemes is also high. For example, the results of an impact assessment in 2019 indicate that the child support grant program (CSG) had an exclusion error of about 30 percent (TDRI & EPRI, 2019). Hence, while targeted programs have lower costs, they may be ineffective due to a large exclusion error. There is a consensus in the literature that the most effective approach to eliminate exclusion error is to make the program universal. Therefore, inclusive social protection that leaves no one behind requires universal programs

that reach all people to ensure that those in poverty and those who are at risk of falling into poverty are all covered (ESCAP, 2018).

Apart from eliminating exclusion error, the universal approach has many other advantages over the targeted approach. ESCAP (2018) summarized the pros and cons of targeting and universality as shown in Table 2.

Social protection is generally acknowledged as an important and effective instrument to reduce inequality. There are many benefits associated with lower inequality. For example, reduced inequality in a country would lead to higher trust among people in the society (Jordahl, 2007). The result from the World Value Survey conducted in Thailand in 2018 also suggests that those who believe that incomes should be more equal tend to be more empathic in dealing with other people than those who accept larger income differences as necessary incentives

Figure 5: Relationship between views on inequality and trust in Thailand



Source: World Values Survey, 2018.

(Figure 5). Trust is essential in effective communication and cooperation, which are key contributing factors for major policy changes or reforms.

RECOMMENDATIONS ON THE NEW WELFARE SYSTEM AND THE ROLE OF NON-STATE ORGANIZATIONS

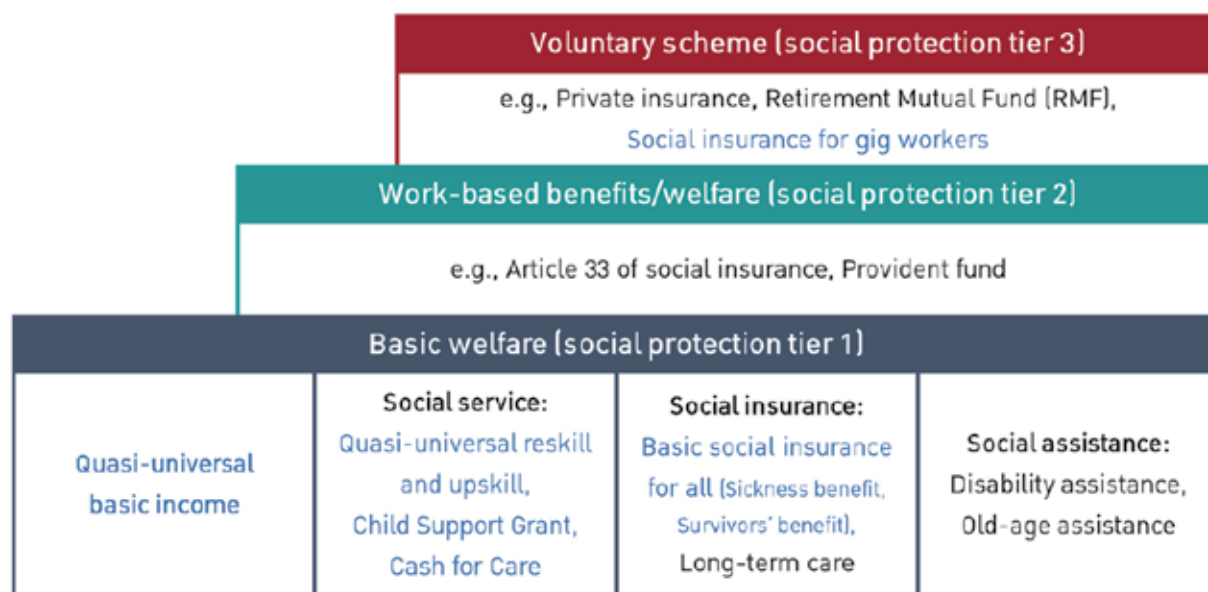
The emphasis on universalism in essential social protection components, while recognizing the limitation on Thailand's fiscal space, can guide the way toward what the Thai welfare system should look like. The recommendations were designed with two key guiding principles in mind: (1) leaving no one behind (adopt universal approach in essential areas), and (2) engaging all stakeholders in society in financing and implementing social welfare.

3.1 Leaving no one behind

Our proposal is to strengthen the multitiered structure of social protection by addressing system gaps while maintaining fiscal sustainability. The new welfare system we recommend is depicted in Figure 6.

Thailand cannot afford to miss even one person when providing access to crucial welfare. As such, the first tier of social protection in our proposal consists of universal or quasi-universal programs that seek to embrace the “leave no one behind” principle. The level of these universal benefits is kept not too generous so that they do not discourage people from working. The thinking is reflected in our “tier 1” recommendation of “universal basic welfare.” The basic welfare package recognizes the important fact that Thai society will soon become increasingly economically dependent on the next generation of children as Thai elders are living lon-

Figure 6: The recommended social protection system



Note: Items highlighted in blue are new recommended schemes.

Source: Authors.

ger and birth rates are declining. If disadvantaged children cannot receive the assistance they need, it would be detrimental to both the Thai economy and society. Therefore, child support grants and cash for care should be universal in order to eliminate all exclusion errors. Next, we believe that social insurance should also be universal, and thus recommend that certain social insurance benefits, such as an illness benefit and a survivors' benefit, be extended to all individuals, regardless of their employment status, free of charge. Effective skill training to address the problem of skill obsolescence and NEET (Not in Education, Employment, or Training, an acronym which refers to a person who is unemployed and not receiving an education or vocational training) is also important in order to solve the problem of the middle-income trap. To be effective, training schemes should be dictated by the market mech-

anism financed by public funds and offered to all workers who need them most. We propose providing quasi-universal program skill training vouchers to everyone in the labor force with an education not higher than lower secondary. Finally, there might be a need for a "universal basic income" initiative, but we propose this to be "quasi-universal" such that transfers are handed out only to those evidently not wealthy.

Certainly, every program has a cost. The following are our cost estimates of schemes proposed in tier 1, as well as more details of the schemes' conditions.

- *Child Support Grant (CSG)*: The program is now a targeting scheme. It will cost an additional 19 billion baht per year when it is converted into a universal program.
- *Cash for care*: This program is intended to

support care for children aged 2 to 3 years of age who are not covered by the current child development system, either by parents or public facilities. Milk, baby care items, and care givers are offered under this scheme. The estimation of annual cost is 46,000 baht per child and estimated number of beneficiaries is 1.1 million children, which would result in total annual cost of 52 billion baht.

- *Basic social insurance for all*: Everyone older than age 14 who is not enrolled in Article 33/39, the compulsory social insurance for employees and the comparable social insurance for persons who have been employed, and is not studying would be covered by the basic plan. The proposed plan is similar to the current social insurance's Article 40 (1) plan, which involves a monthly cost of 100 baht per person. This scheme is projected to cover 38 million people and create an annual fiscal cost of 47 billion baht.
- *Quasi-universal upskill/reskill training coupon*: Every three years, a 6,000-baht voucher will be distributed to workers who have not completed secondary education and are not currently studying. It can be used to pay for private or public training courses that will assist them in upskilling or reskilling. The coupon's annual budget is expected to be 68 billion baht.
- *Quasi-universal basic income (q-UBI)*: Because it does not screen out anyone, the universal basic income (UBI) program is

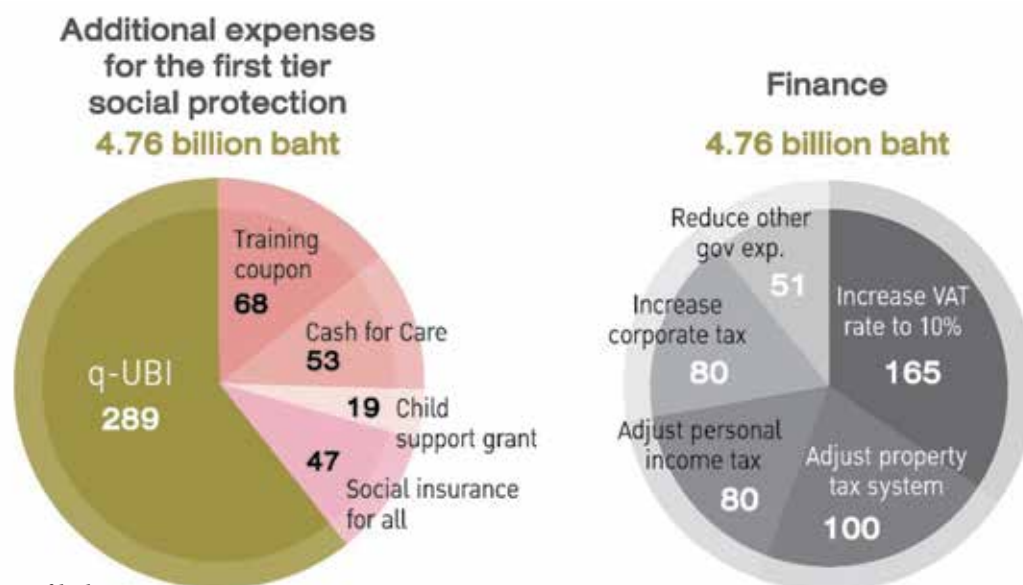
known for reducing exclusion errors. However, the funding needed for UBI is extremely high. The “quasi” element is included here to reduce budgetary costs while minimizing exclusion errors. This approach is employed in the Child Allowance in Denmark and the Child Benefit in the United Kingdom. Our proposal is that everyone would be entitled to the 600-baht monthly benefit, and those considered wealthy or middle-class (having a high income in the tax database or owning high-value land or property) must pay tax on the UBI benefit equal to what they receive. Alternatively, the wealthy might be excluded from receiving the transfer in the first place. The estimated annual budget is 290 billion baht based on the assumption that it covers approximately 66 percent of Thailand's population.

When all programs are added together, the total cost is 476 billion baht (Plan A) and 187 billion baht if q-UBI is not offered (Plan B).

Financing for the tier-1 packages may impose challenges to public spending, but the longterm reward to the country and society should warrant the costs. Furthermore, it is possible to manage the spending more wisely by reallocating budgets from other spending that produces low returns. Lastly, the government may increase tax rates or introduce new taxes to meet this need.

- Adjust the property tax rate: 100 billion baht
- Adjust the personal income taxation system

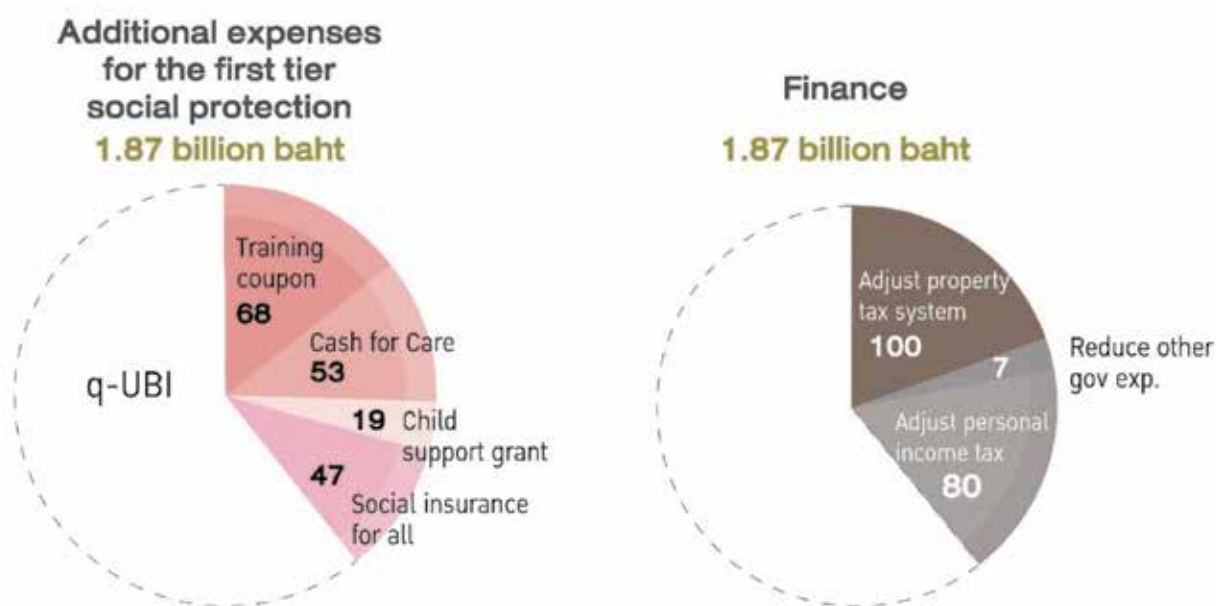
Figure 7: Budget and finance required for implementing Plan A



Unit: Billions of baht.

Source: Calculated by authors.

Figure 8: Budget and finance required for implementing Plan B



Unit: Billions of baht.

Source: Calculated by authors.

by reducing or eliminating tax allowances for the wealthy: 80 billion baht

- Reduce other government spending (such as economic expenditure that should be left to the private sector, or use the Public Private Partnership

(PPP) model to finance infrastructure investment): 51 billion baht

- Increase the value-added tax (VAT) rate to 10 percent: 165 billion baht
- Increase corporate tax rate: 80 billion baht

The above adjustments together would be sufficient to finance Plan A while Plan B would enable the government to raise income by using only the first three items and cutting only 7 billion baht in other government spending.

3.2 Engaging all stakeholders

Apart from relying on the state alone for financing and implementing the new welfare system, other actors could play a significant role as well, and they may be even better suited than the state for these purposes. This became evident during the COVID-19 pandemic when the Thai government's ponderous bureaucracy was widely observed in operation. For example, it took government agencies a long time to transfer COVID-19 patients to hospitals due to the lack of proper coordination, while a non-profit organization Zendai filled the gaps left by the government's inefficiencies as it coordinated and sped up the transfer of COVID-19 patients.

In the social welfare system, numerous examples abound in other countries where nongovernmental parties help in enhancing the performance of the system. The private sector and civil society in Thailand can play vital roles in providing people with social protection.

Over the last 10 years, the amount of money donated in Thailand has averaged 73 billion baht annually and has never declined during times of crisis. This signifies that Thais are willing to help other members of the society. However, donation money has limitations because it is dispersed, uncertain, and often lacks monitoring and follow-up.

Between 2007 and 2017, the number of nongovernmental, non-profit organizations also increased, and most of them were engaged in social work activities. These organizations tend to provide cash to their beneficiaries, which may be inadequate to address complicated socioeconomic issues. This could be because many of them rely on donations, and the unpredictability of such funding sources made planning for ongoing services difficult. Fortunately, more comprehensive non-state social protection services seem to be developing, as can be seen in the almost six-fold increase in three years in the CSR budget of the top 50 companies listed on the Stock Exchange of Thailand (SET50) — from 632 million baht in 2017 to 3.7 billion baht in 2019. Education, health services, and community development are some aspects of their CSR efforts.

Certainly, there is a long road ahead in terms of the role of non-state organizations in the social welfare system of Thailand. Here, we propose an approach that may make this journey more fruitful — the Social Impact Partnership (SIP) model. The SIP model contains the features of sustainability, tangible impact on people, and an evaluation system. The model has been implemented in connection with 194 projects across 33 countries. Approximately one-third of the 194 projects have been completed and have met their objectives.

The “Utah High-Quality Preschool Program” is an example of a project that adopted the SIP model. The program was carried out in the Granite School District in the state of Utah, United States, where there is a large Hispanic population; the dis-

trict also serves as a refugee resettlement site. The program is aimed at improving school readiness and academic performance among preschool students from low-income households in the area. When the program first began, two private sector entities contributed significantly to its funding. In addition, a central agency was established to allocate financial resources and monitor activities under the program. The program was a success. During the first evaluation phase of the program, only 1 out of 110 students required special education services from kindergarten to primary school, indicating an overall improvement in the children's learning skills. In addition to the benefits to children, the state of Utah was also able to save up to 90 percent of its education expenditure and could thus allocate more funding to support other children from low-income families in the target areas and hence mitigate the problem of vulnerable children being left behind.

We believe that the SIP model can serve as an example to promote how non-state organizations and government should join hands in contributing to social services. To do so, we suggest that four requirements must be considered: (1) all stakeholders should change attitudes toward social investing rather than making mere donations; (2) they should initiate primary fundraising for projects with a social impact; (3) there should be data collection and performance evaluation on social service providers; and (4) finally, there should be pilot projects that involve both state and non-state actors with the aim of expanding the coverage so that as few vulnerable people as possible are left behind.

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