

UNEQUAL AND PLAYING FAVORITES?

The Lack of Vaccine Accountability and
Equity in Thailand

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VACCINE EQUITY, TRANSPARENCY, AND ACCOUNTABILITY IN ASIA:
Realities and Dilemmas

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PART I: THAILAND'S VACCINATION DRIVE - INTRODUCTION AND TIMELINES

As of 17 February 2023, Thailand had recorded 4,727,628 cases and 33,894 deaths from COVID-19. The worst month for the country was August 2021, with over 1,300 deaths daily (Ministry of Public Health, 2022).

Thailand's vaccination acquisition plan began in August 2020 with preliminary negotiations with various manufacturers¹ and the COVAX program. There have been three attempts to research and manufacture local vaccines, but no local vaccine had passed Phase 3 trials as of mid-February 2023 (see Chapter 4). In March 2021, the government issued the COVID-19 Emergency Decree and set up the Centre for COVID-19 Situation Administration (CCSA) to centralize all management relating to the COVID-19 emergency, including vaccine acquisition (Thai Government PR, 2021).

The use of an Emergency Decree made holding the government accountable difficult, since the Decree gave the state a wide range of powers and limited liability, creating a decisive centralized decision-making apparatus like in times of war. Even in the case of "unreasonable" use of power, authorities may not be liable with civil, criminal, or disciplinary penalties under the Emergency Decree. The burden of proving whether the authorities' acts "cause unreasonable harm" is on the person claiming to have been harmed. In addition, even though the exercise of power under the Emergency Decree is a direct "administrative power", the mechanism for checking administrative power in Thailand, the Administrative Court, cannot be invoked, according to Section 16 of the Decree. If the government's act under the Emergency Decree unreasonably affects the rights of people or causes any harm, the people affected cannot sue the government in the Administrative Court as usual (iLaw, 2021).

Thailand kicked off a nationwide COVID-19 vaccination program in June 2021, but one year later the vaccination coverage had plateaued. An official at the Department of Disease Control (DDC) suggested that this could be because many Thais, especially the elderly, were afraid of side effects or had already been infected by COVID-19 and saw no need for vaccination; and that many people were waiting for next-generation vaccines (The Matter, 2022). By the end of 2022, no bivalent COVID-19 vaccine had been authorized for use in Thailand (BBC Thai, 2022). As of 10 February 2023, vaccination coverage stood at approximately 78% population coverage of two-dose programs, and slightly more than 50% booster coverage (third dose or more) (DDC, 2023; WHO, 2022).

Between 2020 and 2022, Thailand experienced five waves of COVID-19 infections.

¹ Negotiations including with AstraZeneca, Pfizer, and Sinovac.

Their dominant features and the status of vaccination during each period are summarized in Table 1.

Table 1: COVID-19 infection waves vs. vaccine situation during each wave in Thailand

COVID-19 infection wave	Vaccine situation in the country at that time
<p>First wave: April-May 2020</p> <ul style="list-style-type: none"> Spread originated from Chinese tourists who entered Thailand Origin traced to popular boxing match venues and nighttime entertainment venues in Bangkok Government announced nationwide lockdown measures to combat COVID-19 	Vaccine negotiations not commenced
<p>Second wave: December 2020-March 2021</p> <ul style="list-style-type: none"> Mostly B.1.36.16 COVID-19 variant found in migrant laborers in Samut Sakorn and nearby provinces 	<p>Cabinet resolution (5 January 2021)² unveiled the first vaccine acquisition plan</p> <ul style="list-style-type: none"> Target: 66 million doses to cover 50% of population, comprising 40% from AstraZeneca, 40% from COVAX, and 20% from other vaccines including two million doses of Sinovac
<p>Third wave: April-July 2021</p> <ul style="list-style-type: none"> Mostly nationwide spread of Alpha COVID-19 variant when people all over the country traveled to and from home during Thai New Year holidays 	<p>April 2021 – Government increased the target of vaccine acquisition plan from 66 million doses to 100 million doses, to cover 70% of the population</p> <ul style="list-style-type: none"> By the end of July 2021, approximately 10 million doses of AstraZeneca and 29 million doses of Sinovac had been delivered
<p>Fourth wave: July-October 2021</p> <ul style="list-style-type: none"> Most severe wave of COVID-19 in Thailand Peak deaths occurred during this period Spread of Delta variant led to crisis of the health system in which many patients died while waiting for treatment 	<p>August 2021 – Vaccine shortage situation finally improved</p> <ul style="list-style-type: none"> Government agreed to order another 60 million doses (later reduced to 38.4) of AstraZeneca for 2022 September 2021 – AstraZeneca delivered eight million doses of its vaccines The first delivery of Pfizer vaccine arrived in the same month <p>October 2021 – Vaccination drive for children aged 5-17 years old with Pfizer began</p>
<p>Fifth wave: January 2022 onwards</p> <ul style="list-style-type: none"> Mostly the spread of Omicron variant, with easier infection but less severity 	Vaccination coverage steadily increased to 78% of the population for standard two-dose regimen, and slightly more than 48% for booster coverage (third dose or more) as of mid-December 2022

Source: Juengsateansup et. al. (2022) and DDC dashboards.

² Cabinet resolution of 15 January 2021: https://dep.go.th/images/uploads/files/thaigov_5_Jan_2021.pdf

Table 2 summarizes Thailand's acquisition and use of vaccines for COVID-19 as of 6 December 2022. China was the largest donor country, delivering 3.4 million doses of inactivated-virus vaccines made in China — 2.9 million Sinovac and 0.5 million Sinopharm.

Table 2: Vaccine acquisition and budget, by brand

Vaccine brand (type)	Total doses approved by Cabinet (millions)	Total budget approved by Cabinet (THB, millions)	Total jabs as of 6 Dec 2022 (millions)	Donated from other countries (millions)	Existing stock as of 6 Dec 2022	Actual payment made
Government program (free of charge)						
AstraZeneca (viral vector)	96.4 (reduced from 121 in June 2022)	28,729	48.7	2.58 (from Japan, UK, Korea, and Germany)	N/A	N/A
Sinovac (inactivated virus)	31.4	15,775	26.5	2.9 (from China)	N/A	N/A
Pfizer-BioNTech (mRNA)	60	26,775	46.8	1.5 (from US)	N/A	N/A
"Alternative vaccine" (the term people adopted to mean vaccines not procured by the government; people have to pay for them in most cases)						
Vaccine brand (type)	Total no. doses ordered (millions)	Total price in contract	Total jabs as of 6 Dec 2022 (millions)	Donated from other countries (millions)	Existing stock as of 6 Dec 2022	Actual payment made
Moderna (mRNA)	At least 18	N/A	7.7	1 (from US)	N/A	N/A
Sinopharm (inactivated virus)	21	N/A	14.9	0.5 (from China)	N/A	N/A

Source: Cabinet resolutions, DDC vaccine data, news reports.

Most information in this report is primary data collected from Cabinet resolutions, official vaccination data released by the Ministry of Public Health (MOPH), and in-depth interviews with the following informants:

Name	Position	Affiliation	Date of interview	Method of interview
Bancha Pongpipat	Managing Editor	The Matter (online media)	8 Dec 2022	Online
Roisai Wongsuban	Program Advisor	Freedom Fund (civil society)	1 Dec 2022	Online
Sureerat Treemanka	Chairman, Healthcare Subcommittee	Thailand Consumers Council (civil society)	14 Dec 2022	Online

These data were supplemented with secondary data from news articles, press releases, and information used by representatives from opposition parties during the motions of no-confidence in 2021 and 2022.

PART II: ON INFORMATION ACCESSIBILITY

The DDC and the MOPH established a central portal for all information relating to COVID-19 vaccines.³ In addition, the MOPH manages two public dashboards that are based on the same information, one with a focus on aggregate national vaccination data,⁴ and one with a focus on subnational vaccination data.⁵ The two dashboards disclose subnational (provincial) information for all 79 provinces in Thailand, including inoculation information, making them more detailed than the DDC's COVID-19 vaccine portal.⁶

The main information provided to the public on all the above official websites is the daily tally of COVID-19 vaccination, including the total number of jabs broken down by vaccine brand. Information on daily and cumulative jabs are broken down by the number of doses and different target groups. For example, the "608" target group covers people aged 60-plus, those with seven underlying conditions, and women at least 12 weeks pregnant.

From 1 October 2022, when the label of COVID-19 was downgraded from "dangerous communicable disease" to "communicable disease under surveillance" and the Emergency Decree was lifted (Ministry of Public Health, 2022), the DDC stopped publishing daily COVID-19 related data, including vaccine data, and switched to publishing data on a weekly basis on the same channels.

The government has never publicly disclosed vaccine delivery records, vaccine distribution data, existing vaccine stock, vaccine expiration or wastage information, or actual expenses incurred in the procurement of vaccines. In 2022, six reporters from multiple local media outlets submitted requests for this data by invoking Thailand's Freedom of Information law (Fol law), but as of 15 December 2022 they had yet to receive a response (Pongpipat, B, personal communication, 8 December 2022).

³ <https://ddc.moph.go.th/vaccine-covid19/>

⁴ Dashboard subnational (provincial) information showing weekly situation of COVID-19 patients, including the number of: (1) new patients admitted to the hospital; (2) cumulative patients; (3) new deaths; (4) cumulative deaths; (5) people who have received at least one, two, and three doses; (6) pneumonia patients; (7) intubated patient; and (8) new patients comparing among provinces. <https://ddc.moph.go.th/covid19-dashboard/>

⁵ Dashboard subnational (provincial) information showing vaccine inoculation information filtered by region, health area, province, target group, gender, and vaccine manufacturer which can be filtered by duration and number of vaccines received. In addition, there is more analysis showing the relationship between vaccination and infection by 7-day cumulative infection rate (per 100,000 population) and cumulative vaccination coverage (%). <https://dashboard-vaccine.moph.go.th/dashboard.html>

⁶ The DDC's COVID-19 vaccine portal only shows a report of vaccine inoculation by number of who received at least one, two, or three vaccine doses and type of vaccine of Thailand. It does not have detailed sub-national information which is crucial for vaccine distribution planning.

PART III: ON ENSURING EQUITY

Although the COVID-19 vaccine acquisition plans were announced to the public in advance, questions abounded with regard to the scientific rationale (or lack thereof), political motivations, conflicts of interest, and lack of transparency in the procurement process. Representatives from opposition parties raised issues relating to the irregularities and non-transparency in the acquisition and distribution of Sinovac, AstraZeneca, and Pfizer vaccines no fewer than seven times in the censure debates against the MOPH in 2021 and 2022.⁷

All vaccination data described above are provided in open data and reasonably granular format on the government's central open data website,⁸ managed by the Digital Government Development Agency (DGA). All datasets are collected and sent by the DDC.

When one looks at the geographical distribution of vaccine coverage in Thailand, there is a clear pattern of inequality: as of early December 2022, roughly 18 months after the start of nationwide vaccination, 54 out of 77 provinces (70%) reported more than 70% two-dose coverage, including Bangkok with over 112% coverage, a figure which suggests that a considerable number of non-residents traveled from outside Bangkok to get jobs in Bangkok. Another 19 provinces (25%) reported 60-69% two-dose coverage on average, while the remaining four provinces reported less than 59% coverage (DDC, 2022). It is worth noting that the four are among the poorest provinces of Thailand, which means relatively low vaccination coverage may exacerbate the already severe economic and social inequalities.

Geographical inequality is not the only kind of vaccine inequality present in Thailand. There are at least five dimensions of vaccine inequality:

1. Target group inequality

On paper, Thailand generally follows the prioritization recommendations of the World Health Organization (WHO) which came out in May 2022 and have been gradually updated (WHO, 2022). The WHO's "highest priority-use" groups include older adults, health workers, and immunocompromised persons, while the "high priority-use" groups include adults with comorbidities, pregnant persons, teachers and other essential workers, and disadvantaged sociodemographic subpopulations at higher risk of severe COVID-19 (see Figure 1).

Figure 1: Priority-use group definitions of the WHO

Priority-use groups†	Vaccine coverage rates of <i>higher priority-use</i> (I & II) groups †			
	Low	Moderate	High	Very high
I. Highest priority-use Older adults Health workers Immunocompromised persons	Primary series + Additional dose* / Booster**			
II. High priority-use Adults with comorbidities Pregnant persons Teachers and other essential workers Disadvantaged sociodemographic subpopulations at higher risk of severe COVID-19	Primary series + Booster			
III. Medium priority-use Remaining adults Children and adolescents with comorbidities	Primary series + Booster			
IV. Lowest priority-use Healthy children and adolescents	Primary series + Booster <small>(booster doses in children below the age of 12 years have not yet been assessed)</small>			

⁷ Criticisms and allegations regarding COVID-19 vaccine procurement was the subject of a censure debate raised by the following opposition MPs in the censure debates between 2021 and 2022: MP Sompong Amornvivat (spoken on 31 August 2021), MP Prasert Janturangtong (31 August 2021), MP Wiroj Lakkana-adisorn (1 September 2021), MP Pita Limcharoenrat (2 September 2021), MP Wayo Assawarungruang (1 September 2021 and 19 July 2022), and MP Sorawit Konsomboon (19 July 2022). Collected from parliamentary proceedings, 2021-2022.

⁸ <https://data.go.th/en/dataset/covid-19-daily>

Source: WHO, SAGE roadmap for prioritizing use of COVID-19 vaccines, last update 21 January 2022.

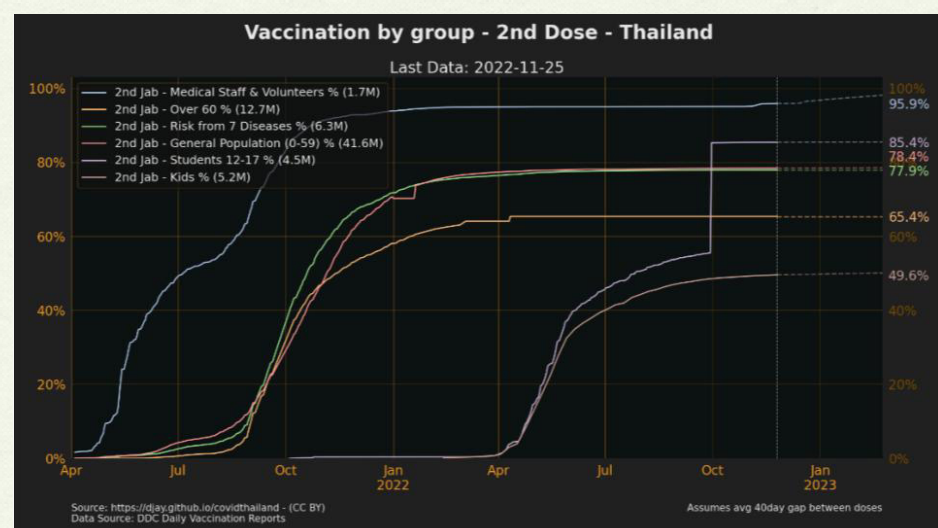
Thailand’s health authorities defined “high-risk groups” primarily as comprising health workers and “608” groups. This definition includes all groups in WHO’s “highest priority-use” and “high priority-use” recommendations except “teachers and other essential workers” and “disadvantaged sociodemographic subpopulations at higher risk of severe COVID-19”.

The DDC announced that the “608” group comprises approximately 18 million people in Thailand, or 26% of the total population.¹¹ Developments have supported this prioritization — the median age range of people who died from COVID-19 in Thailand between May 2021 through the end of 2022 is 68-78 years (DDC, 2022).

Official data from the DDC as of 15 December 2022 shows that health workers and volunteers have been consistently vaccinated well before other high-risk groups (as seen in Figure 2), as per WHO recommendations, but multiple priority-use groups have not. Between July and August 2021, when Thailand faced the first wave of serious cases from the Delta variant amidst a vaccine shortage (as noted in Table 1), two-dose vaccination coverage for both the “over 60” and “7 high-risk disease” groups (both in the DDC’s “608”) consistently lagged behind the general population.

Figure 2 shows that the “7 high-risk disease” group’s vaccination rate surpassed the rate for the general population only in September 2021, when Thailand’s vaccine shortage situation started to improve, before both groups plateaued at approximately 77-78% in January 2022. The two-dose vaccination rate for the high-risk “over 60” group lagged further and further behind the lower-risk general population from November 2022 onwards.

Figure 2: Second dose vaccination by group



² Thailand has a total population of 66,186,727 (Central Registration Office, Department of Provincial Administration, Ministry of Interior) (Royal Gazette, 2020).

Source: David Jay COVID-19 Thailand dashboard, based on DDC daily data (2022).

The target group inequality illustrated in Figure 2 partly comes from the fact that the government never made a concerted effort to effectively target or incentivize the over-60 group for jobs, while the adult working population (not a high-risk group) was given more incentives to register for vaccines, such as a free program launched by the Social Security Department under the Ministry of Labor, which was able to secure a number of vaccines from MOPH despite the adult working population (members of social security) not being a high-risk group according to MOPH classifications.

By the end of 2021, only 65% of people over 60 years old had received two jabs or more. This inequality is even more pronounced when province-by-province data is examined, as discussed in geographical inequality, below.

2. Technological inequality

The target group inequality was exacerbated by vaccination service providers’ overwhelming reliance on digital technologies for facilitating vaccinations in Thailand. Many older people (in the high-risk “over 60” group), especially those with low income, have no access to the Internet or smartphones, and therefore could not register for job appointments on websites or via smartphone applications. By the end of 2020, over 95% of Thailand’s population had at least one mobile phone, and 86.4% of all mobile phone users used smartphones (NSO, 2021), which means that potentially $(1 - (95\% \times 86.4\%)) = 19\%$ of the population, or 13 million people, had no access to smartphones when the nationwide vaccination campaign began in June 2021. Thus, the trouble of accessing job appointment channels may have distributed the risks of severe COVID-19 unevenly along socioeconomic lines; this is even more concerning because these people tend to be members of the “disadvantaged sociodemographic subpopulations at higher risk of severe COVID-19” who fit within the WHO’s “high priority-use” group.

In addition, there is a plethora of digital channels for making job appointment, including the MOPH’s official “Mor Prom” website and application,¹² the social security website,¹³ hospital websites,¹⁴ telecommunications company websites and applications,¹⁵ various municipal governments’ websites,¹⁶ private company Intranet,¹⁷

¹² Mor Prom is an application launched by the MOPH to allow residents to access vaccination services, including vaccine reservation and tracking as well as updated information on COVID-19. It also includes a feature that enables post-vaccination monitoring to check for side effects.

¹³ People insured through Social Security can receive vaccination at hospitals affiliated with Social Security by registering with the establishment through the e-service system of the Social Security Office.

¹⁴ Many hospitals offer vaccination services. There is no central agency handling these appointments; each hospital has its own platform and way of registering people for jabs.

¹⁵ The MOPH joined forces with the National Broadcasting and Telecommunication Commission (NBTC) to increase channels for people to register for COVID-19 vaccination at the Bang Sue Central Vaccination Center project. Users can register to get vaccination via channels provided by telecommunication companies.

and other channels. This caused much confusion and anxiety among the public as to which channel to use for securing job appointments. To make matters worse, even successful appointment registration did not guarantee that the jab would actually be administered on that date: for months, and especially during the period of acute vaccine shortage in Thailand in July-August 2021, there were numerous social media posts and news reports about people who were turned away from health facilities on their appointment dates due to the lack of available vaccines;¹⁸ in other cases, hospitals posted cancellation notices to inform the public that their vaccination appointments had to be postponed, sometimes indefinitely. Even worse, hospitals were afraid to announce appointment delays publicly because the Health Minister was threatening to penalize them. (Rural Doctor Society, 2021).

When the author of this report launched an online survey about COVID-19 vaccine experience during the month of September 2021 via personal Facebook Page, 615 people responded to the survey. Of these, 236 respondents (38.4%) said they made a jab appointment through more than one channel; 38 said they used four different channels to make vaccine appointments, and ten said they used five channels (Achavanuntakul, 2022). Survey respondents said they registered for jab appointments by using both digital channels like the “Mor Prom” application and non-digital channels, including asking for help from relatives or health volunteers to do it for them.

The most popular jab appointment channels, according to survey respondents, were: the “Thai Ruam Jai” website (the Bangkok Administration’s program) (20.7% of total respondents), the “Mor Prom” application (20.4%), appointment made by employers (15.2%), hospital website or mobile application (14.1%), municipal website or mobile application (11%), non-hospital private company website (10.6%), and and seeking help from relatives or acquaintances to register for them (9.7%) (Achavanuntakul, 2022). Notably, because this survey was conducted on Facebook, respondents were unlikely to include people without access to digital technologies, likely affecting survey results.

3. Geographical inequality

There is a clear geographical inequality of vaccination coverage in Thailand, demonstrated by the fact that four of the poorest provinces reported that less than 60% of the population received the two-dose regimen,¹⁹ while the national average for

¹⁶ Other municipal and local governments outside Bangkok have their own channels for applying for or booking jab appointments (e.g. “Kan prom” for Kanchanaburi province, “Khonkaen prom” for Khonkaen, “Chiang rai ruam jai” for Chiangrai, “Gum pang wiang” for Chiangmai, “Vaccine covid talk” for Tak, etc.).

¹⁷ Many companies provide vaccination appointments as a company benefit.

¹⁸ See, e.g., iTAX (12 June 2021); PPTV (13 June 2021); BBC Thai (21 June 2021); The Matter (17 August 2021); Bangkok Biznews (13 June 2021).

¹⁹ Namely Mae Hong Son, Yala, Pattani, and Narathiwat.

two-dose coverage was 78%, as of 10 February 2023 (DDC, 2023). This geographical inequality can be seen not only at the province level but also at several sub-province levels such as district and sub-district.

One of the earliest controversies around vaccine allocation concerned Buriram province in Thailand’s northeast, a stronghold of Bhumjai Thai Party, an influential party in the government coalition. Anuthin Charnvirakul, the presiding party leader, was appointed Minister of Public Health in 2019, and was therefore responsible for the procurement and distribution of vaccines. Between July and August 2022, when Thailand’s vaccine shortage was most acute amid the wave of Delta variant infections and deaths, the expedited vaccine allocation to Buriram province was a subject of public outcry. Thailand Development Research Institute (TDRI), one of Thailand’s most respected think tanks, said pointedly in its July 2021 “performance review of Prayut 2 government: COVID-19 disease control and vaccine management” report:

“An important problem in the vaccine distribution is the lack of unity. Many political parties in the government coalition competed to manage vaccine distribution, leading to many different channels of vaccine appointment registration, such as “Mor Prom”, social security, Thai Ruam Jai platform, and on-site registrations. These channels lack effective coordination. In addition, agencies that are allocated vaccines can also prioritize jabs for different target groups on their own. There is no mechanism in place to ensure that jabs will follow the priorities outlined in MOPH vaccination strategy. As a result, vaccine distribution is distorted; it is not done in the order of priorities as set out in the national strategy. [...] Buriram was the 11th most vaccinated province as of 7 July [2021], with 300,000 doses administered to 19% of total population of the province, even though Buriram is not a high infection province, not a major tourist destination, and is not listed on the list of provinces with the most urgent need for vaccines which the DDC announced in May [2021].” (TRDI, 2021).

The DDC’s daily vaccination data reveals that the geographical inequality in vaccine allocation persisted through 2022, and the DDC’s stated distribution strategy of giving priority to provinces with high case or death numbers did not seem to be adhered to in practice. For example, DDC data as of February 2022 revealed that among the ten provinces with the highest death rates from COVID-19 (death as percentage of total province population), only five provinces reported at least 74% one-dose coverage (74% was the national average of one-dose coverage at that point). These were: Bangkok (123% one-dose vaccination rate), Samut Sakorn (98%), Samut Prakan (86%), Tak (77%) and Pathum Thani (86%). The other five provinces with the highest rates of death from COVID-19 reported one-dose coverage far below the national average: 59% in Samut Songkram, 55% in Pattani, 65% in Yala, 57% in Nakhon Nayok, and 59% in Nakhon Pathom (Achavanuntakul, 2022).

The fact that reported vaccine coverage for Bangkok exceeded 100% is another example of geographical inequality in Thailand. As of 15 December 2022, Bangkok reported 118% two-dose coverage and 127% one-dose coverage (DDC, 2022). This is because many people who got jabs in Bangkok were not Bangkok residents;

they traveled far and wide across Thailand to queue up for vaccination at Bang Sue Grand Station, a large railroad station that was converted into the largest temporary vaccination facility in Bangkok. The station is under management of the Ministry of Transportation, whose current minister also comes from Bhumjai Thai Party (like the Minister of Public Health); this led many Thais to believe that, among the myriad channels, the surest way to get vaccinated was to register or queue up at Bang Sue Grand Station, since the Minister of Transportation probably had enough clout to secure a large number of vaccines for that location, and he would want to do so in order to boost the popularity of his own party. In the author's online survey of vaccination experience mentioned above, 179 respondents (29%) said they were not Bangkok residents but decided to travel to get jabs in Bangkok (Achavanuntakul, 2021).

The geographical inequality is not only observed in the government's vaccination drive; it is also prevalent in the distribution of Sinopharm and Moderna, two "alternative vaccines". As examined in Chapter 4, below, the Thai Red Cross bought 750,000 doses of Moderna from the Government Pharmaceutical Organization (GPO) and announced it would sell them to Provincial Administration Organizations (PAOs) at the price of THB1,300 per dose. The PAOs are the provincial governments, and they were allowed to procure COVID-19 with their own budgets after the CCSA relaxed rules in June 2021 (Prachachat, 2021). An investigation by Rocket Media Lab in July 2021 found that the PAOs that spent the most budget on procuring "alternative vaccines" were all wealthy provinces with significant reserves to spare. On the other end of the spectrum were PAOs of the poorest provinces — such as Mae Hong Son, Nakhon Phanom, and Nong Bua Lamphu — that put in very low or no orders for Moderna or Sinopharm vaccines because they had no money to spare. This means that the poorest populations in Thailand tended to have lower access to alternative vaccines than residents in richer provinces (or none at all), and therefore that the "alternative vaccine" scheme likely exacerbated rather than alleviated vaccine inequality in Thailand (Rocket Media Lab, 2021).

4. Class inequality

Thailand is one of the most unequal countries in the world (ASEAN Today, 2019), with a deep-rooted patronage system, and it was inevitable that vaccine distribution schemes would be gamed by those who were not in high-risk groups but had enough money and/or connections to jump the queue. The aforementioned TDRI report on COVID-19 vaccine management states flatly that:

"[...] jumping the queue to get vaccinated ahead of others is rampant, usually by using donations or personal connections with top executives of hospitals which received vaccine allotment. This led to the outcome that many of the elderly and 7-disease groups which are high-risk still have not received vaccines [...] such a distorted vaccine distribution is likely one reason behind the high rates of severe infections and deaths of these two population groups, as can be seen from excess mortality rates of elderly population that rose very quickly [...]" (TDRI, 2021).

Disadvantaged groups such the poor also experienced more difficulties in getting access to vaccines, although the situation of the urban poor in Bangkok was worse than the rural poor, according to Sureerat Treemanka, expert on universal healthcare and ex-director of the National Health Security Office (NHSO), which administers Thailand's universal healthcare scheme. During COVID-19, Sureerat played a key role in assisting the coordination of health volunteers and civil society organizations with health officials.

Sureerat observed that the rural poor had better access to vaccines compared to the urban poor in Bangkok because: there are more vaccination locations in provinces outside Bangkok, there are over one million Village Health Volunteers nationwide who know everyone in their community, and there is a strong network of Subdistrict Health Promotion Hospitals. In contrast, at the beginning of the pandemic there were only a few health centers in Bangkok that were allocated vaccines from the DDC, although Bangkok has many health stations. This could be because Bangkok is very crowded; the population exceeds the capacity of health stations, which have only 1-2 nurses per station. In addition, the government did not design a proactive coordination mechanism to work with different agencies, nor did it launch a recruitment drive or ask assistance from civil society. This led to a situation where many of the homeless and people in slums lacked access to vaccines. Sureerat cited an example from one of her field trips to Bangkok slums to tell residents that they could get vaccinated at Bang Sue Grand Station: she said a common response was that the slum was located very far from that location, and they could not afford to pay THB400-600 to hire a bus or taxi to go there (Treemanka interview, 2022).

5. Legal status inequality

The fifth and final dimension of vaccine inequality observed in Thailand: non-Thai residents faced much more difficulty in accessing vaccines than Thai nationals. The DDC Director General announced in May 2021 that the national target of 70% vaccine coverage included all non-Thai residents, which he estimated to be three million people. He stressed that "Thailand follows international standards and prescriptions from medical experts; any criteria that is applied to Thai nationals will also be applied equally to foreigners without discrimination" (Prachachat, 2021).

However, in practice the vaccination of non-Thai residents lagged behind Thai nationals by a wide margin. DDC's Office of International Cooperation disclosed on 31 January 2022 that at that point 4.3 million COVID-19 vaccine doses had been administered to foreigners living in Thailand (this information is no longer available online as of December 2022). This number counts all doses, whether first, second, or booster. If one counts only the standard two-dose regimen, then only 1.82 million doses were administered as of 31 January 2022, covering about 60% of the DDC-estimated three million non-Thai residents. Since this figure is far less than the 75% two-dose national average at that time, this shows that the DDC's "no discrimination" announcement was not well implemented in practice.

Foreigners living in Thailand had to register online for vaccine appointments, similar to Thai nationals. However, they also faced additional requirements: they needed to

have entered the country legally and to hold a valid passport or identification papers. This meant that approximately one million foreigners without identification papers or whose passports had expired were barred from vaccination in Thailand, contrary to the DDC's stated "no discrimination" policy (Wongsuban interview, 2022).

The main channels for foreigners' vaccine registration were Social Security offices, proactive vaccination drives in high-risk areas, and the "alternative vaccines" (Sinopharm and Moderna) described earlier in Chapter 3. Foreigners could also register for vaccines on a special website set up by the Ministry of Foreign Affairs (MOFA),²⁰ which opened for registration on 1 August 2021 (Bangkok Post, 2021). However, the MOFA website did not allow migrant workers from Laos, Myanmar, or Cambodia (totaling approximately two million) to register, since there was no option on the website to select their visa category (non-LA). Since most of these workers are unskilled laborers and homeworkers, this situation effectively forced their employers to seek alternative vaccines or other channels at their own expense if they were to provide for their workers.

Vaccine inequality in Thailand in these five dimensions would have been worse had it not been for the efforts of various volunteer groups and civil society organizations, which have long played a crucial role in helping vulnerable groups get access to healthcare. During COVID-19, their contributions were appreciated by the public despite getting no incentives or special assistance from the government. New volunteer groups such as "Zen dai" ("thread") were set up to assist the urban poor, who faced even greater difficulty during the pandemic.

²⁰ expatvac.consular.go.th

PART IV: ON ENSURING SELF-RELIANCE, TRANSPARENCY, AND ACCOUNTABILITY

Since COVID-19 was first detected in Thailand in 2020, there have been three concurrent initiatives to produce homegrown COVID-19 vaccines:

- HXP-GPOVac – non-replicating viral vector vaccine under development by the GPO.
- Baiya SARS-CoV Vax 1 – subunit vaccine under development by BaiyaPhytopharm, a clinical-stage biopharmaceutical company incubated by the CU Innovation Hub, Chulalongkorn University.
- ChulaCOV19 – mRNA vaccine under development by the Faculty of Medicine, Chulalongkorn University.

As of mid-February 2023, all three initiatives aimed to be used as booster dose. The GPO's HXP-GPOVac had registered the most progress, since it planned to complete Phase 3 trials by the end of January 2023 and estimated that it would receive Food and Drug Administration (FDA) approval by mid-2023 (BBC Thai, 2022; HFocus, 2022).

As for vaccine procurement, the Thai government announced its overall plans months ahead of time but changed these over time and invited intense public outcry and scrutiny between November 2020 and the middle of 2022 (Pongpipat interview, 2022). Reasons given for the decision to choose particular vaccine brands over others were inconsistent and questioned by many physicians, especially between November 2020 and August 2021, when Thailand faced the first two serious waves of COVID-19 infections and deaths, and there was a shortage of effective vaccines and uncertainty over vaccine delivery schedules. No details were ever made public on the actual procurement process for each brand.

The government's vaccine strategy has been roundly criticized since the beginning as seemingly motivated more by politics than by medical science. Various reasons were offered for the decisions to buy or not buy certain vaccine brands, and these reasons were later found to be half-truths, lies, or else inconsistent because they were not applied equally to all brands. For example:

Inconsistency 1: When asked by the public and medical professionals in January 2021 why the government did not procure mRNA vaccines, an influential advisor to the CCSA claimed, "the government has tried its best in procuring mRNA vaccines, but the market belongs to the sellers; even if you have money, you can't buy it." (Bangkok Biznews, 2021). However, it was revealed during the censure debate in September 2021 that Pfizer approached the DDC and the National Vaccine Institute in July 2021, actively asking Thailand's interest in reserving its mRNA vaccine, and warned again in

November 2021 that Thailand should decide before it was too late. The government never responded to the company's request (Limcharoenrat, 2021).

Inconsistency 2: When asked in early July 2021 why Thailand did not join GAVI's COVAX program, the Prime Minister responded that it was because Thailand would have to pay up front before knowing if the vaccine would be effective (i.e., an advance market commitment), and the government could not do this under the procurement law (Prime Minister PR, 2021). However, it later became apparent that the government paid AstraZeneca as much as 60% up front without the certainty of vaccine delivery, and that the MOPH issued a ministerial decree under the National Vaccine Security Act in October 2021 to allow this, suggesting the Prime Minister's reason was merely an excuse (Achavanutakul, 2021). In addition, the opposition party revealed during the censure debate in September 2021 that the US and France declared their intention to donate vaccines to Thailand but would donate via COVAX. However, Thailand's refusal to join this program made it impossible to accept these vaccines (Limcharoenrat, 2021).

Inconsistency 3: When queried in the parliament in February 2021 on the tardiness of the vaccine procurement strategy, one of the Minister of Public Health's responses was, "some countries received vaccines because they had the status of being testing grounds for vaccine manufacturers, not sellers. They have enough patients for testing purposes, but it never occurred to me to allow Thai people to become test subjects." (PPTV, 2021). However, less than one year later, Thailand effectively became one of the world's foremost testing grounds for COVID-19 vaccines by using mix-and-match strategies that were untested, or specifically recommended against; it mixed one dose of one vaccine brand with doses of one or multiple other brands for a single patient, despite warnings against this from the WHO's top scientist (Reuters, 2021). The author counted no less than 25 mix-and-match versions in Thailand, 16 of which were not seen in any other country (Achavanuntakul, 2022).

The timeline of different COVID-19 vaccines in Thailand is also telling in its logical inexplicability. Sinopharm, an "alternative vaccine" outside the government program, was imported by Chulabhorn Royal Academy (CRA), a public institution under the patronage of HRH Princess Chulabhorn, the younger sister of King Rama X. Sinopharm had the shortest time frame between the beginning of negotiations, securing approval from Thailand's FDA, and signing of contract: all of this happened in the space of only two months, between April and May 2021 (Thai Enquirer, 2021).

AstraZeneca and Sinovac, the main vaccine brands used in Thailand and the first to arrive in the country, had the next shortest time frame between when the government began negotiations and the date it signed the first contract: less than three months. The Johnson & Johnson vaccine, which appeared as five million doses in the CCSA's "100 million doses" vaccine acquisition plan, was quietly dropped while the Minister of Public Health unconvincingly said in June 2021 that he "could not contact the manufacturer" to cement the deal (The Standard, 2021).

In contrast, both mRNA vaccines — Moderna and Pfizer-BioNTech — faced the longest time frame between the first negotiations and contract signing date: over eight

months in both cases. Moderna was never part of the government's official vaccine acquisition plan, and it became only an "alternative vaccine" outside the government's vaccination program, meaning that it was imported by private hospitals and people had to buy it at their own expense.

It is noteworthy that Pfizer-BioNTech, an mRNA vaccine, which has one of the world's most publicly disclosed efficacy evidence both in laboratory and real-world settings (Zheng et. al., 2022), and was the first COVID-19 vaccine to be approved by the WHO, was approved by Thailand's FDA for emergency use only in June 2021, six months after the WHO approval. This is the complete opposite case of China-made Sinovac, which received approval from Thai FDA four months before WHO approval (Thai FDA, 2021). These disparate timelines gave rise to a popular opinion that the Thai FDA acted as a tool for political expediency of the government, instead of a neutral organization with its decisions rooted in science.

As mentioned in Chapter 1, vaccine delays and uncertainties were most acute in July and August 2021, when Thailand's healthcare system was stretched to its limits amid waves of the Delta variant and news of COVID-19 patients dying in the streets, at home, or while waiting for hospital beds became common. Healthcare professionals, most of whom at that point had received two doses of Sinovac or AstraZeneca vaccines, clamored for the government to expedite the imports of mRNA vaccines for use as booster doses. The DDC finally signed a purchase agreement for 20 million doses of the Pfizer mRNA vaccine on 20 July 2021 (BBC Thai, 2021), and five days later the GPO signed the first purchase order for five million doses of the Moderna mRNA vaccine on behalf of private hospitals (see details in Case #4, later in this chapter).

Between 2020 and 2022, there were four cases relating to Thailand's vaccine acquisition strategy that became the focus of intense public scrutiny and debates, as well as censure debate in the parliament. These cases highlight the issues of conflicts of interest, lack of transparency, and lack of accountability in vaccine acquisition and management in Thailand.

Case 1: The politics and non-transparency of Sinovac

Between January 2020 and the end of 2022, Thailand received at least 3.4 million doses of inactivated virus Sinopharm and Sinovac as donations from the Chinese government (Bridge Consulting, 2022), and the government approved a total of THB15,775 million for the acquisition of 31.4 million Sinovac vaccine doses, totaling no fewer than 18 orders (cabinet resolutions, 2020-2021). Sinovac was also the first COVID-19 vaccine brand that was approved for use by the Thai FDA, and the first to arrive in the country.

When the CCSA unveiled the updated version of Thailand's 2021 and 2022 vaccine acquisition plans on 18 June 2021, medical professionals immediately questioned the wisdom of including 28 million more doses of Sinovac in the 2022 acquisition plan — the figure represented more than 50% of the total planned 50 million doses (Uaprasert, 2021). Combined with an existing 19.5 million doses already in the 2021 acquisition plan, this meant that Thailand planned to use as many as 47.5 million

doses of Sinovac, or almost one third of the government's overall 150 million-dose target. Many medical professionals called this plan "politically motivated" and "not based on science". One medical specialist even called the CCSA's announced 2022 vaccine acquisition plan the "worst in the world" and said it "runs in the opposite direction of every other country" (Uaprasert, 2021), because it relies on Sinovac instead of mRNA vaccines, which are proven to be more effective against the variants of concern.

The CCSA never officially changed the 2022 acquisition plan, but an unofficial change was revealed in various Cabinet resolutions showing that the government approved a total of 31.4 million Sinovac doses in 2021 (of which 26.5 million, or 84%, were administered as of 15 December 2022). There were no new Sinovac orders placed after the 7 September 2021 Cabinet resolution, which occurred one week after the 31 August 2021 censure debate in which an MP from an opposition party alleged that there was a "discrepancy" of over THB1.6 billion between the budget for Sinovac procurement that the Cabinet approved and the actual price paid (Workpoint Today, 2021).

There are several other cases of preferential treatment for Sinovac that the government never coherently explained. For example, the original MOPH guidance for health workers to receive an mRNA booster dose was restricted only to those who first received two doses of Sinovac (see details in Case #3, later in this chapter).

Case 2: Favoritism for AstraZeneca

On 17 January 2021, former Thai opposition leader Thanathorn Juangroongruangkit ran a live broadcast in which he criticized the government's first public COVID-19 vaccine strategy for "putting a bid on only one horse" in an uncertain vaccine race, since the government's first strategy mostly relied on domestic production of AstraZeneca by Siam Bioscience, a biopharmaceutical company owned by King Rama X. Siam Bioscience is AstraZeneca's sole contract manufacturer of its COVID-19 vaccine in Southeast Asia. (Nikkei Asia 2021). The government's original plan, which Thanathorn criticized, was to procure 26 million doses of AstraZeneca (40% of total); another 40% would come from the COVAX program, which Thailand ultimately never joined, and the remaining 20% (or two million doses) would be from Sinovac.

Thanathorn also alleged that Siam Bioscience, which had never manufactured vaccines before, was given an unfair advantage over other biotech companies with more experience (Reuters, 2021). The Ministry of Digital Economy and Society filed charges of lese majeste and violation of the Computer Crime Act against Thanathorn two days after his broadcast (The Nation, 2021). On 25 January 2021, one week after Thanathorn made the allegations, Siam Bioscience sent a press release to the media that clarified its selection process and credentials.

The situation of vaccine shortage in Thailand improved markedly only in September, the month that AstraZeneca was able to deliver its first eight million doses, after the government agreed to buy 60 million more AstraZeneca doses for 2022 at the increased price of USD8.86 per dose (higher than the USD5 per dose price for 2021

contracts) (HFocus, 2021). In the same month, the first two million doses of the Pfizer mRNA vaccine were also delivered to Thailand.

In July 2021, investigative news outfit Isra News published a letter from AstraZeneca from MOPH, dated 25 June 2021, revealing that the company was prepared to deliver about 5-6 million vaccine doses per month (Isra News, 2021). AstraZeneca's letter immediately called into question the DDC's claim that Thailand would receive "10 million doses of AstraZeneca" per month between July and November 2021, and the "10 million per month" figure in the DDC's vaccine acquisition plan since April 2021.

In the censure debate on 1 September 2021, the opposition party revealed that the first contract for 26 million doses did not contain any delivery schedules for the vaccines — not even a tentative schedule (Prachatai, 2021). The author's analysis further reveals that the contract also does not contain a termination date, which means that AstraZeneca could not be held legally liable even if it delivers vaccines months or even years behind the government's vaccination schedule (Achavanuntakul, 2021).

Case 3: Criteria for donated mRNA vaccine that favored Sinovac

The first mRNA vaccines that arrived in Thailand were not part of the government's vaccine acquisition strategy, but were rather 1.5 million doses of Pfizer mRNA vaccine donated by the US (U.S. Embassy, 2021). The leaked criteria for the allocation of these 1.5 million doses, from an internal meeting of a DDC committee on 30 July 2021, revealed that only health workers who received two Sinovac doses would be qualified to receive Pfizer in this lot as a booster dose. All other combinations, including health workers who never received any vaccines, those who received one or two doses of AstraZeneca, those who received AstraZeneca as a booster dose, or those who received only one dose of Sinovac, were not qualified (Pholoung, 2021).

After many protests and demands for a scientific explanation for these criteria, including several viral hashtags on Twitter, the MOPH relented and announced new, more sensible criteria on 2 August 2021, under which healthcare professionals without two previous doses of Sinovac could get Pfizer shots (BBC Thai, 2021).

Case 4: Moderna – an mRNA vaccine that people have to buy

Since January 2021, when there was certainty for only two vaccine brands (Sinovac and AstraZeneca) in the government's vaccine acquisition plan, the private sector had been asking for the government's permission to procure vaccines on its own. In April 2021, the Prime Minister used his authority under the Emergency Decree to set up a special working group on vaccine acquisition, which comprises 18 members: from the National Vaccine Institute, the MOPH, the GPO, and FDA; the Director of Private Hospitals Association; and other experts (HSRI, 2021).

After the government announced its preference that the "alternative vaccine" schemes of the private sector focus on vaccine brands that the government was not pursuing, the GPO agreed to act as a government party to the contract with Moderna on behalf

of private hospitals. In the meantime, CRA concluded a deal with Sinopharm to sell its vaccines in Thailand, and subsequently signed a contract in September 2021 to buy eight million doses of Moderna vaccines (Chulabhorn Royal Academy, 2021), for delivery in 2022.

The upshot of all these activities is that Moderna became the “alternative vaccine” with varying prices for the same vaccine: those who bought the vaccine from private hospitals had to pay THB1,650 per dose, while those who bought it from public hospitals had to pay only THB1,500 per dose (though both public and private hospitals bought Moderna from the GPO, which charged them THB1,100 per dose). Meanwhile, the Thai Red Cross, which bought one million doses from the GPO (amid public outcry that the Thai Red Cross was “jumping the line”), sold its quota of Moderna vaccines to 38 PAOs at THB1,300 per dose for free administration to the residents of those provinces. Lastly, CRA announced that it would sell its eight million doses of Moderna at THB555 per half dose, or THB1,110 per dose (Achavanuntakul, 2021).

PART V: CONCLUSION

Thailand’s COVID-19 vaccination coverage got off to a relatively slow start — there had been three infection outbreaks in the country before the national vaccination drive kicked off in June 2021. Thailand’s two-dose coverage stalled at around 77.6%, while booster dose coverage stalled at 38.5%, from July 2022, approximately 13 months after the start of the nationwide drive (DDC, 2022). These figures also obscure significant vaccine inequality covering five dimensions, as described in the report: target group, geographical, technological, class, and legal status inequalities. During the first few months of the vaccination drive, between June and August 2021, there were numerous news reports of tens of thousands of people crowding in queues for hours at Bang Sue Grand Station, and many doctors said a considerable number of people got infected with COVID-19 while waiting to get vaccinated.

Some dimensions of vaccine inequality, e.g. class or legal status, could be seen as emblematic of a deep-rooted culture of privilege and prejudice in Thai society, but dimensions such as technological inequality were unnecessary novelties: The Thai government did not have to require people to register online or through smartphone applications for job appointments. In many countries, COVID-19 vaccination was freely available to everyone on a walk-in basis and the jabs were administered at drug stores; people did not have to go to hospitals or government health centers to get their jabs.

The government’s vaccine acquisition and distribution by brand was plagued with public outcry over the appearance of favoritism for inactivated virus vaccines from China (Sinovac and Sinopharm) and viral vector vaccines produced under contract by the monarch’s own company (AstraZeneca). The contract for acquisition of mRNA vaccines was signed only in July 2021, after months of public campaigns with demands to the government, including a Change.org “import mRNA” campaign set up by a network of healthcare professionals that gathered over 215,000 signatures (BBC Thai, 2021).

For future pandemics, the government would do well to increase transparency and open crucial health decisions, including vaccine procurement, to participation from the public and the community of healthcare professionals from the beginning. Enhanced collaboration with civil society organizations, especially in urban poor areas, could be much better designed. The distribution of vaccines should be done as widely as possible, including through drug stores as in other countries. Lastly, the use of emergency-decree powers, which both severely limits accountability and possibly makes the government less mindful of public demands and outcries, should be chosen only as a last resort.

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