

COLLABORATIVE GOVERNANCE IN TAIWAN'S COVID-19 PANDEMIC RESPONSE

Lessons Learned From a Human Rights Perspective

COLLABORATIVE GOVERNANCE IN TAIWAN'S COVID-19 PANDEMIC RESPONSE

Lessons Learned From a Human Rights Perspective



Author: Shawn Shieh
Published in February 2023

ACKNOWLEDGEMENTS

This report would not be possible without the support of ICNL, particularly its Asia Legal Advisor, Julie Hunter, who provided extensive feedback on the report drafts, and Professor Helen Liu of National Taiwan University who set aside time from her busy schedule to help coordinate the research. Many thanks also go to Sinead O'Connor (no relation to the singer) for providing valuable research and logistical assistance in Chinese and English, and to Sulley Tsai for helping take notes for our focus groups. Last but not least, we are grateful to Professor Jonathan Schwartz who shared his vast knowledge of comparative pandemic responses and provided valuable guidance and feedback on the report.

TABLE OF CONTENTS

1. EXECUTIVE SUMMARY	2
2. INTRODUCTION	3
3. METHODOLOGY	6
4. TAIWAN IN COMPARATIVE PERSPECTIVE	7
5. GOVERNANCE SUCCESSES AND SHORTCOMINGS IN THE NON-PHARMACEUTICAL PHASE	8
5.1 Transparency, Accountability and Collaboration	9
6. GOVERNANCE SUCCESSES AND SHORTCOMINGS IN THE PHARMACEUTICAL PHASE	18
6.1 Transparency, accountability and collaboration	20
7. KEY FINDINGS, LESSONS LEARNED AND RECOMMENDATIONS	24
ANNEX 1: REFERENCES	29
ANNEX 2: FOCUS GROUP PARTICIPANTS AND INTERVIEWEES	34

1. Executive Summary

Taiwan's pandemic governance has been widely praised for its transparent, collaborative nature in which central and local government agencies worked together with the private sector and civil society in containing the COVID-19 pandemic in Taiwan. This was especially evident in the first non-pharmaceutical phase from January 2020 to May 2021, thanks to early border closings and travel restrictions. With low case and death counts, Taiwan was able to avoid stringent measures such as states of emergency, lockdowns and school and workplace closings. Unlike several other countries in the region, Taiwan was also careful not to impose a state of emergency that might bring back memories of Taiwan's authoritarian past. Instead it went through the legislative process to have the COVID-19 Special Act passed, ensuring that the legislation was in line with constitutional interpretation. These were impressive achievements given that the pandemic generally concentrated greater executive powers in governments worldwide that led in turn to widespread infringements of civil liberties.

Using a rights-based analysis that assesses Taiwan's pandemic governance in three areas – transparency, accountability and collaboration – we found multiple good collaborative governance practices that contributed to the effectiveness of Taiwan's response. These included the use of daily press conferences and social media channels to communicate with the press and public, central/local government coordination with the private sector and civil society on manufacturing masks, setting up quarantine services, procuring vaccines, and combating misinformation.

Other examples of collaborative governance included government cooperation with the civic tech community to scale up a mask map to help people find pharmacies where masks were available, and with fact-checking organizations to counter misinformation regarding the pandemic. In some areas, local governments worked together with groups providing services to the homeless, and other vulnerable groups affected by the pandemic.

While these good practices highlight Taiwan's collaborative approach, we also found a number of gaps: government collaboration and consultation with civil society was more ad hoc



Using a rights-based analysis that assesses Taiwan's pandemic governance, we found multiple good collaborative governance practices that contributed to the effectiveness of Taiwan's response.

than advertised, while issues of government overreach, and accountability and responsiveness to human rights concerns, were not taken seriously when raised by advocates.

Moreover, collaborative governance was more limited in the second, pharmaceutical phase that started after an outbreak in May 2021, when less than one percent of the population was vaccinated and Taiwan faced a vaccine shortage. This phase saw greater social and political divisions as the administration led by the Democratic Progressive Party came under criticism for not procuring and developing vaccines fast enough to prepare the population. These social and political divisions were exacerbated by China's role in complicating the procurement of vaccines, and weakened society's cooperation with, and trust in, the government that had been evident in the first phase.

These divisions are similar to those in other democracies experiencing authoritarian backsliding. They highlight the critical need for Taiwan to build on and further institutionalize its collaborative governance approach, by strengthening its engagement with civil society and communities to address concerns around human rights, discrimination and transparency. Doing so will ensure an even more collaborative governance approach moving forward, serving as a truly laudable example in the region and worldwide.

2. Introduction

The global COVID-19 pandemic that started in late 2019 has had a devastating impact on the Asia-Pacific region, not to mention the rest of the world. The governmental response in managing the pandemic has been widely uneven, with some countries taking draconian measures that infringe on civil liberties, while other countries – many democratic ones – have adopted inconsistent, and even contradictory, measures that have triggered distrust and opposition by their societies. Very few countries have found an effective approach for containing the pandemic that balances public health and civil liberties. One of those countries frequently mentioned in the literature is Taiwan, where the government responded quickly, early and forcefully in carrying out what some call a “collaborative governance” or “whole of nation” approach that combined intragovernmental coordination as well as collaboration with the private sector and civil society (Schwartz and Yen 2017; Hsieh, et. al. 2021).

Taiwan's “whole of nation” approach was built on lessons learned in managing previous disease outbreaks such as SARS in 2003, H1N1 in 2009, and dengue fever in 2015 (Schwartz and Yen 2017). It involved close coordination between agencies such as the Ministry of Health, Central Epidemic Command Center (CECC), and Taiwan Center for Disease Control (TCDC), among others, as well as partnering with the private sector working with hotels to provide quarantine facilities for travelers and manufacturers to produce masks (Siedlock, et.al. 2021). There was also occasional collaboration with local communities on disease prevention and containment (Schwartz 2014, Schwartz and

Yen 2017) and with the tech community on developing digital tools (Lin 2020, Hsieh, et. al. 2021, Lee 2021). Taiwanese leaders such as President Tsai Ing-wen proudly acknowledge this collaborative approach in their speeches when they proclaim that “democracy is behind our pandemic response” and “Taiwan’s civil society involvement in government is unparalleled in the region.” Audrey Tang, the Minister of Digital Information, describes this public-private-peoples partnership (PPPP) approach as key to Taiwan’s pandemic response.¹

Much of the evidence to support Taiwan’s collaborative governance approach was taken from the initial phase (December 2019–April 2021) when non-pharmaceutical interventions such as quarantine, contact tracing, disinfection and cleaning, and masks were the primary tools for containing the outbreak. During this period, Taiwan was lauded as a democratic success story for its “whole-of-nation,” “collective synergy” approach to combatting the pandemic. Frequently mentioned examples included communicating to the public through the CECC’s daily press conferences, and collaboration between the government and manufacturers to accelerate the production of masks, between local governments and hotels to provide quarantine services to travelers, and between tech entrepreneurs and the government and other civic tech organizations to scale up a mask map to help citizens find pharmacies where masks were available. (Lo and Hsieh, 2020; Yen 2020; Hsieh, et. al. 2021; Chang and Lin 2021a).

By April 2021, Taiwan only had a total of 1047 COVID-19 cases and 11 deaths among a population of 23.8 million, while avoiding draconian measures such as community lockdowns and school closures, and maintaining a significant degree of social trust and protection of civil liberties (Yang and Tsai 2020). Taiwan’s political leaders benefited in this early stage from this effective response. In February 2020, Taiwan’s minister of health received an approval rating of 80% for his handling of the crisis, and the president and premier received an overall approval rating of close to 70% (Wang, Ng and Brooks 2020). The collaborative governance model produced many positive examples and results during this period generally unparalleled in the Asia region and, indeed, in much of the world.

However, during the next phase of the pandemic, when Taiwan needed pharmaceutical interventions in the form of vaccines, Taiwan’s governance approach shifted. This phase began in May 2021 when Taiwan was caught off guard by a new COVID outbreak. By this time, less than one percent of the population had been vaccinated, vaccines were in short supply, and people began to criticize the DPP-led administration under President Tsai for not doing more to vaccinate the population (Kuo and Chen 2021): “approval ratings for Taiwan’s president, Tsai Ing-wen....plummeted from more than 70% to about 40% in the 12 months since her re-election and her government is taking political heat for the outbreak and the vaccine shortage” (Davidson 2021). Taiwan’s governance approach during

¹ Speeches made at the World Movement for Democracy General Assembly in Taipei, October 25-26, 2022.

this period was tested by a lack of transparency and communication by the CECC, divisions between local and central governments, and a lack of coordination between government agencies and NGOs serving vulnerable groups, over vaccine procurement and distribution.

This report reexamines Taiwan's COVID-19 pandemic response from a rights-based perspective over this longer period of time from December 2019 to December 2022 when Taiwan began to open up and relax its pandemic measures such as contract tracing, entry restrictions and quarantine for international visitors.

The idea of collaborative governance in pandemic response is important because it assumes that “no single actor has the resources or will to manage complex problems in an increasingly complex, dynamic and diverse sociopolitical environment” (Schwartz and Yen 2017: 127). Governments can enhance their capacity to improve policy outcomes during pandemics by coordinating with other state and non-state actors, but effective collaboration requires governments to be transparent, accountable and responsive if they are to build the trust needed with other actors to arrive at good policy outcomes (Schwartz and Yen 2017:127; Lee 2021). Transparency and accountability are also important in any rights-based analysis seeking to assess whether the government's pandemic response protects civil liberties in addition to public health. Our review of the literature on Taiwan's COVID-19 response, however, found that studies applying the notion of collaborative governance did not consider transparency and accountability. Instead they tended to conceptualize collaborative governance narrowly as collaboration, or “collective synergy,” between state and non-state actors and on that basis concluded that this synergy was an important contributor to Taiwan's effective pandemic response (Yen 2020, Hsieh, et. al. 2021).²

This report carries out a broader assessment of Taiwan's collaborative governance based on three important dimensions of collaborative governance: **collaboration, transparency and accountability/responsiveness**, with attention to the

² Yen's study (2020) adds transparency and open communication between state and society as an additional element to state-society synergy, but like Hsieh's analysis, she concludes that transparency, communication and collaboration between state and society played a key role in Taiwan's effective pandemic response.



Transparency and accountability are also important in any rights-based analysis seeking to assess whether the government's pandemic response protects civil liberties in addition to public health.

protection of constitutional rights and liberties such as the freedom of privacy, and rights to existence, work, and equal treatment under the law. To what extent was there collaboration and/or consultation between government at the central and local levels, the private sector and civil society on pandemic policies, measures and initiatives? How transparent was Taiwan's pandemic governance in terms of communication and access to information regarding the pandemic? In terms of accountability and responsiveness, how effective was the government at both the central and local levels in protecting public health while observing constitutional rights and liberties, and how responsive was the government to feedback and criticism from society?

This report is divided into several sections. Section 2 discusses the methodology used in arriving at our findings. Section 3 provides a look at how Taiwan did in comparison with its neighbors in the Asia-Pacific. Section 4 examines the non-pharmaceutical phase of Taiwan's pandemic response and various examples of collaborative governance during this period. Section 5 examines the pharmaceutical or vaccine phase starting with the outbreak in May 2021 and the shift in governance as Taiwan realized it had been too complacent about vaccinations and sought to procure and distribute vaccines. Section 6 discusses the report's main findings, lessons learned and recommendations.

We conclude that Taiwan's pandemic response was largely effective and transparent, particularly when compared with its regional neighbors, and that the government was accountable and responsive to the public and civil society in a number of cases. Taiwan clearly has good practices in collaborative pandemic management that other countries can learn from. Nonetheless, we also found shortcomings in Taiwan's pandemic response. Those who based their analysis on the non-pharmaceutical stage of the pandemic response when civic solidarity was on full display tended to overstate the government's collaboration and consultation with civil society, while glossing over problems with accountability and responsiveness to human rights concerns. Moreover, they did not anticipate the political and social divisions that would emerge over the vaccine shortage during the pharmaceutical stage, which placed this collaborative governance approach under strain, and raised governance challenges that Taiwan will need to address if it is to successfully manage future pandemics while preserving its democratic character.

3. Methodology

This report was based on the following sources: 1) desk research of English-language and Chinese-language reports and articles written during the 2020-2022 period (see Annex 1); 2) two focus groups consisting of public health experts and NGOs working on issues including social services, digital rights and open government information, and labor and human rights; and 3) follow up interviews with many of the participants in the focus group, as well as with international observers and researchers monitoring Taiwan's pandemic response (see Annex 2).

The focus groups and interviews were carried out from September 2022 to January 2023, just as Taiwan was relaxing restrictions and opening up to the outside world, doing away with quarantine for overseas visitors in October 2022 and the outdoor mask mandate on December 1, 2022. By the time of this report's publication, Taiwan will have returned almost to normal, living with rather than trying to contain the COVID-19 virus.

4. Taiwan in Comparative Perspective

Regionally, Taiwan compares very favorably to its neighbors in terms of its pandemic response. In terms of cases and deaths per million people, Taiwan's numbers were among the lowest in the region until around May 2022 when the government decided to relax restrictions on contact tracing, quarantine, and border controls in preparation for opening up. More importantly, Taiwan ranks near the top when it comes to a variety of indicators that measure policy responses that impose fewer restrictions on the public, and are more transparent and inclusive.³ Our World in Data uses a stringency index to measure the strictness of government pandemic measures such as school closures; workplace closures; cancellation of public events; restrictions on public gatherings; closures of public transport; stay-at-home requirements; public information campaigns; restrictions on internal movements; and international travel controls. On a scale of 1 to 100, where 100 is the strictest response, Taiwan's average index score between 20-30 (with the exception of the May-June 2021 outbreak where its score rises over 70) is the lowest among the Asia-Pacific nations and rivaled only by New Zealand. Taiwan also does well compared to its regional neighbors on the Our World in Data indexes measuring public information campaigns and providing income and debt relief support to its population.

Taiwan also did better than its neighbors in terms of economic performance during the pandemic. Other Asia-pacific countries such as Australia, New Zealand, Japan and South Korea did well in limiting COVID-19 cases and deaths but saw their economies shrink in 2020. In contrast, Taiwan's economy, boosted by high-tech exports, grew by 3.1 percent in 2020 and 6.09 percent in 2021, its highest level since 2010 (Cheng 2021; Chiang 2022).

³ <https://ourworldindata.org/coronavirus>

5. Governance Successes and Shortcomings in the Non-Pharmaceutical Phase

JANUARY 2020 – MAY 2021

The comparative data presented above supports the thesis that the Taiwan pandemic response was a relatively transparent and collaborative one in which the state protected public health while not being overly intrusive of civil liberties. Certainly this is the case when Taiwan is compared with China's highly authoritarian and intrusive zero-COVID response based on continuous testing, contact tracing, and lockdowns that eventually led to nation-wide protests toward the end of 2022. As some have argued, the Taiwan case as well as the cases of South Korea and New Zealand belie the "authoritarian advantage" argument that some, most notably President Xi Jinping of China, have made that authoritarian states such as China are better equipped than democracies to protect the public during a pandemic (Lo and Hsieh 2020; Pu 2020; Kavanaugh 2020).

Taiwan's pandemic response was notable for its early timing and "whole of government" coordination that many attributed to lessons learned from its experiences with SARS in 2003 and later disease outbreaks, as well as Taiwan's isolation from the international community. This isolation had become more acute under the new administration of President Tsai Ing-wen of the Democratic Progressive Party (DPP) which had long played the role of the major opposition party to the Kuomintang Party (KMT) which had been the ruling party continuously from 1949-1995. As the party that stood for an independent Taiwan, the DPP also took a more critical position on China than the KMT which sought a more congenial relationship with the Chinese Communist Party (CCP). When Tsai was elected president and the DPP captured a majority in the Legislative Yuan in 2016, China took more assertive steps to isolate Taiwan. This tense international environment formed the backdrop for, and complicated, Taiwan's response to COVID-19, a virus which originated from China.

Taiwan public health officials proudly take credit for being the first country to identify the COVID-19 virus and take steps as early as late December 2019 to carry out on-board flight inspections of passengers coming from Wuhan, China where the virus originated (Lee, et. al. 2020). Two pieces of legislation - the recently amended CDC Act (2019) and the Special COVID-19 Act (2020) which was passed only a month after the reelection of President Tsai to her second term and the DPP capturing a majority of seats in the legislature - concentrated power to manage the pandemic in the hands of health experts in the executive branch, setting up an inter-agency command center, the CECC, led by the Minister of Health and Social Welfare Chen Shi-Chung, on January 20, 2020 (Lin 2021). Armed with a powerful mandate under the CDC and Special COVID-19 Acts, the CECC coordinated with other government agencies such as the CDC, the National Health Insurance Administration (NHIA), the immigration authority, and the private

sector. Article 7 of the Special COVID-19 Act gives the CECC Commander broad powers to “implement necessary response actions or measures” for disease prevention and control requirements.

The CECC used these broad powers to carry out a series of measures to contain the spread of COVID-19 on the island (Table 1). It adopted a two-pronged approach: 1) preventing the virus from entering Taiwan by imposing bans on all foreign visitors and quarantine for Taiwan residents returning from other countries by March 19, 2020; and 2) controlling community spread through isolation and quarantine, testing, contact tracing and surveillance, social distancing and masking.⁴

Table 1: Timeline of Early Pandemic Control Measures in Taiwan

DATE	MEASURES TAKEN
Dec 30, 2019	On-board inspections of inbound travelers from Wuhan, China
January 20, 2020	CECC activated. Real-time alert system set up combining the National Health Insurance (NHI) and immigration databases to track patient travel and contact history in real time
Feb 6, 2020	14-day quarantine for returning Taiwanese residents from China, Hong Kong and Macau, and ban on Chinese citizens from mainland China
March 5, 2020	Large-scale public gatherings banned and social distancing guidelines issued
March 18, 2020	“Electronic fence” system combined with entry quarantine system to track location of quarantined individuals
March 19, 2020	All foreign visitors banned and returning Taiwanese residents required to quarantine for 14 days. Those in contact with COVID-19 patients required to self-isolate at home or in designated places.
April 1, 2020	All passengers on mass transit required to wear face masks
April 9, 2020	Temporary ban on nightclubs and dance halls

5.1 TRANSPARENCY, ACCOUNTABILITY AND COLLABORATION

As Section 3 discussed, the Taiwan government performed well, especially compared to its regional neighbors, in terms of transparency, accountability and responsiveness in protecting public health. Restrictions on international travelers, isolation and quarantine measures, contact tracing and masking brought the numbers of infections down low enough that Taiwan did not have to impose lockdowns or school and workplace closings as in many other countries.⁵ A number of civil society participants in our focus

⁴ See Lin, et. al. 2020 and Lin 2021 for a detailed description of the legal and policy measures adopted in the first phase, and Cheng 2021 for a discussion of the pandemic control measures taken from January 2020 to October 2021.

⁵ One exception was a CECC executive order closing down of nightclubs and dance halls for several months from April to June 2020 when a hostess at a KTV club was found to have continued working despite having symptoms (Lin 2021).

groups agreed with this assessment. There seems to be a broad consensus that Taiwan learned its lessons from the SARS pandemic in terms of being more transparent and accountable, and performed much better during COVID than during SARS. This improved performance has in turn helped strengthen citizens' trust in government and was cited as a major reason by some in our focus groups why many Taiwanese went along with the pandemic measures (Lin, et. al. 2020:7-8).

Some scholars noted the stark contrast with China which sought to suppress information about cases in January 2020, whereas as early as December 30, 2019, "the Taiwanese government warned China and the WHO International Health Regulations (IHR) Contact Points of the danger of human-to-human transmission and began to send officials to board all direct flights from Wuhan and inspect passengers for fever or pneumonia symptoms, prepared contact tracking and tracing mechanisms and surveyed the availability of medical supplies." (Lin, et. al. 2020:6).

The government's transparency and public communication continued in the form of daily press briefings by the CECC as soon as it was activated in January 2020. These briefings were cited by many focus group participants and others as a major improvement from SARS. "Information about new imported and indigenous cases, global prevalence, new and revised control policies, clarification of misinformation and even the availability of medical masks and household necessities is provided at least once a day in a national press conference, followed by an open session for questions from the media and the public" (Lin, et. al. 2020: 7). The press conference briefings included subtitles, live streaming across various social media platforms such as LINE, and translation in sign-language.

In addition, the Vice President of Taiwan, a prominent epidemiologist, broadcast regular public service announcements from the Office of the President that were made available on the internet. The diversification of media and factchecking platforms since SARS, including independent ones such as *Commonwealth*, *The Journalist*, *Taiwan FactCheck Center (TFC)* and *Initium*, has also contributed to greater transparency and accountability. According to Jill Chen of *The Journalist*, Taiwan's first nonprofit media outlet, "Now there is not just mainstream media but also small independent media and social media outlets covering the pandemic: Transparency has been strengthened, and Taiwan won't conceal an outbreak situation--though their direction and method of investigation are worthy of scrutiny" (DTL 2020).

In several cases, the government was responsive to feedback from the media and civil society on pandemic measures and misinformation (Soon 2021). According to Summer Chen of the TFC, "The CECC responded quickly and held comprehensive press conferences, leaving rumors no room to breed. Even though there is a time lag between investigation and results being released--and news would spread--the time lag wasn't too long. While the CECC was still investigating the developing situation, questions from journalists would impact their decision-making" (DTL 2020). Chen cites examples of

media providing information about new outbreaks in Chinese cities, and outbreaks in Japan after people were allowed to travel during spring festival holiday, and the government revising its travel restrictions and guidelines in response to this new information. Elder care NGOs also reported local government agencies being responsive when they were contacted about problems arising from restrictive visitation rules for nursing homes (Interview with an elder care researcher, 10 November 2022).

Another area where the government performed well on transparency was in monitoring and putting in place checks on pandemic rumors, sometimes in collaboration with civil society organizations such as Taiwan FactCheck Center (TFC). Collaboration with fact-checking organizations was an approach in line with international standards around free expression, unlike the proliferation of ‘false news’ laws across Asia. Unfortunately, Taiwan was not immune to the latter trend. The CDC and Special COVID-19 Acts have articles related to countering misinformation and disinformation, including fines up to NT\$3 million (around \$100,000) and detention or imprisonment of up to three years for individuals spreading “rumors or false information regarding “epidemic conditions...resulting in harm to the public or others...” In one case, a television station was fined NT\$1.2 million (\$40,000) in September 2020 for disrupting public order” by falsely claiming that Taiwan was only six days away from lockdown in March 2020 (Lin 2021). These punitive measures likely did infringe on freedom of expression as discussed below.

One area where previous studies on Taiwan’s pandemic governance praised the government was on collaborating and consulting with local governments, the private sector and civil society. These examples were used to support the concept of Taiwan’s collaborative or “whole-of-society” management of the pandemic. There were certainly examples of such collaboration and consultation, particularly those involving the private sector. These were built on past epidemic responses such as the central and local governments coordinating with manufacturers to ramp up production of masks in early 2020 when there was a mask shortage, and working with hotels to quarantine people (Schwartz and Yen 2017, Yen 2020, Siedlock, et. al. 2021).



Collaboration with fact-checking organizations was an approach in line with international standards around free expression, unlike the proliferation of ‘false news’ laws across Asia.

There were also examples of collaboration with civil society, particularly with the civic tech community that arose out of the ‘g0v’ (g0v-zero) movement which advocated for open government, transparency, and citizens’ agenda-setting power (Ming 2022; Yen 2020). Perhaps the best-known case was that of the government working with g0v and other groups to scale up and promote a mask map developed by a tech activist in early 2020 to help people identify places where masks were available. Another was the CECC collaborating with TFC and other fact checking organizations to counter misinformation and disinformation regarding the pandemic (DTL 2020; Lin 2020).

In some areas, local governments worked together with groups providing services to the homeless, and other vulnerable groups affected by the pandemic. One focus group participant had formed an NGO that coordinated with the New Taipei City government on arranging taxi services for indigenous groups affected by the pandemic (see Box 1). Another focus group participant pointed out that the CECC’s daily press conferences could be seen as a form of collaboration between the government and media in which the media could provide additional information and feedback to the CECC.

BOX 1

Collaboration between New Taipei City and the Taiwan Taxi Academy Association

During the pandemic, a long-term care pick-up service was redeployed as a pandemic taxi service through the efforts of Professor Hou Sheng-tsun, a Distinguished Professor at the Graduate Institute of Public Affairs and Social Innovation of Feng Chia University. The service, which was registered as a civil society organization (CSO) under the name Taiwan Taxi Academy Association, worked closely with the New Taipei City government on coordinating with taxi drivers on quarantine and disinfection procedures. Impressively, none of the taxi drivers were infected with COVID during their period of service. When the pandemic spread to tribal villages where indigenous populations live, the taxi service began providing services in the villages, offering advice on how to support those infected with COVID who often faced discrimination. The local government had limited means to support this project, so they relied on a large donation of around \$160,000 from a car company and smaller donations from individuals.

This taxi service model has spin-off applications. One project that drew on the experience of pandemic taxis was a service launched during a recent earthquake in Taitung where 50 drivers were recruited to take stranded tourists and residents to nearby transportation centers through the sharing of location information.

Professor Hou has also worked with the Ministry of Science and Technology to launch a long-term care project for rural areas, ensuring that for every 1500 people in long-term care, there is one Uber driver. His current research project, INNOVATED, analyzes issues such as how to use taxis to improve mobility. The project trains drivers in multiple skills so that they are able to provide social services as well as driving services, giving one taxi driver the ability to help several people in a community. In the future, there are plans to establish platforms for these services.

The above instances of collaborative governance during this phase, ranging from transparent access to information provided by the CECC to direct government-civil society partnerships, were exemplary not only in Taiwan but across the region, given the need to act quickly to contain the pandemic. At the same time, our focus group discussions and interviews suggest that these cases were more ad hoc in nature, and more the exception than the rule.

When we asked for examples of collaboration or consultation between the government and civil society during the pandemic in our focus groups of NGOs, which included larger umbrella groups with many NGO members, participants generally said they were limited. As an example, one of Taiwan's oldest labor NGOs noted that they had wanted to engage the government on its compensation policy for those affected by COVID-19 to advocate for a progressive payment scheme that would give more to lower-income individuals rather than an across the board payment scheme; however, the government did not provide a mechanism for consulting on this policy and went ahead with a scheme to give all affected individuals the same amount (Interview, Taiwan Labor Front, 8 November 2022). Similar responses by civil society groups on other pandemic measures that were discriminatory or infringed on civil liberties support the view that despite some positive examples, pandemic policy-making itself was often a technocratic process dominated by government agencies in consultation with public health experts with limited input from civil society (Lin, et. al. 2020, Yen 2020, Lin 2021, Lee 2021).

This lack of consultation with civil society can also be seen in the government's accountability and responsiveness to constitutional rights issues which was sporadic at best and left significant room for improvement. In some cases, the administration and legislature were aware of the tremendous power given to the executive branch to contain the pandemic and took steps to observe constitutional limits on that power. A good example of this was the Special COVID-19 Act (see Box 2). But our focus groups, interviews and desk research revealed other examples of government overreach in the area of civil liberties that reflected a lack of transparency, accountability and prior collaboration or consultation with civil society groups. Instead, the administration's preferred modus operandi was to have the CECC and other government agencies set policies and adjust them later in response to feedback and criticism from the public. A number of CECC decisions discussed below prompted concerns by civil libertarians that Article 7 of the Special COVID-19 Act had given the executive branch broad unchecked power to manage the pandemic (Chang and Lin 2021a:46).

BOX 2

The Special COVID-19 Act of 2020

In contrast to some of Taiwan's regional neighbors such as Japan, Vietnam, Thailand and Cambodia, the Tsai administration was careful not to impose a state of emergency that might bring back memories of Taiwan's authoritarian past in spite of pressure from opposition politicians to do so (Lin, et. al. 2020: 14). Instead it went through the legislative process to have the COVID-19 Special Act passed. It also took pains to ensure the legislation was in line with past constitutional interpretations.

One important interpretation was a Constitutional Court ruling in 2011 in response to a legal challenge on a highly controversial executive order during the 2003 SARs epidemic. The order was issued after a suspected outbreak in Taipei's Heping Hospital and required more than 1,000 healthcare workers, patients, and their families and caretakers to quarantine for two weeks at the hospital whether they were infected or not. The Court ruled that compulsory quarantine was justified as a public health measure if a legitimate public health goal existed, the restriction of liberty was based on scientific evidence and was appropriate and proportional to the goal. It also recognized that deprivation of liberty was a serious matter and instructed the legislature to build in procedural safeguards for affected individuals, specifically that these public health restrictions be of limited duration, provide for due process and appeal, and offer adequate compensation for those individuals (Lee 2021: 1118-1120). These safeguards were built into the 2020 Special COVID-19 Act which went in force for a limited time period from 15 January 2020 to 30 June 2021, and included \$7.1 billion for financial aid, subsidies, and tax cuts to assist individuals, enterprises, and medical institutions affected by economic disruptions brought on by the COVID-19 pandemic (Lin 2021).

1) The CECC's decisions in February and March of 2020 to restrict medical personnel and teachers and students at the secondary level or below from traveling abroad unless they had a special reason.

The restrictions on travel by medical personnel lasted until June 30, 2020 and those for teachers and students until the end of that spring semester. These measures were put in place to prevent a shortage of medical personnel and reduce the number of imported cases from teachers and students returning from travel abroad. But student groups and unions criticized the decision as a violation of their constitutional rights to freedom of movement and residence, and asked why they were singled out and never consulted in advance (Wu, et. al. 2020). The Taipei doctor's union also noted that the decision gave hospitals greater control over doctors because they were given the authority to approve overseas trips of medical personnel during this period (DTL 2020). The National Human Rights Commission found similar problems with the decision to impose border restrictions on Chinese spouses of Taiwanese and their children that differed from other groups without a reasonable explanation, lack of transparency on how the decision was made, and no consultation with human rights experts and stakeholders (NHRC 2021:6).

2) The Special COVID-19 Act's measures punishing individuals for spreading rumors and misinformation with fines up to NT\$3 million (around \$100,000) or imprisonment for no more than three years.

Taiwan's National Human Rights Commission noted that these punishments were far greater than penalties for spreading rumors in the CDC Act and the Social Order Maintenance Act, and recommended "that the government clearly delineate censorship from freedom of expression and assess whether penalties can curb the spread of disinformation."

3) The CECC's decision to publish the names of those who had violated the travel bans and quarantine orders.

In one of the few critical assessments of the government's pandemic governance, Lin (2020:11) notes

In times of health emergencies, public interest may serve as a justification for the government to bypass the legal imperatives and bring about a downwards cycle. An illustrative example is the CECC's decision to publish the names of quarantined individuals who travel "unnecessarily" to these countries and to deprive their eligibility for the quarantine subsidy. Whereas the CDC Act, in Article 58(1)(4), authorizes the government to impose home-based quarantine on individuals entering Taiwan from the worst-affected countries, the publication of the names of the quarantined individuals is without legal basis and disproportionately invades individuals' privacy. The travel bans also suffer from the same weaknesses. Article 5(1) of the Immigration Act authorizes the government to restrict the freedom to travel abroad for individuals involved in national security, yet neither medical professionals nor teachers/students are subject to the Act.

4) The lack of transparency and accountability regarding the data collected through contract tracing and surveillance and other pandemic measures (Ngergn 2020).

It should be noted that Taiwan did not carry out phone-based contact tracing and surveillance on the entire population as in some other countries. Instead, mandatory contact tracing and surveillance through the Electronic Fence (or Skynet) system, a collaboration between the CECC and mobile phone carriers to track the real-time location of those in quarantine, was reserved for inbound travellers, and confirmed and suspected COVID-19 cases (Chang and Lin 2021a). Personal data was also collected through the National Health Insurance ID system which was used for getting masks in the early months of 2020 and for getting testing kits in 2022.

After an outbreak of new cases in May 2021, a SMS Real-Time Link System (*shilianzhi*) was established that extended contact tracing to public places, such as stores, restaurants, government agencies, and public transportation. People going into these places were asked to scan a QR code before entering, but also had the option of writing their phone number on a piece of paper. People traveling in groups could also have just one person scan the code, and enter the number of people in the group. This system was dif-

ferent from the “real name system” used in other countries such as China in that it only shared the phone number of the user, and not other personal data. The CECC also made assurances that the data would only be shared with front-line responders.

Despite these safeguards, there were ongoing concerns about how personal data would be protected. In January 2021, the Taiwan Association for Human Rights (TAHR) stated that it asked the CECC to disclose information about the Electronic Fence system which had been used to track the location of 84,903 people from 20 February to 9 April 2020. Based on the information received, it noted several problems with the system that remain unaddressed. One is that the legal basis for the system - Articles 48 and 58 of the CDC Act - only authorizes the government to isolate and quarantine inbound and outbound travelers and their close contacts; it does not authorize it to obtain their mobile phone numbers for the purpose of tracking them. Secondly, the CECC did not provide an exit mechanism specifying a time limit, or objective indicators for how a decision would be made on ending the Electronic Fence system. The CECC’s only response was that an exit mechanism “will be evaluated and decided according to the needs of epidemic prevention and control.” Finally, the CECC refused the TAHR’s request for records of consultation meetings with experts convened by the CECC to understand how it arrived at epidemic prevention measures, saying they were internal drafts. In its statement, TAHR criticized the CECC’s lack of transparency, noting that relying solely on daily press conferences was insufficient for understanding how pandemic measures were decided.⁶

The National Human Rights Commission (NHRC) had similar concerns about infringements on privacy, noting “‘witch-hunt’ or ‘labeling’ behaviors in society and the media that have led to infringements on the privacy of confirmed cases. For example, pejorative labeling of confirmed cases and their family members and specific seat allocation of children of medical professionals at school have resulted in stigmatization and discrimination.” The NHRC called on the government to “inform the public of its principles with regard to accessing and managing personal data” (NHRC 2021:5).

One particular concern was the CECC’s public disclosure of personal data of those who violated quarantine or travel orders. Article 8 of the Special COVID-19 Act authorized the CECC to publicize the personal data of people who violate or intend to violate their isolation or quarantine order, which runs counter to Article 10 of the CDC Act for government agencies and medical institutions and personnel not to disclose personal information related to patients or suspected patients with communicable diseases (Chang and Lin 2021b: 46).

According to Ho (n.d.), the CECC was aware of these privacy issues and issued a public response: “At the end of 2020, the government used ‘Skynet’ in the New Year’s Eve par-

⁶ <https://www.tahr.org.tw/news/2857>

ty for the first time, and expanded the scope of monitoring to include autonomous health managers. After being questioned by many parties, the Central Epidemic Command Center re-named Skynet as ‘Electronic Fence 2.0’, and took the initiative in a press conference to explain its technology and operational procedures, how it was not monitoring everyone’s GPS location information, and promising that the relevant information would be destroyed after 28 days of storage.”

According to TAHR and civic tech organizations such as the Open Culture Foundation (OCF), the government had said that the data would not be used for purposes other than managing COVID and would delete the data in 28 days, but there was never any follow up by the CECC to provide evidence of this (Interview, TAHR, 17 Nov 17 2022; Interview, OCF, 1 January 2023).

Despite the above instances of government overreach and missed opportunities to collaborate with civil society during the non-pharmaceutical phase of the pandemic, much of the public went along with the government pandemic measures. A Pew survey showed 78 percent of Taiwanese felt the pandemic restrictions were just about right, a figure just under the highest ranking country of New Zealand at 80 percent, and 68 percent of Taiwan felt their country was more united under the pandemic than before, behind New Zealand at 75 percent and Singapore at 86 percent.⁷ The public’s cooperation certainly contributed to the low number of cases during this period and was in contrast to Taiwan’s SARS experience when many people did not trust the government and often evaded contact tracing and hid from the authorities (Cheng 2021). As of April 13, 2020, Taiwan only had 1,057 confirmed cases and 11 deaths, numbers far lower than other developed countries. Even Taiwan’s usually politically polarized and rambunctious media generally cooperated (Soon 2020). Analyses of media coverage during this first phase by both the DPP-leaning Liberty Times (LT, *ziyou shibao*) and the KMT-leaning United Daily (UD, *lianhebao*) showed that they generally described government public health policies and guidelines as science-based, and emphasized the importance of citizens doing their civic duty by adhering (Lo and Hsieh 2020: 395, Interview with an elder care researcher, November 20, 2022).

⁷ <https://www.pewresearch.org/global/2021/06/23/people-in-advanced-economies-say-their-society-is-more-divided-than-before-pandemic/>



A Pew survey showed 78 percent of Taiwanese felt the pandemic restrictions were just about right, a figure just under the highest ranking country of New Zealand at 80 percent.

Lo and Hsieh (2020:396-9) though did find troubling signs of divisions in the media coverage over the mask shortage, and on the issue of evacuating Taiwanese from Wuhan, China. Perhaps not surprisingly, the United Daily laid the responsibility for the mask shortage in the early days of the pandemic at the feet of the DPP-led administration, and criticized the administration for inconsistencies in their mask-wearing guidelines. The LT and UD were also sharply divided on the flights to evacuate Taiwanese from Wuhan in February of 2020. The LT, worried that China would use the evacuation as a Trojan horse to bring COVID into Taiwan, argued for stronger safeguards on the evacuation flights. The UD, however, advocated for evacuating the Taiwanese as soon as possible. These divergent views reflected very different perceptions of China. Whereas the KMT was more willing to explore ways to strengthen engagement with China and give it the benefit of the doubt, the DPP tended to see China as an existential threat to Taiwan. This political division would re-emerge with more troubling consequences in the summer of 2021 over the issue of vaccines.

6. Governance Successes and Shortcomings in the Pharmaceutical Phase

MAY 2021-DECEMBER 2022

My wife and I moved to Taiwan in December 2021 when the island was still closed to most foreign travelers. On our arrival in the airport, we were promptly put in a quarantine taxi which took us to a quarantine hotel where we stayed for 14 days, celebrating Christmas and New Years and experiencing our first earthquake. When we emerged from the hotel on January 7, 2022, we took a taxi to our new apartment. During our ride, we asked the driver how the pandemic was going in Taiwan. He spent much of the time venting about the government's lack of transparency about vaccines, where they were coming from and who was getting them. I don't remember too much of the rest of our conversation, but that memory of the driver's grievances stayed with me and resurfaced when I began research for this report and found that the vaccine issue had been a major fault line in Taiwan's pandemic governance. – Shawn Shieh, report author

The willingness of the public and media to cooperate with the government's public health measures did not last long. In late April 2021, a sudden rise in community transmission occurred in Taipei and New Taipei City that was traced to a hotel in Taoyuan used to quarantine aviation staff, and to hostess bars and teahouses in Taipei's Wanhua district. By May 19, Taiwan had recorded 2,243 new cases and 12 deaths, more than the case total from January 2020 to April 2021. The CECC declared a level-3 (on a scale of 1 to 4) emergency alert for Taipei and New Taipei City on May 15 and extended the alert to the entire island on May 19. The emergency orders included closing, for the first time during the pandemic, "all recreational establishments (for example, cinemas,

swimming pools and public libraries), elementary and middle schools, day care centres for children and the elderly; banning of large national and religious gatherings and indoor dining; a mask mandate; and social distancing” (Cheng 2021).

This outbreak caught the island unprepared and widened divisions within the government and society. Taiwan’s very success in keeping case numbers low through non-pharmaceutical measures had lowered the sense of urgency in Taiwan for vaccines. As a result, less than one percent of the population was vaccinated using the only vaccine available, AstraZeneca (AZ), by the time of the outbreak. It also opened the Tsai administration to criticism from its political opponents for not getting the population vaccinated and led to a sharp drop in President Tsai’s popularity rating. A May 27 TVBS poll found that 80 percent of people were unsatisfied with President Tsai, and 75 percent were unsatisfied with Minister of Health and Welfare and CECC head Chen Shih-chung, who as recently as late April had an approval rate of 66 percent (Waksman 2021). The opposition’s criticism was perhaps unjustified given that the Tsai administration had been trying to purchase vaccines from abroad since the year before, but vaccine shortages had held up their delivery to the island. Taiwan had purchased 10 million doses of Astra-Zeneca (AZ) in November 2020, another five million of Moderna in February 2021, and was expecting another 4.76 million doses through a COVAX vaccine sharing agreement (Hioe 2021). Yet by the time of the May outbreak, only 300,000 doses of AZ had been delivered and many Taiwanese were skeptical about AZ due to reports of blood clotting as a side effect.

To complicate matters, the Taiwan government had also been involved in delicate negotiations with the German company BioNTech (BNT) to buy five million doses since June 2020, apparently going around Fosun, the Chinese company which was given distribution rights for BNT for the greater China region including Taiwan. But then in January the deal fell through for reasons that are unclear. Taiwanese officials such as Chen Shi-Chung, the CECC head, suggested it was due to an issue with the wording of how Taiwan was described in the press release, and possibly to objections from Fosun and even the Chinese government (Hille and Riordan 2021; McGregor 2021). As the outbreak worsened in May and amid growing criticism of her



Taiwan’s very success in keeping case numbers low through non-pharmaceutical measures had lowered the sense of urgency in Taiwan for vaccines. As a result, less than 1% of the population was vaccinated using the only vaccine available, AstraZeneca (AZ), by the time of the outbreak.

administration for not having enough vaccines, President Tsai brought up the failed deal again when she accused China of interfering in the BNT vaccine deal and Taiwan officials appealed to the U.S. for help in procuring vaccines. Soon after, the U.S. and Japan came to Taiwan's aid with the U.S. donating a total of 4 million doses of Moderna between June to October, and Japan another 4.2 million doses of AZ in six separate shipments during the same time period.

The BNT vaccine stalemate was resolved with help from the private sector and civil society when two large Taiwan companies - TSMC and Foxconn (through its affiliated Yonglin Foundation) - and the Tzu Chi Buddhist foundation stepped in and were able to arrange a deal with Fosun in July to purchase 15 million doses, after which they donated the vaccines to the Taiwan government (Wang 2021; Lee 2021). In addition, the government arranged for the purchase of 36 million more doses of Moderna to be delivered to Taiwan during the 2022-23 period (Chi 2021).

Taiwan also had several biotech companies developing COVID-19 vaccines and in July 2021 granted emergency-use authorization for its first domestically produced vaccine, Medigen, and said people would have the choice to be vaccinated with that vaccine by late August. The problem was that Medigen was developed through a fast-track process called immuno-bridging that did not go through phase three clinical trials to determine its efficacy, and was therefore not approved by either the U.S. Food and Drug Administration or the World Health Organization. This made Medigen much less desirable for Taiwanese who wanted to travel abroad and needed to show acceptable proof of vaccination. In a poll carried out in June, only 54 percent of Taiwanese said they would take it (Tiberghien and Zhao 2021).

By mid-July, Taiwan managed to bring the outbreak under control as new cases dropped into the single digits, and the CECC's emergency alert was reduced to level-2. By the end of 2021, Taiwan was able to raise its vaccination rates to around 78 percent of the population who had received at least one dose, of which 66 percent were fully vaccinated with two doses. The growing vaccination rates paved the way for measures gradually relaxing pandemic restrictions, stopping use of the emergency alert system, and opening the country up, starting in the spring of 2022.

6.1 TRANSPARENCY, ACCOUNTABILITY AND COLLABORATION

The perfect storm of the May outbreak and corresponding emergency measures, the vaccine shortage, and the role of China in negotiations for the BNT vaccine, put considerable strain on Taiwan's collaborative governance. Compared with the first phase, this was a darker period where instances of collaboration between government, the private sector and civil society were few and far between - the case of Foxconn, TSMC and Tzu Chi purchasing BNT vaccines to donate to the government being perhaps the most prominent example - and overshadowed by growing political and social divisions that

threatened to undermine Taiwan's collaborative governance. Opposition politicians and media, which for the most part had gone along with the pandemic measures in the first phase, now used the outbreak and vaccine shortage to criticize and promote misinformation about vaccines and the Tsai administration's failure to procure them. They accused the administration of a lack of transparency for not coming clear about the reasons for delays in vaccine shipments. (Chi 2021, Tiberghien and Zhao 2021, Hioe 2021).

Transparency and accountability during this phase were further weakened by the insertion of China into Taiwan's pandemic governance. Misinformation and disinformation from China about vaccines, as well as China's offers to provide their vaccines to Taiwan, led people in Taiwan to question their government's performance. In June, one Taiwanese organization that tracks digital misinformation coming from China noted that "negative stories or fake news about vaccines have dominated the most-discussed topics we tracked over the past few weeks" (Hille 2021). Several of our focus group participants also pointed out that transparency over mask procurement and distribution in the first phase was much better than transparency over vaccine procurement and distribution due to the misinformation and opaqueness in the Taiwan government's handling of vaccine procurements. In May, China's Taiwan Affairs Office offered to give Chinese vaccines to Taiwan and in June, "Ma Xiaoguan, spokesperson for China's Taiwan Affairs Office, invited "Taiwanese compatriots" to come to the mainland and get vaccinated, indicating that 62 thousand Taiwanese already had" (Waksman 2021). These offers were rejected by the CECC which noted a long-standing policy banning imports on pharmaceutical goods from China and the ineffectiveness of Chinese vaccines (McGregor 2021).

KMT and other opposition politicians and local governments aligned with the KMT began to ask why they could not buy vaccines from China directly (Waksman 2021; Hioe 2021; focus group). In July, the KMT even filed a lawsuit against the CECC and Taiwan's FDA accusing them of corruption in the decision to issue an emergency use authorization and bypass stage 3 clinical trials for the Medigen vaccine (Chung 2021). Further tarnishing the transparency and accountability of the admin-



In June, one Taiwanese organization that tracks digital misinformation coming from China noted that "negative stories or fake news about vaccines have dominated the most-discussed topics we tracked over the past few weeks."

istration were accusations in early July of insider trading with regard to the Taiwan vaccine Medigen, leading to a formal investigation by the Ministry of Justice and local prosecutors that is still ongoing. These accusations lent weight to suggestions from KMT politicians that the administration was benefiting financially from giving Medigen emergency-use authorization by inflating the vaccine's stock prices (Waksman 2021).

Transparency and accountability regarding the treatment of vulnerable groups such as foreign migrant workers, students and the elderly also suffered during this period. In the midst of the outbreak in June, Amnesty International's Taiwan branch issued a statement remarking on an environment of increasing fear, misinformation and uncertainty as cases rose and emergency measures came into force, and reminding the central and local authorities, as well as the public, that protection of everyone's human rights was more critical than ever at this time. Amnesty called for central and local governments not to discriminate and treat everyone equally, and give more consideration to frontline medical workers, students, unemployed workers and domestic violence victims, as well as vulnerable groups such as the homeless, prison inmates, migrant workers, undocumented immigrants, refugees and asylum seekers.

These cautionary reminders appeared to have fallen on deaf ears during this period as authorities and the public scrambled to prevent and contain the outbreak while also protecting themselves. In the process, several instances of discriminatory treatment came out in the open. One was a well-publicized incident in June in Miaoli county where the local authorities ordered foreign migrant workers not to leave their living quarters during the outbreak, even though Taiwanese workers faced no such restrictions. The Taiwan Association for Human Rights (TAHR) discovered similar incidents occurring in private enterprises in other parts of Taiwan (Interview with TAHR, November 17, 2022). The problems of foreign migrant workers being restricted to their living quarters, as well as the overcrowded living quarters provided to those workers by employers and labor agencies has also been documented by the National Human Rights Commission, who found that these restrictive measures and poor living conditions not only violated the personal freedoms of migrant workers, but also increased the risk of community spread and infringed on the principles of equality and nondiscrimination (NHRC 2021:6-7).

There were other similar incidents of discriminatory treatment, such as when overseas Chinese students studying at a vocational school were told not to leave the campus for several months during summer 2021 even though Taiwanese students and teachers could leave freely.⁸ Undocumented foreign workers who made up many of the caregivers for the elderly also faced a number of barriers, including being shut out of elder care centers and not being able to enter hospitals to provide care because they needed to

⁸ "Second-class international students: whether to realize their dreams or go to jail," 10 August 2021, <https://hellovietnam.tw/tw/hello-life/397>

show their NHI card, which as foreign workers they did not have (DTL 2020; Interview with elder care researcher, 10 November 2022).

On June 18, the Taiwan Association for Human Rights (TAHR) sent a letter to the Executive Yuan and CECC about the Miaoli incident, citing a petition signed by 1500 people demanding the Miaoli authorities lift their stay-at-home order. The petition called the order discriminatory, and asked whether it violated the Level-3 Epidemic Alert standards, and protections of personal freedom in the constitution and international conventions. The CECC waited several weeks before responding with a statement that the Miaoli authorities were in the wrong and the Level-3 Epidemic Alert standards should apply equally to foreign migrant workers and local Taiwanese workers (Interview, TAHR, 17 November 2022).

After the May outbreak, elder care NGOs were worried that the elderly would be scapegoated because one of the centers of the outbreak was the hostess bars in Taipei's Wanhua district which were frequented by older men who would be reluctant to reveal their presence there. They also became more vocal in pushing the government to keep care centers open instead of closing them, and ensuring access to vaccines and compensation payment for the elderly who had a more difficult time applying for these benefits online, as well as access to vaccines for care workers so that care centers could stay open (Interview with elder care researcher, 10 Nov 2022).

Issues of data privacy reemerged during this period regarding the CECC's contact tracing measures targeting around 600,000 "employees, customers and foreigners" who had been in the Wanhua district in Taipei, one of the centers of the May 2021 outbreak. These measures included asking mobile telephone operators to analyze the location data of those people, recording the National Health Insurance cards of "high risk groups" and browsing the internet histories of foreigners in the area. On June 7, TAHR sent a letter to the CECC requesting answers to questions such as the legal basis for these actions, how the CECC defined "high risk groups," the CECC's reasons for browsing the internet histories of foreigners and how long the telecom operators would hold on to the data before deleting it. The CECC sent TAHR a reply with vague responses to these questions, although in later public statements, it did clarify that any personal data would be deleted in 28 days (Interview, TAHR, 17 November 2022). The same month, a Taichung district court judge issued a letter noting that the SMS Real-time Link System was used by police to track down a suspected criminal. The CECC denied that it or its telecom company partners had let the police use its SMS database, but took the opportunity to remind police departments that the SMS system could only be used to track the spread of COVID-19 and could not be used in criminal investigations (Shan 2021).

As Taiwan began to open up in the spring of 2022, and with local elections on November 26 approaching, the government made one last controversial decision, which was seen as discriminating against COVID-19 patients, when the Central Election Commission

(CEC) and CECC refused to amend the election rules and Special COVID-19 Act to allow those in quarantine to vote, thereby depriving potentially hundreds of thousands of people of their voting rights. The CECC also warned that people who broke their mandatory quarantine to vote would face fines of up to NT\$2 million (US\$62,500). Amnesty International, TAHR and several other civic groups issued a statement on November 17 condemning the decision as unconstitutional, noting that the election not only was an opportunity to vote for local offices but also an important referendum on lowering the voting age in Taiwan from 20 to 18. The statement noted that South Korea and Japan had both found a way for those in quarantine to vote, and called for the CEC and CECC to amend the election rules or the Act to do the same.⁹

7. Key Findings, Lessons Learned and Recommendations

This report underlines the important role of civil society in filling in gaps in service provision and holding governments accountable. The former was important when it came to challenges such as providing care and vaccines to marginalized, harder-to-reach groups such as elderly suffering from dementia and Alzheimer's, indigenous villagers, undocumented migrant workers and the homeless. The latter was important in crises such as pandemics when the trend was for governments to concentrate greater power in the executive branch. True collaborative governance requires government and legislators to create greater synergies with civil society to be more transparent and responsive to societal issues, prevent governmental overreach and infringement of constitutional rights and liberties, and in the process achieve more effective policy outcomes.

Taiwan has been praised as a model for this type of collaborative governance and this report highlighted good practices that deserve that description. A number of these good practices stemmed from learning from Taiwan's experience dealing with past epidemics such as SARS, and built on past collaborative efforts. Examples include:

- The government not imposing a state of emergency that would have concentrated even more power in the executive branch, and working through the legislative process, while abiding by court rulings on constitutional challenges to previous epidemic control measures.
- The CECC's daily press conference and social media channels for communicating with the public.
- The central and local government's collaboration with manufacturers, and the hotel and taxi industries.

⁹ <https://focustaiwan.tw/politics/202211090025>

- The government’s coordination with the civic tech sector to create mask maps and combat misinformation.
- The government’s collaboration with private sector companies, such as Foxconn and TSMC, and civil society organizations such as the Buddhist foundation, Tzu Chi, to procure politically problematic vaccines from China.

At the same time, this report uncovered significant gaps that need to be addressed if Taiwan is to live up to its reputation as a model for pandemic governance. Consultation with civil society was not as widespread as it could have been, particularly in the latter half of the pandemic. There were multiple examples of government opaqueness and overreach where the government did not consult with community and civil society leaders, and in the process undermined the constitutional rights and liberties on which Taiwan’s fragile democracy is built. These problems show that the government needs to take steps now to address these gaps to prepare for future pandemics. Because pandemics and other crises require a rapid response by governments, it is not possible for governments to form those coordinating relationships and mechanisms during the crisis. Building them beforehand is crucial.¹⁰ It is worth noting that the successful cases of collaboration between government, the private sector and civic tech groups that did come about were based on a prior history of partnerships that were then re-activated during the pandemic.

Another finding of this report was the existence of deeper fissures in Taiwan’s collaborative governance that threaten its democratic resilience. The biggest red flag is the political divide between the two major parties on China, which emerged as a major obstacle to collaborative governance at different phases of the pandemic, but particularly in the pharmaceutical phase, when vaccine procurement became an urgent and contested issue between the central government, local governments, communities and the media. Partisan divisions are natural in a democracy; but the pandemic, combined with media and social media aligned with the ruling and opposition parties, inflamed those divisions, creating difficulties in coordination between central and local governments, and widening social divisions through the promotion of rumors and misinformation for partisan purposes. More positive analyses talked about the “whole of government,” “whole of society,” collaborative governance approaches in Taiwan’s pandemic management. But not far beneath the veneer of this governance model were signs of a fragmented polity and society that were easily divided and pitted against one another by issues such as vaccine shortages, privacy and the biggest elephant in the room: China. Examples include the controversy over the evacuation of Taiwanese from Wuhan in the early days of 2020, and the fraught issue of getting vaccines from China, whether Chinese-made or BNT through Fosun, its Chinese distributor. KMT-aligned politicians and local governments took a more China-friendly position, while DPP-aligned politicians and local governments took a more anti-China position.

¹⁰ Thanks to Jonathan Schwartz for making this point in a conversation with the author, January 24, 2023.

These divisions made it more difficult for the “government” and “society” to work together to manage the pandemic in ways that protected the public health and civil liberties, and are particularly worrisome in an era of authoritarian backsliding that has been happening in many other democracies and could happen in Taiwan. That backsliding has occurred precisely because of social grievances rooted in immigration, religion, social status, nationalism, and crises such as the pandemic, and amplified by social media and charismatic politicians playing to populist policies to gain power. In July 2021, the Pew Research Center released a poll showing that a majority of people in democracies in the West, and even in the Asia-Pacific such as Japan and South Korea, believed that their societies were more divided as a result of the pandemic.¹¹ In democracies like the U.S., partisan divisions in the federal and state governments hampered coordination over pandemic policies as states led by Democrats adopted a different approach from states led by Republicans. In Taiwan, something similar played out with the central government’s vaccine policies during the May 2021 outbreak as KMT politicians criticized the DPP administration for the vaccine shortage and called for getting vaccines from China. These divisions occurred at precisely the same time as information about Taiwan’s vaccine policies became increasingly opaque and colored by misinformation from opposition politicians and media and China.

In other democracies, populist leaders have been able to seize on these divisions in times of crisis to consolidate their power in ways that erode the rule of law and other democratic institutions. The pandemic did Taiwan a favor by foreshadowing that a similar backsliding could occur in Taiwan’s vibrant but young democracy, particularly over China’s influence, which casts a large and growing shadow over Taiwan’s development. One can imagine in future crises, such as the next pandemic, the fault lines reappearing and reaching proportions that prevent the government and society from acting in a unified, effective manner that respects and preserves the rule of law which forms an important pillar of Taiwan’s democracy. This is why collaborative governance with its emphasis on transparency,

¹¹ <https://www.pewresearch.org/global/2021/06/23/people-in-advanced-economies-say-their-society-is-more-divided-than-before-pandemic/>



In other democracies, populist leaders have been able to seize on these divisions in times of crisis to consolidate their power in ways that erode the rule of law and other democratic institutions.

accountability and collaboration is so critical not only to pandemic response but also to democratic resilience. It builds public trust, which helps prevent these fault lines from growing so large that they debilitate an effective pandemic response and lead to democratic regression.

These two findings – the need for preparedness by further institutionalizing collaborative governance and the importance of collaborative governance for democratic resilience – inform the following recommendations:

RECOMMENDATION 1

While the daily press conferences were helpful, Taiwan public health authorities could be more transparent in providing information about the decision-making process by which pandemic control measures were determined.

RECOMMENDATION 2

Public health authorities should continue their strong collaboration with the civic tech sector on identifying and combatting pandemic misinformation, which are critical to getting good, clear information and messaging to the public.

RECOMMENDATION 3

Public health authorities, and other government agencies, should strengthen their consultative relationships with civic organizations dedicated to protecting civil liberties, particularly for more vulnerable groups. A first step is for public health authorities to set up a database of human rights experts and civil society organizations. According to Taiwan's National Human Rights Commission, the CECC did establish a Human Rights Experts and Scholars Database, but not until after the Control Yuan (where the NHRC is housed) launched an investigation of pandemic measures restricting Chinese spouses and their children in 2021 (NHRC 2021:6). Establishing a database, though, is only the first step. Taiwan's oldest human rights group, TAHR, found it was on a database of NGOs shared by the immigration bureau for foreign migrant workers to contact if they had problems getting vaccinated. Yet the immigration bureau did not inform or consult with TAHR, who only found out when a migrant worker called them for help and told them about the database's existence (Interview with TAHR, November 17, 2022). An important second step would be to require human rights experts to be on the national pandemic taskforce advising the government.¹²

RECOMMENDATION 4

As a follow up to the previous recommendation, regular interactions and consultations with civil society groups in those databases should be institutionalized to build trust

¹² According to Lee (2021), the national pandemic taskforce that advised the CECC was made up mostly of experts from public health and medical backgrounds; no human rights experts were included.

and credibility with those groups and strengthen collaborative governance. Our focus groups recommended that the government and civil society strengthen mechanisms, such as multi-stakeholder and cross-regional platforms, to improve collaboration and consultation with community leaders, civil society and human rights experts in preparation for the next pandemic. Similarly, Schwartz (2014) and Schwartz and Yen (2017) have advocated for more systematic coordination in pandemic response between the government and elected community leaders at the ward or neighborhood level known as ward leaders (*lizhang*).

RECOMMENDATION 5

Finally, and perhaps most importantly, government and public health authorities and experts should not take these gaps in collaborative governance, and the long-term threats they pose to democratic resilience, lightly. In the first stage of the COVID-19 pandemic, Taiwan policymakers and experts came out with articles proclaiming Taiwan as a model, but this had the effect of suggesting that there were no serious problems. In a blogpost titled “What can we learn from Taiwan’s response to the COVID-19 epidemic?,” the authors who included the CECC head and other policymakers, note the government’s early and forceful response, including the use of the Electronic Fence System to carry out contact tracing and surveillance of individuals in isolation and quarantine. They go on to acknowledge there could be concerns about infringing on people’s privacy (not to mention freedom of movement), but brush those concerns aside:

One of the concerns about this system is the infringement of people’s privacy, however there have been minimal objections from the public. This could be due to high levels of trust between the government and the public during the pandemic, solidarity fostered by international political isolation, and memory of the SARS epidemic, as well as the mandate of Infectious Disease Control Act (Lee, et. al. 2020)

Rather than say that they would take steps to address these concerns, the authors assume that the public must trust them and therefore no additional steps need to be taken.

This report shows that there is still much work to be done to strengthen and institutionalize Taiwan’s collaborative governance. If Taiwan can continue on that path, then it will truly be a model for other countries.

Annex 1: Works Cited

Cai, Qihai, Aya Okada, Bok Gyo Jeong, and Sung-Ju Kim. 2021. "Civil Society Responses to the COVID-19 Pandemic: A Comparative Study of China, Japan, and South Korea." *China Review*, 21(1): 107–38.

Chang, Wen-Chen and Chun-Yuan Lin. 2021a. "Taiwan: Democracy, technology, and civil society". In Ramraj, V. (ed). *Covid-19 in Asia: Law and Policy Contexts*, 43-56.

Chang, Wen-Chen and Lin, Chun-Yuan. 2021b. "Legislative/Judicial Deference versus NGOs/Citizens Activism: Taiwan's Successful Fight Against Covid-19, Verfassungsblog, 21 April. <https://verfassungsblog.de/legislative-judicial-deference-versus-ngos-citizens-activism-%20%20%20ta>.

Cheng, Tsung-mei. 2020. "Taiwan's Response to the Coronavirus Challenge of 2020." *Taiwan Insight*. University of Nottingham. <https://taiwaninsight.org/2020/03/05/taiwans-response-to-the-coronavirus-challenge-of-2020/>.

Cheng, Tsung-mei. 2021. "How has Taiwan navigated the pandemic?" <https://www.economicsobservatory.com/how-has-taiwan-navigated-the-pandemic>

Chi, Chunhuei. 2021. "Taiwan and the Politics of Vaccine Warfare." *East Asia Forum* (blog). 13 August 13. <https://www.eastasiaforum.org/2021/08/13/taiwan-and-the-politics-of-vaccine-warfare/>.

Chiang, Min-hua. 2022. "Taiwan's Economy Outperforms Amid COVID-19 Crisis." *East Asia Forum*. 31 January. <https://www.eastasiaforum.org/2022/01/31/taiwans-economy-outperforms-amid-covid-19-crisis/>.

Chung, Jake. 2021. "Taipei Times. "KMT Files Lawsuit on Domestic Vaccine EUA." *Taipei Times*. 21 July. <https://www.taipetitimes.com/News/front/archives/2021/07/21/2003761202>.

Davidson, Helen. 2021. "How Taiwan's Struggle for Covid Vaccines is Inflaming Tensions with China." *The Guardian*. 14 June. <https://www.theguardian.com/world/2021/jun/14/how-taiwan-struggle-for-covid-vaccines-is-inflaming-tensions-with-china>.

Doublethink Lab. 2020. "Survival Playbook for an Island Nation." *Doublethink Lab* (blog). <https://infodemic.doublethinklab.org/transcript5.html>.

Hille, Kathryn. 2021. "Taiwan's unity cracks under China's disinformation onslaught." *Financial Times*. 29 June. <https://www.ft.com/content/f22f1011-0630-462a-a21e-83bae4523da7>.

Hille, Kathryn and Primrose Riordan. 2021. "Taiwan Accuses China of Blocking Efforts to Buy Covid Vaccines." 18 February. *Financial Times*. <https://www.ft.com/content/e08f9c59-4821-4ca4-ac2d-54c087b21900>.

Hioe, Brian. 2021. "Political Contention About Vaccines in Taiwan." *Taiwan Insight* (blog). 20 September 20. <https://taiwaninsight.org/2021/09/20/political-contention-about-vaccines-in-taiwan/>.

Ho, Chih-hsing. N.d. "Renquan? Fazhi? Fangyi xia ruhe quanheng? Yi ge zhexue, lishi yu keji fangyi de fansi [Human Rights? Rule of Law? How are powers balanced during epidemic prevention?: A reflection on the philosophical, historical and technological approaches to epidemic prevention]". *COVID 19 de renwen shehui shengsi* [Considering COVID 19 from an anthropological and sociological perspective] (blog). <https://covid19.ascdc.tw/essay/139>.

Hsieh, Chih-Wei, Mao Wang, Natalie WM Wong, and Lawrence Ka-ki Ho. 2021. "A Whole-of-Nation Approach to COVID-19: Taiwan's National Epidemic Prevention Team." *International Political Science Review* 42 (3): 300–315. <https://doi.org/10.1177/01925121211012291>.

Kavanagh, Matthew M. 2020. "Transparency and Testing Work Better Than Coercion in Coronavirus Battle." *Foreign Policy* (blog). 16 March. <https://foreignpolicy.com/2020/03/16/coronavirus-what-works-transparency-testing-coercion/>.

Kuo, Lily, and Alicia Chen. 2021. "Once a Covid Success Story, Taiwan Struggles with a Vaccine Shortage." *Washington Post*, May 18, 2021. https://www.washingtonpost.com/world/asia_pacific/taiwan-virus-outbreak-covid-vaccines/2021/05/18/bba4c770-b6fa-11eb-bc4a-62849cf6cca9_story.html.

Lee, Chien-Liang. 2020. "Taiwan's Proactive Prevention of COVID-19 under Constitutionalism". *Verfassungsblog* (blog). 22 April 22. <https://verfassungsblog.de/taiwans-proactive-prevention-of-covid-19-under-constitutionalism/>

Lee, Hsin-fang. 2021. "Tzu Chi Foundation Inks Vaccine Deal." *Taipei Times*, 22 July. <https://www.taipetimes.com/News/front/archives/2021/07/22/2003761256>.

Lee, Po-Chang, Shih-Chung Chen, Tai-Yuan Chiu, Chi-Mai Chen, and Chunhuei Chi. 2020. "What We Can Learn from Taiwan's Response to the Covid-19 Epidemic." 21 July. <https://blogs.bmj.com/bmj/2020/07/21/what-we-can-learn-from-taiwans-response-to-the-covid-19-epidemic/>.

Lee, Tsung-Ling. 2021. "The Rise of Technocracy and the COVID-19 Pandemic in Taiwan: Courts, Human Rights, and the Protection of Vulnerable Populations." *German Law Journal*. 25: 1115-1132. <https://www.cambridge.org/core/journals/german-law-journal/article/rise-of-technocracy-and-the-covid19-pandemic-in-taiwan-courts-human-rights-and-the-protection-of-vulnerablepopulations/0FCD6D70FCDE950C775CC05E9D922DAD>.

Lin, Cheryl, Jewel Mullen, Wendy E. Braund, Pikuei Tu, and John Auerbach. 2020. "Reopening Safely – Lessons from Taiwan's COVID-19 Response." *Journal of Global Health* 10 (2). <https://doi.org/10.7189/jogh.10.020318>.

Lin, Ching-Fu, Chien-Huei Wu, and Chuan-Feng Wu. 2020. "Reimagining the Administrative State in Times of Global Health Crisis: An Anatomy of Taiwan's Regulatory Actions in Response to the COVID-19 Pandemic." *European Journal of Risk Regulation* 11 (2): 256–72. <https://doi.org/10.1017/err.2020.25>.

Lin, Guan Ting. 2020. "Civic Tech Versus COVID-19: Online Map and Reservation System Help Fight the Virus." *Commonwealth*, 4 March 4. <https://english.cw.com.tw/article/article.action?id=2668>.

Lin, Thung-Hong. 2020. "Jiangou ren shili (Resilient Power): Quanqiu yiqing xia taiwan de gongmin shehui yu chuangxin fuli guojia" [Building Resilient Power: Civil Society and Welfare State under the Challenge of the Pandemic]. *Taiwan Shehui Xuekan* [Taiwanese Journal of Sociology] 67: 203-212. http://www.tjs.org.tw/up_photo/moon-system/images/%E6%9E%97%E5%AE%97%E5%BC%98202006.pdf.

Lo, Ming-Cheng M., and Hsin-Yi Hsieh. 2020. "The 'Societalization' of Pandemic Unpreparedness: Lessons from Taiwan's COVID Response." *American Journal of Cultural Sociology* 8 (3): 384–404. <https://doi.org/10.1057/s41290-020-00113-y>.

Luo Su. 2021. "Chuangyi zaojiu Taiwan fangyi youdengsheng: minjian dianzi duo bang da mang"[Innovation puts Taiwan's epidemic response at the top of the class: individuals' ideas were able to help the whole society - Luo Su]. *Caituan far-en haixia jiaoliu jijinhui* [Straits Exchange Foundation] (blog). 15 October. <https://www.sef.org.tw/article-1-129-10830>.

Ma, Mingming, Shun Wang, and Fengyu Wu. "Covid-19 prevalence and well-being: lessons from East Asia." *World Happiness Report 2021*, 57-90. https://happiness-report.s3.amazonaws.com/2021/WHR+21_Ch3.pdf

McGregor, Grady. 2021. "Taiwan Needs Vaccines. Beijing Has Offered Them. The Problem? Politics as Usual." *Fortune*. 25 May 25. <https://fortune.com/2021/05/25/taiwan-covid-cases-vaccine-china-beijing-offer/>.

Ming, Ho-sho. 2022. "Exploring Worldwide Democratic Innovations – a case study of Taiwan." *European Democracy Hub*. <https://epd.eu/wp-content/uploads/2022/06/case-study-taiwan.pdf>

National Human Rights Commission (NHRC). 2021. *Independent Opinion on the Third National Report on the ICCPR and ICESCR*. <https://nhrc.cy.gov.tw/en-US/monitor/opinion/detail?id=55e41d74-8d56-42e8-abc3-64a6caea7a90>.

Ngerng, Roy. 2020. "Taiwan's Digital Response to Covid-19: Impressive, But Is Privacy Respected?" *The News Lens International Edition* (blog). 27 March. <https://international.thenewslens.com/article/133095>.

Pu, Victor. 2020. "The Coronavirus Outbreak: How Democratic Taiwan Outperformed Authoritarian China." *The Diplomat*. 27 February <<https://thediplomat.com/2020/02/the-coronavirus-outbreak-how-democratic-taiwanoutperformed-authoritarian-china>>

Qiu Yi-ling. 2021. "Taiwan: Yiqing shengwen xia de renquan tixing" [Taiwan: Remembering human rights as the pandemic escalates]. Amnesty International Taiwan (blog). 30 May. <https://www.amnesty.tw/news/3755>.

Schwartz, Jonathan. 2014. "Achieving Effective Pandemic Response in Taiwan through State-Civil Society Cooperation The Role of the Li Zhang." *Asian Survey* 54 (6): 1136–57. <https://doi.org/10.1525/as.2014.54.6.1136>.

———. 2020. "Coronavirus and China's 'Authoritarian Advantage.'" *The Diplomat*. February 8, 2020. <https://thediplomat.com/2020/02/coronavirus-and-chinas-authoritarian-advantage/>.

———. 2022. "Is There an Authoritarian Advantage in Pandemic Response? A Comparative Case Study of China's Responses to SARS-CoV-1 (2003) and SARS-CoV-2 (2019)." *Issues & Studies* 58 (02): 2250001. <https://doi.org/10.1142/S1013251122500011>.

Schwartz, Jonathan, and Muh-Yong Yen. 2017. "Toward a Collaborative Model of Pandemic Preparedness and Response: Taiwan's Changing Approach to Pandemics." *Journal of Microbiology, Immunology and Infection* 50 (2): 125–32. <https://doi.org/10.1016/j.jmii.2016.08.010>.

Shan, Shelley. 2021. COVID-19: SMS System Not Used by Police. *Taipei Times*. 22 June. <https://www.taipeitimes.com/News/taiwan/archives/2021/06/22/2003759599>

Siedlok, Frank, Natasha Hamilton-Hart, and Hsiao-Chen Shen. 2021. "Taiwan's COVID-19 Response: The Interdependence of State and Private Sector Institutions." *Development and Change* 53 (1): 190–216. <https://doi.org/10.1111/dech.12702>.

Soon, Wayne. 2021. "Why Taiwan Is Beating COVID-19 – Again." 29 July. <https://thediplomat.com/2021/07/why-taiwan-is-beating-covid-19-again/>.

Tiberghien, Yves, and Jackie Jiaqi Zhao. 2021. "Taiwan's COVID-19 Vaccine Struggles." *East Asia Forum*. 24 September. <https://www.eastasiaforum.org/2021/09/24/taiwans-covid-19-vaccine-struggles/>.

Waksman, Itamar. 2021. "The politicalization of COVID vaccines in Taiwan." <https://thechinaproject.com/2021/06/15/the-politicalization-of-covid-vaccines-in-taiwan/>

Wang, Ann. 2021. "Helped by TSMC and Foxconn, BioNTech Vaccines Finally Reach Taiwan." *Reuters*. 2 September. <https://www.reuters.com/world/asia-pacific/helped-by-tech-giants-biontech-vaccines-finally-reach-taiwan-2021-09-01/>.

Wang, C. Jason, Chun Y. Ng, and Robert H. Brook. 2020. "Response to COVID-19 in Taiwan: Big Data Analytics, New Technology, and Proactive Testing." *JAMA* 323 (14): 1341. <https://doi.org/10.1001/jama.2020.3151>.

Wu, Po-hsuan, Hsin-yu Chen and Chin-yun Wei. 2020. "Virus Outbreak: Students, teachers barred from traveling overseas." *Taipei Times*. 17 March. <https://www.taipeitimes.com/News/taiwan/archives/2020/03/17/2003732852>.

Yang, Wan-Ying, and Chia-hung Tsai. 2020. "Democratic Values, Collective Security, and Privacy: Taiwan People's Response to COVID-19." *Asian Journal for Public Opinion Research* 8 (3): 222–45. <https://doi.org/10.15206/ajpor.2020.8.3.222>.

Yen, Wei-ting. 2020. "Taiwan's COVID-19 Management: Developmental State, Digital Governance, and State-Society Synergy." *Asia Politics and Policy* July 12(3): 455-468. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7537052/>

Annex 2: Focus Group Participants and Interviewees

Eeling Chiu, Executive Director, Amnesty International Taiwan

Professor Samuel Hou, Distinguished Professor, Graduate Institute of Public Affairs and Social Innovation, Feng Chia University, and Chairman of the Board, Taiwan Taxi Academy Association, 台灣計程車學院協會

Singing Li, CEO, Open Culture Foundation, 開放文化基金會

You-lian Sun, Secretary-General, Taiwan Labour Front, 台灣勞工陣線

Yi-xiang Shi, Secretary-General, Taiwan Association for Human Rights, 台灣人權促進會

Dr. Muh-yong Yen, Director of Infectious Diseases, Cheng Hsing General Hospital, 振興醫療財團法人振興醫院

Chihao Yu, Co-director, IORG, 台灣資訊環境研究中心

Staff member, umbrella organization of CSOs serving youth in Taiwan

ADDITIONAL INTERVIEWS:

Political Officer, American Institute of Taiwan

Environment, Science, Technology and Health Officer, American Institute of Taiwan

Justine Rochot, Postdoctoral Research Fellow, Institute of Sociology, Academic Sinica

ICNL

1126 16th Street NW, Suite 400
Washington, DC 20036 USA

 www.icnl.org

 facebook.com/ICNLAlliance  twitter.com/ICNLAlliance