



On April 24, 2020, TSENG Yong-Kwang (Michael Y. K. TSENG), Director General of the Taipei Economic and Cultural Office in Honolulu, discussed Taiwan's experience with COVID-19 and how it has managed to avoid wide-spread public shutdowns while containing the spread to only 428 confirmed cases and 6 deaths (as of April 24). Much of Taiwan's success is due to lessons learned during the SARS and MERS outbreaks, with an emphasis on transparency, timeliness, and social cohesion. Tseng's talk centered on three main themes:

1. Technology and Big Data:

- a. Officials integrated Taiwan's national health insurance database with its immigration and customs database to enable the government and medical facilities to track the 14-day travel histories and symptoms of citizens returning from countries with a heightened travel alert.
- b. Taiwan implemented a quarantine monitoring system described as a "digital fence" to monitor quarantined individuals (first using phone signals from government-issued phones and later from quarantined people's personal cellphones under the authorization of related laws). An alert notifies authorities if the order is breached.

Insight: As visitors are arriving on the islands on a daily basis and quarantine compliance is hard to enforce, Hawaii may explore the possibility of adopting a digital fence monitoring system (through State-provided devices) to ensure better compliance with quarantine orders.

2. Community measures: Taiwan has not enacted widespread public shutdowns. SARS and MERS have impressed upon the Taiwanese public the importance of following guidelines from relevant authorities, such as:

- a. Wearing masks outdoors, on public transportation and in schools. These were made available to citizens at an affordable price (around 6 masks for \$1) through increased domestic production and rationing supply.
- b. Keeping schools open by adopting social distancing measures.
- c. Developing protocols for restricting activities further should confirmed cases resume in specific sectors (e.g., if cases are detected among students at a specific school, it would close immediately to prevent further spread).
- d. Implementing service-oriented quarantine measures that incentivize public cooperation. These measures include subsidizing quarantine costs by delivering meals and providing essential services.
- e. Granting healthcare access to foreign workers.

Insight: As it aims to reopen its non-tourism economy, Hawaii could elaborate tailored precautionary measures for indoor spaces with shared facilities by encouraging widespread use of masks and standardizing hygiene and sanitation maintenance. Expanding hiring of sanitation professionals would assure the public of the safety of shared spaces and provide opportunities to rehire portions of the workforce. The availability of masks could be increased by designating certified distributors and/or establishing a system for controlling sales. Some quarantine costs could also be subsidized by providing some essential services such as food delivery. These measures, in company with systematic sample testing to confirm cases are not spreading again, provide an avenue for gradual opening in targeted sectors.

3. Organizational structure: Taiwan CDC has assigned key tasks to two groups:

- a. The first group focuses on "hunting" infected individuals by means of continuous screening, testing, and technology-enabled contact tracing.
- b. The second group is in charge of treating individuals who tested positive.

This organizational structure gives the "hunting" group a free hand to identify infected individuals without having the responsibility to also treat them, eliminating a potential conflict of interest.

Insight: Due to current understaffing, Hawaii may consider providing additional resources to the Department of Health to enhance the efficiency and effectiveness of the contact tracing process. This includes hiring additional investigators as well as employing contact tracing technology using Bluetooth (as it has anonymous properties) to safeguard citizens' sensitive data.

Hawaii has taken effective steps to manage the pandemic, with 604 confirmed cases and one of the lowest death rates in the United States. The above insights are intended as considerations to complement existing efforts toward reopening its economy in a timely and prudent manner.

This document was prepared by Eugenio Benincasa, Ariel Stenek, and Keoni Williams. For more information, please contact Dr. Crystal Pryor (crystal@pacforum.org), Director of Nonproliferation, Technology, and Fellowships at Pacific Forum. These preliminary findings provide a general summary of the discussion. This is not a consensus document. The views expressed are those of the HIF chair and do not necessarily reflect the views of all participants. The speaker has approved this summation of his presentation.