

東協國家防疫及疫苗政策的檢視及研析： 2020 至 2022 年初期間

林伶靜*

摘 要

全球新冠肺炎自 2020 年爆發，初期防疫良好的越南、泰國、緬甸、柬埔寨等國則在 2021 年疫情持續升高。隨著英國、印度、Omicron 變異病毒株盛行，疫情防控困難。而疫苗取得不易，交付不及、施打效率低落等問題，難以及時落實大規模接種，造成疫情擴大與惡化。2021 年東協諸國陷入抗疫及開放邊境的兩難，馬、菲、印等延長全國封鎖，各國的邊境管制連帶限制東南亞區域流通及連結。東協各國因應疫情採取防控及疫苗政策，有其共通性，然係於醫療公衛、國內政治經濟及外交關係等考量，呈現不同的政策光譜。本文將檢視及比較東協十國政策發展、成效及決策因素，東協區域防疫合作效益為何，以及研析區域重啟流通及經濟復甦的前景為何。

關鍵詞：東協、新冠肺炎疫情、防疫、疫苗、邊境開放、區域合作

* 作者為國立政治大學外交所博士，曾派駐東南亞地區。
Email: sabine4746@yahoo.com.tw。

一、前言

全球新冠肺炎疫情 (Covid-19 pandemic) 自 2020 年初爆發，世界衛生組織 (WHO) 於 1 月 30 宣布為全球公衛危機 (global health emergency)。東南亞地區初期疫情平穩，隨 Alpha 變異病毒株 (Alpha variant) 及 Delta 病毒株 (Delta variant) 流行，第二、三波疫情爆發，疫情始轉為嚴峻，遂成為全球疫情熱區。人口眾多的印尼與菲律賓染疫與死亡人數最多，初期防疫成效稱佳的越南、泰國、緬甸、柬埔寨等陸路東協成員亦在 2021 年下半疫情升高，疫情防控困難。而疫苗取得不易，交付不及、施打效率低落等問題，難以及時落實大規模接種，導致疫情更為難控。東協諸國反覆陷入抗疫及開放邊境的兩難，2020 年至 2021 年期間，馬來西亞、菲律賓、印尼、泰國、柬埔寨、寮國都曾實行全國或部分的封鎖，¹ 2021 年底進入 Omicron 疫情階段，防疫及疫苗政策相應有新的轉變，重新開放 (reopening) 將成為下一階段的優先順位，取代先前的邊防管制及移動限制。各國因應疫情發展所採取防控及疫苗政策，有其共通性 (參見表 1)，然係於醫療公衛、國內政治經濟及外交關係等因素，將呈現不同的政策態樣及防疫成效。

一國醫衛體系、資源多寡及衛生政策是國際傳染病防治要件，防控成效繫於邊境防控及政策制定及執行綜效，尤以發生大規模疫病時，涉及醫療量能、財政能力、社會順服、公共溝通、科技運用及國際合作等多面向制度及資源的動員及整合。² 基本上，在防疫及疫苗政策上，

¹ Center for Strategic and International Studies (CSIS), "Southeast Asia Covid-19 Tracker," 05 June 2022, <https://www.csis.org/programs/southeast-asia-program/projects/past-projects/southeast-asia-covid-19-tracker>

² Gianna Gayle Amul, Michael Ang, Diya Kraybill, I Suan Ee Ong, and Joanne Yoong (2022), "Responses to COVID-19 in Southeast Asia: Diverse Paths and Ongoing Challenges," *Asian Economic Policy Review*, 17, pp. 90-110.

東協各國都採取由上而下的單一指揮模式，並實行管制性及強制性政策 (regulatory and mandatory policy)，惟執行強度及成效有異。國內政治經濟因素也影響決策及執行過程，各國前後都曾採取封城、停工歇業、宵禁等限制移動及群聚的禁令，星、汶、越嚴格管制群聚活動，而印、菲考慮國內經濟因素，始終不願過於嚴厲管制，即因未限制大型宗教活動，而導致疫情急速擴大。而馬國慕尤汀 (Muhyiddin) 政府的政治危機與疫情同步升溫，實行全國緊急狀態僅為鞏固政治權力，而無助抗疫，政治動盪不安危及政府威信，指揮體系弱化，防疫政策難以落實。³ 在印支半島，緬甸因軍變導致全國動亂，疫情防線終臨崩解。另一方面，正值全球疫苗供應不及，國內疫苗短缺就會成為政治問題。各國均實行全國疫苗接種計畫 (national vaccination scheme)，啟動施打的時程趨近，惟達成完成接種 (full vaccination) 目標值的時程差異甚大，這涉及疫苗取得的難易程度，除星國之外，全數東協國家都曾面臨無疫苗可打的窘境，需透過雙邊或國際援贈，或擇次佳選擇的疫苗施打。而歷經兩年餘的邊防及國內管制，連帶限制區域流通連結，各國都承受莫大經濟復甦壓力，重新開放成為最大共識，這同樣有政治經濟因素的考量，東協體認到已無法持續採取高強度的管制措施，因已嚴重危及國內產業及國際商機，公衛及政治經濟成本成互為消長，而緩和兩者衝擊則須依賴疫苗接種率的提升。

外交關係對東協防疫的影響主要在於疫苗政策，呈現在雙邊、國際援贈以及商業採購。東協各國與主要疫苗輸出國如美、日、中、印

³ Alifah Zainuddin, "Politics is Wrecking Malaysia's Pandemic Response," *The Diplomat*, 09 August 2021, <https://thediplomat.com/2021/08/politics-is-wrecking-malysias-pandemic-response/>; Joshua Kurlantzick, "Malaysia's Political Crisis Is Dooming Its COVID-19 Response," 26 July 2021, <https://www.cfr.org/article/malysias-political-crisis-dooming-its-covid-19-response>

的雙邊關係親疏，反映疫苗廠牌的組合，另亦可觀大國間透過疫苗外交延續區域地緣戰略的競爭態勢。大國捐贈雖有助紓解東協的疫苗荒，然不可避免的必須承擔政治風險。

疾病管制 (disease control) 涉及一國人民生命安全及國家安全，為國家機關的重要職能。防疫與疫苗都屬衛生政策 (health policy) 的領域，中央政府結合相關利益行動者 (stakeholder) 預防及杜絕傳染病擴散，本諸科學專業的指揮調控，對應管制性政策 (regulatory policy) 的分析途徑，尤見諸於東協各國政府的防疫體系。⁴ 然在實然面，衛生決策無法脫離政治經濟及國際因素的考量，影響政策規劃及管制型態的調整，如全面禁止外人入境或放寬隔離天數等。在全球疫情的範疇，當抗疫物資如疫苗、篩劑、口罩等防護設備具稀少性，國際競爭便無法避免，外交關係作用將逐漸浮現。透過政治經濟學對衛生政策的研究觀點，將可提供防疫與疫苗政策的分析架構，檢視科學及非科學面向的影響因素。自新冠疫情擴散全球，相關文獻著重於歐美經驗，針對東協國家者，多限於單一國家、政策或議題，較缺乏東協十國比較與分析，⁵ 鑒此，本文旨透過公衛、政治經濟及外交關係分析觀點，針對 2020 年底首波中國武漢疫情爆發至 2022 年初 Omicron 疫情期間，對東協各國的防疫管制及疫苗政策進行整體性的比較研析。

⁴ Organization for Economic Co-operation and Development (OECD), “Regulatory Responses to the COVID-19 Pandemic in Southeast Asia,” 11 October 2021, <https://www.oecd.org/coronavirus/policy-responses/regulatory-responses-to-the-covid-19-pandemic-in-southeast-asia-b9587458/>

⁵ 經濟合作暨發展組織 (OECD)、美國智庫戰略及國際研究中心 (Center for strategic and International Studies, CSIS)、澳洲雪梨大學、澳洲智庫 Lowy Institute 等均長期追蹤及分析東南亞疫情及各國的防疫因應措施，惟僅就單一期間或數個東協國家的靜態研究，較缺乏十國整體檢視與比較的動態分析，較無法歸納出政策及資源的差異性。

東協國家防疫及疫苗政策的檢視及研析：2020 至 2022 年初期間

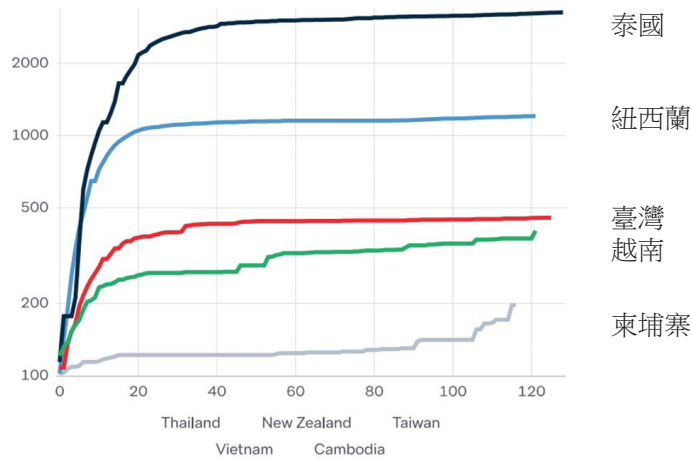


圖 1：首波全球疫情，防疫表現良好的亞太國家
(通報確診總數達百例的天數)

資料來源：Dominic Meagher, “What’s the Secret to Southeast Asia’s Covid Success Stories?” *The Interpreter*, 28 July 2020, <https://www.lowyinstitute.org/the-interpreter/what-s-secret-southeast-asia-covid-success-stories>

二、各國防疫管制政策的成效與限制

(一) 疫情初期階段：採行邊境及國內管制措施

歐美、中南美成為首波疫情嚴峻地區，單以美國 2020 年底已逾 250 萬人確診，相較之下，東南亞地區直至 2021 年初，疫情仍緩，多國防疫受到肯定，其中越南與泰國更獲澳洲智庫 Lowy Institute (2021) 評比防疫有成的前四名國家 (參見圖 1)。⁶ 除人口眾多的印、菲疫情難控，其餘各國疫情尚稱平穩，因此有亞洲防疫模式的美名，認為社會凝聚與有力的政府機關為其優勢。⁷

⁶ 前四名分別為：紐西蘭、越南、臺灣及泰國。參見：Swati Pandey, “New Zealand, Vietnam top COVID Performance Ranking; U.S., UK languish,” *Reuters*, 28 January 2021, <https://www.reuters.com/article/us-health-coronavirus-australia-lowy-idUSKBN29W311>

⁷ “Covid Performance Index,” *Lowry Institute*, <https://interactives.lowyinstitute.org/features/covid-performance/>; Dominic Meagher, “What’s the Secret to Southeast Asia’s Covid Success Stories?” *The Interpreter*, 28 July 2020, <https://www.lowyinstitute.org/the-interpreter/what-s-secret-southeast-asia-covid-success-stories>

全球首波疫情期間，東協防疫成效繫於均快速採行邊境、移動管制、隔離等管制措施，⁸加上其他篩檢及防護措施如戴口罩、維持社交距離及強制隔離等（參見表 1），成效顯著。2020 年間，汶萊於 5 月前未曾出現社區傳染，主因在於及早採取嚴格邊境管制，甚禁止國人及外國人士離境。新加坡力行普篩政策，且厲行強制隔離及疫調。陸路東協雖與中國接鄰，泰國是最早通報案例之境外地區，惟因與越南都立即採取關閉邊境、限制境內移動及入境人士與確診者的強制隔離，越南有 9,600 萬人口，泰國有 6,700 萬人口，兩國都曾出現長達數月本土零感染波段，長期維持低死亡率。其中越南雖不具有新加坡優越的醫療水準，但決策的主動性及社會動員的整合，有效達到監測及防控成效，整體表現優異。⁹另柬、寮、緬三國雖缺乏醫衛資源，移動禁令較為寬鬆（相較星、越的強制程度），但所處位置形成有利因素，接鄰的越、泰兩國防控有成，就不易造成跨境傳播，此外東國因長期受國際公衛訓練技術援助，仍具疫調及普篩的能力。¹⁰緬甸經歷長期動亂，醫療體系薄弱，醫衛人員缺乏，但透過邊防及限制移動已達到防堵之效。¹¹同期間，印、菲雖亦關閉國境，但未嚴格管制國內移動，此外

⁸ Richard Maude, "Southeast Asia and COVID-19 Vaccines Explained," 21 June 2021, <https://southeastasiacovid.asiasociety.org/southeast-asia-and-covid-19-vaccines-explained/>; Organisation for Economic Co-operation and Development (OECD), "COVID-19 Crisis Response in ASEAN Member States," updated on 04 May 2020, <https://www.oecd.org/coronavirus/policy-responses/covid-19-crisis-response-in-asean-member-states-02f828a2/>

⁹ Shafiah F. Muhibat, "COVID-19 in Southeast Asia: 10 Countries, 10 Responses," *CSIS Commentaries* (DMRU-051-EN), 16 April 2020, pp. 1-13.

¹⁰ Buntongyi Nit, Alexander Lourdes Samy, Shu Leed Tan, Sopanha Vory, Youhok Lim, Ryan Rachmad Nugraha, Xu Lin, Attaullah Ahmadi, Don Eliseo Lucero-Prisno III (2021), "Understanding the Slow COVID-19 Trajectory of Cambodia," *Public Health in Practice*, 2, pp. 1-3.

¹¹ Myo Minn Oo, Nilar Aye Tun, Xu Lin and Don Eliseo Lucero-Prisno III (2022), "COVID-19 in Myanmar: Spread, Actions and Opportunities for Peace and Stability," 10 (2), pp. 1-4.

表 1：東協國家疫情防控措施之比較 (2021 年至 2022 年初)

國 家	移動限制有 無及強制性 之強弱	邊境封鎖有 無	強 制 隔 離 (入 境 及 確 診 隔 離 執 行 強 度)	公衛體系防控與 韌性 (優 勢 / 劣 勢 能 力)
新加坡	有/強	有	有	強 卓越醫療資源 具 SARS 及 H1N1 防治經驗
汶萊	有/強	有	有	強
印尼	有/弱	有	有/較寬鬆	偏弱 篩檢/隔離資源 不足
馬來西亞	有/弱	有	有	中等
菲律賓	有/弱	有	有/較寬鬆	偏弱 篩檢/隔離資源 不足
越南	有/強	有	有	強 具 SARS 及 H1N1 防治經驗
泰國	有/偏強	有	有	強
柬埔寨	有/強	有	有	偏弱
寮國	有/強	有	有	偏弱
緬甸	有/弱	有	有/較寬鬆	偏弱

資料來源：作者整理。

因醫療資源不足，未能於早期就實行篩檢及隔離，疫情始終居高不下。¹²2020 年底，東協超過半數的染疫人口來自印尼，超過四分之一來自菲律賓(參見圖 2)。¹³

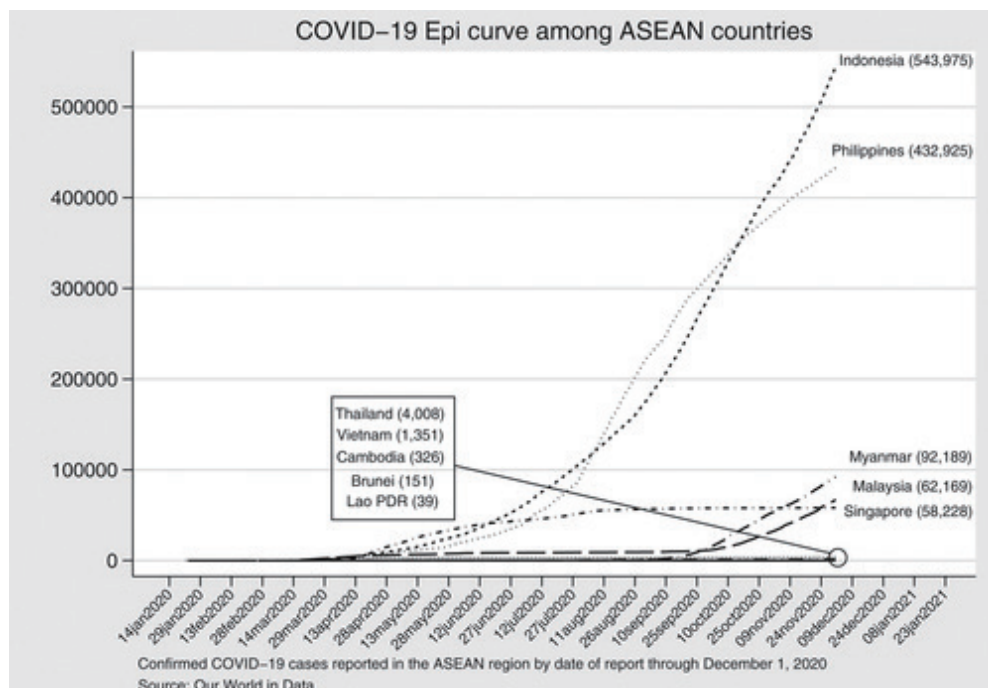


圖 2：東協國家 2020-2021 年期間確診人數趨勢變化

資料來源：Gianna Gayle Amul, Michael Ang, Diya Kraybill, Suan Ee Ong, and Joanne Yoong(2022), “Responses to COVID-19 in Southeast Asia: Diverse Paths and Ongoing Challenges,” *Asian Economic Policy Review*, 17, p. 92.

¹² Shafiah F. Muhibat, “COVID-19 in Southeast Asia: 10 Countries, 10 Responses,” *CSIS Commentaries* (DMRU-051-EN), 16 April 2020, pp. 1-13.

¹³ Gianna Gayle Amul, Michael Ang, Diya Kraybill, Suan Ee Ong, and Joanne Yoong, “Responses to COVID-19 in Southeast Asia: Diverse Paths and Ongoing Challenges,” p. 92.

整體觀之，邊防管制及限制國內移動成為東協各國共同採取的策略（參見表 1），這是恐於本土疫情大流行，國內醫衛難以因應所致，隨醫療崩潰導致的大量疫病、死亡人口將造成社會動亂，認為透過短期鎖國及限制流動，應可有效防堵，並可快速恢復國內百工及國際通運。¹⁴在限制國內移動方面，各國執行強度不一，採取措施從全國性到局部性的封鎖，包括：全國封城、停工停課、關閉商場、娛樂場所、禁地區間移動、宵禁等。在全球第一波疫情延燒的數月，陸路東協的泰、緬、越、柬、寮境內防疫表現受到國際關注，一般認為與中國相鄰，尤以緬、柬、寮三國醫療缺乏，恐成為疫情重災區，惟卻能有效控制染疫人數（參見圖 1），關鍵因素在於一開始就以抗疫優於經濟考量的決策，及時關閉邊境及強制執行管制措施。¹⁵相較之下，印尼始未見好轉，可察管制範疇及強制力較低，原因在於封城將導致物價上揚及失業，對印政府而言是更沉重負擔。¹⁶這也成為後來東協的共同壓力，封城、鎖國手段不可能持久，危及國本的不僅是疫病人口，還有龐大的飢餓及貧窮人口。因此待疫情平緩，東協便急於 2021 年初重啟國門、恢復商旅交流。然隨 2021 年中陸續爆發 Alpha、Delta 疫情，全面擴及東南亞海陸，傳播力及致命性更高，區域疫情急轉直下，導致邊境管制更為緊縮，¹⁷然未

¹⁴ Scott Kaplan, Jacob Lefler, and David Zilberman (2021), “The Political Economy of COVID-19,” *Appl Econ Perspect Policy*, pp. 1–12. Lili Yulyadi Arnakim and Tia Mariatul Kibtiah (2021), “Response of ASEAN Member States to the Spread of COVID-19 in Southeast Asia,” *IOP Conf. Series: Earth and Environmental Science*, 729, pp. 1-7.

¹⁵ Dominic Meagher, “What’s the Secret to Southeast Asia’s Covid Success Stories?” <https://www.lowyinstitute.org/the-interpreter/what-s-secret-southeast-asia-covid-success-stories>

¹⁶ Lili Yulyadi Arnakim and Tia Mariatul Kibtiah, “Response of ASEAN Member States to the Spread of COVID-19 in Southeast Asia,” pp. 1-7.

¹⁷ 〈防疫優等生東南亞 為什麼擋不住 Delta ？〉，《天下雜誌》，2021 年 9 月 8 日，<https://www.cw.com.tw/article/5118050>；〈東南亞疫情再現高峰！連防疫模範生越南也失守〉，《TVBS》，2021 年 5 月 11 日，<https://today.line.me/tw/v2/article/zLqOX7>

能及早啟動疫苗接種導致確診、重症及死亡率居高不下的嚴峻疫情。

(二) 疫情嚴峻時期：凸顯醫療不均及疫苗短缺問題

2021 年第一季，出現 Alpha 病毒疫情，自緬、柬 2 月爆發本土疫情，擴及泰、寮，陸路東協進入第二波疫情高峰。¹⁸ 接續 4 月初 Delta 病毒在陸路東協擴散，爆發第三波疫情，傳染力更強，重症及死亡率急速倍增，逐漸擴及海洋東協，東南亞旋成為全球疫情熱區（參見圖 3）。2021 年 7 月間，印尼日均確診及死亡數已超過印度、巴西，出現單日逾 5 萬人的新高，較 2020 年逾 5 倍確診數及兩倍的死亡病例。¹⁹ 印、菲、馬、泰、緬等均面臨醫療體系瀕於崩潰、重症及死亡比例攀升，公衛政策失調等困境，共通性在於疫苗接種率低，施打效率不佳等問題。²⁰

至此，邊境管制已不足遏止各類變異株的境內傳播，尤以邊境相接的印支半島，移工、非法移民、毒販、偷渡者的流動造成疫情跨境擴散，大型群聚活動則加速本土疫情升高。如人口近 2.8 億的印尼因未禁開齋節的節慶活動，大量返鄉潮造成 Delta 病毒株疫情大流行。另，疫情仍熾之際，

¹⁸ Nathan Thompson, “Southeast Asia Had COVID-19 Under Control. What Went Wrong?” *Foreign Policy*, 26 May 2021, <https://foreignpolicy.com/2021/05/26/southeast-asia-covid-pandemic-cases-laos-thailand-vietnam-myanmar-cambodia/>

¹⁹ Erwida Maulia, “Indonesia Overtakes India to Become Asia's COVID Epicenter” *Nikkei Asia*, 13 July 2021, <https://asia.nikkei.com/Spotlight/Coronavirus/Indonesia-overtakes-India-to-become-Asia-s-COVID-epicenter>; “‘Dying At Home’: Indonesians Scramble For O2,” *The ASEAN Post*, 12 July 2021, <https://theaseanpost.com/article/dying-home-indonesians-scramble-o2>

²⁰ Madeleine Hoecklin, “Indonesia Becomes Epicenter of COVID Pandemic, as Southeast Asia is Battered by Third Wave” *Health Policy Watch*, 19 July 2021, <https://healthpolicy-watch.news/indonesia-becomes-epicenter-of-covid-pandemic-as-southeast-asia-is-battered-by-third-wave/>; “Thai Hospitals Short Of Beds As COVID Cases Soar,” *The ASEAN Post*, 30 June 2021, <https://theaseanpost.com/article/thai-hospitals-short-beds-covid-cases-soar>

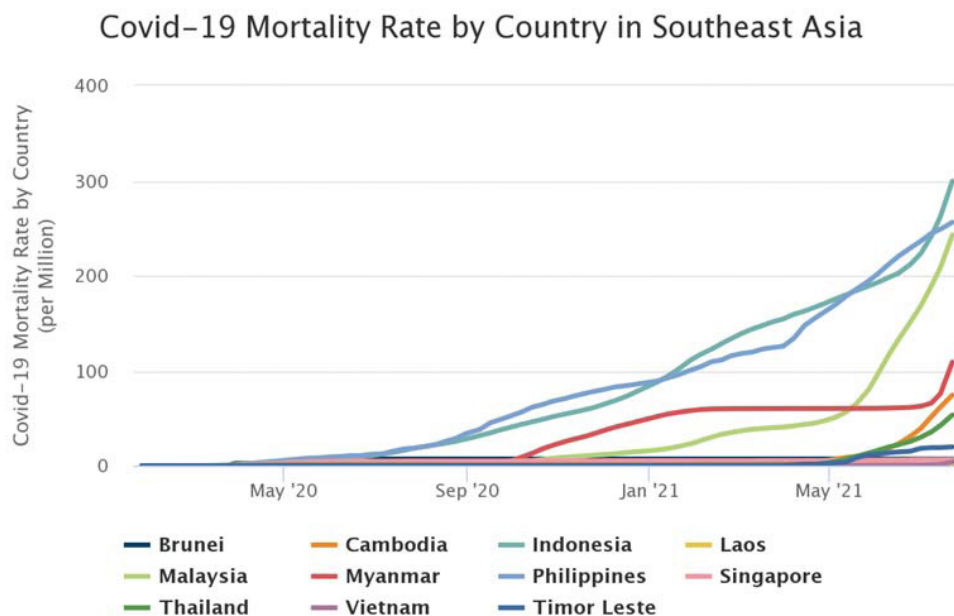


圖 3：東南亞疫情死亡率趨勢圖

資料來源：Center for Strategic and International Studies, “Southeast Asia Covid-19 Tracker,” updated on July 28, 2021, <https://www.csis.org/programs/southeast-asia-program/projects/southeast-asia-covid-19-tracker>

政府仍鼓勵國內旅遊，為能提振國內經濟，這反映出佐科威政府考量經濟因素，始終抗拒採取強硬封鎖政策；另全國篩檢率偏低，都是造成印尼疫情加劇的因素。疫情危急之際，全國已有超過四分之一採檢陽性，而首都雅加達有半數採檢陽性，防疫體系已無法有效管控感染來源、篩檢、隔離收治及阻絕傳播鏈，大量重症及死亡病例導致醫療體系崩潰，氧氣瓶需求孔急，遂使印尼成為全球疫情的重災區。²¹泰國經歷 2020 年第一、二波的疫情，防控良好，曾受世界衛生組織 (WHO) 大力推崇，泰國總理帕拉育

²¹ “The Flaws Behind Indonesia’s COVID Surge,” *The ASEAN Post*, 10 July 2021, <https://theaseanpost.com/article/flaws-behind-indonesias-covid-surge>

(Prayuth Chan-Ocha) 就曾矢言泰國將於 2021 年底全面開放國境。²² 4 月 Alpha 病毒來襲，6 月 Delta 病毒侵入，於 7 月轉為大規模本土疫情，泰國政府坦言情況危急有如 2004 年南亞海嘯災難。²³

初期東南亞疫情尚可防控，境管防堵措施奏效，未爆發全面性的本土疫情，醫衛量能未受影響，社會秩序衝擊較微，然隨重症、死亡率急速上升，承受沉重負擔的醫療體系將備受考驗。一國醫衛水平、整備能力及衛生政策韌性 (resilience) 至為關鍵。近十年，東協各國公衛支出 (health expenditure) 佔 GDP 比有成長趨勢，以 2019 年為例，東亞及太平洋地區均值近 7%，日本 10.74%、南韓 8.16%、紐西蘭 9.74%。東協國家介於 4% 至 5%，其中印尼偏低，僅 2.9%。²⁴ 然在醫療資源方面則明顯不足，病床數及醫護人員比例偏低，相較日、韓每千人平均有 13 張病床，東協均值低於 2 張，越、星約 2.5 張為較高者。另醫護人員每千人比例偏低，除星國與日本均值相近有逾 2 人之外，其餘均值都低於 1 人。²⁵ 在醫衛資源動員及整合方面，星、越兩國表現較佳，因已具有因應嚴重急性呼吸道症候群 (SARS)、H1N1 新型流感的經驗，前已建置全國傳染病防治管控及整備的醫衛架構，有助運用於新冠疫情，可及時因應大規模疫情所需的檢測、收治及隔離的醫療資源。²⁶ 泰

²² Government Public Relations Department, "Government Aims to Fully Reopen Thailand within the Next 120 Days," 16 June 2021, https://thailand.prd.go.th/mobile_detail.php?cid=4&nid=11443

²³ "Hospital Turns to Containers for Body Storage," *Bangkok Post*, 31 July 2021, <https://www.bangkokpost.com/thailand/general/2157747/hospital-turns-to-containers-for-body-storage>

²⁴ World Bank, "Current Health Expenditure (% of GDP) - East Asia & Pacific," https://data.worldbank.org/indicator/SH.XPD.CHEX.GD.ZS?locations=Z4&name_desc=true, 31 May 2022; World Bank, "Physicians (per 1,000 people) - East Asia & Pacific," 31 May 2022, <https://data.worldbank.org/indicator/SH.MED.PHYS.ZS?locations=Z4>

²⁵ *Ibid.*

²⁶ Gianna Gayle Amul, Michael Ang, Diya Kraybill, Suan Ee Ong, and Joanne Yoong, "Responses to COVID-19 in Southeast Asia: Diverse Paths and Ongoing Challenges," pp. 98-99.

國實行全民健康保險，納入外籍移工，得以涵蓋境內百萬名移工的檢疫及疫苗所需。越南因社會主義國家，亦建立全面社會保險制度，且基層醫療水準良好。相較印尼、菲律賓則不具備類似的醫衛制度與資源，大量的篩檢需求即已對醫療體系造成過度負荷。²⁷而寮、柬公衛體系近年雖有改善，但人口的分化，城鄉差距嚴重、婦幼等弱勢族群等問題，醫衛資源分布嚴重不均。

中國新冠疫情進到東協諸國多在 2020 年 1 月間，東協各國的因應有其共通性，一經通報首例，便限制跨境移動。疫情初期，嚴守邊境即可有效防堵疫情，然待境內出現大規模傳播，重症人數急增，醫療體系即受檢驗，包含檢測、收治及隔離量能及執行效益，這在東協之中已見差異，相較星、越、泰的醫衛體系及整備能力，可以進行篩檢、疫調等公衛措施，確診人數最高的印、菲兩國則因缺乏相關資源而力有未逮。²⁸

三、疫苗政策的特殊性及共通性

(一) 全球疫苗供需分布：資源鴻溝的縮影

一國疫苗政策分成取得 (access to vaccine) 及大規模施打 (massive inoculation) 兩個層面，東協是全球疫苗資源及施打率分布的縮影，即多數疫苗集中在高收入國家，形成開發國家對開發中國家的疫苗資源鴻溝 (參見圖 4)。

²⁷ OECD, “COVID-19 crisis response in ASEAN Member States,” updated on 04 May 2020, <https://www.oecd.org/coronavirus/policy-responses/covid-19-crisis-response-in-asean-member-states-02f828a2/>

²⁸ Gianna Gayle Amul, Michael Ang, Diya Kraybill, Suan Ee Ong, and Joanne Yoong, “Responses to COVID-19 in Southeast Asia: Diverse Paths and Ongoing Challenges,” pp. 102-103.

Cumulative COVID-19 vaccination doses administered

This is counted as a single dose, and may not equal the total number of people vaccinated, depending on the specific dose regime (e.g. people receive multiple doses).

Our World in Data

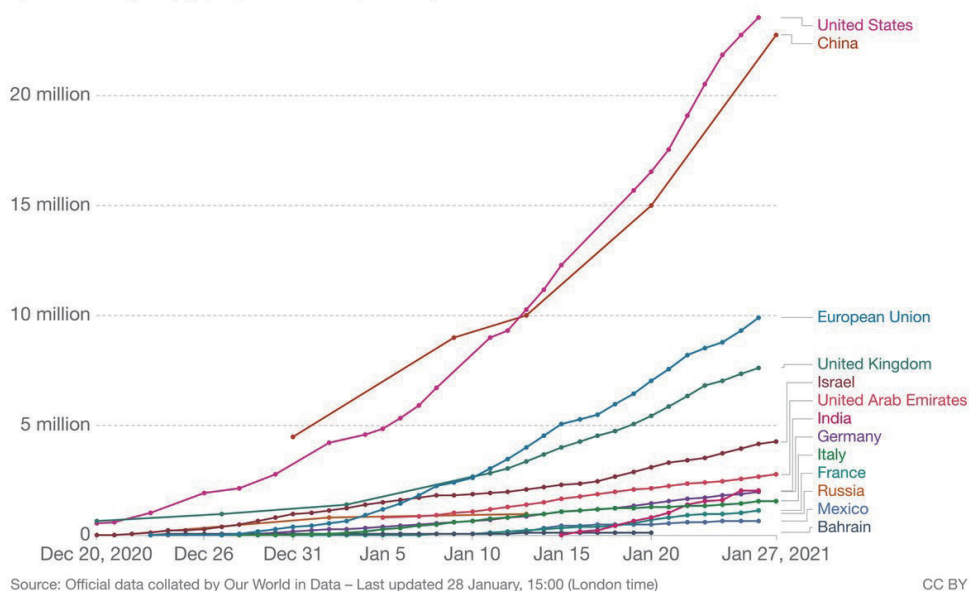


圖 4：第一波全球疫苗採購國

資料來源：Julia Belluz, “Rich Countries Are Hoarding Covid-19 Vaccines,” 29 January 2021, <https://www.vox.com/2021/1/29/22253908/rich-countries-hoarding-covid-19-vaccines>

2021 年間，除新加坡外，多數成員都面臨疫苗不足及施打延緩的問題。疫苗於 2020 年底問世，2021 年初的疫苗採購統計，佔全球人口 16% 的高收入國家即整備約全球 60% 的劑量。根據經濟學人情資中心 (Economist Intelligence Unit, EIU) 統計，多數已開發國家預計可於 2022 年中完成疫苗接種，然而超過 85% 的開發中國家在 2023 年前都無法達標；低收入國家則遲於 2024 年才可能完成。(參見圖 5)²⁹

²⁹ The Economist Intelligence Unit (2021), *Coronavirus Vaccines: Expect Delays*, London: The Economist Intelligence Unit Limited, pp.1-10.

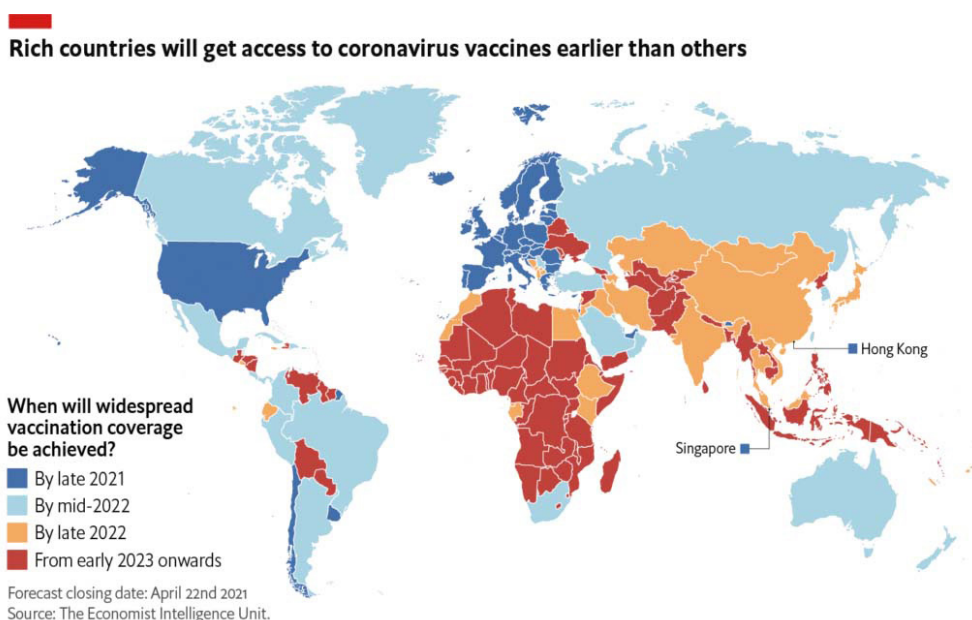


圖 5：全球各區域疫苗接種覆蓋率達成時程

資料來源：“The EIU’s Latest Vaccine Rollout Forecasts,” *Economist Intelligence Unit*, 28 April 2021, <https://www.eiu.com/n/eiu-latest-vaccine-rollout-forecasts/>

綜觀影響東協諸國疫苗決策的因素包括人口規模、財政能力、疫情風險以及疫苗取得的難易程度及外交關係。2020 年初期，大廠疫苗取得不易，疫苗生產國的美、英等國，國內疫情嚴峻，自身需求孔急，另高收入國家高價採購，使得其他較低收入國家疫苗的取得更不易。中國疫苗成為開發中國家的憑藉，也包含東協。³⁰ 在首波的疫苗採購階段，東協是中國疫苗的大戶，緩和國內疫苗匱乏危機及維繫對中雙邊關係的媒介。在中國疫苗效力疑慮發生前，印、菲、泰、柬等都大力

³⁰ Sebastian Strangion, “COVID-19 Vaccine Delays Push Indonesia into Reliance on China,” *The Diplomat*, 22 April 2021, <https://thediplomat.com/2021/04/covid-19-vaccine-delays-push-indonesia-into-reliance-on-china/>

Vaccination coverage forecasts highlight rich-poor divide *(Estimated timing of 60-70% population coverage)*

Late 2021	Mid 2022	Late 2022	Early 2023 onward
 Hong Kong	 Australia	 China	 Bangladesh
 Singapore	 New Zealand	 India	 Cambodia
 U.K.	 Russia	 Japan	 Indonesia
 U.S.	 South Korea	 Malaysia	 Laos
	 Taiwan	 Thailand	 Myanmar
		 Vietnam	 Pakistan
			 Philippines

Forecasts as of April 22, 2021

Source: The Economist Intelligence Unit

圖 6：亞太各國疫苗施打覆蓋率預估 (2021 初預估)

資料來源：Sandy Ong, “COVID Purgatory: Variants and other Risks Complicate Asia’s Escape,” *Nikkei Asia*, 06 May 2021, <https://asia.nikkei.com/Spotlight/Asia-Insight/COVID-purgatory-Variants-and-other-risks-complicate-Asia-s-escape>

推崇科興疫苗，印、泰也以科興為全民施打的主力疫苗。2021 年，除新加坡疫苗取得充足，其餘東協成員都面臨疫苗到貨或取得的困境。根據 2021 年初的預估，多國遲於 2022 或 2023 年才能達到疫苗完全接種 70% 的目標 (參看圖 6)。

(二) 疫苗取得管道

在疫苗取得管道，分為透過 COVAX 平臺購置或捐贈、政府採購及雙邊捐贈等三種途徑。東協為爭取足量疫苗及降低供貨來源風險，均已朝向多元採購策略，持有多種疫苗種類，另囿於經濟能力及外交因素，會出現單一傾向，如緬、柬、寮三國較依賴中、印疫苗。

1. COVAX 平臺

COVAX 是新冠疫苗分配的全球平臺，由世界衛生組織 (World Health Organization)、流行病預防及創新聯盟 (Coalition for Epidemic Preparedness and Innovations) 及全球疫苗免疫聯盟 (Gavi, the Vaccine Alliance) 共同建置，透過聯合採購及均衡分配的運作機制，用於協助較低收入獲得疫苗的資助機制為預先市場承諾 (COVAX Advance Market Commitment, COVAX/AMC)，捐助受援國人口約 30% 的疫苗數量；³¹迄 2021 年中期，COVAX 已運送近 2 億劑的疫苗至 136 國，主要為較低收入國家，³²柬、印、寮、緬、菲、越符合 AMC 的捐助資格。美國、歐盟、日本、澳洲等是 AMC 主要捐助國 (參見表 2)，由 AMC 負責與不同的疫苗藥廠採購簽約，已於 2021 年 3 月開始陸續配送東南亞地區。因應東南亞疫情嚴峻，捐助國也透過 COVAX 捐助疫苗，如柬埔寨獲日本捐贈 AZ 疫苗 100 萬劑。³³美國大力捐助東協國家，寮國獲嬌生疫苗 1,008,000 劑、越南獲莫德納 2,000,040 劑、菲律賓獲嬌生疫苗 3,240,850 劑、印尼獲贈莫德納 4,500,160 劑。³⁴

COVAX 另一機制為自行支付模式 (Self-Financing, SFP)，星、馬兩國即循此模式獲 COVAX 配送疫苗。COVAX 的運作高度仰賴外來疫苗供應及資金捐助，供應國的疫情風險為不確定因素，如主要供應 AZ 疫苗的印度，因 2021 年 3 月國內疫情危機，印度政府遂管制疫苗出口，

³¹ “The Gavi COVAX AMC Explained,” *Gavi Website*, 15 February 2021, <https://www.gavi.org/vaccineswork/gavi-covax-amc-explained>

³² Julia Sawatzky, “How Relevant Is COVAX to Middle-Income Countries?” *Think Global Health*, 15 July 2021, <https://www.thinkglobalhealth.org/article/how-relevant-covax-middle-income-countries>

³³ Mom Kunthear, “PM Set for Japan’s Covid Jabs,” *Phnom Penh Post*, 21 July 2021, <https://www.phnompenhpost.com/national/pm-set-japans-covid-jabs>

³⁴ Gavi Website- Covax Vaccine Roll-Out, updated on 29 July 2021, <https://www.gavi.org/covax-vaccine-roll-out>

表 2：COVAX 主要的捐助國 (2021 年)

國家	數量 (劑)	開始期間	預估完成期間
美國	6000 萬	2021 年 6 月	2021 年 6 月
日本	3000 萬	未知	未知
法國	3000 萬	2021 年 4 月	2021 年 6 月
德國	3000 萬	未知	2021 年 12 月
西班牙	2250 萬	未知	2021 年 12 月
義大利	1500 萬	未知	2021 年 12 月

資料來源：Samantha Kiernan, Serena Tohme, Kailey Shanks and Basia Rosenbaum, “The Politics of Vaccine Donation and Diplomacy,” *Think Global Health*, 04 June 2021, <https://www.thinkglobalhealth.org/article/politics-vaccine-donation-and-diplomacy>

立即衝擊 COVAX 的疫苗配送，疫苗短缺高達 1.9 億劑。³⁵ COVAX 原計於 2021 年 3 月至 4 月間配送印度生產的 AZ 疫苗 9,000 萬劑至較低收入國家，因此必須轉向歐盟國家調度可釋出的疫苗。³⁶ 在歐美各國對疫苗恐需之際，可提供全球捐助之用有限，待可釋出較多數量，多已至 2021 年下半年 (參見表 2)。另共計 92 國接受 COVAX 資助，各國最高獲捐贈的疫苗數量上限是總人口數的 30%，因此要達到一國群體免疫所需的 70% 接種率，仍需透過自購疫苗或雙邊援贈管道。

³⁵ Tulip Mazumdar, “India’s Covid Crisis Hits Covax Vaccine-Sharing Scheme,” *BBC*, 17 May 2021, <https://www.bbc.com/news/world-57135368>

³⁶ Kerry Cullinan, “Ambitious Push to Resume Routine Immunisations to Save 50 Million Lives – COVAX Waits for Indian Vaccines,” *Health Policy Watch*, 26 April 2021, <https://healthpolicy-watch.news/ambitious-push-to-resume-routine-immunisations-to-save-50-million-lives/>

2. 商業採購 (Purchased Vaccines)

東協總人口近 7 億，印尼人口近 2.8 億，成為最大新冠疫苗買家，2021 年 6 月止，採購總量約 2.6 劑億。其次為菲律賓 1.5 億劑、越南 8,000 萬劑、馬來西亞 6630 萬劑、泰國 6,300 萬劑；柬埔寨約 330 萬劑。各國疫苗種類包括中國、歐美、俄國等疫苗，而隨疫情發展，廠牌的選擇及數量出現轉變，與全球疫苗施打總量呈同向趨勢。

(1) 中國疫苗

東南亞是中國疫苗銷售的重點區域，商業採購占全球比例最高，這反映在第一波全球疫苗採購的趨勢，各成員對於中國疫苗的接受度介於光譜兩端。印尼是中國疫苗大宗買家，也是科興疫苗第三期試驗的合作國，與 2.8 億的人口規模有關。泰國是少數擴大增購的買家，最初疫苗採購，因獲授權代工英國 AZ 疫苗，預購 6,100 萬劑要做為主力疫苗，僅購置科興 200 萬劑，然因 4 月爆發第三波疫情，另當地代工藥廠 Siam Bioscience 交付不及，為解決因疫苗荒的政治危機，轉向增購科興疫苗補足。³⁷新加坡因是高收入國家，初期便以購入輝瑞為主力疫苗，購置的 20 萬劑科興未納入全民施打計畫，且未予授權緊急使用。而越南則因恐中因素，自始都未購入中國疫苗，後來獲贈的國藥疫苗，僅用於在越中國人士及赴中留學的國人。菲律賓、泰國都陸續購入千萬劑納入大規模接種之用，而柬埔寨亦以國藥為主力疫苗。對中雙邊關係深刻影響對中國疫苗的需求程度，然歐美疫苗的影響力未墜，東協國家都已加入 COVAX，該平臺配送的疫苗以 AZ 為大宗。

³⁷ “Is China's Vaccine Success Fading in Asia?” *The ASEAN Post*, 19 July 2021, <https://theaseanpost.com/article/chinas-vaccine-success-fading-asia>; Eileen Ng, “Other Nations in South-east Asia Ramping up Covid-19 Vaccination Drives,” *The Strait Times*, 17 July 2021, <https://www.straitstimes.com/asia/se-asia/other-nations-in-south-east-asia-ramping-up-covid-19-vaccination-drives>

表 3：世界衛生組織（WHO）核准緊急使用（EUL）的疫苗

疫苗名稱	核准日期
輝瑞／BNT Pfizer/BioNtech Comirnaty	2020/12/31
英國阿斯特捷利康（AZ） SII／Covishield（印度代工） AstraZeneca／AZD1222（韓國代工）	2021/02/16
美國嬌生 Janssen／Ad26.COV 2.S	2021/03/12
美國莫德納 Moderna COVID-19 vaccine （mRNA 1273）	2021/04/30
中國國藥 Sinopharm	2021/05/07
中國科興 Sinovac-CoronaVac	2021/06/01

資料來源：World Health Organization Website, “Coronavirus Disease (COVID-19): Vaccines,” 17 May 2022, [https://www.who.int/news-room/q-a-detail/coronavirus-disease-\(covid-19\)-vaccines?topicsurvey=&gclid=EAIaIQobChMI2ITsteS08QIVzX4rCh0k9QEOEAAYASAAEgK9evD_BwE](https://www.who.int/news-room/q-a-detail/coronavirus-disease-(covid-19)-vaccines?topicsurvey=&gclid=EAIaIQobChMI2ITsteS08QIVzX4rCh0k9QEOEAAYASAAEgK9evD_BwE).

(2) 歐美疫苗

歐美疫苗仍為東協的首選，這不僅關乎疫苗效力，也涉及日後國際認證及區域通行的便利。除緬、柬、寮疫苗採購較單一，其餘各國均採取多廠牌採購的混合政策，隨疫情升高，轉向歐美疫苗的趨勢明顯，疫苗類別涵蓋 AZ、輝瑞、莫德納、嬌生、諾瓦瓦克斯 (Novavax) 等。世界衛生組織列入的緊急使用疫苗如表 4，包括中國科興與國藥疫苗。然歐盟食藥局 (European Medicines Agency,

EMA) 核准的疫苗為 AZ、輝瑞、莫德納及嬌生疫苗，為多數歐盟及申根國家疫苗護照採行的接種認證。³⁸這意味若要重啟國際交流，疫苗廠牌本身就是通行證，是國際信心的呈現。

3. 雙邊直接捐贈 (Direct bilateral donations)

雙邊捐贈充分呈現大國與東協雙邊關係的延伸，蘊含傳統外交關係及地緣政治意涵，可從疫苗外交 (vaccine diplomacy) 的概念說明。捐贈國透過雙邊與多邊機制提供受贈國疫苗。³⁹在首波疫苗捐贈，中國、俄羅斯、印度積極輸送疫苗，反映在地緣政治的版圖。美國則在拜登新政府開始擘劃全球疫苗政策，日本、澳洲及歐盟隨之活躍於疫苗援助合作的進程。在美國更弦易轍之前，中國向全球各地推介科興及國藥疫苗，東南亞為重點區域，該時歐美無餘國際援贈，中國的疫苗外交獲得主導地位，迄 2021 年 6 月止，中國對全球輸送疫苗近 2,300 萬劑，柬、寮、泰、菲、緬都是重要受贈國。(參見圖 7)，然仍以商業採購為主，獲贈比例仍為少數。⁴⁰

³⁸ Schengen Visa Information Website, “Travel: Only 7 EU/Schengen Countries Recognise China’s Sinovac Vaccine as Valid Proof of Immunity,” 06 August 2021, <https://www.schengenvisa.info.com/news/travel-only-6-eu-schengen-countries-recognise-chinas-sinovac-vaccine-as-valid-proof-of-immunity/>

³⁹ 林份靜 (2021)，〈大國疫苗外交的推進：東南亞區域的疫情地緣政治〉，《全球政治評論》，75，頁 95-171。

⁴⁰ Samantha Kiernan, Serena Tohme, Kailey Shanks and Basia Rosenbaum, *Think Global Health*, 04 June 2021, “The Politics of Vaccine Donation and Diplomacy” <https://www.thinkglobalhealth.org/article/politics-vaccine-donation-and-diplomacy>

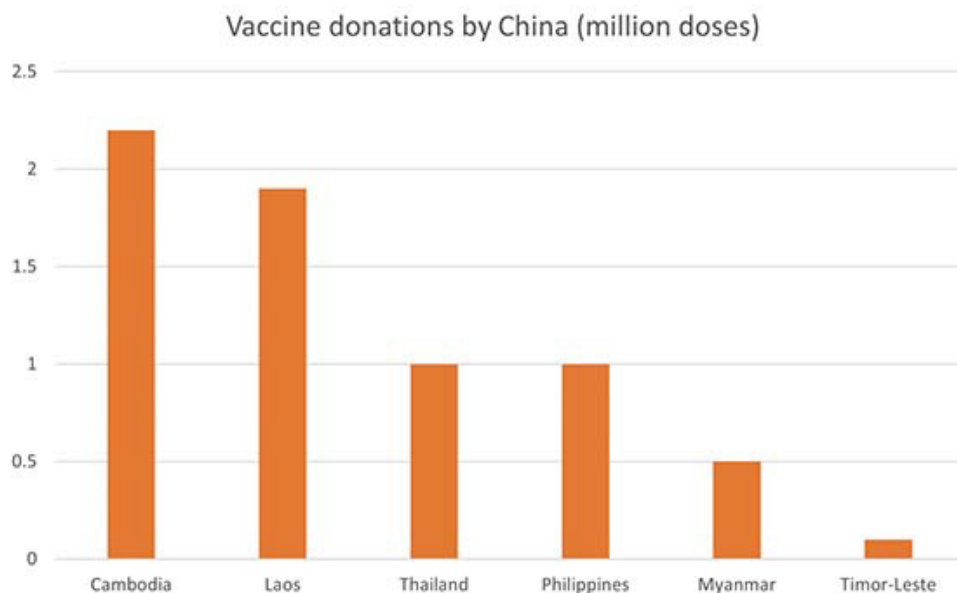


圖 7：中國對東協的疫苗捐贈

資料來源：Richard Maude, “Southeast Asia and COVID-19 Vaccines Explained,” 21 June 2021, <https://southeastasiacovid.asiasociety.org/southeast-asia-and-covid-19-vaccines-explained/>

印度因具卓越的製藥能力，獲代工英國 AZ 疫苗，主要提供 COVAX 所需疫苗。印度積極推動疫苗外交，係莫迪 (Narendra Modi) 政府東行政策 (East Act Policy) 及睦鄰優先政策 (neighborhood first) 的延伸，南亞及東協為核心區域，而東協又以緬甸為重點國家。⁴¹在首波的疫苗外交中，印度被視為平衡中國的角色，疫苗供應援助的國際角色顯著，然印度為全球前三大的疫情嚴重國家，2021 年 3 月疫情惡化，援助者角色轉為受援者，國內疫情危急，各國馳援。而莫迪政府勒禁疫苗出

⁴¹ *Ibid.*

口，衝擊 COVAX 疫苗輸送時程。⁴²

2021 年 4 月起，隨歐美本土接種率提升，美國開始積極投入全球疫苗的施放。拜登政府一改川普主張的美國優先主義，重返全球抗疫的領導角色。首先，美國重新加入 COVAX。6 月間，拜登發表全球疫苗分配聲明(Statement by President Joe Biden on Global Vaccine Distribution)定調美國在全球疫苗政策的主導地位，除重申對 COVAX 的捐助，也開始對各區域捐輸疫苗，其中東南亞比例最高。⁴³

G7 高峰會於同年 6 月舉行，疫苗亦為峰會主題，⁴⁴七國領袖承諾於 2021 年 2022 年將提供 COVAX 計 8.7 億疫苗，並於 2021 年底前至少提供半數。⁴⁵美國捐贈 COVAX 的疫苗，其中分配給亞洲國家約 700 萬劑，

⁴² Kiran Sharma, "India's COVID Second Wave Disrupts Vaccine Export Plans," *Nikkei Asia*, 20 July 2021, https://asia.nikkei.com/Spotlight/Asia-Insight/India-s-COVID-second-wave-disrupts-vaccine-export-plans?utm_campaign=IC_asia_daily_free&utm_medium=email&utm_source=NA_newsletter&utm_content=article_link&del_type=1&pub_date=20210720190000&seq_num=2&si=17107575

⁴³ 聲明要點包括：

- (1) 支持疫苗智財權的暫時性豁免 (temporarily waive intellectual property rights)；
 - (2) 將於 6 月間輸送全球 8,000 萬疫苗；首批 2,500 萬劑將送疫情嚴峻危急的國家；其中 75% 的劑量將透過 COVAX 配送，拉丁美洲及加勒比海地區獲配約 600 萬劑，南亞及東南亞地區約 700 萬劑，非洲地區約 500 萬劑；另 600 餘萬劑將直接提供情勢危急的國家及周邊國家，包括：加拿大、墨西哥、印度及南韓。
 - (3) 美國將持續與民主夥伴國的緊密合作及建立多邊協作關係，包括與 G7 的合作。
- 參考自：“Statement by President Joe Biden on Global Vaccine Distribution,” White House Statement, 03 June 2021, <https://www.whitehouse.gov/briefing-room/statements-releases/2021/06/03/statement-by-president-joe-biden-on-global-vaccine-distribution/>

⁴⁴ Finbarr Bermingham and Robert Delaney, "G7 Leaders Turn Attention to China with Announcement of Global Version of Biden's 'Build Back Better' Plan," *South China Morning Post*, 12 June 2021, https://www.scmp.com/news/china/diplomacy/article/3137082/g7-leaders-turn-attention-china-summit-focus-shifts-foreign?utm_medium=email&utm_source=mailchimp&utm_campaign=enlz-scmp_international&utm_content=20210613&tpcc=enlz-scmp_international&MCUID=8b930a1292&MCCampaignID=0332421ba4&MCAccountID=3775521f5f542047246d9c827&tc=11；

包括南亞、中亞及東協國家，有馬、菲、越、印、泰五國。⁴⁶另釋出的 8,000 萬劑 AZ 疫苗，施放國家涵蓋菲、越、印、泰、馬、寮、柬等。⁴⁷另一方面，中國緊迫在後，7 月間宣布運送 100 萬劑國藥疫苗給寮國，另同時近 74 萬劑的國藥疫苗已運抵緬甸，美國隨即再啟動對深受 Delta 疫情肆虐的東協接續另一波疫苗捐輸。⁴⁸至此，中美進入疫苗外交的競賽。

日本是另一疫苗捐助大國，與東協經貿關係緊密，與美國同步於 2021 年 7 月開始捐輸疫苗，主要為 AZ 疫苗。印、馬、菲、泰、越都已透過與雙邊協議各獲疫苗 100 萬劑。另日方已透過 COVAX 捐助柬埔寨 100 萬劑。⁴⁹透過大國的疫苗捐贈，東協才正式進入大規模接種的階

⁴⁵ “G7 Announces Pledges of 870 Million COVID-19 Vaccine Doses, of Which At Least Half to Be Delivered by the End of 2021,” *World Health Organization*, 13 June 2021, <https://www.who.int/news/item/13-06-2021-g7-announces-pledges-of-870-million-covid-19-vaccine-doses-of-which-at-least-half-to-be-delivered-by-the-end-of-2021>

“BREAKING – United States Unveils Global Vaccine Sharing Scheme for 80 Million Doses by End June,” *Health Policy Watch*, 03 June 2021, <https://healthpolicy-watch.news/united-states-to-share-at-least-80-million-covid-vaccine-doses-by-end-june-unveils-strategy-for-global-vaccine-sharing/>

⁴⁶ “BREAKING – United States Unveils Global Vaccine Sharing Scheme for 80 Million Doses by End June,” *Health Policy Watch*, 03 June 2021, <https://healthpolicy-watch.news/united-states-to-share-at-least-80-million-covid-vaccine-doses-by-end-june-unveils-strategy-for-global-vaccine-sharing/>

⁴⁷ “FACT SHEET: Biden-Harris Administration Announces Allocation Plan for 55 Million Doses to be Shared Globally,” *The White House*, 21 June 2021, <https://www.whitehouse.gov/briefing-room/statements-releases/2021/06/21/fact-sheet-biden-harris-administration-announces-allocation-plan-for-55-million-doses-to-be-shared-globally/>

⁴⁸ 7 月間，透過 COVAX，越南已獲美方捐贈 200 萬劑莫德納，寮國獲贈 100 餘萬劑嬌生疫苗，馬來西亞直接獲美方捐贈 100 萬劑輝瑞疫苗；另菲、泰亦直接獲美方贈 154 萬劑輝瑞疫苗，另菲國透過 COVAX 再獲 320 萬劑嬌生疫苗。

⁴⁹ Sebastian Strangio, “Japan Steps Up Its ‘Vaccine Diplomacy’ in Southeast Asia,” *The Diplomat*, 17 June 2021, <https://thediplomat.com/2021/06/japan-steps-up-its-vaccine-diplomacy-in-southeast-asia/>; “Japan to Provide Millions More COVID-19 Vaccine Doses to Taiwan, Asian Neighbours,” *Channel News Asia*, 13 Jul 2021, <https://www.channelnewsasia.com/news/asia/japan-donate-1-million-more-covid-19-vaccines-astrazeneca-taiwan-15210604>

表 4：東協各國疫苗施打種類 (2021 年)

國 家	獲得 COVAX 疫苗的方式	疫 苗 種 類	疫苗開始施打日程
新加坡	支付	Moderna Pfizer / BioNTech Sinovac (未納入全民施打項目)	2020/12/30
印尼	捐助	AstraZeneca Sinovac Sinopharm Pfizer / BioNTech	2021/01/13
緬甸	捐助	AstraZeneca Sinopharm	2021/01/27
汶萊	捐助	AstraZeneca Sinopharm	2021/02/10
柬埔寨	捐助	AstraZeneca Sinopharm Sinovac	2021/02/10
馬來西亞	支付	AstraZeneca Sinovac Sinopharm	2021/02/24
寮國	捐助	Sinopharm Gamaleya AstraZeneca Pfizer / Biontech Johnson & Johnson	2021/02/25
泰國	捐助	AstraZeneca Sinovac Sinopharm Pfizer / BioNTech	2021/02/28

菲律賓	捐助	AstraZeneca Sinovac Gamaleya Pfizer / BioNTech Moderna Johnson & Johnson	2021/03/01
越南	捐助	AstraZeneca Gamaleya Sinopharm Moderna Pfizer / Biontech	2021/03/08

資料來源：作者整理。

段，也得以大幅提升覆蓋率，東協各國獲得疫苗方式、種類及施打日程詳見表 4。就疫苗取得機會而言，東協是大國疫苗外交戰略下的受益者。

(三) 疫苗施打政策、成效評估及風險管控策略

新加坡最早啟動疫苗施打計畫，2020 年 12 月 30 日至 7 月底，施打輝瑞疫苗就累計 750 萬劑，至少施打一劑者約 74%，完成兩劑施打已逾 57%，是最快達到完全接種率 70% 的東協國家。印尼於 2021 年 1 月 13 日開始施打，主要施打科興疫苗，完成兩劑接種約 7.5%，要完成 70% 尚需一年以上的時程。2021 年第一季前後，其餘會員國也陸續施打，初期多以醫護人員及高風險族群為優先對象，多經數月才進展至全民大規模接種。馬來西亞僅次新加坡，也可於 2021 年第四季完成 70% 的接種率，柬埔寨緊追在後；其餘印、菲、越、汶等則需尚待 1-2 年。⁵⁰ 東協諸國都在力拼疫苗覆蓋率，寄望藉以控制疫情。⁵¹ 然初期施打率普

⁵⁰ 各國每日疫苗接種統計更新參見 :Covidvax.live website, 12 August 2022, <https://covidvax.live/location/sgp>

⁵¹ “‘Dying At Home’: Indonesians Scramble for O2,” *The ASEAN Post*, 12 July 2021, <https://theaseanpost.com/article/dying-home-indonesians-scramble-o2>

遍不高，疫苗供應不穩定及施打緩慢是主因，尤以對人口逾億人的印、菲影響最鉅，印尼高達 2.8 億人口，須施打 1.8 億人才達到抗疫成效，而 Delta 疫情緊急期間，僅有 1,500 萬人接種，而印尼整備的疫苗僅約 1.4 億劑，出現疫苗缺口。⁵²另，民眾對於疫苗接種多持保留遲疑，政府即便大力宣導，祭出誘因，仍無法提振。⁵³菲律賓總理杜特蒂 (Rodrigo Duterte) 甚威脅不施打疫苗就進監獄的威嚇發言，都可看出政府對疫苗施打成效的殷切期盼。⁵⁴究因來自民眾對政府施政的不信任及負面消息，質疑疫苗安全性，類此民意，菲律賓高達 84%，特別針對中國及俄羅斯疫苗，⁵⁵民眾意願有賴政府政策設計及公共溝通，相關成效也顯示在各國接種率的增幅。2021 年底，星、汶、柬、馬已達到逾 70% 的完全接種率 (參見圖 8)，印、菲比例較低，除人口規模大之外，民眾施打意願較低，而緬甸則因國內動亂，疫苗施打更為遲緩。

⁵² Edna Tarigan, “Indonesia Reports 54,000 Virus Cases, Becomes Asian Hotspot,” *The Diplomat*, 14 July 2021, <https://thediplomat.com/2021/07/indonesia-reports-54000-virus-cases-becomes-asian-hotspot/>

⁵³ Johanna Son, “Vaccination in Southeast Asia: It's complicated,” *Bangkok Post*, 24 April 2021, <https://www.bangkokpost.com/opinion/opinion/2104763/vaccination-in-southeast-asia-its-complicated>

⁵⁴ “‘Vaccine Or Jail?’: Duterte Warns Filipinos,” *The ASEAN Post*, 22 June 2021, <https://theaseanpost.com/article/vaccine-or-jail-duterte-warns-filipinos>

⁵⁵ Kevin S.Y. Tan and Grace Lim, “‘Vaccines and Vaccinations in Southeast Asia’s Fight against Covid-19’,” *ISEAS Perspective* (2021/58), <https://www.iseas.edu.sg/articles-commentaries/iseas-perspective/2021-58-vaccines-and-vaccinations-in-southeast-asias-fight-against-covid-19-by-kevin-s-y-tan-and-grace-lim/>; Arianna Maeve L. Amit, Veincent Christian F. Pepito, Lourdes Sumpaico-Tanchanco and Manuel M. Dayrit, “COVID-19 Vaccine Brand hesitancy and other Challenges to Vaccination in the Philippines,” *Plos Global Public Health*, 13 January 2022, pp.1-23.

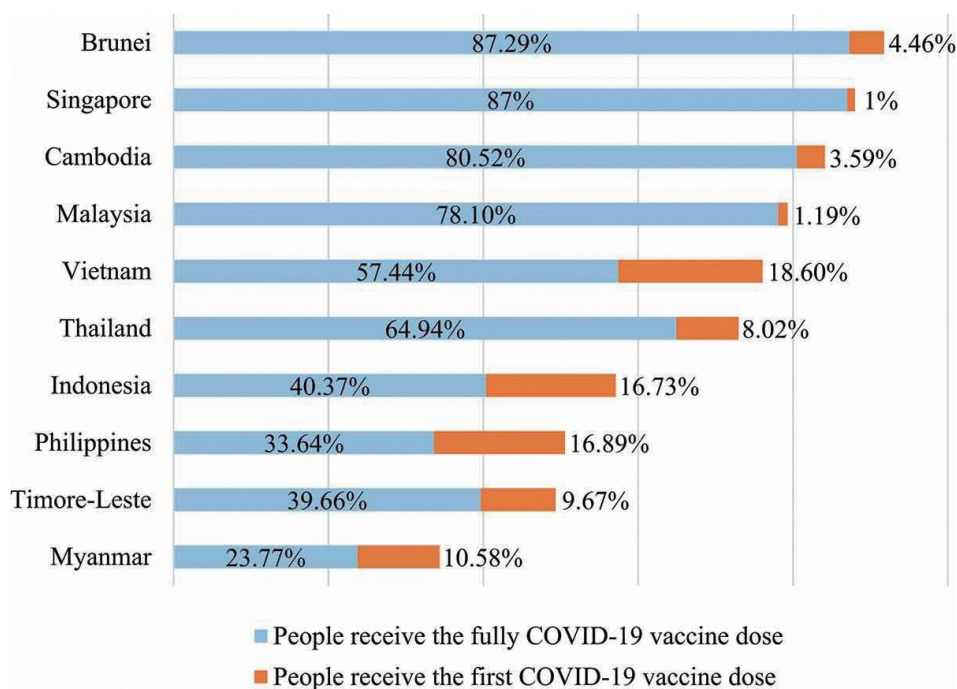


圖 8：東協疫苗接種率趨勢圖 (2021 年底)

資料來源：Dinh-Toi, Suong-Mai Vu Ngoca, Hue Vu Thia, Yen-Vy Nguyen Thia, Thuy-Tien Hoa, Van-Thuan Hoang, Vijai Singhd, and Jaffar A. Al-Tawfiq, "COVID-19 in Southeast Asia: Current Status and Perspectives," *Bioengineered*, 2022, 12 (2), pp. 3797-3809.

2021 年中半，相對於歐美逐漸解封、恢復國際運通，東協仍處封鎖狀態，究因疫情仍熾，而疫苗接種率不足，難見經濟復甦及開放邊境前景。⁵⁶分析各國疫苗施打遲緩的原因不盡相同，但共同因素在於無法掌

⁵⁶ Hanh Nguyen and James Borton, "Vaccine Shortages in Focus as COVID-19 Surges in Southeast Asia," 25 May 2021, <https://www.geopoliticalmonitor.com/vaccine-shortages-in-focus-as-covid-19-surges-in-southeast-asia/>

握疫苗供應的足量。⁵⁷ 大國疫苗的捐贈畢竟有限，亦非常久之道，缺乏疫苗產能的國家，都須仰賴國際疫苗的輸入。而容易取得的中國疫苗效力疑慮，以及是否符合清真認證等特殊因素，使得整備疫苗更為困難。⁵⁸ 如泰、印都大量施打科興疫苗，之後均調疫苗廠牌，這意味疫苗決策缺失，導致疫苗缺口更為擴大。⁵⁹ 東協近 7 億的總人口數，至少需要 14 億的疫苗劑量，其中尚未計入，因疫苗效力不足需轉換其他疫苗廠牌及加強防護力的追加劑需求，要達成整體區域的群體免疫，是東協重大的挑戰。而各成員國財政、公衛能量及國際採購的能力不同，也將擴大疫苗資源的鴻溝。新加坡是高收入國家的縮影，而緬甸則是呈現動亂國家的危機與困境。⁶⁰

東協深知疫苗短缺已經造成國家防疫及政治危機，主流疫苗藥廠全球訂單都已超訂，交付延遲已成常態。而大國在東南亞區域進行疫苗外交的競賽，擴大區域權力及戰略的競爭，降低東協中心的區域角色及外交平衡。東協致力形成區域疫苗供應中心，透過代工及國產疫苗建立供應鏈，除自給自足，亦能提供區域需求，縮小疫苗資源鴻溝，突破全球南北困局。⁶¹

⁵⁷ Richard Maude, "Southeast Asia and COVID-19 Vaccines Explained," 21 June 2021, <https://southeastasiacovid.asiasociety.org/southeast-asia-and-covid-19-vaccines-explained/>; Sydney Southeast Asia Centre, "Addressing the barriers to vaccination in Southeast Asia," <https://www.sydney.edu.au/sydney-southeast-asia-centre/news/addressing-the-barriers-to-vaccination-in-southeast-asia.html>

⁵⁸ *Ibid.*

⁵⁹ "Is China's Vaccine Success Fading in Asia?" *The ASEAN Post*, 19 July 2021, <https://theaseanpost.com/article/chinas-vaccine-success-fading-asia>

⁶⁰ Hanh Nguyen and James Borton, "Vaccine Shortages in Focus as COVID-19 Surges in Southeast Asia," 25 May 2021, <https://www.geopoliticalmonitor.com/vaccine-shortages-in-focus-as-covid-19-surges-in-southeast-asia/>; Sydney Southeast Asia Centre, "Addressing the barriers to vaccination in Southeast Asia," 26 April 2022, <https://www.sydney.edu.au/sydney-southeast-asia-centre/news/addressing-the-barriers-to-vaccination-in-southeast-asia.html>

⁶¹ "The Way Forward for Vaccine Development in Southeast Asia," *Southeast Asia Globe*, 25 March 2021, <https://southeastasiaglobe.com/the-way-forward-for-vaccine-development-in-southeast-asia/>

除競相搶購國際疫苗的熱潮，爭取國際疫苗的代工及催生國產疫苗也形成另一波的競賽。⁶²

在全球疫苗代工方面，星、泰、越、印積極爭取。泰國於 2019 年 10 月獲英國 AZ 授權代工，2021 年全年生產約 2 億劑疫苗，三分之一供泰國使用，三分之二輸送東協、臺灣等。⁶³美國輝瑞將於新加坡設廠，作為亞太區域的總部，建立核酸疫苗生產線，預計 2023 年營運。⁶⁴越南則是代工俄羅斯的衛星五號 (Sputnik V)，於 2021 年 7 月完成第一批次的樣本疫苗，⁶⁵ 2021 年底已開始量產。⁶⁶在國產疫苗研發方面，星、越、泰、印四國已有進入臨床試驗疫苗組。新加坡國產的 Lunar-Cov19 疫苗（又稱 ARCT-021），由杜克 - 新加坡國立大學醫學院（Duke-NUS Medical School）與美國藥廠 Arcturus Therapeutics 合作研發，已進入第

⁶² John Power, “Wary of Covid-19 Vaccine Shortages, Several Asian Governments are Determined to Develop Home-Grown Shots,” *South China Morning Post*, 06 June 2021, <https://www.scmp.com/week-asia/health-environment/article/3136021/wary-covid-19-vaccine-shortages-several-asian>

⁶³ “An Open Letter to the People of Thailand,” *AstraZeneca Website*, 24 July 2021, <https://www.astrazeneca.com/country-sites/thailand/press-release/an-open-letter-to-the-people-of-thailand-en.html>; “AstraZeneca to Deliver Six Million COVID-19 Vaccine Doses in Thailand,” *AstraZeneca Website*, 28 June 2021, <https://www.astrazeneca.com/country-sites/thailand/press-release/astrazeneca-to-deliver-six-million-covid-19-vaccine-doses-in-thailand.html>

⁶⁴ “BioNTech to Build Vaccine Manufacturing Site in Singapore,” *ASEAN Briefing*, 13 July 2021, <https://www.aseanbriefing.com/news/biontech-to-build-vaccine-manufacturing-site-in-singapore/>

⁶⁵ “Vietnam Produces First Batch of Russian COVID-19 Vaccine,” *Reuters*, 21 July 2021, <https://www.reuters.com/world/asia-pacific/vietnam-produces-first-batch-russian-covid-19-vaccine-2021-07-21/>

⁶⁶ “Vietnam to produce more Sputnik V vaccine in deal with Russia,” *Reutter*, 01 December 2021, <https://www.reuters.com/markets/europe/vietnam-produce-more-sputnik-v-vaccine-deal-with-russia-2021-12-01/>; “Vietnam to Increase Production of Russia’s Sputnik V Vaccine,” *ASEAN Briefing*, 03 December 2021, <https://www.aseanbriefing.com/news/vietnam-to-increase-production-of-russias-sputnik-v-vaccine/>

三期試驗。⁶⁷越南有兩組國產疫苗已進入臨床試驗，其一為 Nanogen 製藥公司研發的 Nanocovax，已進入第三期試驗。⁶⁸其二為越南衛生部疫苗與醫療生物製品研究院（IVAC）研發的 Covivac，非複製型病毒載體疫苗）。泰國研發中的三款國產疫苗，分別為朱拉隆功大學醫學中心研發的 Chula-Cov 19、泰國政府製藥機構（GPO）研發的 NDV-HXP-S 及 Baiya Phytopharm 生技公司研發的 Baiya SARS-CoV Vax 1。前二組均已進入臨床試驗，第三組也於 2021 年 8 月開始第二期試驗。Chula-Cov 19 為核酸疫苗，目前試驗結果最佳，可望最快於 2022 年推出，另兩組亦有相當進展。⁶⁹印尼主要有兩項國產疫苗研發計畫，其一為由國家贊助的「紅白疫苗計畫」（Vaksin Merah Putih）和前衛生部長主導研發的「千島疫苗」（Vaksin Nusantara）。紅白疫苗有兩組試驗發展成果較佳，包括由印尼大學研發的滅活疫苗，目前進入動物實驗階段，8 月計畫將展開人體臨床實驗，預計 2022 年量產。另一支為印尼艾克曼分子生物研究所（Eijkman）與國有製藥公司（Bio Farma）共同研發的重組蛋白疫苗，預計在 2022 年第二季完成臨床實驗並開始量產。⁷⁰

⁶⁷ “Arcturus Therapeutics Inc: LUNAR-COV19/ARCT-021,” *Covid-19 Vaccine Tracker Website*, 02 December 2022, <https://covid19.trackvaccines.org/vaccines/20/>

⁶⁸ Covid-19 Vaccine Tracker Website, “Nanogen: Nanocovax,” <https://covid19.trackvaccines.org/vaccines/72/>; “13,000 shots of Vietnam’s NanoCovax Vaccine Administered in Third Trial Phase,” *Voice of Vietnam-World*, 15 July 2021, <https://vovworld.vn/en-US/spotlight/13000-shots-of-vietnams-nanocovax-vaccine-administered-in-third-trial-phase-1004817.vov>

⁶⁹ Smriti Mallapaty, “The COVID Vaccine Pioneer behind Southeast Asia’s First mRNA Shot,” *Nature*, 26 May 2021, <https://www.nature.com/articles/d41586-021-01426-9>; COVID19 Vaccine Tracker, “Chulalongkorn University: ChulaCov19,” 02 December 2022, <https://covid19.trackvaccines.org/vaccines/65/>; COVID19 Vaccine Tracker, “Mahidol University: NDV-HXP-S,” <https://covid19.trackvaccines.org/vaccines/89/>

⁷⁰ “Indonesia Gearing Up to Produce Homegrown Covid-19 Vaccines,” 20 April 2021, <https://go.kompas.com/read/2021/04/20/162812474/indonesia-gearing-up-to-produce-homegrown-covid-19-vaccines>

四、東協疫情下的區塊化：資源鴻溝與整合困境

(一) 疫苗資源鴻溝

2021 年第一季以降，東協諸國陸續展開大規模疫苗接種，檢視全國接種率，除新加坡如同多數歐美國家，已達逾半比例，如期於 8 月已達成符合群體免疫 70% 以上的兩劑接種率，其餘各成員國則預估遲至 2022 年下半年能達成。而陷入軍變動亂的緬甸，若現況未獲改善，則更需數年才能達標（參看表 6）。⁷¹ 隨全球疫苗捐贈增加、自購疫苗到貨，東南亞地區已歷經疫苗短缺的緊急情勢，在 2021 年 8 月至 2022 年 1 月苗完成兩劑施打加速，其中越、泰都是自個位數增長至近 70%，增幅最為顯著。其中印、菲原預估於 2022 年 3 月可達目標值，統計迄至 5 月底約六成，仍未達標。⁷² 比較各國的達標時程，人口數、疫苗品牌偏好及公衛資源是主要差異因素。越、泰兩國全國基層公衛較為完備，施打效率較佳；印、菲兩國除人口眾多，染疫總數亦重，疫苗需求更為迫切，較易取得的中國疫苗防護力受到質疑，民眾偏好歐美疫苗，此外行政支援較薄弱，如印尼為島國，眾多島民如何獲得施打的便利，就是一大問題，施打進程更受拖延。⁷³ 相較之下，人口規模較小的柬、寮兩國，即使公衛體系不完善，完成接種比例快速增加。整體觀之，相較 2021 年 3 月的預估，東協整體接種進程明顯提速，顯示疫苗供量增加及政策執行見效。

⁷¹ “More Than 4.06 Billion Shots Given: Covid-19 Tracker,” *Bloomberg*, 31 July 2021, <https://www.bloomberg.com/graphics/covid-vaccine-tracker-global-distribution/>

“More Than 4.06 Billion Shots Given: Covid-19 Tracker,” *Bloomberg*, 31 July 2021, <https://www.bloomberg.com/graphics/covid-vaccine-tracker-global-distribution/>

⁷² “Coronavirus (COVID-19) Vaccinations,” *Our World in Data*, 30 May 2022, https://ourworldindata.org/covid-vaccinations?country=OWID_WRL

⁷³ Sydney Southeast Asia Centre, “Addressing the Barriers to Vaccination in Southeast Asia,” 26 April 2022, <https://www.sydney.edu.au/sydney-southeast-asia-centre/news/addressing-the-barriers-to-vaccination-in-southeast-asia.html>

表 6：東協國家疫苗接種率預估及實際達成情形 (2021 年 3 月預估值)

國家／人口數	兩劑接種 70% 預估完成率 (2021 年預估)	兩劑接種 70% 實際完成率 (2022 年 3 月更新)	已施打疫苗總劑次 (含第 3、4 劑) (2022 年 3 月 8 日預 估值)／平均每 100 人施打劑次
新加坡	2021 年 8 月	已達	13,702,985/ 251.26
汶萊	2022 年 2 月	已達	1,063,036/ 240.76
印尼	2022 年 9 月	預計 2022 年 3 月完成	1,790,201,259/ 128.67
馬來西亞	2021 年 9 月	已達	1,063,036/ 206.96
泰國	2022 年 7 月	已達	124,729,996/ 178.31
菲律賓	2022 年 10 月	預計 2022 年 3 月完成	151,172,258/ 136.12
越南	2022 年 3 月	已達	198,848,783/ 202.55
柬埔寨	2021 年 10 月	已達	1,063,036/ 212.87
緬甸	未知	預計 2023 年 7 月	45,105,892/ 82.30
寮國	2023 年 9 月	預計 2022 年 4 月	9,417,411/ 127.61

資料來源：Covidvax Live Website, 30 August 2022, <https://covidvax.live/>

達成兩劑疫苗施打接種率目標值並不是終點，疫苗效力消退及新變異病毒疫情再起，歐美早已開打第 3、4 劑的加強劑。星國幾與歐美同步，於 2021 年 8 月達標後，隨於 9 月已開打加強劑，統計至 2022 年 5 月，每百人施打加強劑比例近 75%，汶、越、柬、馬緊追在後，相較 2021 年初第一波的疫苗施打，星、汶依然領先在前，然越、柬在新一波追加疫苗時程，積極追趕，印、菲仍較遲緩，同一期間，僅約

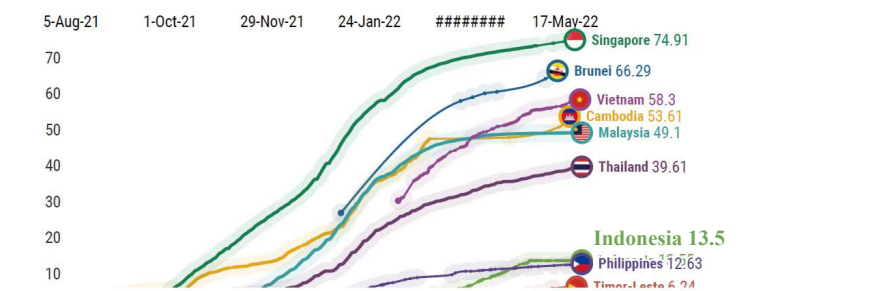


圖 9：東協各國每百人施打加強劑數 (2022 年 5 月統計)

資料來源：“In Numbers: COVID-19 Vaccination in Southeast Asia,” Reporting ASEAN, 30 May 2022, <https://www.reportingasean.net/in-numbers-covid-19-vaccination-in-southeast-asia/>

13%。而緬甸完全接種率則尚未達 50%。(參見圖 9)⁷⁴ 這將再次凸顯東協疫苗資源不均困境，不僅是疫苗取得問題，亦涉及疫苗政策的調整與執行成效，其中統計至 2022 年 3 月，印、菲疫苗施打總數雖列居前位(參見圖 10)，但完成率始終較為緩慢，足見逾億人口規模、政府財政、公衛能量及民眾勸導的公共溝通都是影響因素。

⁷⁴ “In Numbers: COVID-19 Vaccination in Southeast Asia,” *Reporting ASEAN*, 30 May 2022, <https://www.reportingasean.net/in-numbers-covid-19-vaccination-in-southeast-asia/>; Covidvax Live Website, 30 May 2022, <https://covidvax.live/>

東協國家防疫及疫苗政策的檢視及研析：2020 至 2022 年初期間

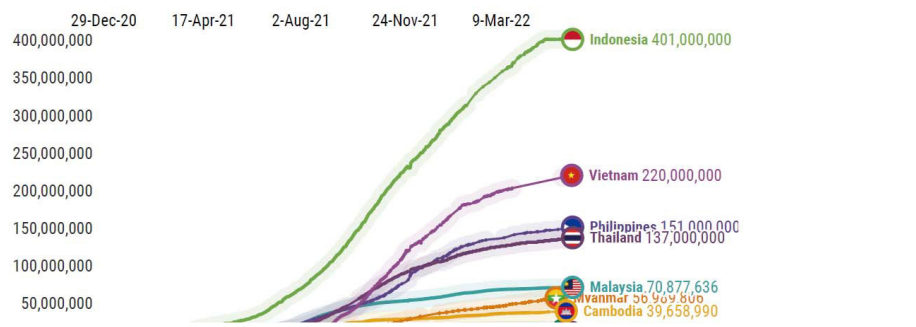


圖 10：東協各國疫苗施打總數 (2022 年 3 月統計)

資料來源：“In Numbers: COVID-19 Vaccination in Southeast Asia,” *Reporting ASEAN*, 30 May 2022, <https://www.reportingasean.net/in-numbers-covid-19-vaccination-in-southeast-asia/>

(二) 疫苗取得的不確定

1. 中國疫苗的疑慮

東南亞是中國疫苗施放的主要區域，疫苗效力問題引發印、泰、馬等國的公衛及政治危機。⁷⁵東協初期採購多以中國疫苗為主，究因與交付時程及雙邊關係有關。中國大力推舉疫苗外交，結合國際宣傳、大國關係及一帶一路計畫利益等目的，兼具軟硬實力相輔的政治、經濟及外交效益。然中國疫苗效力始終是個議題，東協中印、泰、馬都是用於大規模施打，疫情未見好轉。印、泰首先對醫護人員施打科興，後有數百名完成接種後仍染疫。這迫使兩國政府，不論先前對該疫苗的擁護，最終轉向採購更多歐美疫苗。⁷⁶

⁷⁵ “Is China's Vaccine Success Fading in Asia?” *The ASEAN Post*, 19 July 2021, <https://theaseanpost.com/article/chinas-vaccine-success-fading-asia>

⁷⁶ Jon Emont, “Hit Hard by Covid-19, Southeast Asian Countries Turn to Western Vaccines,” *The Wall Street*, 16 July 2021, <https://www.wsj.com/articles/hit-hard-by-covid-19-southeast-asian-countries-turn-to-western-vaccines-11626451122>

中國疫苗成為東協疫苗政策的不穩定因素，甚構成政府執政危機及社會不安，泰國反對勢力再起即針對帕拉育政府疫苗採購政策的失誤。東協各國均持有科興或國藥疫苗，印、泰、菲、柬、寮官方表現高度肯定態度，並極力維護疫苗效力。而新、越、緬則持低調。新加坡持有科興疫苗 20 萬，遲至世界衛生組織 2021 年 6 月初納入緊急使用名單 (EUL) 後，官方才核准選定的民間醫療診所提供有意願的民眾施打，惟未屬國家公費疫苗項目，亦不得申請整政府醫療保險的傷亡救濟，另不納入全國接種統計。⁷⁷ 馬來西亞於 7 月中公布現有科興疫苗存量用畢將不再施打，將改施打美國輝瑞疫苗，科興與國藥則只提供民間醫院施打。⁷⁸ 同期間，泰國公布批准科興混打 AZ 疫苗，另對全國 97% 已施打科興兩劑的醫護人員，再追加第三劑的輝瑞疫苗，以加強防護力。印尼也將對施打科興的醫護加打莫德納為加強劑。⁷⁹ 隨著國際疫苗陸續到貨及美、日捐贈增加，歐美疫苗施打逐漸成為主流，特別是加強劑，多以核酸疫苗 (mRNA) 為主。

2. 國際疫苗搶購白熱化

星、越、泰持續研發國產疫苗，均有進入臨床試驗二期的疫苗組，但能取得緊急授權並量產，都需尚待至 2022 年中，因此面對 2021 年的疫情緊急狀態，仍需依賴國際疫苗的輸入，國際捐贈有限，因此仍寄望

⁷⁷ “Singapore Omits Sinovac Shots from COVID-19 Vaccination Tally,” *Reuter*, 07 July 2021, <https://www.reuters.com/world/asia-pacific/singapore-not-counting-sinovac-shots-covid-19-vaccination-tally-2021-07-07/>

⁷⁸ Hazlin Hassan, “Malaysia Denies Efficacy Issues Led to Sinovac Covid-19 Vaccine Being Phased out,” *The Straits Times*, 16 July 2021, <https://www.straitstimes.com/asia/se-asia/malaysia-denies-efficacy-issues-led-to-sinovac-vaccine-being-phased-out>

⁷⁹ Aradhana Aravindan and Chen Lin and Chalida Ekvittayavechnukul, “Thailand to Join COVAX, Acknowledging Low Vaccine Supply,” 22 July 2021, <https://thediplomat.com/2021/07/thailand-to-join-covax-acknowledging-low-vaccine-supply/>

採購疫苗及時到貨。全球疫苗市場，各國都在搶購。上文提及，疫苗尚未問世，訂單多數就來自已開發國家，大量整備多倍於本國人口數的疫苗數量，為來年疫情變化提前儲備。而覆蓋率尚未逾半的東協國家，因應疫情多變，除加速施打進程，另調高覆蓋率，疫苗需求擴增。各國深受疫苗供需的影響。如印度因國內疫情限制代工的 AZ 疫苗出口，另一代工 AZ 疫苗的泰國廠因產能不穩及本土疫情惡化急需疫苗，影響 AZ 疫苗供或其他東協成員國的數量及時程。

莫德納東南亞的供應商 Zuellig Pharma 藥廠就表示，2021 年東南亞的地區的莫德納訂單都已超額滿訂，全球產能已達極限，新的訂單都必須等到 2022 年才能供貨，新、菲、泰等都已洽購來年疫苗訂單，加強防護施打第三劑疫苗將於來年成為國際趨勢，勢將擴大疫苗需求。⁸⁰值得觀察的是，獲得最多國家授權緊急使用的疫苗為 AZ，輝瑞等，中國的國藥、俄羅斯的衛星五號雖亦獲多國核准，但就實際採購數量及是否用於全民施打，歐美疫苗佔有率呈持續增加趨勢，而中、俄疫苗雖有採購 / 受贈國政府支持，但國際信譽及評價已現警示。隨區域開放及疫苗護照 (vaccine passport) 的實行，接種疫苗的廠牌涉及國際認證及信心，如歐盟現仍未認證中、俄疫苗。這將成為東協疫苗決策的另一因素。

國際疫苗市場長期為歐美藥廠所主導，如 Merck, GlaxoSmithKline, Pfizer 及 Sanofi Pasteur 等，供應全球疫苗生產的 80%，主要研發及產能仍集中於歐美。⁸¹ 新冠肺炎疫情接種堪稱人類史大最大規模的施打計畫。

⁸⁰ Aradhana Aravindan, "Moderna SE Asia Partner Says Regional Vaccine Supplies Booked until Year-End," *Reuters*, June 29, 2021, <https://www.reuters.com/world/asia-pacific/moderna-se-asia-partner-says-regional-vaccine-supplies-booked-until-year-end-2021-06-29/>

⁸¹ "The Way Forward for Vaccine Development in Southeast Asia," *Southeast Asia Globe*, 25 March 2021, <https://southeastasiaglobe.com/the-way-forward-for-vaccine-development-in-southeast-asia/>

2021年7月止，超過180個國家已施打逾40億劑疫苗，每天平均施打約3,970萬劑，美國已施打約3.5億劑。⁸²美國輝瑞先前已獲准施打青少年族群，而莫德納也於7月獲歐盟食藥局獲准，這意味歐美國家將需更多疫苗用於年輕人口，全球疫苗超訂將持續至2022年。⁸³

2021年，全球疫苗產能已達限，短期而言，東協疫苗短缺問題難以根絕，來年預期仍是搶購白熱化局面，各國現已如火如荼洽簽2022年的訂單，特別全球疫情反覆、歐美預備第3、4劑疫苗、開發中國家力拼覆蓋率、施打年齡下降等，疫苗需求將有增無減。對於東協而言，雖積極發展國產疫苗，以降低對國際疫苗的依賴，然國產疫苗尚未成功量產之前，仍需確保疫苗來源。東協內部存在疫苗資源鴻溝，新加坡與印尼、菲律賓的覆蓋率形成強烈對比。如何透過東協區域一體，透過集體交涉提高國際疫苗的議價及取得的優勢，是發揮區域集體行動的策略；而建立區域疫苗輸送與管理的機制，將是區域疫苗合作的可行方案。⁸⁴

(三) 國家風險及社會危機

疫情升高的同時，不僅擴大公衛危機，同時因人民對政府不滿增加，伴隨失業、貧窮、犯罪問題惡化，危及執政穩定，民心浮動，社會危機加劇。疫情已成為國家風險的因子，並在東南亞擴散。菲國雖採取壓制社會異議，但仍出現抗議失業及食物短缺的全國示威活動。泰國

⁸² “More Than 4.06 Billion Shots Given: Covid-19 Tracker,” *Bloomberg*, 31 July 2021, <https://www.bloomberg.com/graphics/covid-vaccine-tracker-global-distribution/>

⁸³ “European Medicines Agency Approves Moderna’s COVID Vaccine for Children Ages 12-17,” Health Policy Watch News Website, 23 July 2021, <https://healthpolicy-watch.news/moderna-covid-vaccine-approved-for-children-12-to-17-in-europe/>

⁸⁴ “Southeast Asia’s Vaccine-Shaped Road to Recovery,” *Bangkok Post Opinion*, 25 March 2021, <https://www.bangkokpost.com/opinion/opinion/2089311/southeast-asias-vaccine-shaped-road-to-recovery>

因疫苗政策受到質疑，7 月民運再起，各界反政府力量集結，不滿政府購入大量科興疫苗，防護力受到質疑，而代工 AZ 藥廠 Siam Bioscience 疫苗交付延遲，漠視人民需要優質疫苗的需求，疫苗不足及政府防控不當導致疫情惡化，要求帕拉育政府下臺聲浪不斷。⁸⁵ 泰國負責疫苗採購的國家疫苗中心 (National Vaccine Institute) 公開承認疫苗短缺及施打遲緩而道歉，並改加入 COVAX，並調整疫苗施打政策，即上文所提的科興混打 AZ 及完成兩劑接種的醫護加打第三劑的輝瑞，這反映醫界及民眾先前對科興的疑慮，因此對政府持續編列預算增購科興，另皇家系統的朱拉蓬學院 (Chulabhorn Royal Academy) 持續購入中國國藥疫苗，更感不滿。⁸⁶

馬來西亞政治不安衝擊疫情，醫師組織揚言發動示威抗議。另全國緊急狀態無限期的延長，國會自 2021 年 1 月停議數月，國家政策形同停擺，陷入民主與公衛的雙重危機。⁸⁷ 緬甸因軍變危機已成為失敗國

⁸⁵ Jitsiree Thongnoi, "Thailand's street protests return, taking aim at Prayuth's handling of Covid-19 pandemic," *South China Morning Post*, July 29, 2021, https://www.scmp.com/week-asia/health-environment/article/3142864/thailands-street-protests-return-taking-aim-prayuths?utm_medium=email&utm_source=cm&utm_campaign=enlz-coronavirusupdate&utm_content=20210729&tpcc=enlz-coronavirusupdate&UUID=5fa87f84-70da-4529-a62a-b2db25495684&tc=21&CMCampaignID=e7971b9b3348a1a8b02bbb46b3a8f9c1; Thitinan Pongsudhirak, "Correcting the Pandemic Policy Tack," *Bangkok Post*, 30 July 2021, <https://www.bangkokpost.com/opinion/opinion/2156963/correcting-the-pandemic-policy-tack?fbclid=IwAR3pDnwm0yi9HvPj9G-yX7hmsUokc-HB26xVvJYAV5Or70PkAoSwFUDtGB0>; "Protesters Call For Thai PM's Resignation," *The ASEAN Post*, 19 July 2021, <https://theaseanpost.com/article/protesters-call-thai-pms-resignation>

⁸⁶ Chalida Ekvittayavechnukul, "Thailand to Join COVAX, Acknowledging Low Vaccine Supply," 22 July 2021, <https://thediplomat.com/2021/07/thailand-to-join-covax-acknowledging-low-vaccine-supply/>

⁸⁷ Joshua Kurlantzick, "Malaysia's Political Crisis Is Dooming Its COVID-19 Response," *World Politics Review*, 23 July 2021, https://www.worldpoliticsreview.com/articles/29828/in-malaysia-political-crisis-dooms-covid-19-response?utm_source=WPR+Free+Newsletter&utm_campaign=dc9cd8d9c6-weekly-free-072421&utm_medium=email&utm_term=0_6e36cc98fd-dc9cd8d9c6-64615490&mc_cid=dc9cd8d9c6&mc_eid=8a9e5a852d. 〈Delta 病毒打亂東南亞解封計畫 大馬無限期全國封鎖〉，《公視新聞網》，2021 年 6 月 28 日，<https://news.pts.org.tw/article/532685>

家，國家正面臨解體危機，自 2021 年 2 月迄今，政治動亂加劇疫情危機，軍方與醫護人員的對抗，防疫體系瓦解，疫苗施打計畫停擺，疫情失控，全國陷入高度染疫風險中。⁸⁸ 緬甸成為區域疫情溫床，大量人民逃離，進入周邊的越、寮、泰、柬，政治動盪升高周邊及區域疫情情勢。⁸⁹

2022 年初，Omicron 疫情擴散，東協的開放政策再次受阻，鎖國情勢再現。⁹⁰ 然相較前幾波疫情，Omicron 較不易造成重症、死亡，且隨疫苗接種率大幅提升，鑒於歐美多已開放出入境，降低檢疫規格，這也影響到東協成員的關閉政策，亦趨向逐步開放鬆綁，視疫情流感化及與病毒共存成為趨勢，這反映東協共同的困境，已無法負荷因疫情

⁸⁸ “Myanmar Junta Declares War on Medic,” *Daily Sabah*, 06 July 2021, <https://www.dailysabah.com/world/asia-pacific/myanmar-junta-declares-war-on-medics>; Helen Regan, “Myanmar Doctors in Hiding and Hunted by the Junta as Covid Crisis Ravages the Country,” CNN, 22 July 2021, <https://edition.cnn.com/2021/07/21/asia/myanmar-covid-oxygen-intl-hnk/index.html>; “COVID And Coup: Pushing Myanmar To The Brink,” *The ASEAN Post*, 30 July 2021, <https://theaseanpost.com/article/covid-and-coup-pushing-myanmar-brink>

⁸⁹ “What’s Happening in Myanmar, 6 Months After the Coup?” *Bangkok Post*, 01 August 2021, <https://www.bangkokpost.com/world/2158027/whats-happening-in-myanmar-6-months-after-the-coup->; Samantha Kiernan, Bayan Galal, Serena Tohme and Thomas J. Bollyky, “Pandemic Protests: When Unrest and Instability Go Viral,” *Think Global Health*, July 28, 2021, <https://www.thinkglobalhealth.org/article/pandemic-protests-when-unrest-and-instability-go-viral>; “COVID And Coup: Pushing Myanmar to The Brink,” *The ASEAN Post*, 30 July 2021, <https://theaseanpost.com/article/covid-and-coup-pushing-myanmar-brink>

⁹⁰ Chad De Guzman, “Asia Has Kept COVID-19 at Bay for 2 Years. Omicron Could Change That,” *Time*, 18 January 2022, <https://time.com/6139851/asia-omicron-covid-surge/>; Natasha Khan, Mike Cherney and Miho Inada, “Omicron Disrupts Reopening Plans Across Asia,” *Wall Street Journal*, 29 November 2021, <https://www.wsj.com/articles/omicron-disrupts-reopening-plans-across-asia-11638186847>; Robin Harding, John Reed, and Chan Ho-him, “Omicron Forces Asian Countries to Abandon Reopening of Borders,” *Financial Times*, December 24 2021, <https://www.ft.com/content/2642cd6a-c35d-40e5-8300-77f4423113ba>

封閉國境造成的經濟與社會的危機。⁹¹即使 Omicron 疫情未歇，重新開放 (reopening) 已成為東協 2022 年的優先政策，這意味已不再續行零確診策略，惟各國開放幅度及時程有異，如泰、越、緬已開放完整疫苗接種旅客入境免隔離，另新、馬、印、菲、寮則仍有入境隔離天數規定，各國開放及檢疫措施不一，這仍會形成另一形式的區域流動障礙，東協的重新開放政策需要各國入境措施的協調整合。⁹²新的政治風險將來自重新開放的壓力，當鄰國已經恢復國際通運及經濟復甦，防疫轉型為與病毒共存，而自身國家還因疫情膠著及疫苗施打不足遲遲未能開放國境及解除移動與商業管制。

五、結論

(一) 混合公衛、政治經濟及外交因素的防疫及疫苗政策

新冠肺炎疫情對全球的衝擊是全面性且持續性，已非限於公衛危機，並擴大為政治、經濟及安全危機，2020 年疫情自中國武漢爆發，接鄰的泰國出現中國境外的首例，陸路東協旋為疫情高風險區。然而，泰國、緬甸、柬埔寨等接鄰中國均及早採取邊境管制，新冠肺炎疫情反在歐美各國大流行。除印、菲人口眾多、未採嚴格邊防及檢疫隔離外，多數東協國家疫情防控不俗，越南、泰國就被評比為全球防疫典範之

⁹¹ Robin Harding, John Reed in Bangkok and Chan Ho-him, “Omicron Forces Asian to Abandon Reopening of Border,” *Financial Times*, 24 December 2021, <https://www.ft.com/content/2642cd6a-c35d-40e5-8300-77f4423113ba>

⁹² Emma Connors, “Frustrated Airlines Slam South-East Asia’s ‘Disorderly’ Reopening,” *Financial Review*, 16 February 2022, <https://www.afr.com/world/asia/frustrated-airlines-slam-south-east-asia-s-disorderly-reopening-20220215-p59wru>

一。隨 Alpha、Delta 病毒株的盛行，第二波、第三波疫情進入東南亞，諸國自 2021 年 4 月起陸續爆發嚴重疫情，確診、死亡及重症均出現疫情以來的新高。時序進入 8 月，多國均陷入日增數萬人的染疫，醫療體系瀕臨瓦解、百業蕭條，國家進入公衛緊急情勢及政治動亂的雙重危機，在菲、馬、泰都可見示威抗議，責難政府防疫不力。而 2021 年爆發軍變的緬甸則因國內情勢動盪，疫情緊急。邊境管制措施已不足因應新一波疫情，疫苗施打被視為最有效的防控策略，而東南亞疫苗施打的延遲，成為疫情嚴峻的歸因。

東協疫苗施打進度凸顯資源鴻溝問題，星、印最先開始疫苗施打，其餘各國均於疫情惡化前後才啟動，而疫苗不足為共同困境，這係全球疫苗資源分配不均的問題，東協為其縮影。新加坡 2021 年 8 月即已達成全國 70% 以上的接種率，符合群體免疫的覆蓋率，馬來西亞亦於 2021 年底前完成，其餘成員則尚需年餘的時間，而陷入軍變動亂的緬甸則遙遙無期。印、菲、泰、越人口規模較大，疫苗需求迫切。疫苗不足是國際現實，也與一國疫苗政策有關。印、菲因人民施打意願低落，即便疫情嚴峻，仍難以拉升接種率，這與人民對政府信心有關，印尼大量施打中國科興疫苗，而菲律賓前於 2016 年曾發生學童施打登革熱疫苗的失策，都是阻礙全民疫苗施打的不利因素。而泰、越因先前防守良好，無疫苗施打迫切，待疫情驟然轉惡，才開始啟動全國疫苗施打，已錯失預防良機。泰國因單一仰賴代工 AZ 疫苗，未料產量不如預期且交付延遲，轉而大量增購中國疫苗，成為國內政治危機的主因。越南以歐美疫苗為主，但交付不足，亦拖延國內施打進程。

東協對深知依賴國際疫苗具高度不確定，星、泰、越等都積極研發國產疫苗及爭取國際疫苗的代工，目的在於降低全球疫苗供需的制約，達到自給自足之外，亦能對外輸出，提供東協疫苗取得的自主性，並擴大東協推動區域防疫合作的資源及能動性。星、泰、越三國的國產

疫苗均已進入臨床試驗階段，然迄 2022 中期仍未完成，這無助扭轉短期之內東協疫苗缺乏及依賴外來輸入的現況。

疫情是公衛危機，並已擴大為國內政治危機，也將成為外交議題。在各國疫苗決策中，可見外交關係的延續，東協與中國密切，印、泰、緬、寮、柬等都是一帶一路的參與國，表現大力支持中國疫苗的立場，呈現中國在東協的主導地位及影響力。然隨著拜登政府一改川普時期疫苗國家主義的政策，透過疫苗大國的角色，重返全球防疫領導的地位。美、中戰略競爭已延伸至疫苗外交賽局，東南亞是中國的戰略場域，而美國重拾東協的信任與戰略合作，大國關係將再次形塑東協區域政治及安全。對東協而言，將帶來疫苗資源，尤以疫苗需求仍熾，國際援贈疫苗有助縮短區域疫苗鴻溝。美國為首的印太聯盟持續對東南亞捐贈疫苗，在東協的防疫、疫苗政策及區域合作方面，將可見更為顯著角色；⁹³另一方面，中國亦將加碼施力抗衡，東南亞已是大國疫苗外交的主要場域，過於依賴大國疫苗的捐輸，將不可避免的受到牽制，而東協也尚未發展自產疫苗及建立區域疫苗共享架構，而無法主導疫苗供需穩定，疫苗鴻溝問題將有礙區域重新流動及連結。在東南亞疫情的區域政治中，東協需重新檢視在疫情時代的大國關係下，如何重新帶回東協中心 (ASEAN-centric) 的地位及大國平衡的外交傳統，邊境防疫及疫苗政策也將反映出新的區域安全情勢。

⁹³ “Southeast Asia Covid-19 Tracker,” *Center for Strategic & International Studies*, 10 March 2022, <https://www.csis.org/programs/southeast-asia-program/projects/past-projects/southeast-asia-covid-19-tracker>

(二) 下一波的壓力：恢復邊境開放及區域連結的窒礙

東協對於重新開放邊境、恢復區域連結已具高度共識及決心，均視 2022 年為重新開放年。東協於 1 月 19 日在柬埔寨舉行的第 25 屆觀光部長會議中宣示重啟區域觀光業，說明即使疫情未歇，東協已決定與病毒共處，推動新的旅遊型態，建立共同的安全規範，提出《東協旅遊標章》(ASEAN Safe Travel Stamp)，及展開推行《東協旅遊走廊協議架構》(ASEAN Travel Corridor Arrangement Framework, ATCAF)，恢復區域連結與流通將成為 2022 年東協的主軸。⁹⁴ 各國莫不逐步鬆綁邊防、降低入境限制門檻，惟開放幅度與進程不一，以泰國推動鼓吹最力，泰國已於 2022 年初恢復完整接種旅客入境免隔離，⁹⁵其餘則採漸進開放，越南於 2 月間恢復 20 條國際航線，有條件開放旅客入境；菲律賓也開放接種觀光商旅旅客入境免隔離；印尼於 3 月開始開放美國、加拿大、英國等 23 國接種旅客入境巴厘島入境自主管理免隔離。新加坡則透過接種旅遊通道 (Vaccinated Travel Lane) 首先開放自美國入境旅客。馬來西亞亦於 4 月全面開放接種旅客入境。⁹⁶可預期，東協在下半年將會有更大幅度的開放。鑒於疫苗接種、檢測證明普遍成為入境條件，為恢復區域流通及經濟、觀光商機，東協目前積極推動區域流通便捷化措施，如 2022 年 3 月東協經濟部長會議討論發行單一數位疫苗證明 (digital vaccination certificate) 的可行性，適用於區域通行的疫苗護照，將有助活絡區域內高達 5,100 萬旅遊人口，提振觀光業的復甦。

⁹⁴ ASEAN (2022), *The 25th ASEAN Tourism Ministers 19 January 2022 Joint Media Statement*.

⁹⁵ “PM Presses ASEAN to Reopen,” *Bangkok Post*, 27 October 2021. <https://www.bangkokpost.com/thailand/general/2204491/pm-presses-asean-to-reopen>

⁹⁶ Natalie B. Compton, “Asia is Slowly Reopening to Travelers. Here’s Where You Can Go,” *Washington Post*, 11 October 2021, <https://www.washingtonpost.com/travel/tips/asia-travel-restrictions-americans-thailand-bali/>

⁹⁷然實際問題在於東協缺乏文件認證的法律制度及個資安全管理的規範，不利推動疫苗護照之類的共同採認的機制平臺。⁹⁸此外，各成員國內疫情風險不一，相互開放邊境，建立互惠出入境規範，實難付諸實行。檢視現況，隨著疫苗接種率提升，邊境管制雖逐漸鬆綁，若均以完整疫苗接種成為入境條件，星、汶、馬、泰都已開打第 3、4 劑，而印、菲、寮、緬則未完成第 2 劑的 70% 接種率，對於達到區域自由流通仍待時日。⁹⁹後疫情時代，邊境管制顯然已非最佳策略，恢復商旅流通及觀光、經濟復甦成為東協首要目標及區域合作的重點，而如何衡平各會員疫苗接種率、邊防檢疫政策及相互認證為當前要務。

⁹⁷ Kentaro Iwamoto, "ASEAN Eye Digital Vaccine Certificate for Post-COVID Travel," *Nikkei Asia*, 03 March 2021, <https://asia.nikkei.com/Economy/ASEAN-eyes-digital-vaccine-certificate-for-post-COVID-travel>

⁹⁸ *Ibid.*

⁹⁹ *Ibid.*

參考文獻

中文部分

- 〈Delta 病毒打亂東南亞解封計畫 大馬無限期全國封鎖〉，《公視新聞網》，2021 年 6 月 28 日，<https://news.pts.org.tw/article/532685>。
- 〈防疫優等生東南亞 為什麼擋不住 Delta ？〉，《天下雜誌》，2021 年 9 月 8 日，<https://www.cw.com.tw/article/5118050>。
- 〈東南亞疫情再現高峰！連防疫模範生越南也失守〉，《TVBS》，2021 年 5 月 11 日，<https://today.line.me/tw/v2/article/zLqOX7>。
- 林份靜 (2021)，〈大國疫苗外交的推進：東南亞區域的疫情地緣政治〉，《全球政治評論》，75，頁 95-171。

外文部分

- “‘Dying At Home’: Indonesians Scramble for O2,” *The ASEAN Post*, 12 July 2021, <https://theaseanpost.com/article/dying-home-indonesians-scramble-o2>
- “‘Vaccine Or Jail?’: Duterte Warns Filipinos,” *The ASEAN Post*, 22 June 2021, <https://theaseanpost.com/article/vaccine-or-jail-duterte-warns-filipinos>
- “13,000 Shots of Vietnam’s NanoCovax Vaccine Administered in Third Trial Phase,” *Voice of Vietnam-World*, 15 July 2021, <https://vovworld.vn/en-US/spotlight/13000-shots-of-vietnams-nanocovax-vaccine-administered-in-third-trial-phase-1004817.vov>
- “An Open Letter to the People of Thailand,” *AstraZeneca Website*, accessed

- on 24 July 2021, <https://www.astrazeneca.com/country-sites/thailand/press-release/an-open-letter-to-the-people-of-thailand-en.html>
- “Arcturus Therapeutics Inc: LUNAR-COV19/ARCT-021,” *Covid-19 Vaccine Tracker Website*, 02 December 2022, <https://covid19.trackvaccines.org/vaccines/20/>
- “AstraZeneca to Deliver Six Million COVID-19 Vaccine Doses in Thailand,” *AstraZeneca Website*, 28 June 2021, <https://www.astrazeneca.com/country-sites/thailand/press-release/astrazeneca-to-deliver-six-million-covid-19-vaccine-doses-in-thailand.html>
- “BioNTech to Build Vaccine Manufacturing Site in Singapore,” *ASEAN Briefing*, 13 July 2021, <https://www.aseanbriefing.com/news/biontech-to-build-vaccine-manufacturing-site-in-singapore/>
- “BREAKING – United States Unveils Global Vaccine Sharing Scheme for 80 Million Doses by End June” *Health Policy Watch*, 03 June 2021, <https://healthpolicy-watch.news/united-states-to-share-at-least-80-million-covid-vaccine-doses-by-end-june-unveils-strategy-for-global-vaccine-sharing/>
- “Brunei Govt Announce Temporary Suspension on Travel from Indonesia,” *The Star*, 19 July 2021, <https://www.thestar.com.my/aseanplus/aseanplus-news/2021/07/19/brunei-govt-announce-temporary-suspension-on-travel-from-indonesia>
- “Brunei Reopens Green Lane for Singapore Essential Travellers,” *The Scoop*, July 12, 2021, <https://thescoop.co/2021/07/12/brunei-reopens-green-lane-for-singapore-essential-travellers/>
- “Cambodia Closes Land Border Gates with Thailand and Vietnam to Control COVID-19 Surge,” *Khmertimeskh*, 4 July 2021, <https://www.>

- khmertimeskh.com/50886601/cambodia-temporarily-closes-land-border-gates-with-thailand-and-vietnam-to-control-covid-19-surge/
- “Cambodia's Hun Sen: 'If I Don't Rely on China, Who Will I Rely On?’”
Nikkei Asia, 20 May 2021, <https://asia.nikkei.com/Spotlight/The-Future-of-Asia/The-Future-of-Asia-2021/Cambodia-s-Hun-Sen-If-I-don-t-rely-on-China-who-will-I-rely-on>
- “Chulalongkorn University: ChulaCov19,” *COVID19 Vaccine Tracker*, 29 April 2022, <https://covid19.trackvaccines.org/vaccines/65/>
- “COVID And Coup: Pushing Myanmar to The Brink,” *The ASEAN Post*, 30 July 2021, <https://theaseanpost.com/article/covid-and-coup-pushing-myanmar-brink>
- “Covid Performance Index,” *Lowry Institute*, <https://interactives.lowryinstitute.org/features/covid-performance/>
- “Covid-19: Myanmar Extends Travel Suspension until August 31,” *Khaleej Times*, 31 July 2021, <https://www.khaleejtimes.com/coronavirus-pandemic/covid-19-myanmar-extends-travel-suspension-until-august-31>
- “European Medicines Agency Approves Moderna’s COVID Vaccine for Children Ages 12-17,” *Health Policy Watch News Website*, accessed on 23 July 2021, <https://healthpolicy-watch.news/moderna-covid-vaccine-approved-for-children-12-to-17-in-europe/>
- “FACT SHEET: Biden-Harris Administration Announces Allocation Plan for 55 Million Doses to be Shared Globally,” *The White House*, 21 June 2021, <https://www.whitehouse.gov/briefing-room/statements-releases/2021/06/21/fact-sheet-biden-harris-administration-announces-allocation-plan-for-55->

million-doses-to-be-shared-globally/

“G7 Announces Pledges of 870 Million COVID-19 Vaccine Doses, of Which At Least Half to Be Delivered by the End of 2021,” World Health Organization, 13 June 2021, <https://www.who.int/news/item/13-06-2021-g7-announces-pledges-of-870-million-covid-19-vaccine-doses-of-which-at-least-half-to-be-delivered-by-the-end-of-2021>

“Hospital Turns to Containers for Body Storage,” *Bangkok Post*, 31 July 2021, <https://www.bangkokpost.com/thailand/general/2157747/hospital-turns-to-containers-for-body-storage>

“Indonesia Gearing Up to Produce Homegrown Covid-19 Vaccines,” *Kompas*, 20 April 2021, <https://go.kompas.com/read/2021/04/20/162812474/indonesia-gearing-up-to-produce-homegrown-covid-19-vaccines?page=all>

“Indonesia Rejects Unvaccinated Foreign Visitors,” *Jakarta Globe*, 04 July 2021, <https://jakartaglobe.id/lifestyle/indonesia-rejects-unvaccinated-foreign-visitors>

“Is China's Vaccine Success Fading in Asia?” *The ASEAN Post*, 19 July 2021, <https://theaseanpost.com/article/chinas-vaccine-success-fading-asia>

“Japan to Provide Millions More COVID-19 Vaccine Doses to Taiwan, Asian Neighbours,” Channel News Asia, 13 July 2021, <https://www.channelnewsasia.com/news/asia/japan-donate-1-million-more-covid-19-vaccines-astrazeneca-taiwan-15210604>

“Mahidol University: NDV-HXP-S,” 26 April 2022, <https://covid19.trackvaccines.org/vaccines/89/>

“More Than 4.06 Billion Shots Given: Covid-19 Tracker,” *Bloomberg Website*, accessed on 31 July 2021, <https://www.bloomberg.com/>

graphics/covid-vaccine-tracker-global-distribution/

“Myanmar Junta Declares War on Medic,” *Daily Sabah*, 06 July 2021, <https://www.dailysabah.com/world/asia-pacific/myanmar-junta-declares-war-on-medics>

“Nanogen: Nanocovax,” *Covid-19 Vaccine Tracker Website*, 23 April 2022, <https://covid19.trackvaccines.org/vaccines/72/>

“PM Presses ASEAN to Reopen,” *Bangkok Post*, 27 October 2021, <https://www.bangkokpost.com/thailand/general/2204491/pm-presses-asean-to-reopen>

“Protesters Call for Thai PM’s Resignation,” *The ASEAN Post*, 19 July 2021, <https://theaseanpost.com/article/protesters-call-thai-pms-resignation>

“Singapore Omits Sinovac Shots from COVID-19 Vaccination Tally,” *Reuter*, 07 July 2021, <https://www.reuters.com/world/asia-pacific/singapore-not-counting-sinovac-shots-covid-19-vaccination-tally-2021-07-07/>

“Southeast Asia Covid-19 Tracker,” *Center for Strategic & International Studies*, accessed on 10 March 2022, <https://www.csis.org/programs/southeast-asia-program/projects/past-projects/southeast-asia-covid-19-tracker>

“Southeast Asia Covid-19 Tracker,” *Center for Strategic and International Studies*, 28 July 2021, <https://www.csis.org/programs/southeast-asia-program/projects/southeast-asia-covid-19-tracker>

“Southeast Asia's Vaccine-Shaped Road to Recovery,” *Bangkok Post Opinion*, 25 March 2021, <https://www.bangkokpost.com/opinion/opinion/2089311/southeast-asias-vaccine-shaped-road-to-recovery>

“Statement by President Joe Biden on Global Vaccine Distribution,”

- White House Statement*, 03 June 2021, <https://www.whitehouse.gov/briefing-room/statements-releases/2021/06/03/statement-by-president-joe-biden-on-global-vaccine-distribution/>
- “Thai Hospitals Short of Beds as COVID Cases Soar,” *The ASEAN Post*, 30 June 2021, <https://theaseanpost.com/article/thai-hospitals-short-beds-covid-cases-soar>
- “The Flaws Behind Indonesia’s COVID Surge,” *The ASEAN Post*, 10 July 2021, <https://theaseanpost.com/article/flaws-behind-indonesias-covid-surge>
- “The Gavi COVAX AMC Explained,” Gavi Website, 15 February 2021, <https://www.gavi.org/vaccineswork/gavi-covax-amc-explained>
- “The Way Forward for Vaccine Development in Southeast Asia,” *Southeast Asia Globe*, 25 March 2021, <https://southeastasiaglobe.com/the-way-forward-for-vaccine-development-in-southeast-asia/>
- “US Sends Vietnam 2 Million Covid Vaccine Doses,” *Vnexpress*, 06 July 2021, <https://e.vnexpress.net/news/news/us-sends-vietnam-2-million-covid-vaccine-doses-4305076.html>
- “Vietnam Produces First Batch of Russian COVID-19 Vaccine,” *Reuters*, 21 July 2021, <https://www.reuters.com/world/asia-pacific/vietnam-produces-first-batch-russian-covid-19-vaccine-2021-07-21/>
- “Vietnam to Increase Production of Russia’s Sputnik V Vaccine,” *ASEAN Briefing*, 03 December 2021, <https://www.aseanbriefing.com/news/vietnam-to-increase-production-of-russias-sputnik-v-vaccine/>
- “Vietnam to Produce More Sputnik V vaccine in Deal with Russia,” *Reutter*, 01 December 2021, <https://www.reuters.com/markets/europe/vietnam-produce-more-sputnik-v-vaccine-deal-with-russia-2021-12-01/>

- “What's Causing Vaccine Delays in Some Asian Countries?” *BBC*, 08 March 2021, <https://www.bbc.com/news/world-asia-56150755>
- “What's Happening in Myanmar, 6 months After the Coup?” *Bangkok Post*, 01 August 2021, <https://www.bangkokpost.com/world/2158027/whats-happening-in-myanmar-6-months-after-the-coup-%202021>
- Amit, Arianna Maever L., V. C. F. Pepito, L. S.-T. and M. M. Dayrit, “COVID-19 Vaccine Brand hesitancy and other Challenges to Vaccination in the Philippines,” *Plos Global Public Health*, 13 January 2022, pp.1-23.
- Amul, G. G., M. Ang, D. Kraybill, S. E. Ong, and J. Yoong (2022), “Responses to COVID-19 in Southeast Asia: Diverse Paths and Ongoing Challenges,” *Asian Economic Policy Review*, 17, <https://doi.org/10.1111/aepr.12362>
- Aravindan, A. and Chen Lin and C. Ekvittayavechnukul, “Thailand to Join COVAX, Acknowledging Low Vaccine Supply,” 22 July 2021, <https://thediplomat.com/2021/07/thailand-to-join-covax-acknowledging-low-vaccine-supply/>
- Aravindan, A. “Moderna SE Asia Partner Says Regional Vaccine Supplies Booked until Year-End,” *Reuters*, June 29, 2021, <https://www.reuters.com/world/asia-pacific/moderna-se-asia-partner-says-regional-vaccine-supplies-booked-until-year-end-2021-06-29/>
- ASEAN (2022), The 25th ASEAN Tourism Ministers 19 January 2022 Joint Media Statement
- Bermingham, F. and R. Delaney, “G7 Leaders Turn Attention to China with Announcement of Global Version of Biden’s ‘Build Back Better’ Plan,” *South China Morning Post*, 12 June 2021, <https://>

www.scmp.com/news/china/diplomacy/article/3137082/g7-leaders-turn-attention-china-summit-focus-shifts-foreign?utm_medium=email&utm_source=mailchimp&utm_campaign=enlz-scmp_international&utm_content=20210613&tpcc=enlz-scmp_international&MCUID=8b930a1292&MCCampaignID=0332421ba4&MCAccountID=3775521f5f542047246d9c827&tc=11

Compton, N. B., “Asia is Slowly Reopening to Travelers. Here’s Where you can go,” *Washington Post*, 11 October 2021, <https://www.washingtonpost.com/travel/tips/asia-travel-restrictions-americans-thailand-bali/>

Connors, E., “Frustrated airlines slam south-east Asia’s ‘disorderly’ reopening,” *Financial Review*, 16 February 2022, <https://www.afr.com/world/asia/frustrated-airlines-slam-south-east-asia-s-disorderly-reopening-20220215-p59wru>

Corpuz, J. C. G., “COVID-19 Vaccination Certificate (CVC) for ASEAN: The Way Forward?” *Journal of Public Health*, 09 June 2021, <https://doi.org/10.1093/pubmed/fdab202>

Covidvax Live Website, 03 May 2022, <https://covidvax.live/location/lao>

Cullinan, K., “Ambitious Push to Resume Routine Immunisations to Save 50 Million Lives – COVAX Waits for Indian Vaccines,” *Health Policy Watch*, 26 April 2021, <https://healthpolicy-watch.news/ambitious-push-to-resume-routine-immunisations-to-save-50-million-lives/>

Dancel, R., “Philippines Extends Travel ban to Malaysia, Thailand; Imposes Curbs amid Delta-Fuelled Covid-19 Surge,” *The Straits Times*, 23 July 2021, <https://www.straitstimes.com/asia/se-asia/philippines-to-bar-travel-from-malaysia-thailand-to-curb-delta-covid-19s-spread>

- Ekvittayavechnukul, C., “Thailand to Join COVAX, Acknowledging Low Vaccine Supply,” 22 July 2021, <https://thediplomat.com/2021/07/thailand-to-join-covax-acknowledging-low-vaccine-supply/>
- Gavi Website- Covax Vaccine Roll-Out, updated on 29 July 2021, [https://www.gavi.org/covax-vaccine-roll-out\(2021/07/29\)](https://www.gavi.org/covax-vaccine-roll-out(2021/07/29))
- Government Public Relations Department, “Government Aims to Fully Reopen Thailand within the Next 120 Days,” 16 June 2021, https://thailand.prd.go.th/mobile_detail.php?cid=4&nid=11443
- Guzman, C. D., “Asia Has Kept COVID-19 at Bay for 2 Years. Omicron Could Change That,” *Time*, 18 January 2022, <https://time.com/6139851/asia-omicron-covid-surge/>
- Harding, R. J. Reed, and C. Ho-him, “Omicron Forces Asian Countries to Abandon Reopening of Borders,” *Financial Times*, 24 December 2021, <https://www.ft.com/content/2642cd6a-c35d-40e5-8300-77f4423113ba>
- Hassan, H., “Malaysia Denies Efficacy Issues Led to Sinovac Covid-19 Vaccine Being Phased out,” *The Straits Times*, 16 July 2021, <https://www.straitstimes.com/asia/se-asia/malaysia-denies-efficacy-issues-led-to-sinovac-vaccine-being-phased-out>
- Hoecklin, M., “Indonesia Becomes Epicenter of COVID Pandemic, as Southeast Asia is Battered by Third Wave” *Health Policy Watch*, 19 July 2021, <https://healthpolicy-watch.news/indonesia-becomes-epicenter-of-covid-pandemic-as-southeast-asia-is-battered-by-third-wave/><https://covid19.trackvaccines.org/vaccines/72/>
- Hutt, D., “The Regional Absence in Mainland Southeast Asia’s COVID-19 Strategy,” *The Diplomat*, 12 July 2021, <https://thediplomat.com/2021/07/12/the-regional-absence-in-mainland-southeast-asias-covid-19-strategy/>

com/2021/07/ the-regional-absence-in-mainland-southeast-asias-covid-19-strategy/

Iwamoto, K.,” ASEAN Eye Digital Vaccine Certificate for Post-COVID Travel,”*Nikkei Asia*, 03 March 2021, <https://asia.nikkei.com/Economy/ASEAN-eyes-digital-vaccine-certificate-for-post-COVID-travel>

Jon E., “Hit Hard by Covid-19, Southeast Asian Countries Turn to Western Vaccines,” *The Wall Street*, 16 July 2021, <https://www.wsj.com/articles/hit-hard-by-covid-19-southeast-asian-countries-turn-to-western-vaccines-11626451122>

Khan, N., M. Cherney and M. Inada, “Omicron Disrupts Reopening Plans Across Asia,” *Wall Street Journal*, 29 November 2021, <https://www.wsj.com/articles/omicron-disrupts-reopening-plans-across-asia-11638186847>

Kiernan, S., S. Tohme, K. Shanks and B. Rosenbaum, “The Politics of Vaccine Donation and Diplomacy,” *Think Global Health*, 04 June 2021, <https://www.thinkglobalhealth.org/article/politics-vaccine-donation-and-diplomacy>

Kiernan, S., B. Galal, S. Tohme, and T. J. Bollyky, “Pandemic Protests: When Unrest and Instability Go Viral,” *Think Global Health*, 28 July 2021, <https://www.thinkglobalhealth.org/article/pandemic-protests-when-unrest-and-instability-go-viral>

Kunthear, M., “PM Set for Japan’s Covid Jabs,” *Phnom Penh Post*, 21 July 2021, <https://www.phnompenhpost.com/national/pm-set-japans-covid-jabs>

Kurlantzick, J., “Malaysia’s Political Crisis Is Dooming Its COVID-19 Response,” *World Politics Review*, 23 July 2021, <https://www.>

worldpoliticsreview.com/articles/29828/in-malaysia-political-crisis-dooms-covid-19-response?utm_source=WPR+Free+Newsletter&utm_campaign=dc9cd8d9c6-weekly-free-072421&utm_medium=email&utm_term=0_6e36cc98fd-dc9cd8d9c6-64615490&mc_cid=dc9cd8d9c6&mc_eid=8a9e5a852d

Lee, G. and Q. S. Jye, “Commentary: A Digital Vaccine Passport Could Open Up Southeast Asia Travel Bubble but Some Changes Needed First,” *Channel News Asia*, 09 April 2021, <https://www.channelnewsasia.com/news/commentary/asean-vaccine-passport-travel-border-open-covid-19-restriction-14580756>

Loh, D., “Singapore Eyes September Border Easing Once Vaccine Rate Hits 80%,” *Nikkei Asia*, 26 July 2021, <https://asia.nikkei.com/Spotlight/Coronavirus/Singapore-eyes-September-border-easing-once-vaccine-rate-hits-80>

Mallapaty, S., “The COVID Vaccine Pioneer behind Southeast Asia’s first mRNA Shot,” *Nature*, 26 May 2021, <https://www.nature.com/articles/d41586-021-01426-9>

Maude, R., “Southeast Asia and COVID-19 Vaccines Explained,” 21 June 2021, <https://southeastasiacovid.asiasociety.org/southeast-asia-and-covid-19-vaccines-explained/>

Maulia, E., “Indonesia Overtakes India to Become Asia's COVID Epicenter,” *Nikkei Asia*, 13 July 2021, <https://asia.nikkei.com/Spotlight/Coronavirus/Indonesia-overtakes-India-to-become-Asia-s-COVID-epicenter>

Mazumdar, T., “India's Covid Crisis Hits Covax Vaccine-Sharing Scheme,” *BBC*, 17 May 2021, <https://www.bbc.com/news/world-57135368>

- Ng, E., “Other Nations in South-east Asia Ramping up Covid-19 Vaccination Drives,” *The Strait Times*, 17 July 2021, <https://www.straitstimes.com/asia/se-asia/other-nations-in-south-east-asia-ramping-up-covid-19-vaccination-drives>
- Nguyen, H., and J., Borton, “Vaccine Shortages in Focus as COVID-19 Surges in Southeast Asia,” 25 May 2021, <https://www.geopoliticalmonitor.com/vaccine-shortages-in-focus-as-covid-19-surges-in-southeast-asia/>
- Organization for Economic Co-operation and Development (OECD), “Regulatory Responses to the COVID-19 Pandemic in Southeast Asia,” 11 October 2021, <https://www.oecd.org/coronavirus/policy-responses/regulatory-responses-to-the-covid-19-pandemic-in-southeast-asia-b9587458/>
- Pandey, S., “New Zealand, Vietnam Top COVID Performance Ranking; U.S., UK Languish,” *Reuters*, 28 January 2021, <https://www.reuters.com/article/us-health-coronavirus-australia-lowy-idUSKBN29W311>
- Pongsudhirak, T., “Correcting the Pandemic Policy Tack,” *Bangkok Post*, 30 July 2021, <https://www.bangkokpost.com/opinion/opinion/2156963/correcting-the-pandemic-polic-tack?fbclid=IwAR3pDnwm0yi9HvPj9G-yX7hmsUokc-HB26xVvJYAV5Or70PkAoSwFUDtGB0>
- Power, J., “Wary of Covid-19 Vaccine Shortages, Several Asian Governments are Determined to Develop Home-Grown Shots,” *South China Morning Post*, 06 June 2021, <https://www.scmp.com/week-asia/health-environment/article/3136021/wary-covid-19-vaccine-shortages-several-asian>
- Regan, H., “Myanmar Doctors in Hiding and Hunted by the Junta as

- Covid Crisis Ravages the Country,” *CNN*, 22 July 2021, <https://edition.cnn.com/2021/07/21/asia/myanmar-covid-oxygen-intl-hnk/index.html>
- Sawatzky, J., “How Relevant Is COVAX to Middle-Income Countries?” *Think Global Health*, 15 July 2021, <https://www.thinkglobalhealth.org/article/how-relevant-covax-middle-income-countries>
- Schengen Visa Information Website, “Travel: Only 7 EU/Schengen Countries Recognise China’s Sinovac Vaccine as Valid Proof of Immunity,” 06 August 2021, <https://www.schengenvisainfo.com/news/travel-only-6-eu-schengen-countries-recognise-chinas-sinovac-vaccine-as-valid-proof-of-immunity/>
- Sebastian S., “Japan Steps Up Its ‘Vaccine Diplomacy’ in Southeast Asia,” *The Diplomat*, 17 June 2021, <https://thediplomat.com/2021/06/japan-steps-up-its-vaccine-diplomacy-in-southeast-asia/>
- Sharma, K., “India's COVID Second Wave Disrupts Vaccine Export Plans,” *Nikkei Asia*, 20 July 2021, https://asia.nikkei.com/Spotlight/Asia-Insight/India-s-COVID-second-wave-disrupts-vaccine-export-plans?utm_campaign=IC_asia_daily_free&utm_medium=email&utm_source=NA_newsletter&utm_content=article_link&del_type=1&pub_date=20210720190000&seq_num=2&si=17107575
- Son, J., “Vaccination in Southeast Asia: It's complicated,” *Bangkok Post*, 24 April 2021, <https://www.bangkokpost.com/opinion/opinion/2104763/vaccination-in-southeast-asia-its-complicated>
- Sydney Southeast Asia Centre, “Addressing the Barriers to Vaccination in Southeast Asia,” 26 April 2022, <https://www.sydney.edu.au/sydney-southeast-asia-centre/news/addressing-the-barriers-to-vaccination-in-southeast-asia.html>

- Tan, K. S.Y. and G. Lim (2021), “Vaccines and Vaccinations in Southeast Asia’s Fight against Covid-19,” *ISEAS Perspective*, <https://www.iseas.edu.sg/articles-commentaries/iseas-perspective/2021-58-vaccines-and-vaccinations-in-southeast-asias-fight-against-covid-19-by-kevin-s-y-tan-and-grace-lim/>
- The Economist Intelligence Unit (2021), *Coronavirus Vaccines: Expect Delays*, London: The Economist Intelligence Unit Limited, pp.1-10.
- Thompson, N., “Southeast Asia Had COVID-19 Under Control. What Went Wrong?” *Foreign Policy*, 26 May 2021, <https://foreignpolicy.com/2021/05/26/southeast-asia-covid-pandemic-cases-laos-thailand-vietnam-myanmar-cambodia/>
- Thongnoi, J., “Thailand’s Street Protests Return, Taking Aim at Prayuth’s Handling of Covid-19 Pandemic,” *South China Morning Post*, 29 July 2021, <https://www.scmp.com/week-asia/health-environment/article/3142864/thailands-street-protests-return-taking-aim-prayuths>
- World Health Organization Website, “Coronavirus Disease (COVID-19): Vaccines,” 17 May 2022, [https://www.who.int/news-room/q-a-detail/coronavirus-disease-\(covid-19\)-vaccines?topicsurvey=&gclid=EAIaIQobChMI2ITsteS08QIVzX4rCh0k9QEOEAAYASAAEgK9evD_BwE](https://www.who.int/news-room/q-a-detail/coronavirus-disease-(covid-19)-vaccines?topicsurvey=&gclid=EAIaIQobChMI2ITsteS08QIVzX4rCh0k9QEOEAAYASAAEgK9evD_BwE).
- Xinghui, K., and D. Sim, “Singapore’s Return to Tighter Rules Raises the Question: What Does Living with Covid-19 Really Mean?” *South China Morning Post*, 23 July 2021, https://www.scmp.com/week-asia/health-environment/article/3142180/singapores-return-tighter-rules-raises-question-what?utm_medium=email&utm_source=mailchimp&utm_campaign=enlz-scmp_global_impact&utm_

content=20210725&tpcc=enlz-china_coronavirus&MCUID=8b930a1
292&MCCampaignID=c65eec8849&MCAccountID=3775521f5f542
047246d9c827&tc=27

Zainuddin, A., “Politics is Wrecking Malaysia’s Pandemic Response,”
The Diplomat, 09 August 2021, [https://thediplomat.com/2021/08/
politics-is-wrecking-malysias-pandemic-response/](https://thediplomat.com/2021/08/politics-is-wrecking-malysias-pandemic-response/)

The Review and Analysis of COVID-19 Pandemic Control and Vaccination Policy by ASEAN Countries: 2020—Early 2022

Yi Ching Lin *

Abstract

In the aftermath of the outbreak of Coronavirus (COVID-19) worldwide in early 2020, as global infection was rising, Southeast Asia countries demonstrated good performance in pandemic control due to stringent border control and domestic regulation. However, with another wave of new-variant pandemic, such as Alpha, Beta, Delta and Omicron, the SE Asia countries saw a tremendous rising in infections due to the vaccination delay against rapid-transmission virus, border-reopening and domestic deregulation measures. The pandemic response and massive vaccination policy adopted by individual ASEAN policies share some similarities, while some variances are showed in the decision-making under the influence of medical and health science, domestic politics, economy, and foreign relations. This essay reviews the disease-control and vaccination policy by every ASEAN country, in which the similarities and variances from micro-to macro-dimension along the phase of pandemic development are addressed, and the prospect of regional cooperation and re-connectiveness is further assessed.

Keywords: ASEAN, COVID-19 Pandemic, disease-control, vaccination, border reopening, regional cooperation

* PhD, Department of Diplomacy, National Chengchi University.
Email: sabine4746@yahoo.com.tw.