

COVID-19 VACCINATION SRI LANKAN APPROACH



**Researched and Conceptualized by
State Intelligence Service**

COVID-19 VACCINATION – SRI LANKAN APPROACH
EXECUTIVE SUMMARY

1. Since the first detection of the Coronavirus (COVID-19) in Wuhan Province in China in December 2019, the world has now spent nearly two years under the COVID-19 pandemic. Vaccines intended to provide immunity against the COVID-19 provided a major hope for the world and Sri Lanka planned for the vaccination of its population parallel to any other country.
2. His Excellency's vision in vaccination against the COVID-19 is "***free vaccine up to the last citizen and nationwide vaccination at the fastest possible mean***". Sri Lankan approach into COVID-19 vaccination focuses on (a) securing vaccines (b) administration of vaccines and (c) monitoring of the progress.
3. **Continuous Planning.** On 12 January 2021, His Excellency the President appointed a Vaccine Task Force to sphere-head national deployment and vaccination for COVID-19. Ministry of Health, National Operation Centre for Prevention of COVID-19 Outbreak and Vaccine Task Force focused on identifying hotspots, specific groups, approval for vaccines, developing vaccination roadmap and allocation of vaccines to fulfil national vaccination objectives.
4. **Securing Vaccines.** Process to secure vaccines through procuring, donations or COVID-19 Vaccines Global Access commenced in early 2021. Personal involvement of His Excellency the President himself to speak to Presidents and Heads of States in friendly foreign countries, contributed tremendously to realize the early arrival of vaccines to Sri Lanka. As of 24 August 2021, Sri Lanka has received 20,800,964 doses of different types vaccines.
5. **Administration of Vaccines.** Sri Lanka commenced the vaccination of front-liners with on 29 January 2021 and as of 11 August 2021 completed the 100% vaccination of above 30 population with first dose. Sri Lanka has been commended by the World Health Organization for vaccination progress and was also placed once at the first by "Our World in Data" for highest rolling of vaccination in 7-day average per 100 people in the total population.
6. **Monitoring of Progress.** Monitoring is an essential part of the whole vaccination process and His Excellency the President weekly meets the Vaccine Committee to assess the progress of the vaccination drive. Each dose of different vaccines arrived Sri Lanka is counted, accounted, charted, number of doses administered and stock levels are monitored on daily basis to avoid any misuse.
7. Sri Lanka commenced the COVID-19 vaccination in late January 2021 and completed vaccination of above 30 population by 11 August 2021. Sri Lanka intends to fully vaccinate them by mid-September 2021 and even commenced vaccination of above 18 population by mid-August 2021. There is no doubt that Sri Lanka, as a developing nation has done remarkable well in the COVID-19 vaccination unparalleled to any other country in the world.

COVID-19 VACCINATION – SRI LANKAN APPROACH

INTRODUCTION

1. Since the first detection of the Coronavirus (COVID-19) in Wuhan Province in China in December 2019, the world has now spent nearly two years under the COVID-19 pandemic. Every country in the world is affected differently due to the COVID-19 pandemic. Impact of the pandemic is not only limited to the global health security. It has largely impacted the global economy creating domino effects on many other spheres. Vaccines intended to provide immunity against the COVID-19 provided a major hope for the world to overcome the pandemic. Many countries undertook genetic sequencing of COVID-19 by early 2020, commenced developing vaccine candidates by March 2020 and by late 2020, a number of countries implemented vaccination programmes against the COVID-19.

SRI LANKA’S APPROACH FOR COVID-19 PANDEMIC

2. Vision of His Excellency the President in combatting the COVID-19 has been “**proactive intervention to prevent any outbreak of COVID-19 within Sri Lanka**” whilst keeping the economy moving. Sri Lanka acted well before the pandemic hit the region and adjusted, readjusted strategies as epicenters of the pandemic shifted from China to America, Europe and then to India. The Government promptly imposed many control measures from local and international travel restrictions to localized and countrywide lockdowns. This is whilst many other actions across several fields were taken covering (a) detection, isolation and contact tracing (b) medical surveillance, lab investigations and case management (c) right information to public, confidence building and consolidate solidarity and (d) supply of food and medicine and maintenance of essential service. The strategy adopted is a “whole-of-government approach”.

SRI LANKA’S APPROACH FOR COVID-19 VACCINATION

3. His Excellency’s vision in vaccination against the COVID-19 is “**free vaccine up to the last citizen and nationwide vaccination at the fastest possible mean**”. The Government of Sri Lanka (GoSL) planned for the vaccination of its population parallel to any other country. It explored all possibilities to purchase different vaccine candidates and even to produce vaccines within Sri Lanka. Sri Lankan approach into COVID-19 vaccination focuses on (a) securing vaccines (b) administration of vaccines and (c) monitoring of the progress:

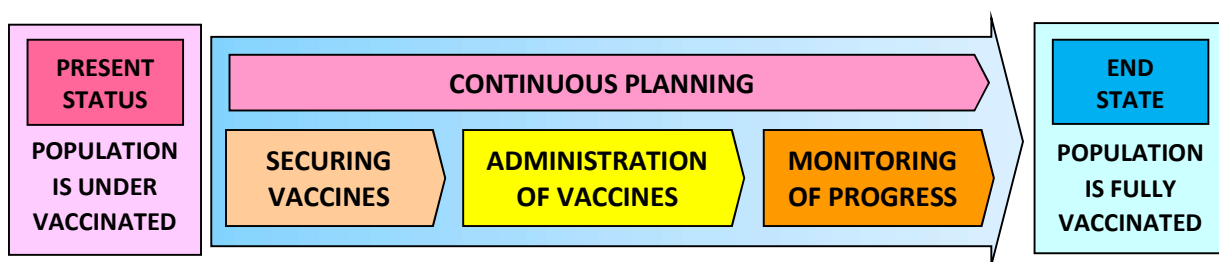


Figure 1 : Conceptualization of Vaccination Process.

CONTINUOUS PLANNING

4. The GoSL undertook studies on vaccine candidates as early as December 2020 and on 12 January 2021, His Excellency the President appointed an eight-member committee headed by the Principal Advisor to the President, Mr. Lalith Weeratunga for national deployment and vaccination plan for COVID-19. Ministry of Health has been given the operational responsibility of vaccination drive. State Ministry of Production, Supply and Regulation of Pharmaceuticals has been given the responsibility of purchases and State Pharmaceuticals Corporation (SPC) of Sri Lanka was given the sole authority to procure vaccines thereby avoiding any third-party involvements.

5. **Prioritization of Hotspots.** National Operation Centre for Prevention of COVID-19 Outbreak (NOCPCO) along with Vaccine Task Force, Health and Medical Experts and Intelligence Services deployed different mechanics to identify hotspots for vaccination. These hotspots ranged from Provinces, Districts upto smallest administrative area; Grama Niladhari Division. Extensive and careful studies of the COVID situation to include number of daily positive cases, deaths, inputs from contact tracing, number of people under quarantine, medical / health factors which include hospital, bedding and ICU capacities, population dynamics, mobility data, range of other social factors, inputs from genome sequencing and many others. This process was dynamic and was ever evolving with changes in daily situation. Number of modelling tools have also been extensively used for this purpose:

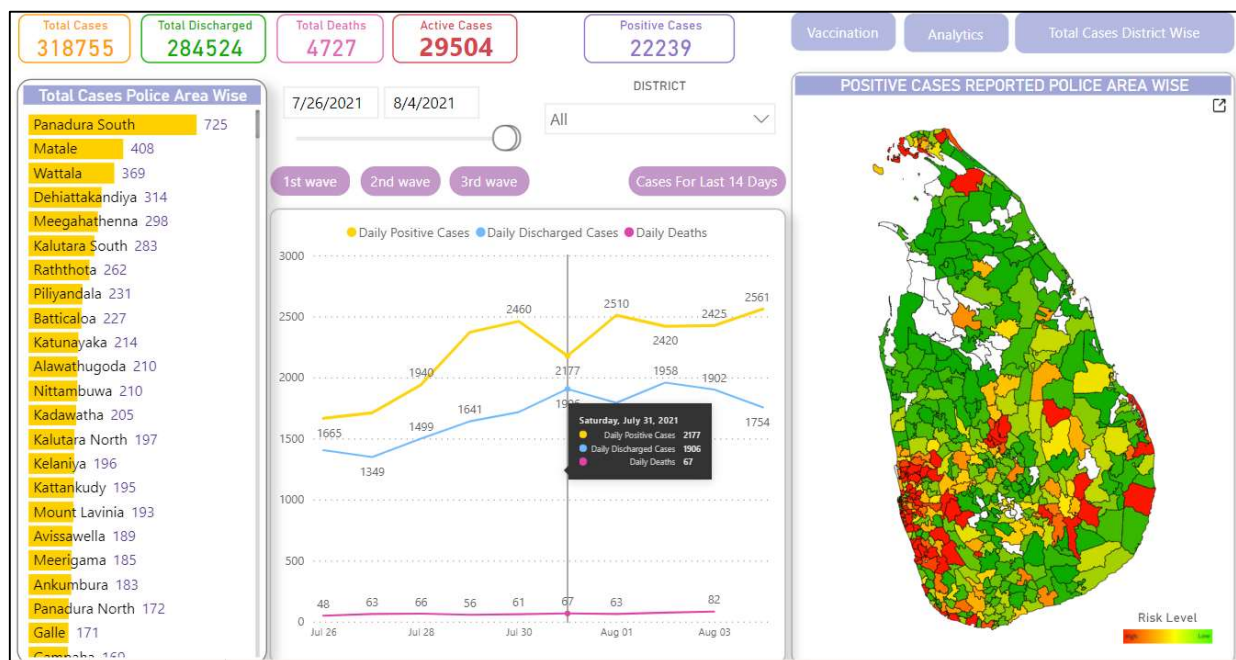


Figure 2 : Identification of Hotspots.

6. **Prioritization of Specific Groups.** Prioritization of vaccination took place in line with the World Health Organization (WHO) guidelines and first group to be vaccinated in Sri Lanka was the frontline health, community workers and Security Forces personnel engaged with pandemic

control activities. High priority in the vaccination process was also given to the above 60 age group with more attention on those who have underlying health conditions / comorbidities. Many efforts were put in place to vaccinate above 60 age group to include priority vaccination line for them, mobile vaccination centers and special arrangements for in-home-vaccination for feeble community. As more vaccines were available, systematically, the GoSL shifted the efforts to include above 30 age groups with more attention to people with comorbidities, pregnant women, employees of entry / exit points, harbours, airports, economic sector employees, factory workers, employees in essential services, school and university teachers / lectures, tourism sector employees, students going abroad for higher studies., etc and even included above 18 age group in those categories as appropriate.

7. **Approval of Vaccines.** The National Medicines Regulatory Authority (NMRA) is the leading authority that ensures the standards, safety, quality and efficacy of medicinal products in the country. SPC engaged with NMRA as early as possible to register different vaccine candidates to be authorized for emergency use in Sri Lanka. Based on extensive review of the quality, safety, immunogenicity and efficacy data, NMRA has so far given the approval for AstraZeneca, Sputnik V, Pfizer, Sinopharm, Moderna and Sinovac vaccines. Inputs from scientific studies on changing dynamic of the virus, mutations, variants in circulation and their response to vaccine candidates under consideration have also been reviewed when selecting / approving different vaccine candidates. Further, Advisory Committee on Communicable Diseases in Sri Lanka also approved the use of Pfizer and Moderna vaccines as the second dose of AstraZeneca. Details of vaccines approved by NMRA are given below:

Serial	Type of Vaccine	Manufacturer	Date of Approval
1	AstraZeneca	Serum Institute of India Private Limited, India	22 January 2021
2	Sputnik V	Generium Joint Stock Company, Russia	4 March 2021
3	Pfizer	Pfizer Inc., USA and BioNTech, Germany	7 May 2021
4	Sinopharm	The Beijing Institute of Biological Products, China	8 May 2021
5	Moderna	Moderna Biotechnology Company, USA	29 June 2021
6	Sinovac	Sinovac Biotech Limited, China	16 July 2021

Table 1 : Approved Vaccine Candidates in Sri Lanka – 24 August 2021.

8. **Vaccination Roadmap.** Complete the nationwide vaccination at the fastest possible mean was the Government's primary objective during the vaccination programme. His Excellency the President outlined the framework for vaccination of 100% of above 30 population in the country (nearly 11.4 million) with at least a single dose by early September 2021 and fully vaccinate 50% of the same population by mid-September. The GoSL also earmarked to complete the vaccination of first dose to all over 30 years of age in the Western Province before 31 July 2021. These timelines were dynamic and were reviewed, readjusted and redefined as more vaccines were available and with the changes in the overall COVID situation in the country.

9. NOPCO, Vaccine Task Force and Health and Medical experts regularly meet to discuss and analyze the progress and improvements to the roadmap. Outcome of such discussions / meetings were used to accelerate the vaccination programme and to expedite the procurement. The GoSL, later set the objective of completing the administration of first dose to above 30 population in the country by 31 August 2021 considering the changing dynamics of new variants but completed the same by 11 August 2021.

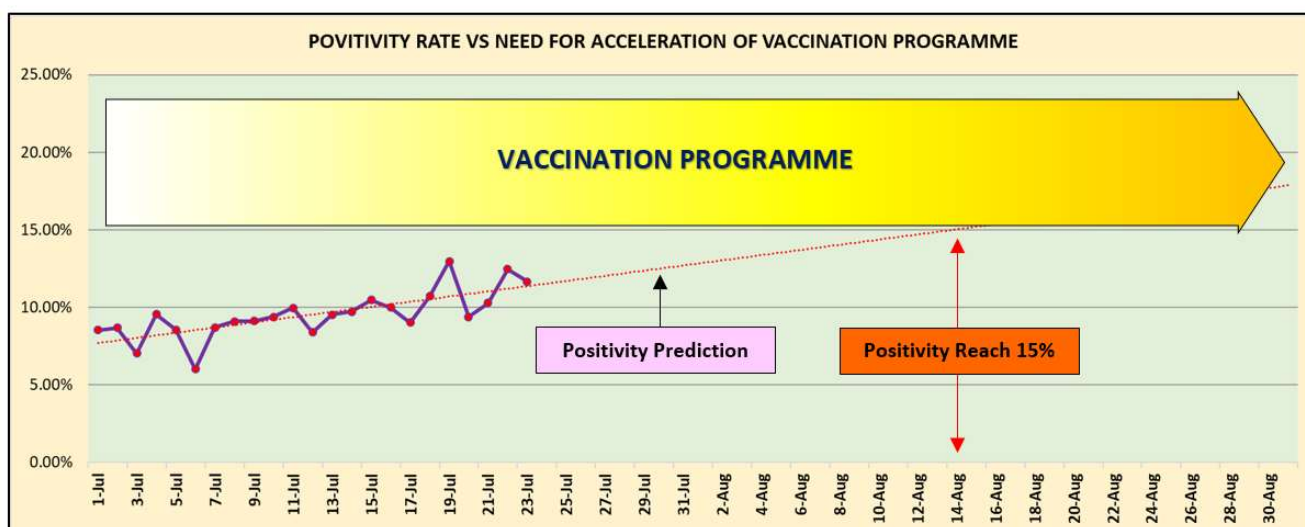


Figure 3 : Analysis of Requirement of Accelerating Vaccination.

10. **Allocation of Vaccines.** Allocation of different vaccines based on the stock's availability, future arrivals, needs of specific groups and hotspots were done with judicious planning and forecasting. This process is centrally controlled by the Vaccine Task Force under the strict supervision of His Excellency the President. Ministry of Health, NOPCO and the Vaccine Task Force are to account the last dose of vaccine and to avoid misuse of a single dose. Consideration has also been given to assign a specific vaccine candidate to total population in a selected geographical area with medical considerations and administration dynamics. As cases in point, AstraZeneca was allocated for aged population with comorbidities and Pfizer for cancer patients. Puttalam and Mannar districts were also given the Pfizer coverage to protect that population from possible exposure into new variants across the sea.

SECURING VACCINES

11. Process to secure vaccines through procuring, donations or COVID-19 Vaccines Global Access (COVAX) commenced in early 2021. Vaccine Task Force was to explore all possibilities of procuring different vaccine candidates from different countries; whether government to government purchases or otherwise, engage with the WHO for vaccines through COVAX facility and to explore cordial bi-lateral relations for vaccine-aids. Personal involvement of His Excellency the President himself to speak to Presidents and Heads of States in friendly foreign countries, contributed tremendously to realize the early arrival of vaccines to Sri Lanka.

12. As of August 2021, the GoSL has spent nearly 25 billion Sri Lankan Rupees for the purchases of vaccines and forecast 40 billion Sri Lankan Rupees for future deployment of vaccines. On 12 May 2021, Government also signed an agreement with the World Bank for additional financing of 80.5 million USD to access and distribute vaccines, strengthen vaccination process and pandemic response. Sri Lanka received its first consignment of free 500,000 AstraZeneca doses from India on 28 January 2021 and Chinese Government donated 2,700,000 Sinopharm doses in three occasions. Sri Lanka received 1,865,424 doses of AstraZeneca and 1,500,000 Moderna through COVAX facility. Further, as of August 2021, Sri Lanka has placed orders to secure 49.25 million of vaccine doses which is even ample for booster shots.

Serial	Vaccine Type	Category			Total
		Donations	COVAX	Purchased	
1	Sinopharm	2,700,000	0	13,000,000	15,700,000
2	AstraZeneca	500,000	1,865,424	500,000	2,865,424
3	Moderna	0	1,500,000	0	1,500,000
4	Pfizer	0	0	540,540	540,540
5	Sputnik V	0	0	195,000	195,000
	Total	3,200,000	3,365,424	14,235,540	20,800,964

Table 2 : Arrival of Vaccines – 24 August 2021.

13. As of 24 August 2021, Sri Lanka has received 20,800,964 doses of vaccines out of which 3,200,000 were donations, 3,365,424 under COVAX facility and 14,235,540 were procured by the SPC. Sinopharm has been the main vaccine candidate in Sri Lanka with 15,700,000 doses, AstraZeneca has been the second with 2,865,424 doses and Moderna is the third with 1,500,000 doses. Total stocks received by mid-August is given below:

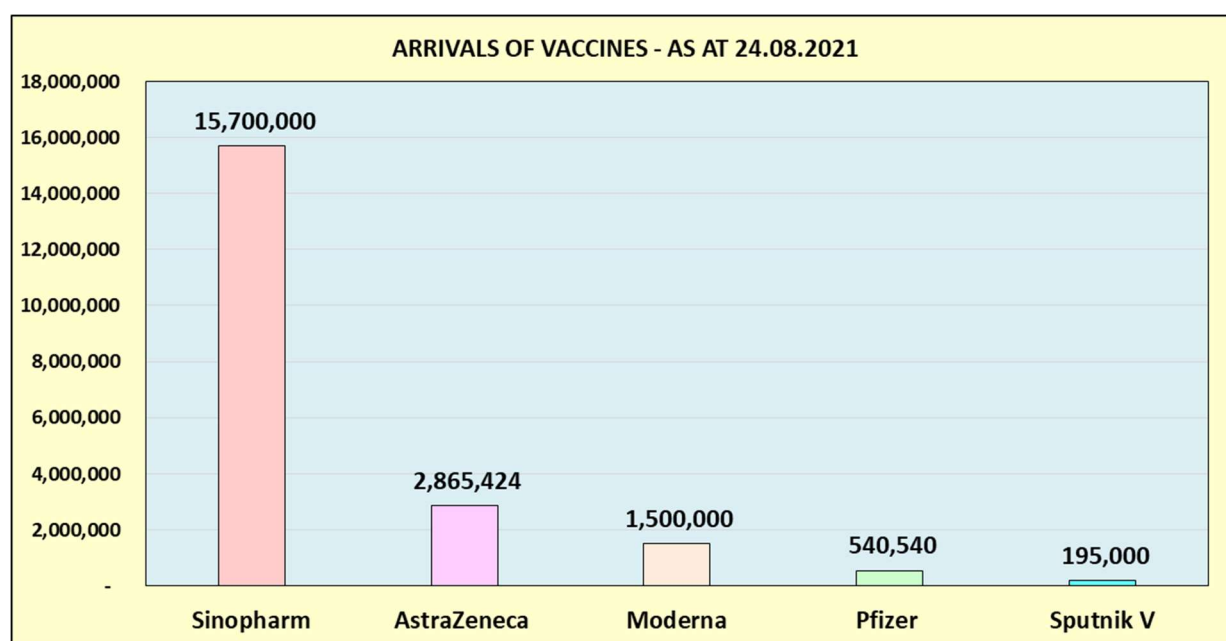


Figure 4 : Arrivals of Vaccines – 24 August 2021.

ADMINISTRATION OF VACCINES

14. Sri Lanka has one of the best track records of immunization in the region which goes back to the 19th century. It has made an excellent progress over the past decades in immunization, notably in terms of achieving high immunization coverage and disease control. Thus, administration of COVID-19 vaccines was not any different to Sri Lanka and Ministry of Health simply incorporated the COVID-19 vaccination into the already available immunization network. Medical services of the Army along with other forces were also augmented in order to expedite the process within the timeline.

15. Sri Lanka commenced the vaccination of front-liners with AstraZeneca first dose on 29 January 2021 and completed by 22 April 2021. Administration of second dose of AstraZeneca commenced on 23 April 2021. Initial roll-out of first doses of Sinopharm and Sputnik V commenced on 6 May 2021 and second doses of Sinopharm and Sputnik V commenced respectively on 8 June 2021 and 12 June 2021. Pfizer was first deployed in Sri Lanka on 9 July 2021 and Moderna on 18 July 2021. Detailed administration is given below:

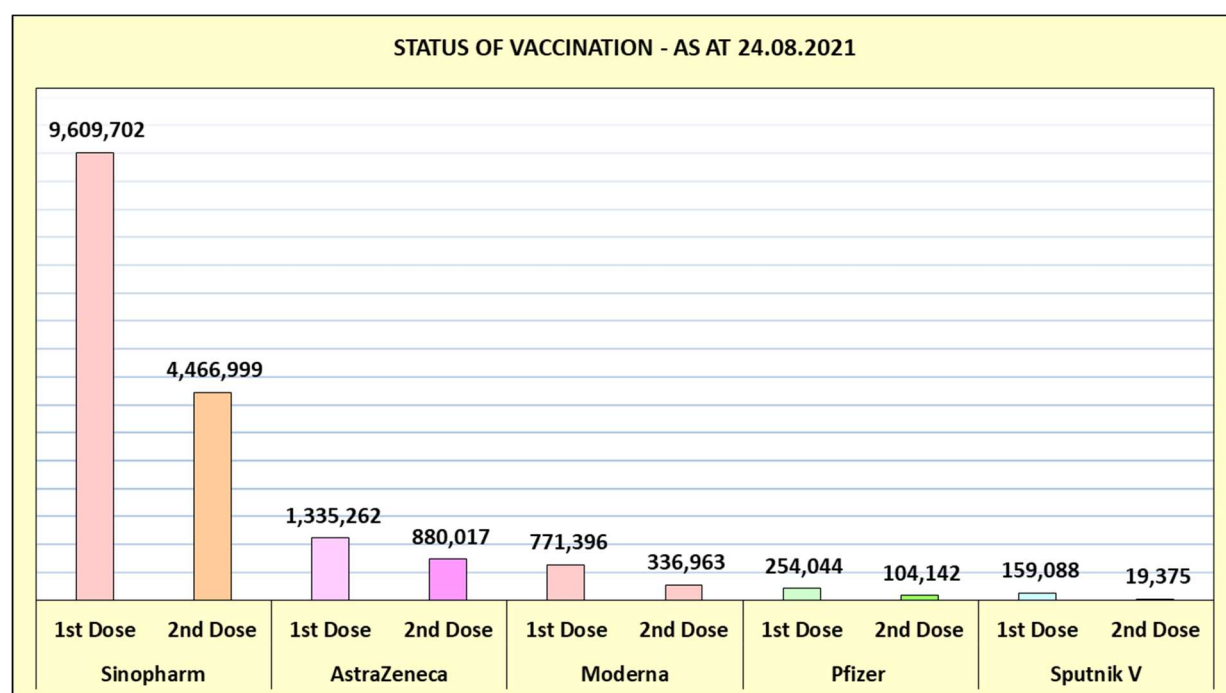


Figure 5 : Administration of Different Vaccine Candidates – 24 August 2021.

16. As Sri Lanka commenced the vaccination in January it was only 59,426 doses administered during the whole month. However, augmentation of the Army medical units with other forces in the vaccination programme accelerated the process in many folds and by June 2021, monthly administration was 1,852,311 and it reached 8,245,347 just in the month of July alone. Sri Lanka has also recorded 520,077 doses administered in a single day and had been placed as the first in rolling of 7-day average per 100 people in the total population by “Our World in Data” for 10 consecutive days since 27 July 2021. On 2 August 2021, WHO Sri Lanka and the Director General of the WHO have commended on Sri Lankan vaccination process.



Figure 6 : Rolling of 7-day Average per 100 people by “Our World in Data”.

17. On 11 August 2021, Sri Lanka surpassed administering 11,496,904 first doses (100% of the total above 30 population) and administered 5,748,452 second doses (50% of the total above 30 population) by 24 August 2021. This marked the completion of the GoSL’s first two vaccination objectives. The GoSL commenced the vaccination of age group between 18 – 30 age group as the next step and hopeful of completing the first dose of the same age group during the September 2021. Vaccine coverage with percentages is given below:

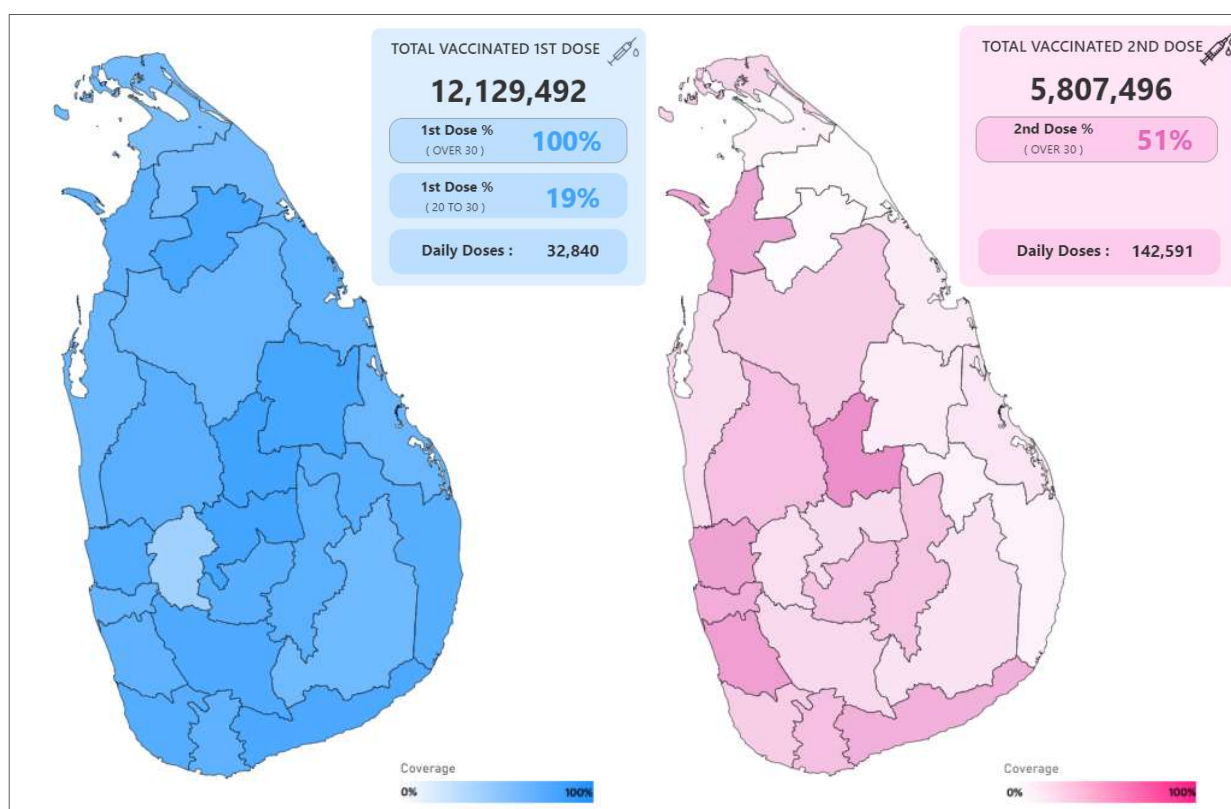


Figure 7 : Vaccine Coverage with Percentages – 24 August 2021.

18. **Deployment of Vaccination Center.** Achievement of vaccination objectives were possible due to the combined administration process by Ministry of Health, NOCPCO along with Army Medical Service assisted by Navy and Air Force. 50 / 60 vaccination centers deployed daily as of January 2021, were increased upto 275 / 300 by July 2021. The GoSL implements (a) regular / static vaccination centers at selected hospitals / other locations for regular vaccination (b) ad-hoc vaccination centers at all hospitals / MoH Offices and (c) 24 x 7 vaccination centers manned by the Army Medical Service for mass vaccination and (d) mobile vaccination centers by the Army and Ministry of Health to vaccinate feeble community, specially above 60 age group.

19. Monitoring of progress is an essential part of the whole vaccination process. His Excellency the President weekly meets officials from Ministry of Health, NOCPCO and the Vaccine Task Force to assess the progress of the vaccination drive, attainment of vaccination objectives and to decide on modifications. This process is also important to determine future goals of vaccination drive and to forecast requirements of different vaccines candidates. Each dose of different vaccines arrived Sri Lanka is counted, accounted, charted, number of doses administered and stock levels are monitored on daily basis. The State Intelligence Service (SIS) plays a vital role in the data synthesizing process.

Figure 8 : Monitoring of Progress of the Vaccination.

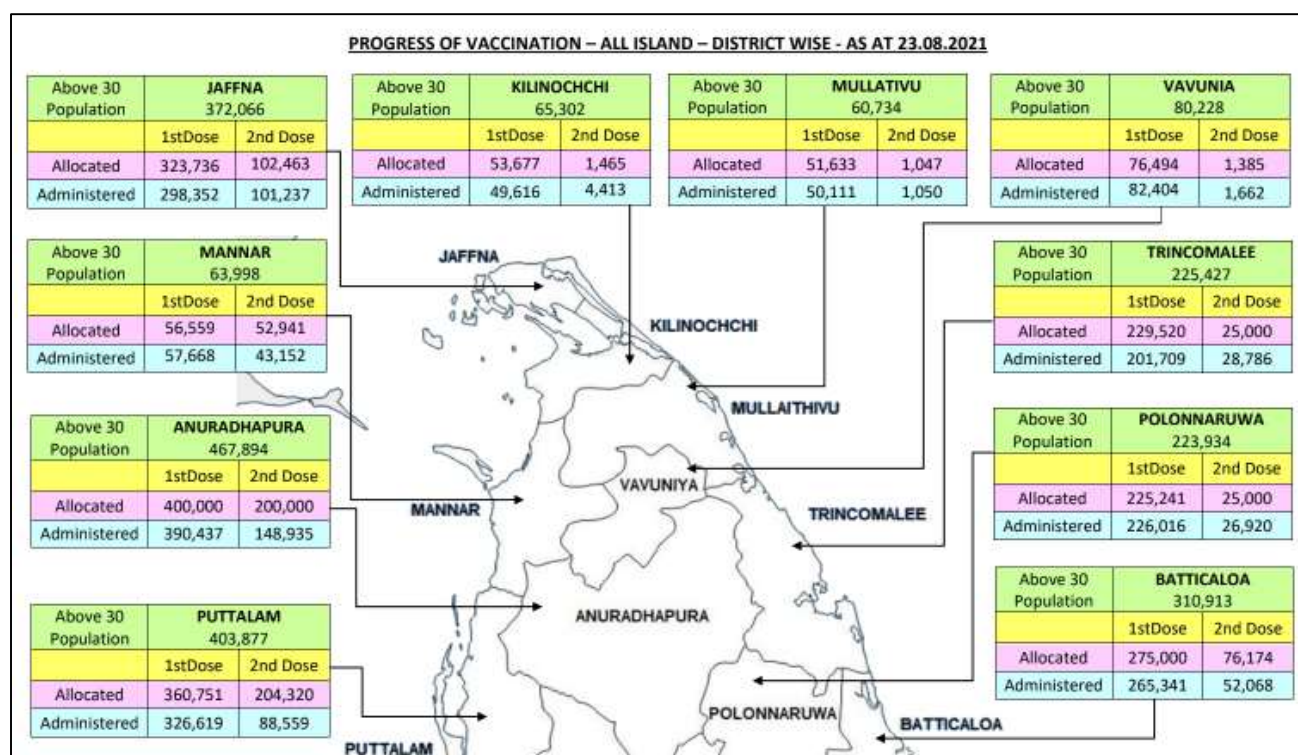


Figure 9 : Monitoring of District Stock Levels.

SYNERGY OF THE VACCINATION PROCESS

21. Vaccination of the population amidst the spread of pandemic is not an easy endeavour. Judicious planning, combined efforts by the health and defence, 24 x 7 commitment, detailed monitoring, forecasting and procuring are the pillars of success in the vaccination process in Sri Lanka. Role played by the Ministry of Health and the Defence Services, contributions made by NOPCO, the Vaccine Task Force and the SPC are major contributing factors to the success of the process. Numerous assistances given by all other line Ministries, Departments, Corporations, Authorities, Local Government Systems, all State and Private Sectors partners and the commitment of the population to the vaccination drive were also very much supportive to this achievement.

CONCLUSION

22. Since the first detection of the COVID-19 in December 2019, the world has now spent nearly two years under this pandemic. Vaccine candidates developed against the virus have provided a major hope for the world to overcome the pandemic and Sri Lanka planned as early as possible for the vaccination of its population. His Excellency's vision in vaccination against the COVID-19 is ***“free vaccine up to the last citizen and nationwide vaccination at the fastest possible mean”***. The GoSL commenced the COVID-19 vaccination in late January 2021 and completed vaccination of above 30 population by 11 August 2021 and intends to fully vaccinate them by mid-September 2021. There is no doubt that Sri Lanka, as a developing nation has done remarkable well in the COVID-19 vaccination unparalleled to any other country in the world.