

JAPAN FUND FOR POVERTY REDUCTION GRANT

ENHANCING THE EFFICIENCY OF THE PREHOSPITAL AMBULANCE SYSTEM TO SUPPORT MANAGEMENT OF COVID-19

I. INTRODUCTION

1. The proposed project grant aims to support the Government of Sri Lanka to enhance the efficiency of Sri Lanka's only government-managed prehospital ambulance system (the 1990 Suwa Seriya ambulance service) to efficiently link the exponentially increasing third wave of coronavirus disease (COVID-19) patients to the defined hospitals for further management without compromising the non-COVID-19 emergency services.¹ It will also support the government to strengthen the capacity of human resources of the 1990 Suwa Seriya ambulance service in collaboration with Japanese experts to maintain a high-quality, effective, and efficient prehospital service under the incremental COVID-19 burden in the country. The grant will benefit the total population of Sri Lanka as access to the prehospital ambulance service is essential for COVID-19 patients and all other medical and surgical emergencies when moving the ill person from their home or place of emergency to the health facility.²

II. THE GRANT

A. Rationale

2. Sri Lanka is an island, with a population of 21.9 million. Compared with most low-income and lower middle-income countries, Sri Lanka has made impressive gains in health outcomes and in ensuring access to health services for all. The Human Development Index (2020) was 0.782 and Sri Lanka was ranked 72 out of 189 countries, while the Universal Health Coverage (UHC) effective coverage index was 65.5 in 2019 with significant improvements observed since 2010.³ Sri Lanka is currently categorized as a lower middle-income country and the gross domestic product per capita in 2020 was \$3,682. Following a 26-year civil war, which ended in 2009, the gross domestic product per capita growth was rapid, averaging approximately 6.2% during 2010–2015, but since 2016 the growth rate has declined from 4.5% to 2.2% in 2019; and because of the COVID-19 pandemic the growth rate was –3.5% in 2020.⁴

3. **Population dynamics.** Sri Lanka's population is rapidly aging because of many factors including the improvements in reproductive health outcomes for women since the 1950s, fertility control measures initiated in the early 1960s leading to a total fertility rate of 2.2 children per woman since 2000, and overall improvements in social determinants of health and health care. These measures improved life expectancy from 53.0 years in 1950 to 77.0 years in 2019, but the healthy life expectancy⁵ at birth for Sri Lanka is 67.0 years, indicating that even though life expectancy is high there are people living with a disability for about 10 years. By 2020, 12.3% of the population were over the age of 60 years, and by 2030 it is anticipated that nearly 20% of the

¹ Institute of Health Metrics Evaluation, University of Washington. [Sri Lanka Profile](#).

² Collaborations with Japanese experts will be done through forming institutional partnerships between the 1990 Suwa Seriya Foundation and Japan International Cooperation Agency (JICA) or Japan Emergency Medical Services. Required expertise includes prehospital service delivery, emergency medical service, technology innovations, and private sector engagement.

³ Government of Sri Lanka, Department of Census and Statistics. [Life Tables for Sri Lanka, 2011–2013](#). Colombo.

⁴ Central Bank of Sri Lanka. 2021. [Monetary Policy Review: No. 01 - January 2021. Press release](#). Colombo.

⁵ Healthy life expectancy is the number of years that a person at a given age can expect to live in full health, considering mortality and disability.

population will be over 60 years. The median age of the population is already 31 years (footnote 3).

4. **The health system.** The preventive and curative arms of the health system were laid out in Sri Lanka in the early 20th century. It has been instrumental in providing universal comprehensive care at no cost to the population at point of service delivery for more than 75 years. The public sector provides (i) 90% of inpatient care with more than 7 million patient hospitalizations; (ii) approximately 55% of outpatient care with more than 58 million outpatient visits in 2019; and (iii) nearly 100% of preventive care which includes childhood immunization for 12 vaccine-preventable diseases,⁶ antenatal care, and family planning services, ensuring a safety net for the population.⁷

5. **Preventive health services.** One of the most notable features of the system was the early recognition of the importance of preventive care, and therefore the need to establish a separate, parallel system of field-based preventive services with the country divided geographically into medical officer of health areas. These preventive services are managed by a separate field-based preventive health staff (accounting for approximately 10% of the total health staff in the country) who provide communicable disease surveillance of 28 notifiable diseases, antenatal care (more than 90% of pregnant women receive at least three antenatal visits),⁸ child care (as much as 99% age-appropriate immunization coverage), nutrition services for mothers and children under 5 years, school health services, and other environment and occupational services. Presently, there are 356 such medical officer of health areas. Generally, the population is mapped to an area and people register and access free preventive health services within their area of residence.

6. **Curative health services.** In parallel to the preventive health service network, a geographically wide network of curative services in three tiers of care (primary, secondary, and tertiary) are provided via 1,165 health facilities spread across the country with 643 hospitals with a bed strength of 86,589 (four beds per 1,000 people) and 522 primary medical care units providing primary-level outpatient care services, and 489 divisional hospitals providing primary health care services with approximately 22,293 beds and outpatient departments (footnote 7). As many as 64,296 (74.25%) of the hospital beds are under specialist care (secondary, tertiary, or specialized care) and are in the 116 secondary and tertiary care hospitals and 38 special hospitals (e.g., mental health, prison, cancer, and dental hospitals distributed across the country [footnote 7]). The availability of intensive care facilities is limited to around 600 beds (three intensive care unit beds per 100,000 people).⁹ People have autonomy in accessing any level of curative facility (primary, secondary, or tertiary care hospitals) for first contact primary health care free of charge anywhere in the country. The curative subsector does not have a formal referral system.

7. **Emergency health services (prehospital care).** In addition to the curative and preventive arms that provide services to people seeking care at hospitals and at preventive health services, since 2016 the Government of Sri Lanka has provided an emergency health service, a state-of-the art prehospital ambulance system (the 1990 Suwa Seriya ambulance service), at no cost to the population at point of service delivery. The service was introduced to Sri Lanka with the support of the Government of India, became fully operational in 2018, and is managed via an

⁶ The Epidemiology Unit of the Ministry of Health (MOH) manages the national immunization program for 12 vaccine-preventable diseases: tuberculosis, poliomyelitis, diphtheria, pertussis (whooping cough), tetanus, hepatitis B, haemophilus influenzae B, Japanese encephalitis, measles, mumps, rubella, and human papilloma virus (for girls).

⁷ Government of Sri Lanka, MOH, Medical Statistics Unit. 2020. [Annual Health Statistics 2019](#). Colombo.

⁸ Government of Sri Lanka, MOH, Family Health Bureau. 2018. *National Strategic Plan, Maternal and Newborn Health 2017–2025*. Colombo.

⁹ V. Pinto, et al. 2019. [Critical Care in Sri Lanka](#). Colombo.

act of Parliament (1990 Suwaseriya Act No. 18 of 2018).¹⁰ It is a government-owned foundation with financial allocations provided by the treasury via the Ministry of Health (MOH) through the State Ministry of Primary Health Care, Epidemics, and COVID Disease Control.

8. **COVID-19 pandemic.** COVID-19 cases were first reported in Sri Lanka in January 2020. The first wave of COVID-19 was during March–June 2020, the second wave was during September 2020–March 2021, and an ongoing third wave has affected the country since 25 April 2021. As of 20 July 2021, Sri Lanka had reported 287,481 confirmed cases and 3,870 deaths because of COVID-19.¹¹ The third wave continues to bring an unprecedented number of COVID-19 patients to health facilities, with the effective reproduction rate during the third wave being markedly higher than that during the first and second waves. Since April 2021, the number of daily new confirmed cases has increased more than 350-fold, from 0.3 cases per million people to 106.0 per million people.¹² The reported spread of more infectious variants has contributed to this significant increase. The speed of transmission of the virus and its virulence requires the country to ramp up testing, quickly identify and isolate cases, and effectively care for COVID-19 patients.

9. The importance of having access to an emergency health service via an ambulance system is well recognized as an essential part of a well-functioning, responsive health system in any country. The best emergency ambulance service systems are reported in the United States (911 emergency service), the United Kingdom (999 emergency service), Japan (119 emergency service), and the European Union (112 emergency service) and these provide 24-hour emergency services, connect the entire populations with state-of-the-art equipped ambulances to reduce the time taken, and initiate prehospital care prior to reaching the hospital to ensure reductions in premature preventable deaths and high-quality care.¹³ These emergency systems in high-income countries have been in operation since the mid-1900s but only a few low- and lower middle-income countries (India, Pakistan, Cambodia, Iraq, Sri Lanka, and a few countries in Africa) have national or regional emergency medical services for many reasons including financial and system issues.¹⁴ In 2007, the World Health Organization brought forward a resolution highlighting the importance of emergency medical care services (EMS) and defined an EMS framework for adoption by countries, and in May 2019 stressed the need for EMS for ensuring the UHC.¹⁵

10. **Prehospital services for emergency services.** The 1990 Suwa Seriya prehospital ambulance system is the only prehospital emergency health service that provides a 24/7 service via a fleet of 297 ambulances (one ambulance per approximately 70,000 people, located based on the geographic area and population density), accessible to the total population at no cost. The 1990 Suwa Seriya ambulance service is mandated to provide prehospital care which includes first aid and emergency care or treatment given to a person suffering from any sickness, injury, or infirmity until he or she reaches a health care provider. As of 13 May 2021, the service had responded to more than 3,983,000 calls and assisted in 833,412 emergencies with an average response time of 11 minutes 41 seconds.¹⁶

¹⁰ Government of Sri Lanka. 2018. [1990 Suwaseriya Foundation Act, No. 18 of 2018](#). Colombo.

¹¹ Government of Sri Lanka, MOH. [COVID-19 Situation Reports](#). Colombo.

¹² Our World in Data. [Effective reproduction rate](#) (average number of new infections caused by a single infected person, 7-day rolling average) and [daily new confirmed cases per million population](#) (7-day rolling average).

¹³ Ziqitza Healthcare Ltd. 2020. [Ziqitza Rajasthan – Countries with the Best Emergency Services](#). 6 October.

¹⁴ V.Sriram et al. 2016. [Comparative analysis of three prehospital emergency medical services organizations in India and Pakistan](#); *Public Health*. Volume 137, pp. 169–175.

¹⁵ World Health Organization. 2019. [Emergency care systems for universal health coverage: ensuring timely care for the acutely ill and injured](#). Geneva; and World Health Organization. 2007. [Health systems: emergency-care systems](#). Geneva.

¹⁶ The response time is defined as the time taken from receipt of call at the call center to the ambulance arriving at the location of the emergency.

11. **Prehospital services for COVID-19 services.** With the increasing COVID-19 burden, the need for a prehospital ambulance service has further increased. The 1990 Suwa Seriya ambulance service has been used exclusively to support the transport of COVID-19 patients from their homes to the defined nearest hospital or treatment center, and to monitor home care COVID-19 management while continuing the emergency care services provided for non-COVID-19 emergencies. Since May 2021, approximately 30% of all attending emergency calls (approximately 400–500 emergency calls out of about 1,500 attending calls) to the 1990 Suwa Seriya ambulance system services were related to COVID-19 emergencies and the system has provided emergency care to more than 38,163 COVID-19 patients. Even with the increasing COVID-19 burden, all other types of patients with any medical and surgical emergencies are also carried by the 1990 Suwa Seriya ambulance system.

12. **Efficiency of the 1990 Suwa Seriya service.** The current response time (the time taken to mobilize a 1990 Suwa Seriya ambulance from the time of the first call to the patient) is 11 minutes and 41 seconds on average, which is much longer than the ideal response time, which is within 8 minutes. Further, the range of the response time in different districts and provinces is wide (varying between 9 minutes 28 seconds in Colombo to 20 minutes 20 seconds in Badulla for non-COVID-19 cases, and for COVID-19 cases the response time varies between 14 minutes 49 seconds in Jaffna to 57 minutes 23 seconds in Badulla). The inefficiency is attributable to the lack of adequate ambulances in some jurisdictions that cover a huge geographic area and in some jurisdictions that overlap with hotspot areas of the local transmission of COVID-19. In addition, the total fleet of 297 ambulances is currently used to serve both COVID-19 emergencies and other emergencies. Therefore, the staff of the total fleet and the vehicle need to follow a special sanitizing protocol to ensure adequate infection prevention control and safety measures prior to the vehicle being available for another call. This process also delays the response time because of the limited number of available vehicles. Given these reasons, the 1990 Suwa Seriya ambulance service urgently needs to increase its fleet by 112 ambulances (by 37%, or one ambulance per 50,000 people) to enable the service to respond in a timelier manner to meet the medical emergencies of COVID-19 patients without compromising its response to other medical and surgical emergencies. This new ambulance requirement is based on a geographic information system (GIS)-based mapping and timing analysis and new ambulances are planned to be positioned in locations to reduce the response time and improve the efficiency of the system. Table 1 summarizes the current efficiency (response time and time taken at hospital) of the 1990 Suwa Seriya ambulance system (a sample analysis of the time saved [reduction in response time] is shown in the Annex.)

Table 1: Efficiency of the 1990 Suwa Seriya Ambulance System
(minutes:seconds)

Province	District	For Non-COVID-19 Patients		For COVID-19 Patients	
		Average Response Time	Average of Time Spent In Hospital	Average Response Time	Average of Time Spent In Hospital
Eastern	Ampara	14:34	17:04	17:04	23:43
	Trincomalee	14:49	14:49	19:36	22:37
	Batticaloa	14:33	17:02	21:40	25:28
North	Polonnaruwa	13:34	14:12	21:52	25:10
Central	Anuradhapura	15:40	14:56	18:39	31:05
Western	Gampaha	10:53	33:46	41:42	37:50
	Colombo	09:28	26:33	31:38	32:58
	Kalutara	12:36	12:50	31:38	25:52
Southern	Galle	14:10	18:04	19:52	33:27
	Hambantota	20:06	06:59	25:28	18:47
	Matara	14:31	12:23	21:06	30:24

Province	District	For Non-COVID-19 Patients		For COVID-19 Patients	
		Average Response Time	Average of Time Spent In Hospital	Average Response Time	Average of Time Spent In Hospital
Uva	Monaragala	18:23	10:50	26:24	41:43
Northern	Badulla	20:20	15:40	26:45	47:05
	Jaffna	11:33	19:41	14:49	50:59
	Kilinochchi	18:01	14:12	23:29	19:00
	Mannar	15:59	13:28	19:13	19:00
	Mullaitivu	18:19	13:05	24:03	14:00
Central	Vavuniya	18:44	13:09	18:46	16:38
	Nuwara Eliya	18:13	24:25	21:48	30:10
	Kandy	16:43	22:10	21:29	42:12
	Matale	17:42	16:15	23:09	33:59
North	Kurunegala	18:21	17:41	57:23	34:11
Western	Puttalam	15:50	19:03	18:50	25:28
Sabarag- amuwa	Ratnapura	17:55	14:23	33:50	24:40
	Kegalle	18:14	18:36	21:10	37:38

COVID-19 = coronavirus disease.

Source: 1990 Suwa Seriya Foundation.

13. In addition to response time, the other efficiency measure is the turnaround time of an ambulance.¹⁷ The turnaround time includes the time taken from responding to an emergency to the ambulance being ready for the next call. This is currently 2 hours and 3 minutes, but for COVID-19 patients the total turnaround time on average is 6 hours as patients are transported long distances as they are allocated appropriate beds for COVID-19 care with long delays at patient handover points because of infection control measures and receiving-hospital protocols. This delay is also because the receiving hospital is only aware of the emergency patient upon admission of the patient to the emergency treatment unit of the hospital. In countries like Japan, the receiving hospital is made aware of the patient prior to their arrival, which reduces the patient idle time at the hospital and reduces the gap from arrival to treatment initiation. This delay can affect COVID-19-related medical emergency outcomes in a significant way as patients with COVID-19 tend to deteriorate rapidly. Therefore, the 1990 Suwa Seriya ambulance service needs to reduce the time spent at the hospital and this requires training, appropriate protocols, and use of technology at emergency treatment units of expected emergency patients.

14. **Monitoring the efficiency measures in the 1990 Suwa Seriya system.** The 1990 Suwa Seriya system is technologically well equipped and is currently able to monitor all steps in the service process. Further, detailed protocols and close monitoring of their implementation ensures that real-time data is available for planning, management, and efficiency improvement of the system. The system can provide data by vehicle, various steps, district, ambulance and location. Therefore, investing to improve the efficiency of the 1990 Suwa Seriya system will be assessed without investment in new data monitoring systems.

15. **The Japan Fund for Poverty Reduction (JFPR) project grant.** The grant aims to supplement the government's efforts to increase the efficiency of the 1990 Suwa Seriya ambulance system for the safe and timely transport of COVID-19-positive people to defined level 1, 2, and 3 hospitals for further management for COVID-19 without compromising non-COVID-19 emergency services. All activities under the project grant will be carried out in synergy and

¹⁷ Turnaround time is the total time taken from the time the case is assigned to the ambulance to the patient location (base to scene time), plus the time at the patient location (at scene), plus the time to the hospital (scene to hospital), plus the time taken to hand over the patient to the hospital from the time the ambulance enters the hospital (handover time), plus the time taken to disinfect the ambulance (disinfection time), plus the time taken to reach to the police station (back to base time), plus the time taken for the ambulance to dry (dry up time).

coordination with the support of development partners to the government. The project grant is aligned with the following impacts: (i) health outcomes in Sri Lanka improved, and (ii) access to improved health services increased (ADB operational priority 1). The project grant will have the following outcome: efficacy, timeliness, and safety of Sri Lanka's only prehospital ambulance system enhanced.

B. Outputs and Key Activities

16. The JFPR grant will contribute to the activity (iii) of the second set of activities under output 2 of the main loan: enhancing the efficiency of the prehospital ambulance system (1990 Suwa Seriya ambulance system) to link COVID-19 patients to the designated hospitals for further treatment and management without compromising the non-COVID-19 emergency services.

17. **Output 1: The average response time of the 1990 Suwa Seriya ambulance service reduced for patients with COVID-19 and other emergencies.** This output will (i) expand the ambulance fleet by 8% to improve the service capacity of 1990 Suwa Seriya to provide timely prehospital services in underserved areas identified by the MOH and the 1990 Suwa Seriya Foundation based on GIS-based mapping of demand and population and involving COVID-19 as well as timing analysis through the procurement of 25 ambulances, (ii) provide trainings on infection prevention and control to ambulance teams who are involved in transporting patients seeking COVID-19 treatment and other emergency care to maintain safety measures, and (iii) provide trainings to new emergency medical technicians and other selected staff (approximately 250 personnel) required to operate the new ambulances. .

18. **Output 2: Turnaround time of the 1990 Suwa Seriya ambulance service reduced.** The output will (i) improve the efficiency of the 1990 Suwa Seriya ambulance system and the receiving secondary and tertiary care hospitals to reduce the time lag from patient arrival to initiation of treatment at the emergency treatment units through support from and technical collaboration with the Japanese Emergency Medical Services or via consultants, if possible and feasible; (ii) develop locally appropriate protocols to create a real-time link with the ambulance and the receiving emergency treatment unit of the hospital in selected secondary and tertiary care hospitals to provide the best benefit of the golden hour (first 60 minutes from the time of injury or appearance of symptoms) to the COVID-19 and other emergency care patients; and (iii) improve the staff and center facilities by renovating 20 ambulance stations for 1990 Suwa Seriya staff who are located at local police stations. The 20 stations to be renovated will be selected from 48 identified stations that lack adequate space for vehicle parking and for emergency medical technician teams to rest, stand by, and coordinate with call centers through participatory consultations with the MOH and 1990 Suwa Seriya Foundation during the project implementation.

19. **Output 3: Capacity of the human resources of the prehospital services strengthened.** Continuous training of the human resources is pivotal in maintaining a high-quality, effective, and efficient prehospital service, especially with the increasing COVID-19 burden. This training needs to include appropriate infection and prevention measures, staff motivation, appropriate use of personal protective equipment, enhancing the knowledge of emergency medical and surgical emergencies. Therefore, in collaboration with the Japan Emergency Medical Services, this output will support (i) refresher training (via a combination of virtual and face-to-face training in country) to all paramedical staff of the 1990 Suwa Seriya team (approximately a 10-day training for 2,000 staff); (ii) training a team of six personnel from each of the receiving hospital emergency treatment units from approximately 100 secondary and tertiary care hospitals in the country; (iii) improving the training facilities of the 1990 Suwa Seriya trainers by purchasing emergency care training equipment; and (iv) delivering a local workshop for

concerned MOH and 1990 Suwa Seriya officials to learn emergency medical service systems in Japan, including its operational mechanism, service delivery model, technology innovations, and private sector engagement, and discuss further technical cooperation in other areas such as prehospital elderly care services in the future.

C. Cost Estimates and Financing Plan

20. The grant outputs are estimated to cost \$3.27 million (Table 2). The JFPR will provide grant cofinancing equivalent to \$3.0 million, to be administered by ADB.

Table 2: Cost Estimates

Item	Amount (\$ million) ^a	Share of Total (%)
A. Base Cost^b		
1. Average response time of the 1990 Suwa Seriya ambulance service reduced for patients with COVID-19 and other emergencies	1.51	46.2
2. Turnaround time of the 1990 Suwa Seriya ambulance service reduced	0.97	29.7
3. Capacity of the human resources of the prehospital services strengthened	0.52	15.9
Subtotal	3.00	91.8
B. Contingencies	0.27	8.2
Total (A+B)	3.27	100.0

COVID-19 = coronavirus disease.

^a Includes taxes and duties of \$0.27 million to be financed from the government resources.

^b In mid-2021 prices as of 17 August 2021.

Source: Asian Development Bank.

21. The financing plan is in Table 3. The executing and implementing agencies will cover taxes and duties and provide counterpart support in kind for project preparation, implementation, and other contributions.

Table 3: Financing Plan

Source	Amount (\$ million)	Share of Total (%)
Japan Fund for Poverty Reduction ^a	3.00	91.7
Government	0.27	8.3
Total	3.27	100.0

^a Administered by the Asian Development Bank.

Source: Asian Development Bank.

D. Implementation Arrangements

22. The implementation arrangements are summarized in Table 4 and described in the project administration manual (PAM).¹⁸ Loan and grant components will have the same institutional arrangements, but there are dedicated staff in the project implementation unit specifically for the grant components.

Table 4: Implementation Arrangements

Aspects	Arrangements
Implementation period	October 2021–November 2025
Estimated completion date	31 May 2026
Management	

¹⁸ Project Administration Manual (accessible from the list of linked documents in Appendix 2 of report and recommendation of the President).

Aspects	Arrangements		
(i) Oversight body	National Project Steering Committee chaired by the MOH secretary		
(ii) Executing agency	MOH		
(iii) Key implementing agencies	1990 Suwa Seriya Foundation via the additional secretary Medical Services Office		
(iv) Implementation unit	PMU under MOH		
Procurement	International competitive bidding	1 contract	\$1.16 million
	National competitive bidding	1 contract	\$0.56 million
	Request for quotations	1 contract	\$0.46 million
Consulting services	QCBS	48 person-months	\$0.69 million
	ICS (1 person)	6 person-months	\$0.05 million
Advance contracting	There will be advance contracting of civil works, equipment, vehicles, and consulting services.		
Disbursement	The grant proceeds will be disbursed in accordance with ADB's <i>Loan Disbursement Handbook</i> (2017, as amended from time to time) and detailed arrangements agreed between the government and ADB.		

ADB = Asian Development Bank, ICS = individual consultant selection, MOH = Ministry of Health, PIU = project implementation unit, PMU = project management unit, QCBS = quality- and cost-based-selection.

Source: Asian Development Bank.

III. DUE DILIGENCE

A. Technical

23. The JFPR grant-financed assistance complements ADB's loan-financed assistance on improving the country's capacity to detect, treat, and manage the ongoing COVID-19 pandemic by providing comprehensive and systematic support to strengthen the prehospital ambulance service to ensure that (i) COVID-19 patients can be separate from the community and transported to hospitals promptly to receive appropriate treatment before causing any further community transmission of COVID-19, and (ii) COVID-19-related emergencies that arise from COVID-19-positive patients who are receiving care at home have emergency access to a hospital. The prehospital service for COVID-19 patients is the most neglected aspect of the overall COVID-19 pandemic response. However, it is critical at this stage to minimize local transmission and avoid the development of severe cases. The project will collaborate with the Japan Emergency Medical Services to introduce innovative strategies and best practices from Japan to improve the coordination and integration of the 1990 Suwa Seriya ambulance system and the emergency health teams at receiving hospitals to enable seamless continuum of care to COVID-19 patients.

B. Economic and Other Impacts, Financial Viability, and Sustainability

24. The JFPR grant will increase the efficiency of prehospital care in rural and hard-to-reach areas and COVID-19 hotspots by reducing the average response and turnaround times of ambulance services to transport COVID-19-positive patients, safely and promptly, to hospitals for further management and treatment without compromising the emergency prehospital services for non-COVID-19 patients. It will help contain the spread of COVID-19, lower the health care burden of COVID-19, and restore the normality of non-COVID-19 health service delivery. Further, the renovation of ambulance stations and the development of locally appropriate protocols to enable a real-time link between ambulances and secondary and tertiary hospitals are considered investments with long-term development impacts which can significantly improve Sri Lanka's capacity to mobilize emergency medical support to address future pandemics and disasters.

C. Governance

25. **Financial management.** The JFPR grant will use the ongoing project financial management systems and arrangements, for which the MOH has satisfactorily conformed with ADB's financial management requirements. All the actions outlined in the agreed financial management action plan for the original project, including establishing management and implementing units, recruiting an internal auditor, procuring accounting software, and setting up a separate fixed asset register, have been satisfactorily complied with. Nonetheless, the project's premitigation financial management risk is assessed *moderate*, because (i) the extended scale of the activities may overstretch the capacity of the MOH, (ii) the budget allocation for the additional scope has yet to be made and delays in release of funds may lead to implementation delays, and (iii) possible delay in submission of audited project financial statements to ADB. This risks will be mitigated by (i) engaging additional financial management staff to further strengthen the capacity of the project management unit (PMU); (ii) creating separate budget codes and timely budget allocation for the additional financing; (iii) conducting an internal audit to ensure proper controls are in place to safeguard assets; (iv) preparing and submitting financial information to ADB on a quarterly basis, including a summary of auditor's findings and status of actions taken; and (v) having the National Audit Office conduct timely financial audit of the project.

26. **Procurement.** Procurement for works and equipment financed by JFPR grant will be handled by the PMU. An updated procurement assessment confirmed that the PMU has sound procurement track records and has experience in procurement following ADB requirements. The procurement system is accountable and transparent but experiences significant delays, and so the overall procurement risk is *moderate*. To mitigate this risk, the project will implement systematic procurement training to strengthen staff capacity in procurement and compliance monitoring and monitor the procurement process and report the delays to the steering committee. The project will also engage additional procurement staff and improve procurement transparency by setting up a project-specific page on the MOH website wherein contract information as well as information relating to procurement processes will be uploaded. Value for money procurement will be achieved by selecting the most appropriate methods with careful packaging after consideration of the PMU capacity, size, market, and location of the sites.

27. ADB's Anticorruption Policy (1998, as amended to date) was explained to and discussed with the government and the MOH. The specific policy requirements and supplementary measures are described in the PAM (footnote 18).

D. Poverty and Social Impacts

28. 4.1% of Sri Lanka's population are deemed to be below the national poverty line. Despite the inclusive development efforts, regional disparities remain and are particularly evident in access, utilization, and service provision related to prehospital services. The outbreak of the COVID-19 pandemic is estimated to have created poverty among about 500,000 additional people across the country. The pandemic has also disproportionately affected women by exacerbating their care burden and vulnerability to poverty because of the loss or reduction in own and household income. Capitalizing on the country's extensive ambulance system, the project will support poverty reduction and strengthen human capital through improvements in prehospital care. The project outputs are also designed to advance the access of both women and men to health services and infrastructure, which in turn will help promote gender equality.

E. Participatory Approach

29. The project team has initiated consultations with the MOH and 1990 Suwa Seriya Foundation and has incorporated their feedback into the project design. A participatory approach involving regular communication with stakeholders will continue throughout the project cycle.

F. Development Coordination

30. The JFPR grant component will be implemented through enhanced collaboration with the World Health Organization and Japan International Cooperation Agency (JICA) and reflects good practices from other countries, especially Japan, through regular consultations with experts and development partners. The project team, with support from JICA and/or the Embassy of Japan, will explore the possibility to liaise with the Japan Emergency Medical Services and request their technical advice and expertise to improve the quality of the service package and introduce measures to reduce the turnaround times of the 1990 Suwa Seriya ambulance service. The workshop for concerned MOH and 1990 Suwa Seriya officials to learn the emergency medical service systems in Japan will also be designed and convened in close collaboration with JICA.

G. Safeguards

31. The JFPR grant component is classified category C for environment, involuntary resettlement, and indigenous peoples safeguards as per the ADB Safeguard Policy Statement (2009). The grievance redress mechanism established under the ongoing project will continue to assist in resolving any grievance caused by any activity under the grant.

32. Activities financed by JFPR grant shall not cause any significant environmental impacts. All ambulance stations identified for renovation are located within police stations. Acquisition of private land or any physical or economic displacement shall not occur because of the proposed interventions. The initial environmental examination report prepared for the additional financing includes a discussion on impacts of JFPR-financed activities and mitigation measures. The PMU shall include progress in compliance with safeguards needs with respect to the grant in the semiannual monitoring reports submitted to ADB. The reports shall be disclosed on ADB website.

H. Risks and Mitigating Measures

33. Major risks and mitigating measures are summarized in Table 5 and described in detail in the risk assessment and risk management plan.¹⁹

Table 5: Summary of Risks and Mitigating Measures

Risks	Description	Mitigating Measures
Possible acquisition of private land when renovating ambulance stations which may lead to involuntary resettlement and cause impacts on indigenous people.	Low	As all ambulance stations identified for renovation are located within government lands, the acquisition of private land leading to any involuntary resettlement impacts and impacts on indigenous people are not anticipated. A screening checklist for involuntary resettlement impacts have been included in the updated Environment Assessment and Review Framework. Once the detail designs are completed in each sub project, the project management unit shall undertake a screening to reconfirm the social safeguard categorization.

Source: Asian Development Bank.

¹⁹ Risk Assessment and Risk Management Plan (accessible from the list of linked documents in Appendix 2 of the report and recommendation of the President).

IV. ASSURANCE

34. The MOH has assured ADB that implementation of the JPFR grant shall conform to all applicable ADB policies, including those concerning anticorruption measures, safeguards, gender, procurement, consulting services, financial management, and disbursement as described in detail in the PAM (footnote 18) and the grant agreement.