Republic of Korea – World Bank Group Partnership on COVID-19 Preparedness and Response

Country Case Study: **Fiji**

Containing, Mitigating, and Responding to COVID-19: Knowledge Generation and Exchange, Preparedness, and Response (March 2020 to June 2022)

by Donald Wilson, Avelina Rokoduru, Gade Waqa, and Kaminieli Tawake

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On the cover: Panoramic aerial landscape view of Savusavu town in Vanua Levu island, Fiji

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Preface

COVID-19 has ravaged the economy of many countries, and its impact will be felt for many years to come. This World Bank report on COVID-19 preparedness and response documents the impact of COVID-19 in Fiji and presents some lessons learned during the first, second, and third waves of the pandemic, which spanned from March 2020 to June 2022.

The study focuses on key areas such as the government/health system/public response to COVID-19, vaccination, protection of vulnerable people, innovation through leapfrogging, human capital, and the progress of Universal Health Coverage and Sustainability. This report contains six sections, which document the government's actions in containing, mitigating, and responding to COVID-19.

Disclaimer

The information has been obtained from published materials deemed reliable and accurate and that were readily accessible for public consumption at the time of data collection, and supplementary data came from key sources who either led or informed specific parts of Fiji's national response. The authors have no obligation to update any new information, and they will not be liable for any dispute arising in connection to this report.

Magic Waterfall and natural pool in Suva, Fiji

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ABBREVIATIONS

ABBREVIATION	EXPANDED FORM
ADB	Asian Development Bank
AIIB	Asian Infrastructure Investment Bank
AUSMAT	Australia Medial Assistance Team
CDC	Centre for Disease Control
CEPI	Coalition of Epidemic Preparedness Innovation
CLCF	Commonwealth Local Government Forum
CRMT	COVID-19 Risk Mitigation Taskforce
CSN	Clinical Service Network
CWMH	Colonial War Memorial Hospital
DFAT	Australian Government- Department of Foreign Affairs
DISMAC	Disaster Management Committee
DMO	Divisional Medical Officer
ESMF	Environmental and Social Management Framework
EWARS	Early Warning Alert and Response System
FBOS	Fiji Bureau of Statistics
FCOSS	Fiji Council of Social Services
FEMAT	Fiji Medical Assistance Team
FEMIS	Fiji Education Management Information System
Fiji CDC	Fiji Centre for Disease Control
FNPF	Fiji National Provident Fund
FNU	Fiji National University
FOID	Fijians of Indian Descent
FPBS	Fiji Pharmaceutical & Biomedical Services
FRCS	Fiji Revenue and Customs Service
FRIEND	Foundation for Rural Integrated Enterprises and Development
FTCWO	Failure to Comply with Orders Offence
FWCC	Fiji Women's Crisis Centre
GAVI	Global Alliance for Vaccines and Immunization
GBV	Gender Based Violence
GDP	Gross Domestic Product

ABBREVIATION	EXPANDED FORM
HCWs	Healthcare Workers
HEADMAP	Health Emergencies & Disaster Management Plan
HIES	Household Income Expenditure Survey
HIU	Health Information Unit
ICT	Information and Communications Technology
ICU	Intensive Care Unit
IMF	International Monetary Fund
IMT	Incident Management Team
JICA	Japan International Cooperation Agency
KAP	Knowledge, Attitude, and Practice
KOICA	Korean International Cooperation Agency
LGBTQI	Lesbian, Gay, Bisexual, Transgender, Queer, and Intersex
LTD	Leptospirosis, Typhoid, Dengue
MEHA	Ministry of Education, Heritage, and Arts
MFAT	New Zealand Ministry of Foreign Affairs and Trade
MLO	Media Liaison Officer
MoHMS	Ministry of Health and Medical Services
MSME	Micro, Small, and Medium Enterprise
NCDs	Non-Communicable Diseases
NDMC	National Disaster Management Council
NDMO	National Disaster Management Office
NFA	National Fire Authority
NGO	Non-governmental Organization
NNDSS	National Notifiable Disease Surveillance System National
NPHL	National Public Health Laboratory
NPI	Non- Pharmaceutical Interventions
NZMAT	New Zealand Medical Assistance Team
PCR	Polymerase Chain Reaction
PHC	Primary Health Care
PHECC	Pre-Hospital Emergency Care Centre
PHEIC	Public Health Emergency of International Concern
PICTS	Pacific Island Countries and Territories

ABBREVIATION	EXPANDED FORM
PPE	Personal Protective Equipment
PPHSN	Pacific Public Health Surveillance Network
PSIDS	Pacific Small Island Developing States
RBF	Reserve Bank of Fiji
RFMF	Republic of Fiji Military Forces
RISE	Revitalizing Informal Settlement Environment
RMNCH	Reproductive, Maternal, Newborn, and Child Health
SCC	Suva City Council
SDG	Sustainable Development Goals
SDMO	Sub- Divisional Medical Officer
SOP	Standard Operating Procedure
SOPD	Surgical Outpatient Department
SPC	The Pacific Community
STC	Save the Children Fiji
UNDP	United Nations Development Programme
UNICEF	United Nations International Children's Emergency Fund
VRS	Vaccination Registration System
WAF	Water Authority of Fiji
WHO	World Health Organization

EXECUTIVE SUMMARY

The Fiji government responded quickly and moved decisively with stringent measures following the identification of the first COVID-19 case and took various effective measures to prevent its spread. It has been quick to implement public health emergency measures including lockdowns, curfews, physical distancing, travel restrictions, and international border closures to prevent imported cases of the virus. While the Fiji government used its endorsed Health and Emergencies Disaster Management Plan (HEADMAP) and did not view the pandemic as a new concept requiring a new approach, its application remains one that is innovative and potentially transformative, especially for Fiji and the Pacific region. A total of 65,713 cases (7,426 per 100,000 population) and 866 deaths (98 per 100,000 population) have been reported up until June 30, 2022.

The Ministry of Health and Medical Services (MoHMS) in Fiji mobilized its staff to serve at designated fever clinics and isolation facilities in hospitals and communities, and it gradually increased its sentinel sites for polymerase chain reaction (PCR) tests, with additional capacity to undertake GeneXpert COVID-19 testing. Since the first confirmed case of COVID-19 was identified in Fiji on March 19, 2020, the government of Fiji has taken proactive and effective measures, including nonpharmaceutical interventions (NPIs) such as school and workplace closure, community quarantine, limiting size of meetings, restricting travel, stay-at-home guidelines for high-risk people, teleworking, closure of high-risk venues, and personal hygiene measures; active surveillance and case detection; and appropriate case management using various strategies including fever clinics, contact tracing, supervision, and home quarantine to ensure safe delivery of clinical services. The pandemic has disproportionately impacted the most vulnerable and marginalized groups, including women, children, older people, young people, persons with disabilities, the LGBTQI+ community, single and women-headed households, and poor households, with escalating rates of gender-based violence being reported. Although there are many challenges faced in adequately containing and responding to the COVID-19 pandemic, some of the lessons learned could provide valuable insights for policy makers and researchers globally.

Children playing in the ocean in Savusavu, Fiji

Key Findings

Containment Phase

- The early formation of the Incident Management Team (IMT) was important for the coordination of the "whole-of-government" response.
- Early activation of the Fiji Emergency Medical Assistance Team (FEMAT) was critical to ensure a continuum of health services delivery during the pandemic.
- Early closure of borders (early February 2020) and strict implementation of border control measures helped keep the COVID-19 virus out of the country during the early phase.
- The role of the Fiji Centre for Disease Control (CDC) in facilitating good testing capacity led to the early detection of cases, which prevented the direct transmission of the virus to the general community.
- Good testing capacity led to the early detection of cases, which prevented the direct transmission of the virus to the general community.
- The "whole-of-government" approach involving stakeholders from the government, the private sector, and local and international nongovernmental organizations provided important tools for the fight against COVID.

Mitigation

- Information and communication technology (ICT) applied to track COVID-19 infections and vaccine uptake in real time has been useful to inform decision-making.
- The use of incentives has been effective in boosting vaccination coverage in Fiji.
- Retaining the trust of community institutions and leaders (especially religious leaders and health care professionals) was pivotal in the government's success in combating COVID-19.
- Aggressive risk communication during the second wave was conducted to combat vaccine hesitancy.

Mitigation and Containment

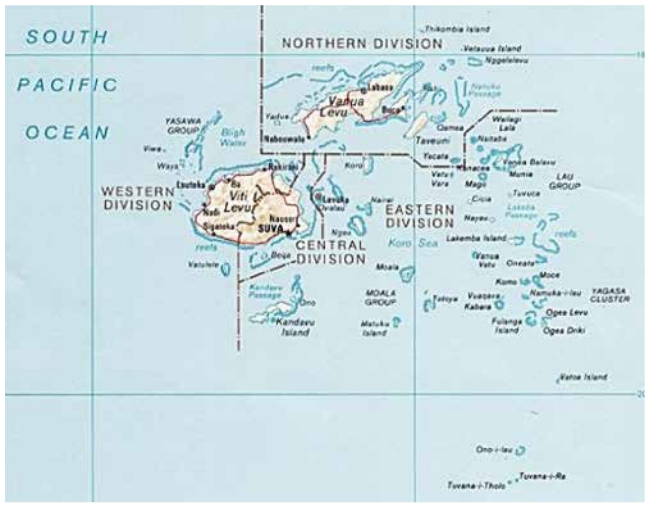
- The development of a remodeled framework toward a remodeled health services provision structure was crucial during the pandemic.
- Timely and well-coordinated management plans are critical during this health crisis.
- Continuous capacity developments at the institutional, legislative, and individual levels were critical for the overall understanding of the preparedness and mitigation process to ensure trust.

1. INTRODUCTION

1.1 Background

Fiji is an island country in the South Pacific Ocean consisting of 322 islands, with a total land area of about 18,274 square kilometers (see Figure 1). Close to 100 of the 322 islands are inhabited, with the two major islands of Viti Levu and Vanua Levu having the greatest landmasses and distribution of the population. The latest population census of Fiji (2017) recorded a total population of 884,887; an increase of approximately 5.7 percent from the last census in 2007 (Fiji Government 2018). Approximately half of Fiji's population is under the age of 27, an estimated 56 percent of the total population resides in urban areas, and the population density is about 49 persons per square kilometer. The country is divided into four administrative divisions (Western, Eastern, Central, and Northern), with 14 provinces, 195 districts, and 1,193 villages.[1] The population comprises two major ethnic groups—the I-Taukei (indigenous Fijians) and the Fijians of Indian Descent (FOID). Other minority ethnic groups include Rotumans, Part-Europeans, Chinese, and other Pacific Islanders.

Figure 1: Map of Fiji



Source: Fiji Map—Turtle Island

1 https://bestfijiguide.com/fiji-provinces/

...the social and economic impacts of COVID-19 in Fiji cannot be discussed separately from its experience of climate change impacts, as these costs have also had bearing on the country and its capacity to respond to the pandemic.

Economy

Fiji is an upper middle-income country with a gross domestic product (GDP) per capita of 4,881 Fiji dollars (F$) in 2020 (World Bank and IDB/WHO 2021. Fiji's economy relies heavily on revenues from tourism, sugar and agricultural exports, and remittances as an important source of household income. Before the COVID-19 pandemic, tourism contributed to nearly 40 percent of Fiji's GDP and directly employed around 40,000 Fijians and nearly another 100,000 indirectly, both in the formal and informal sectors. In 2019, Fiji's tourism revenue was F$2065.5 million in total (Reserve Bank of Fiji 2021).

Economic growth has been consistent and high for the past decade, with growth averaging over 3 percent from 2010 (ADB 2021a). Poverty is much higher in rural areas (37 percent) than in urban areas (20 percent). Basic services reach almost all urban and many rural households (Ibid). In the most recent Household Income Expenditure Survey (HIES) conducted between February 2019 and February 2020 (FBOS [Fiji Bureau of Statistics] 2021a) Fiji's poverty rate was recorded at 29.9 percent (258,000) with most of the country's poor living in rural (62 percent) rather than in the urban (38 percent) areas of the country. The profile of those living below the poverty line in the recent HIES records an almost even distribution of males (52 percent) and females (48 percent) who are mostly I-Taukei (75 percent) and Fijian of Indian Descent (23 percent). Most of the poor reside in the Western and Central divisions, rather than the Northern and Eastern divisions.

Economic Impact of Disasters

The International Monetary Fund's (IMF) 2020 Article IV Consultation Report highlights that Fiji is highly vulnerable to natural disasters and climate change (IMF 2020). Therefore, the social and economic impacts of COVID-19 in Fiji cannot be discussed separately from its experience of climate change impacts, as these costs have also had bearing on the country and its capacity to respond to the pandemic. The annual economic damages caused by disasters between 1980 and 2016 for Fiji have been estimated to cost F$35 million, which is approximately US$16.3 million (UNDRR 2019). The Category 5 Cyclone Winston which struck Fiji in 2016 resulted in losses and damages totaling a record US$1.38 billion the equivalent of 31% of GDP for the country (World Bank 2016).

The disaster had severe impacts on infrastructure, the agriculture sector, the sugar industry, and public finances, and the government spent about 4 percent of GDP on the reconstruction of schools, roads, bridges, and other infrastructure. The World Bank's Climate Vulnerability Assessment of 2018 identified the need for large investments to strengthen Fiji's resilience to climate change and natural hazards. According to the same source, climate change will create long-term threats to Fiji's development plan as rising sea levels negatively impact coastal populations, agriculture, and food sources for the country's vulnerable populations. This will worsen health issues, as development, climate change, and the tourism sector are subjected to multiple

stressors. The Fiji government has identified five potential solutions to address its climate change challenges: First, adaptation strategies would be integrated into town planning activities. Second, partnerships would be developed between the main stakeholders (communities, private sector, and the municipal councils) to facilitate a unified response to address climate change issues. Third, a national platform would be established through which stakeholders may coordinate their actions. Fourth, awareness would be created on adaptation methods for communities; and fifth, a national strategic plan for climate change and adaptation would be developed (MOE [Ministry of Economy] 2017).

History of Epidemics/Disease Outbreaks in Fiji

Fiji has had multiple epidemics before the well-known disease outbreaks in 1875 and 1918. In 1875, 40,000 (4,520 per 100,000) people lost their lives due to measles, and in 1918, approximately 9,000 (1017 per 100,000) people died due to the Great Influenza Epidemic (Allsopp 2020). However, due to advancement in science, vaccines were developed and led to the drop in measles infection in 1982 (the second dose of the vaccine, combined with Rubella, was developed in 2003). In 2019, following a measles outbreak, Fiji's health authorities responded with actions that included banning large gatherings (such as sports), vaccination requirements for inbound and outbound travelers, and quarantine for those who were believed to be in contact with cases. Nurses conducted vaccination from house to house, and the 2019 Fiji Measles Check showed that less than 30 cases were identified in the Central division, and no deaths were recorded. Hence Fiji's response to measles had been successful.

Fiji has had an increase in cases of meningococcal disease over recent years. Twenty-nine (29), 48, and 18 cases were reported in 2016, 2017, and 2018, respectively. All the reported patients were 19 years old or younger (MoHMS 2018). In 2018, the MoHMS conducted a mass vaccination campaign across the country, with the aim of vaccinating approximately 325,000 children and adults. The government received support from UNICEF, WHO, and other development partners in sourcing out vaccines and implementation of the vaccination plan, including cold chain (UNICEF 2018).

Socio-Economic Impact of a Double Tragedy

While the country was in the throes of its first wave of COVID-19, Fiji was also hit by Category 4 Cyclone Harold on April 8, 2020. The government declared a state of emergency in the wake of the cyclone, as well as for the pandemic. As was expected, most emergency operations and humanitarian responses targeting cyclone victims were drastically affected (Cowley 2020). This was mainly due to COVID-19 restrictions on movement, social distancing, and other prevention measures, which limited the humanitarian response around the country.

A total of 250 evacuation centers were opened around the country's four divisions, and an estimated 10,000 people were further displaced (Du Parc and Spieth 2020). Some of the consequences of the double tragedy included an increased demand on women's domestic and caregiving roles, which were linked to the COVID-19 restrictions (lockdowns and school closures). Additionally, the combined impacts of Cyclone Harold and COVID-19 affected short- and long-term socio-economic resilience levels for Fiji's populations, as most people compromised health and economic security by choosing to reduce food intake, barter of assets (UNAIDS 2020), and out-of-pocket costs for health and education. Sections of the population who found themselves jobless resettled in rural areas, and the urban-to-rural drift is placing undue pressure on existing limited rural services. Finally, accessing existing but limited assistance available through social protection schemes for marginalized groups became a challenge as COVID-19 prevention measures also restricted movement, especially for people living with disabilities (Cowley 2020).

Undoubtedly, the COVID-19 pandemic has had a huge impact on the economy, leading to the closure of 93 percent of Fiji's tourism industry since March 2020. According to a joint research by the International Finance Corporation and the Fiji Ministry of Commerce, Trade, Tourism and Transport (2020), Fiji COVID-19 Business Survey Tourism Focus (2020) report, about 50 percent of tourism businesses were closed due to the pandemic. Tourism revenue went down by 59 percent, hence leaving 27 percent of staff to work on reduced hours per day, 25 percent

on leave without pay, and 8 percent having been made redundant. The report further stated that large businesses involved in tourism have lost twice as much income as large businesses in non-tourism sectors, while micro, small, and medium enterprises (MSMEs) have lost seven times more income than MSMEs in non-tourism sectors.

This has directly impacted 37 percent of households in urban informal settlement in Fiji, with 25 percent having their work hours reduced and 12 percent having lost their source of income (RISE 2020), resulting in more than 100,000 jobs lost. Apart from the direct economic impacts, the pandemic has put significant pressure on the health system in Fiji and disrupted education at all levels, affecting teaching roles and responsibilities for teachers and learning aspects for students (Gounder and Narayan 2021).

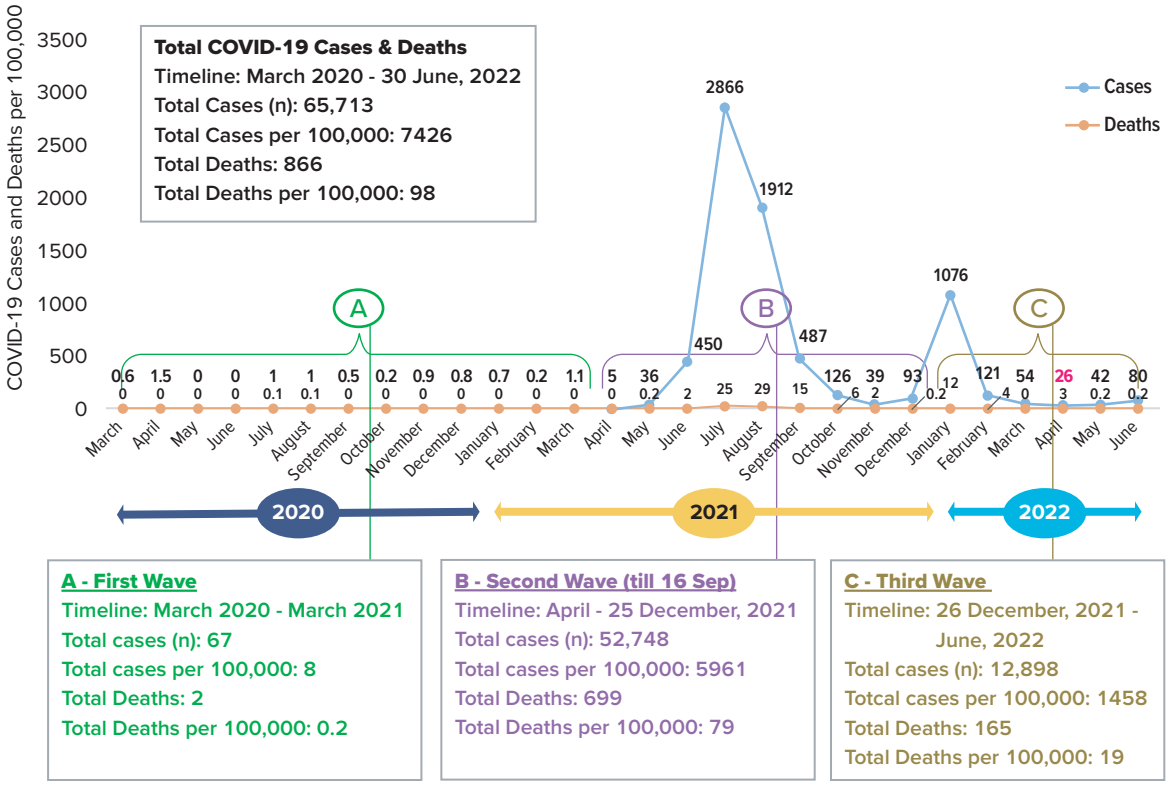
However, Fiji is gradually moving toward economic recovery. The government has successfully vaccinated 100 percent of its population with the first dose and 90 percent with the second dose, as of June 30, 2022 (MoHMS 2022). Following this, the government was able to open containment zones around the country to enable movement in the Western and Central divisions of Viti Levu and allow bus companies to operate. Businesses began reopening, and people started going to work. Private sectors began expanding their trade, and all workplaces, tertiary institutions, houses of worship, hotels, restaurants, and so forth started operating at 70 percent capacity (only for fully vaccinated individuals). Furthermore, students in Years 12 and 13 resumed classes on November 1, 2021, while classes for Years 8 to 11 resumed on January 4, 2022, and classes for Early Child Education to Year 7 resumed on February 7, 2022 (MEHA [Ministry of Education, Heritage, and the Arts] 2021d, 2022).

1.2 Epidemiology of COVID-19 in Fiji

Fiji reported a total of 65,713 (7,426 per 100,000) COVID-19 cases from March 2020 to June 30, 2022, starting with the first wave, where 65,643 (7,418 per 100,000) COVID-19 cases were reported since April 2021 *(Figure 2).* In the first wave, the MoHMS detected 18 cases in the community—the original Wuhan strain (between March and April of 2020), while other recorded cases were detected from international travelers undergoing 14 days of quarantine in border quarantine facilities *(Figure 4).* By March 21, 2021, Fiji had recorded a total of 67 cases, 64 recoveries, and 2 deaths. The second wave began when Fiji recorded the first Delta variant case in the Western division (Nadi) in April 2021. The disease spread rapidly, and the number of cases increased exponentially. Three days later, cases of the same variant were reported in the Central division in Suva, and within months, the virus had spread to all the areas within Lami, Suva, and Nausori. The transmission was very fast as the virus almost made its way throughout the whole of Viti Levu. The MoHMS with other government ministries, civil service organizations (CSOs and other allied partners, through tireless efforts, were able to contain the virus within Viti Levu, sparing Vanua Levu and most of the Eastern division. However, later in 2021, the virus was detected in these areas, as borders were opened to allow for domestic travel *(Figure 5).* The third wave began when border restrictions were loosened in November and December 2021. The government opened its borders to its citizens, and by December 1, 2021, they were fully opened to all nationals. A few days later (December 7, 2021), the MoHMS confirmed two new cases of the Omicron variant in Fijians who were returning from Nigeria (Tadulala 2021b). However, the variant had most likely already made its way into the community based on positive test reports received by the MoHMS from the Peter Doherty Institute for Infection and Immunity in Melbourne (MoHMS 2021b) *(Figure 6).*

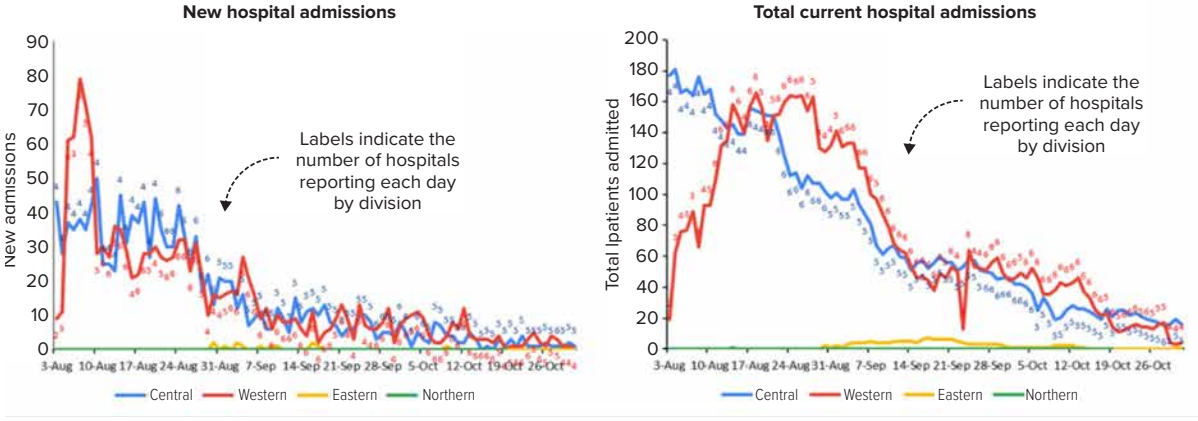
The clinical courses of the disease varied widely. Although the MoHMS has no negative pressure isolation rooms, it has facilities available to separate patients with infectious disease from others. Because fever was one of the most common manifestations of COVID-19, the government of Fiji established fever clinics across the country to identify early symptoms and prevent the spread of COVID-19 (see *Figure 3:* Total Hospital Admissions). The infection can affect people of any age group, with the elderly and patients with comorbidities being particularly vulnerable to the high risk of severe infection.

Figure 2: Total COVID-19 Cases and Deaths—First, Second, and Third Waves (per 100,000 Population)



Source: Our World in Data and MoHMS (2020, 2021, and 2022)

Figure 3: Total Hospital Admissions

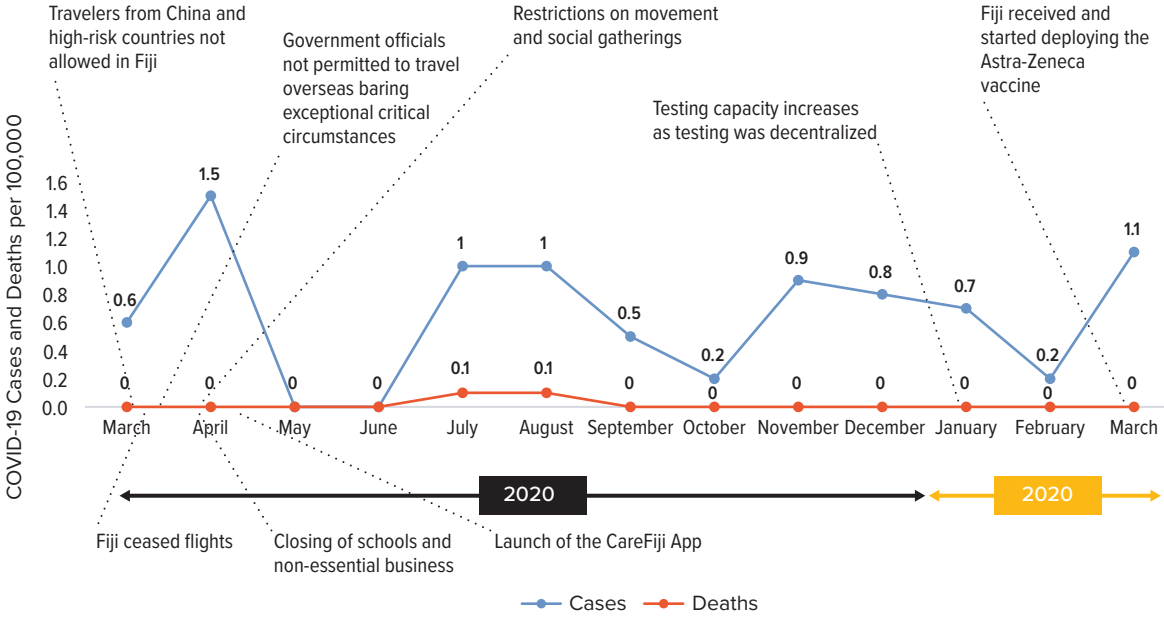


Source: MoHMS, 2021i

COVID-19 Waves in Fiji

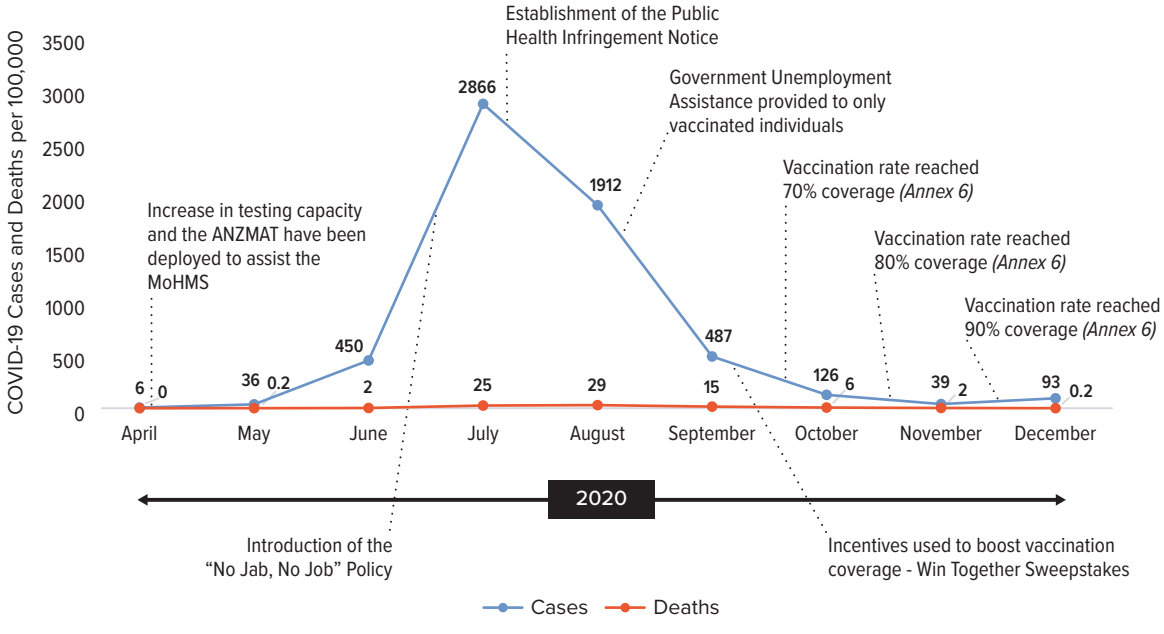
Fiji experienced three COVID-19 waves after the detection of the SARS-COV-2 virus in Hubei, China. The country detected its first case, a flight attendant returning from San Francisco, on March 18, 2020 (Deo 2020). Following that, the government introduced a series of measures to contain the virus *(Figure 4)*. In the first wave, the country recorded a total of 67 cases and 2 deaths (recorded in July and August of 2020). The second wave started around April 2021, with the Delta variant spreading rapidly within the Viti Levu group (mainly the Central and Western divisions) and later to the Eastern and Northern divisions. Cases plummeted during this period, and more deaths were also recorded. Fiji recorded more than 50,000 cases and 699 deaths in the second wave alone. The third wave corresponds to the presence of the Omicron variant in the country. The variant was detected around late December 2021, and from that period until June 30, 2022, the country recorded more than 12,000 cases and 165 deaths. Figures 4, 5, and 6 present the distribution of the cases and deaths (by months) and the government responses in each of the waves.

Figure 4: First Wave—COVID-19 Status and Government Response (March 2020 to March 2021)



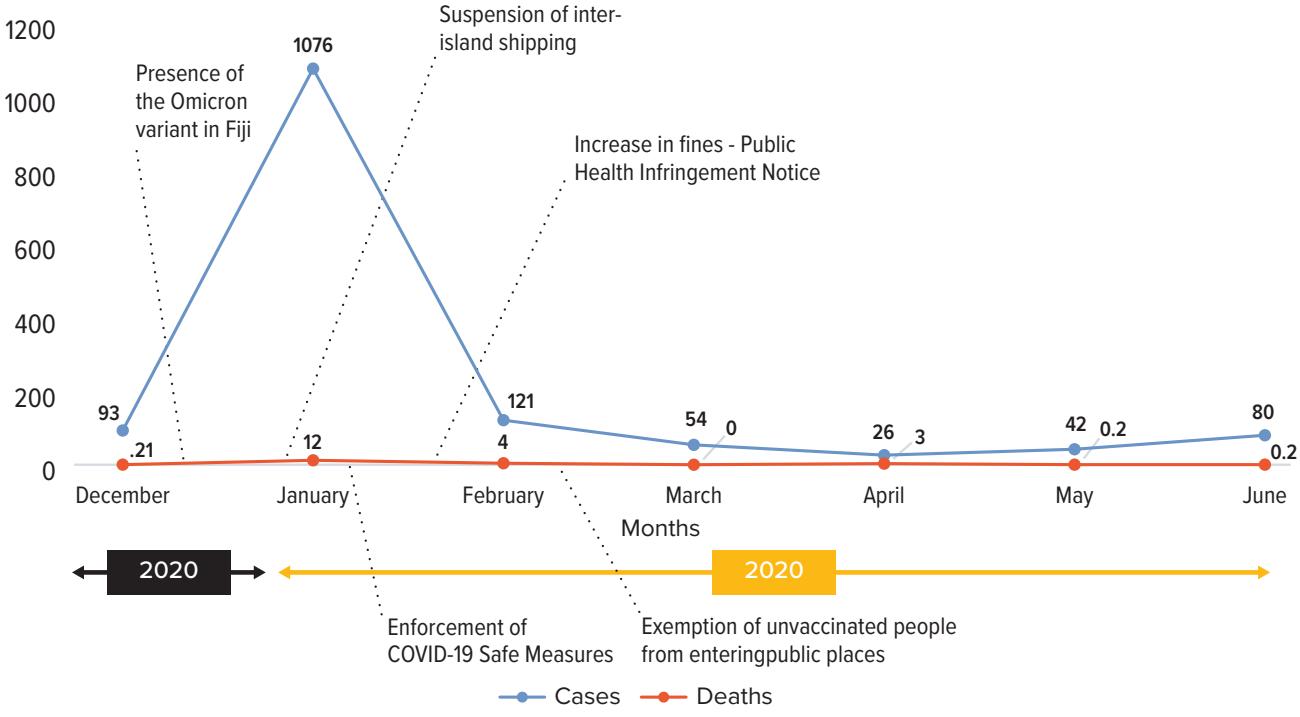
Source: MoHMS COVID-19 Updates

Figure 5: Second Wave—COVID-19 Status and Government Response (April to December 2021)



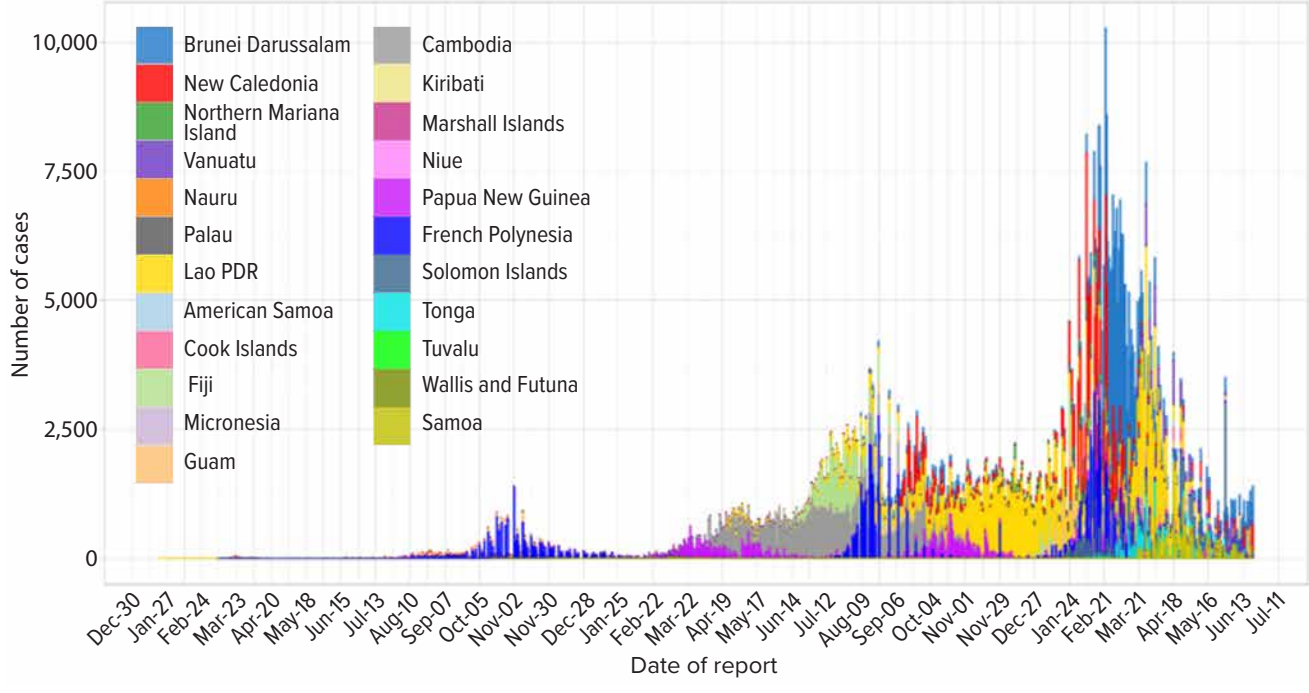
Source: MOHMS COVID-19 Updates

Figure 6: Third Wave—COVID-19 Status and Government Response (December 2021 to June 30, 2022)



Source: MoHMS COVID-19 Updates

Figure 7: Epidemic Curve of Confirmed COVID-19 Cases in Countries or Areas With the Lowest Number of Cases, as of June 29, 2022, 10:00 (GMT+8)



Source: WHO 2022a—Pacific COVID-19 Daily Epidemiological Update

Figure 8: Countries or Areas With Reported Laboratory-Confirmed COVID-19 Cases and Deaths, Covering the Period From June 22 to 28, 2022, as of June 29, 2022 (GMT+8) (n = 63,949,507)

Country or area	New cases (cumulative)	New deaths (cumulative)	Change (7-day average of cases)	Days since last reported case
American Samoa	02 (6 414)	0 (31)	-10.29	9
Australia	198 493 (8 048 708)	332 (9 777)	678.86	0
Brunei Darussalam	4 528 (163 055)	0 (166)	19.14	0
Cambodia	0 (136 262)	0 (3 056)	0.00	52
China	304 411 (4 686 285)	971 (21 073)	-11 867.00	0
Cook Islands	6 (5 768)	0 (1)	-5.14	0
Fiji	197 (65 558)	0 (865)	7.57	0
French Polynesia	82 (73 268)	0 (649)	2.86	0
Guam	376 (43 073)	0 (371)	-41.71	0
Japan	109 145 (9 283 083)	189 (31 246)	1 596.14	0
Kiribati	21 (3 236)	0 (13)	3.00	0
Korea, Republic of	51 460 (18 349 746)	63 (24 537)	233.86	0
Lao PDR	44 (210 258)	0 (757)	-0.86	0
Malaysia	15 957 (4 560 583)	21 (35 758)	234.71	0
Marshall Islands	0 (18)	0 (0)	0.00	26
Micronesia (Federated States of)	0 (38)	0 (0)	0.00	24
Mongolia	02 (928 586)	2 (2 118)	-81.86	24
Nauru	2 491 (3 174)	0 (0)	258.71	0
New Caledonia	822 (64 337)	0 (313)	44.14	0
New Zealand	41 245 (1 323 528)	81 (1 449)	1 039.14	0
Niue	5 (15)	0 (0)	0.57	0
Northern Mariana Islands	190 (11 759)	1 (35)	14.71	0
Palau	27 (5 220)	0 (6)	-0.14	0
Papua New Guinea	26 (44 717)	0 (662)	1.43	0
The Philippines	5 119 (3 702 319)	55 (60 531)	254.86	0
Pitcairn Islands	0 (0)	-	-	-
Samoa	94 (14 906)	1 (29)	-31.57	0
Singapore	47 081 (1 425 171)	5 (1 410)	2 538.00	0
Solomon Islands	02 (21 544)	0 (153)	0.00	18
Tokelau	0 (0)	--	-	-
Tonga	222 (12 301)	0 (12)	31.71	0
Tuvalu	0 (3)	0 (0)	0.00	37
Vanuatu	253 (11 266)	0 (14)	-8.29	0
Viet Nam	5 945 (10 744 854)	3 (43 087)	45.86	0
Wallis and Futuna	0 (454)	0 (7)	0.00	77
Total	788 240 (63 949 507)	1 724 (238 126)	-5 041.57	

Source: WHO 2022a—Pacific COVID-19 Daily Epidemiological Update

Mortality of COVID-19 Cases

Fiji has recorded 866 deaths (which is 98 deaths per 100,000 population) since the beginning of the pandemic until June 30, 2022, with most deaths reported in the second wave *(Figures 2 and 9)*. Other Pacific Islands such as Samoa, Vanuatu, and the Solomon Islands reported low counts of COVID-19 cases and deaths. As of June 29, 2022, Samoa recorded 14,906 cases with 29 deaths, Vanuatu 11,266 cases and 14 deaths, and the Solomon Islands 21,544 cases and 153 deaths (WHO [World Health Organization] 2022b) *(Figures 7 and 8)*.

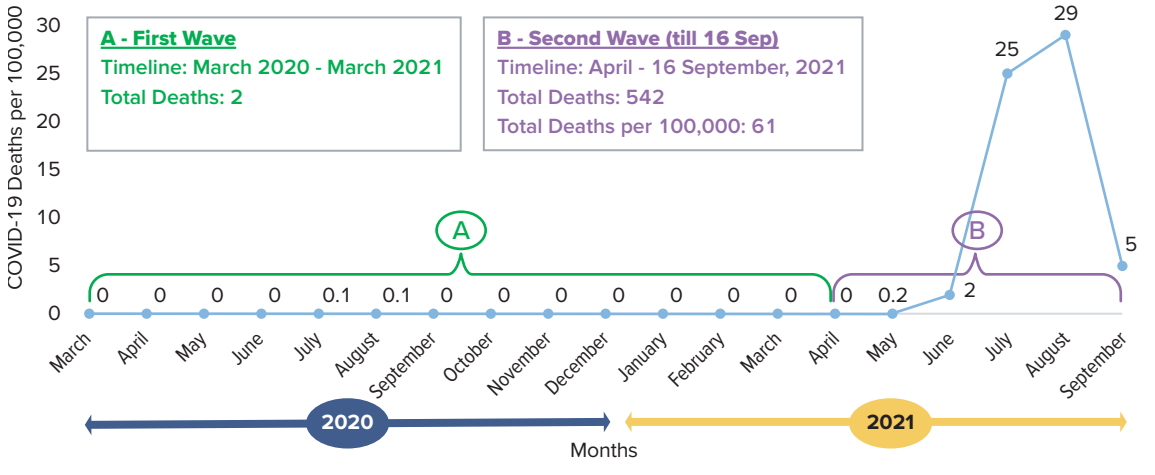
Analysis of COVID-19 Deaths in the First and Second Waves

[Note: Data provided in Figures 8 and 9 is from March 2020 to September 17, 2021. Data from September 18, 2021, and onwards was not obtained due to limited information on deceased cases].

Fiji's youngest COVID-19 death was a four-month-old baby boy, and the oldest case was a 102-year-old female—both deaths reported from the Central division. Fiji recorded the highest number of COVID-19 deaths in July and August of 2021. Fewer females (47 percent) were reported as dying from COVID-19 compared to males (53 percent), and more deaths were reported from the Central division (69 percent) compared to the Western and Eastern divisions *(Figure 9)*. Case fatalities were among those aged 50 years and above *(Figure 10)*. These may be related to non- or partial vaccination, as well as existing comorbidities. Fewer deaths have been recorded for age cohorts under 40 years old and more than 90 years old.

During this period, the country reported high rates of deaths on arrival (DoA) and deaths at home (DaH). These may be attributed to local health-seeking behaviors as well as the fear of being isolated from family members and dying alone if they presented at health facilities. At the peak of the wave, administration of life-saving treatment proved futile as the symptoms and complications of the virus appeared to escalate in a matter of hours. Reports of deaths at homes or on the way to the hospital increased exponentially for the country, and severe respiratory distress was the common complication (RNZ 2021b). Tran et al. (2020) discussed health-seeking behaviors as one of the factors related to deaths on arrival at hospitals. Generally, there was a fear of visiting hospitals or health centers and a higher preference for seeking over-the-counter remedies at local pharmacies for self-treatment or for accessing alternative herbal medicine through traditional healers.

Figure 9: COVID-19 Deaths per 100,000-—First and Second Waves (March 2020 to September 16, 2021)



Total COVID-19 Deaths	
Timeline:	March 2020 - 16 September, 2022
Total Deaths:	544
Total Deaths per 100,000:	61

Proportion and total number of COVID-19 Deaths by Patient Sex		
	Male	Females
%	53%	47%
n	287	257

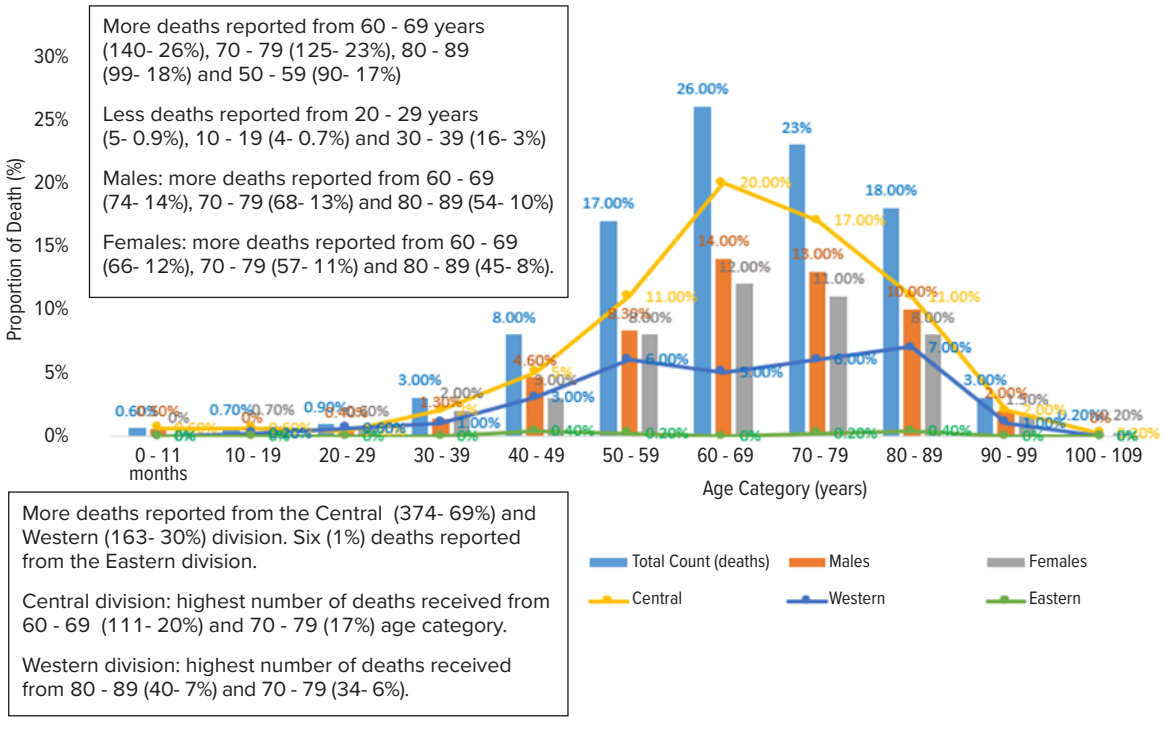
Proportion and total number of COVID-19 Deaths by Division			
	Central	Western	Eastern
%	69%	30%	1%
n	375	163	6

Source: World in Data and MoHMS—2020 and 2021

Analysis of COVID-19 Deaths in the Third Wave

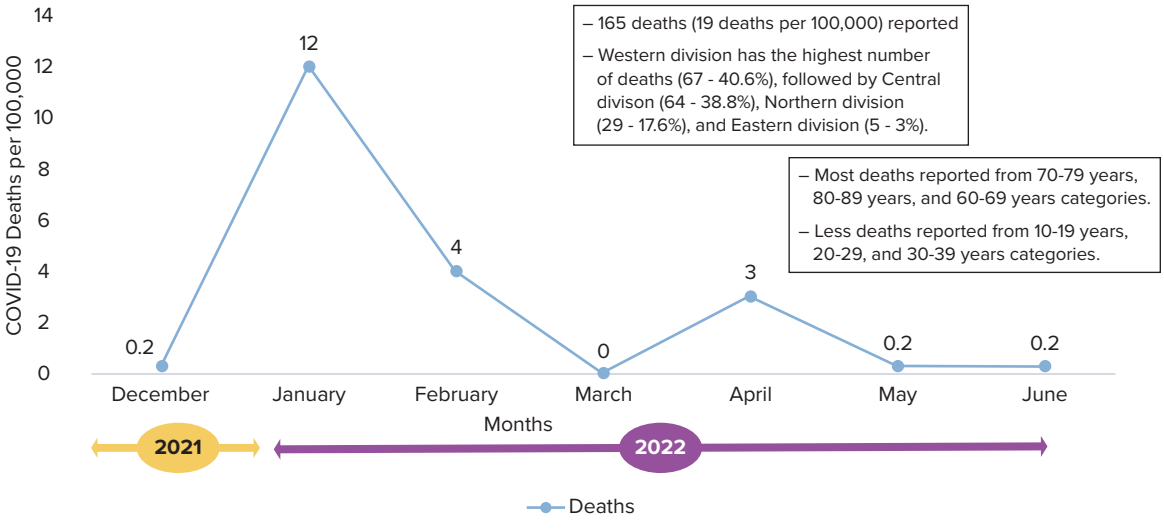
The third COVID-19 wave started around mid- to late December 2021 (since the reporting of the Omicron variant in Fiji). Deaths started peaking by mid-January 2022, contributing to a total of 165 deaths in the third wave alone *(Figure 11)*. The Western division recorded the highest absolute number of deaths (n = 67), while the Northern division had the highest rate of death when adjusted for population—20.7/ 100,000 population *(Table 1)*. When analyzing deaths by age group, the age group 50 years and older has the highest death rate adjusted per 100,000 population *(Table 2)*.

Figure 10: Proportion of COVID- 19 Deaths by Age Group (March 2020 to September 16, 2022)



Source: World in Data and MoHMS—2020 and 2021

Figure 11: Proportion of COVID-19 Deaths by Age—Third Wave (December 2021 to June 30, 2022).



Source: MoHMS 2022b

Table 1: Deaths in the Third Wave (December 2021 to March 8, 2022), by Division

Division	Total COVID Deaths	Deaths per 100,000
Central	64	15.9
Western	67	18.8
Northern	29	20.7
Eastern	5	13.0

Source: MoHMS 2022b

Table 2: Deaths in the Third Wave (December 2021 to March 8, 2022), by Age Group

Age Group	Total Deaths	Deaths per 100,000 population
0 - 9	6	3.3
10 - 19	2	1.3
20 - 29	3	2.1
30 - 39	4	2.9
40 - 49	7	6.7
50 - 59	21	23.1
60 - 69	34	65.4
70 - 79	50	223.2
80 - 89	30	533.2
90 - 99	6	1153.8

Source: MoHMS 2022b

Summary 1: Epidemiology of COVID-19 in Fiji

- Fiji's first case was reported on March 19, 2020. In the first wave, the MoHMS detected 18 confirmed cases in the community, from March to April 2020, while other cases were reported from border quarantine facilities. A total of 67 cases and 2 deaths were reported during this period. In the second wave, the MoHMS detected 52,748 cases and 699 deaths from April to December of 2021. In the third wave, Fiji recorded 165 deaths and 12,898 cases—as of June 30, 2022.
- The original COVID-19 Wuhan strain reached the Fiji shores in March 2020. The Delta and Omicron variants were detected in April and December of 2021, respectively.
- COVID-19 cases and deaths peaked between June and August of 2021, and they gradually decreased in September 2021.
- Fiji's youngest death was a four-month-old baby, and the oldest was a 102-year-old female.
- Most deaths reported were from the Central division with a fair distribution of deaths by patient gender. High-risks groups were those ages 60 years and above.
- In the first and second waves, most deaths reported were from the Central division, with a fair distribution of deaths by patient gender *(Figures 9 and 10)*. In the third wave, most reported deaths were from the Northern division—rate adjusted for population *(Table 1)*.

1.3 Macro-Economic Indicators

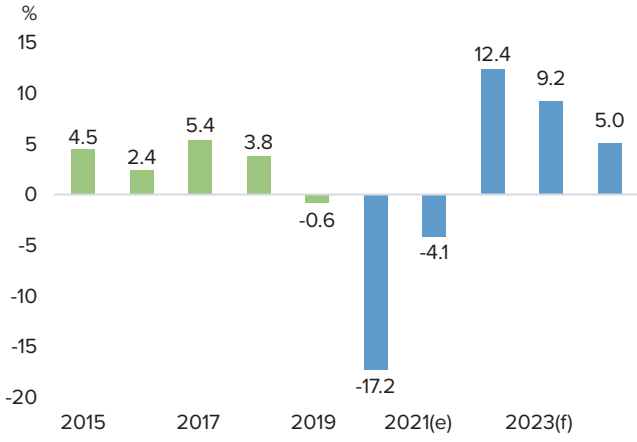
Prior to COVID-19 in Fiji, the country had the strongest period of economic growth from 2010 to 2018. For instance, per capita income levels rose to over F$13,000, and the unemployment rate fell to a 20-year low of 4.5 percent. This economic stability was due to increased productivity and investment, improved private sector confidence, political stability, and implementation of critical reforms by the Fijian government. However, COVID-19 and a series of natural disasters devastated the country's economy in terms of local business activities and the global supply chains, impacting trade flows, employment, remittance inflow, and government tax collections.

Gross Domestic Product (GDP) per Capita

According to the International Monetary Fund (2021), the global economy was projected to increase by 5.9 percent in 2021 and 4.9 percent in 2022. However, beyond 2022 it was expected to grow moderately, by 3.3 percent. Fiji's GDP contracted by 17.2 percent in 2020 with a further 4.1 percent contraction in 2021 *(Figure 12).* Projections showed that Fiji's real GDP is expected to increase by 11.3 percent in 2022, 8.5 percent in 2023, and 7.7 percent in 2024. The COVID-19 pandemic and consecutive natural disasters have contributed to these drops, as jobs, public finance, and socioeconomic conditions were altered. However, Fiji's economy is gradually recovering as the government was able to vaccinate more than 100 percent and 95 percent of its population with the first and second doses, respectively, and 45 percent with the booster doses (n = 141,572 or 15,999 per 100,000 population). Borders were also opened to international, regional, and domestic travelers, as a response to economic recovery (MoHMS 2022).

Fishing fleet at anchor, Suva harbour, Fiji

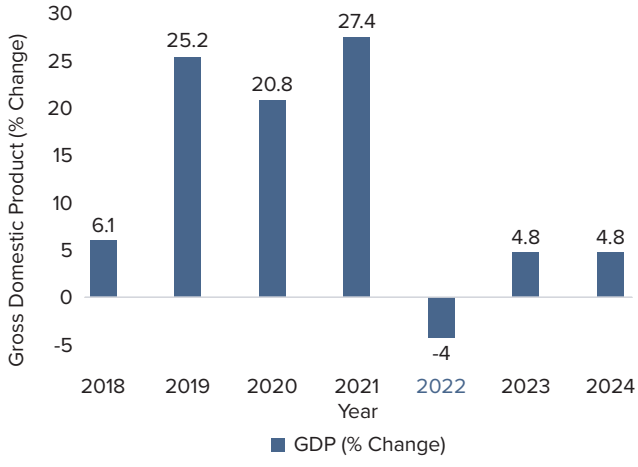
Figure 12: Fiji GDP Growth Rate (2013 to March 2021, 2022., and 2023)



Source: Republic of the Fiji 2022a

Fiji's data on the percentage change GDP on human health and social services was 6.1 percent in 2018 (actual) and 25.5 percent in 2019 (provisional). The years 2020 and 2021 (estimated) showed an estimated percentage of 20.8 and 27.4, respectively. However, projections of 2022 to 2024 (forecasted) are forecasted to be -4 percent, 4.8 percent, and 4.8 percent, respectively *(Figure 13).*

Figure 13: Percentage GDP Change on Human Health and Social Services

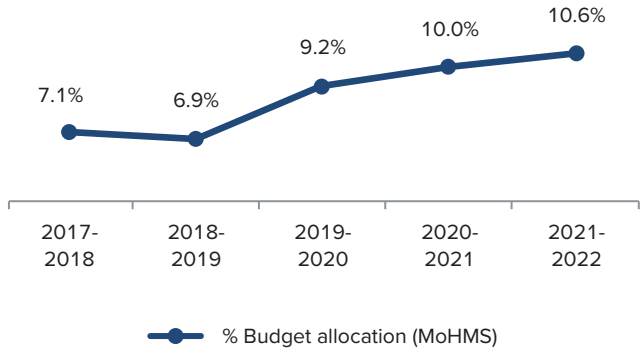


Source: Republic of Fiji 2022a

Budget Increase for the MoHMS (2017 to 2021)

COVID-19 has increased fund allocation toward the MoHMS in the total government budget. As depicted in *Figure 14,* budget allocations have increased in the years 2019, 2020, and 2021. A comparison of the budget estimates for the years 2018–2019 and 2019–2020, 2020–2021, and 2021–2022 shows it increased by 2.3 percent, 3.1 percent, and 3.7 percent, respectively. Budget allocation details are provided in *Annex 21.*

Figure 14: Proportion of Budget Allocation—MoHMS (2017 to 2021)



Source: Republic of Fiji 2017, 2018a, 2019a, 2020a.

The economy is projected to recover in 2022 and 2023 with a broad-based growth forecast of 8.7 percent, based on the assumption that tourism activity will normalize, leading to a pickup for tourism-related sectors and a rebound in domestic demand toward the end of 2021 (Reserve Bank of Fiji 2021).

In response to the pandemic, the Ministry of Economy introduced a COVID-19 Response Package valued at F$1.0 billion (US$470 million) in parliament in 2020, and announced a strategy focusing on redirection of funds to "relevant front-line agencies that required additional resources for the prevention and containment activities, ensuring food security and maintaining support for the disadvantaged" through a series of measures in its 2020/2021 budget (MOE 2020). These included support to all employers in Fiji through a reduction of the mandatory Fiji National Provident Fund (FNPF—social security scheme) employer contribution from 10 percent to 5 percent, thereby providing approximately F$103 million (US$49.6 million) relief to employers from April to December 2020. Employee deductions to the same scheme were also reduced from 8 percent to 5 percent, allowing F$80 million (US$38.5 million) worth of spending back into the pockets of employees for the same period. The government provided further relief to employers through direct reimbursement payment for 21 days of leave for employees who were certified by the MoHMS as having COVID-19 infections. Additionally, employers who continued to pay their employees during self-quarantine, as required by the MoHMS, were eligible for a 300 percent tax reduction. *Table 3* presents a summary of the direct budget funding for the COVID-19 response for fiscal year 2020.

Table 3: Direct Budget Funding for COVID-19 2020 to 2021

Details`	(FJD) $ Million	(US) $ Million	%
Ministry of Health	40.0	18.80	4.00
Fiji Police Force	0.7	0.329	.07
Rep of Fiji Military Forces	0.15	0.07	0.015
Min. of Agriculture	1.0	0.40	0.10
Fiji Competition & Consumer Commission	0.01	0.047	0.001
Unemployment Benefits - Tourism Sector	5.6	2.60	0.56
Unemployment Benefits - Lockdown Areas (Formal Sector)	7.0	3.29	0.70
Unemployment Benefits - Lockdown Areas (Informal Sector)	3.0	1.40	0.30
Unemployment Benefits - General	5.0	2.35	0.50
Assistance to SMEs	5.0	2.35	0.50
Contingency Funds (Unemployment)	5.0	2.35	0.50
Contingency Funds (General)	27.5	12.90	2.75
Total Budget Allocation FJD $1 Billion (USD $470 million)	100.0	47.00	

Source: Fiji MOE—Supplement to the COVID-19 Budget Address

A total budget of F$3,536.4 million (US$1,698.68 million) was allocated to the COVID-19 response in 2020, of which F$2,507.6 million (US$1,204.5 million) was to be funded through projected total revenue, and the remaining deficit of F$1,028.7 million (US$494.12 million)—9.0 percent of GDP—funded from the Asian Development Bank and World Bank (MOE 2020).

The government allocated 10.6 percent of its total budget (2021–2022) toward the MoHMS (F$403.3 million). The MoHMS's major focus has been on communicable diseases, including the response to COVID-19 and the vaccination initiative. The budget also ensures that various components of the health system are supported, which includes strengthening and decentralizing selected clinical services. *Annex 23* presents a distribution of funds that has been allocated toward the COVID-19 National Deployment and Vaccination Plan (Republic of Fiji 2021a).

Tourism Industry

The tourism industry has been identified as an important economic activity in Fiji as it contributes to 40 percent of Fiji's GDP, both indirectly and indirectly. The Fijian 2021 development plan stipulated that by the end of 2021, Fiji's tourism industry will be worth F$2.2 billion with 930,000 visitors (Republic of Fiji 2021c). However, this plan was affected when COVID-19 emerged in late 2019. The Fiji Tourism Statistics showed that the tourism industry was favorable from 2016 until 2019, with an average earning of F$1,955.9 million, with 849,976 visitors (Republic of Fiji 2020c.). However, it was not consistent in 2020 and 2021, as visitors' arrivals declined from more than 890,000 in 2019 to 146,905 in 2020, then further to 31,618 in 2021 (Republic of Fiji 2021b) *(Table 4)*.

In a COVID-19 business impact survey taken between January and February 2021 of the country's 1,569 branches and outlets of 236 enterprises that earned F$8 million or more per annum (and comprise 70 percent of total gross output), 94 percent reported being adversely affected by the pandemic. About 87 percent of the businesses reported reduced income of between F$ 1–5 million (33 percent) and more than F$5 million (32 percent (FBOS 2021b). They embarked on a series of measures including renegotiation of building rentals, deferment of loan repayments, and reducing wages and salaries. Additionally, 59 percent of the businesses (6 out of every 10) placed their staff on reduced hours. Overall, performance by businesses in Fiji was impacted negatively by local demand (74 percent), international demand (44 percent), staff reduction (38 percent), high cost of raw materials (33 percent), and shortage of materials (31 percent) (FBOS 2021b).

During the same period, 57 percent of the businesses were directly affected by lockdown measures, resulting in shortened business hours, temporary reduction of staff working hours, and therein reduced local demand (FBOS 2021b).

Table 4: Tourism Earnings 2016–2023. (p) = provisional (f) = forecast

	2016	2017	2018	2019 (p)	2020 (p)	2021 (f)	2022 (f)	2023 (f)
Visitors	792,320	824,884	870,309	894,389	146,905	16,892	268,317	715,511
Average length of stay (days)	11.2	11.2	11.2	11.1	11.0	11.0	11.0	11.0
Visitors days (millions)	7.0	7.2	7.6	7.6	1.5	1.5	2.7	5.3
Earnings (F$M)	1,823.3	1,924.3	2,010.3	2,065.5	314.9	14.3	486.6	1,035.0

Source: FBOS (Fiji Bureau of Statistics)

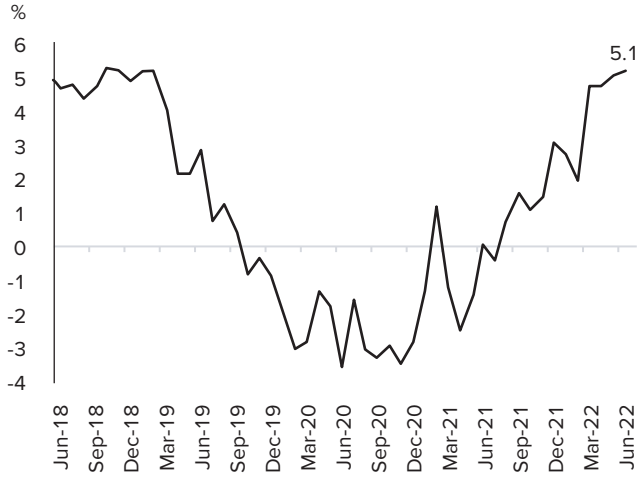
About 76 percent of the businesses retained their employees and granted their employees were granted paid/unpaid leave or reduced working hours. However, employees of the remaining 26 percent of the businesses lost their jobs and 24 percent of the businesses placed their staff on work-from-home initiatives (FBOS 2021b). Capital investment performance of the businesses has also been affected by the pandemic. While only 4 percent reported increased investment, 23 percent deferred capital plans and expenditure and another 4 percent canceled investments. This has ramifications not only for businesses, but also workers and the government.

Inflation

Since September 2019, Fiji had experienced negative inflation with inflation rates dropping to -2.8 percent at the beginning of the pandemic. However, there was a significant turnaround from August 2021 to June 2022, after figures had remained in the negative territory for nearly two years. The low inflation rates were influenced by the pandemic as movement was restricted, and there was a continued labor shortage, an increase in prices of food and fuels, higher freight costs, and discrepancies between demand and supply.

Figure 15 shows the country's annual inflation rate at 5.1 percent in June 2022. This was attributed to the war in Ukraine, which has led to the increase in prices of food and fuels. It is estimated that by the end of 2022, Fiji's annual inflation rate will be 5 percent.

Figure 15: Inflation Rates (June 2018 to June 2022)



Source: Republic of Fiji 2022b

Multi-colored fabrics in a local Fiji market

Government Debt

The government debt was estimated to reach F$8.3 billion (83.4 percent of GDP) by the end of July 2021. However, the budget forecast was much lower, at around F$7.6 billion (79.2 percent of GDP) in the same year *(Table 5)*. For fiscal year 2022, debt was forecasted to reach F$9.1 billion, equivalent to 88.4 percent of GDP, by the end of July 2022, with 64 percent in domestic debt and 36 percent in external debt (*Table 6)*. In the fiscal years 2021 and 2022the government accessed over F$900 million concessional loans from development partners. The external debt financing and budget support grants were made available through the government's multilateral and bilateral partnerships with development partners including the Asian Development Bank (ADB), World Bank, Japan International Cooperation Agency (JICA), Asian Infrastructure Investment Bank (AIIB), and the governments of Australia and New Zealand. The COVID-19 pandemic contributed to Fiji's increased debt levels amounting to over 80 percent of GDP. Prior to the pandemic, Fiji's debt-to-GDP ratio remained within the accepted benchmark of 50 percent. However, the prolonged and continuous impact of the pandemic led the government to support the economy as business revenue plummeted, and tax revenues declined by almost 50 percent, with the largest foreign earner (tourism) at near zero for almost 20 months. Hence, the government implemented a countercyclical fiscal response through increased borrowings from external and domestic sources. This response was critical to prevent severe economic contractions and severe socio-economic challenges and to help increased liquidity levels in the domestic market.

The Ministry of Economy reported that the government finances had been under strain during the pandemic. The pandemic has contributed to the decrease in tax revenue collected in the fiscal years 2020/2021 and 2021/2022. During this period, expenditure demands increased to support Fiji's delicate economic situation and to meet the needs of the vulnerable population. Hence, the government ramped up borrowings from development partners and was able sustain expenditure at all levels.

Figure 16 depicts the total revenue collected in the years 2017–2022, with (a) signifying actual amount and (b) signifying budgeted amount.

Table 5: Fiji Government Debts (July 2017 to July 2021)

Particulars	Jul-17	Jul-18	Jul-19	Jul-20	Jul-21 (f)
Domestic Debt	3,300.8	3,763.0	4,278.5	4,976.5	5,240.8
External Debt	1,370.9	1,457.5	1,456.8	1,709.5	2,365.2
Total Debt	4,671.7	5,220.5	5,735.2	6,686.0	7,606.0
% growth	3.6%	11.7%	9.9%	16.6%	13.8%
Debt (as a % of GDP)	43.5%	46.0%	49.3%	65.5%	79.2%
Domestic Debts to Total Debt (%)	71%	72%	75%	74%	69%
External Debts to Total Debt (%)	29%	28%	25%	26%	31%

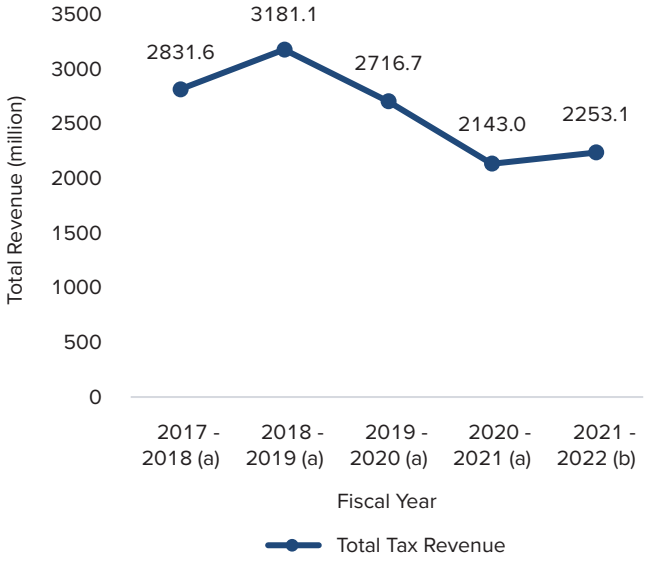
Source: Ministry of Economy

Table 6: Fiji Government Debts (July 2018 to July 2022)

Particulars	Jul-18	Jul-19	Jul-20	Jul-21	Jul-22 Revised Forecast
Domestic Debt	3,763.0	4,278.5	4,976.5	5,241.2	5,825.7
External Debt	1,457.5	1,456.8	1,709.5	2,422.5	3,300.0
Total Debt	5,220.5	5,735.2	6,686.0	7,663.7	9,125.7
Debt (as a % of GDP)	46.0%	49.3%	65.5%	79.8	88.6
Domestic Debts to Total Debt (%)	72%	75%	74%	68%	64%
External Debts to Total Debt (%)	28%	25%	26%	32%	36%

Source: Ministry of EconomyTax Revenue

Figure 16: Total Government Revenue (2017–2022)

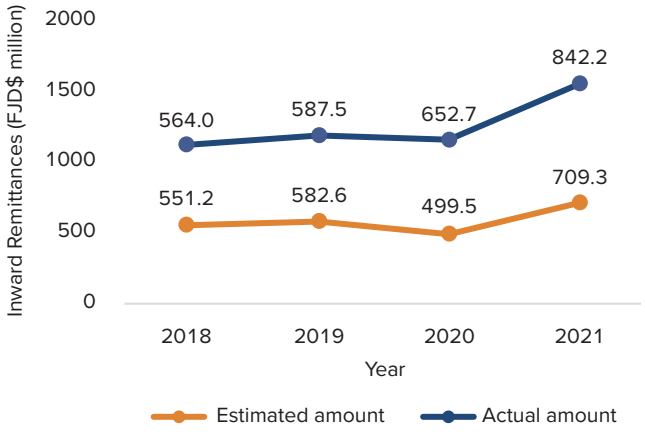


Source: Republic of Fiji 2020c, 2021d, 2022b.

Remittances

Remittances continued to increase from 2018 to 2021. As depicted in *Figure 17,* actual remittance amount surpassed estimated remittance amount and there was a significant increase in 2021. Inward remittance noted a substantial growth of 14.6 percent in 2021. This was influenced by increase of remittances from Fijians living abroad. Cash assistance was sent to support family members, relatives, or friends during the pandemic in Fiji. Additionally, people opted for or preferred cheaper and more convenient mobile money transfer platforms.

Figure 17: Inward Personal Remittances (2018 to 2021)



Source: Republic of Fiji 2018b, 2019b, 2020b, 2021b

Summary 2: Macro-Economic Indicators

- Fiji's GDP contracted by 15.2 percent in 2020 and contracted by another 4.1 percent in 2021. It is expected to increase by 11.3 percent in 2022.
- Fiji's main source of revenue, the tourism industry, has been severely affected in the years 2020 and 2021.
- In 2020, the government established the COVID-19 Response Package, valued at F$1 billion dollars, with most allocations directed toward the MoHMS.
- COVID-19 has resulted in 87 percent of businesses having reduced income, with 59 percent of businesses placing their staff on reduced hours. About 26 percent of the employees lost their jobs, while 24 percent of the businesses placed their staff on work-from-home status.
- Capital investments have also been affected in the same businesses, with 4 percent reported to have increased investment, 23 percent to have deferred capital plans, and 4 percent having canceled their investments.
- Fiji's inflation rate drops were influenced by the pandemic due to movement restrictions, continued labor shortages, increase in prices of food and fuels, higher freight costs, and discrepancies between demand and supply. Continued conflict between Russia and Ukraine led to the increase in prices of foods and fuel.
- The pandemic contributed to the decrease in tax collected in fiscal years 2020/2021 and 2021/2022. To meet the needs of Fiji's vulnerable population, the government ramped up borrowings from development partners.
- Remittances increased from 2018 to 2021 by 14.6 percent. This was influenced by Fijians living abroad who sent in cash assistance to support family members/ relatives/friends during the pandemic.

Parliament Building in Suva, Fiji

2. METHODOLOGY

This case study adopted a mixed-methods study-based design involving archival records search, administration of online semi-structured questionnaires, and key informant interviews.

Research Tools

Archival Records Search

This involved the search and retrieval of institutional governance documents including relevant institutional policies, annual reports, work plans, evaluation reports, program reports, and relevant statistics from websites and databases held by the institutions, among others. Information such as Fiji's COVID-19 epidemiology has been disaggregated by gender, geographic location, and age, while macroeconomic indicators such GDP per capita, poverty levels and inequity, budget decreases, and other factors were used to measure economic impact. Records of public responses to policies and measures were obtained from the Fiji Police Force, nongovernmental organizations (NGOs) including the Fiji Women's Crisis Centre and the Kidney Foundation, and the Fiji National Provident Fund, and included performance reports and forecasts from technical institutions such as the WHO, ADB, WBG (World Bank Group), UNICEF (United Nations Children's Fund) , and UNDP (United Nations Development Programme), from their corresponding websites and databases. Apart from observing COVID-19 social restriction measures, prior approvals were sought from those institutions for access, storage, and use of information and data *prior* to data collection.

Key Informant Interviews (Annex 24)

Due to their extensive technical knowledge of relevant law and bylaws, policies, and programs of action in their own fields of expertise, select individuals in technical agencies, government, and civil society were approached for interviews to provide insight for this study. The one-hour interviews have yielded responses to questions concerning risk communication and information disclosure, primary care and hospital response, and human resources for health, among other issues. Again, apart from the observation of COVID-19 restriction measures, consent and willingness to voluntarily participate were first obtained from participants prior to interviews.

Data and Sources

Given the time limitations of this study, most of the data used was sourced from updated secondary available information in the public domain. Data included relevant organizational structures, annual reports, policies and laws of those institutions, and databases holding programmatic information such as types and uptake of services by age, location, and sex, among other factors. Government ministry websites such as that of the MoHMS's annual reports, annual work plans, strategic plans, evaluation and performance reports, and daily updated information relating to COVID-19 were reviewed. Data from other statutory bodies such as the Fiji Police Force, the Fiji National Provident Fund Ministry of Women, Poverty Alleviation & Social Welfare, and the Ministry of Education, Heritage, and Arts (MEHA) was also gathered, either as physical or e-reports. All data accessed from these sources has been appropriately referenced within the report and links provided.

Other information relating to the effectiveness of response or changes in the same and preparedness of the country going forward was mostly accessed through primary data collection— online semi structured surveys, Key Informants Interviews (KII), and Focus Group Discussions (FGDs). Key thematic responses were gleaned from analysis of the qualitative tools and used to describe phenomena in the field. Primary sources of data have been acknowledged in the report, with relevant quotations used within it highlighting significant findings.

Other independent sources of data such as relevant published assessments and research on Fiji and COVID-19 (UNP 2020) published technical agency reports and forecasts, such as the World Bank's Country Partnership Framework for the Republic of Fiji FY2021–FY2024 (WBG 2020), and IMF data on different countries' GDP have been used in this study. The ADB's annual status reports and economic plans concerning Fiji before and now during COVID-19, the WHO Dashboard (WHO 2022b), the Pacific Community's regional COVID-19 updates, other relevant reports from UN agencies, the media (radio, print, and TV), and social media (research blogs) have also been used and appropriately acknowledged in the report. Data was triangulated from the different sources for accuracy and synergy.

Limitations

This study also had its own limitations. Firstly, due to COVID-19, a few of our participants were sick and thus inaccessible for interviews. There were others who were heavily involved in the response and were not able to accept our interview request. Secondly, there was a low response rate for the online survey. Hence the team had to adapt the knowledge, attitude, and practice (KAP)survey conducted by the MoHMS and AusAID (Australian Agency for International Development) titled "Understanding Knowledge, Attitudes and Practices in the Context of COVID-19 in Fiji."

Ethics

The Fiji National University (FNU Team followed ethical research processes by submitting its research proposal and ethics application for this study to the College of Medicine, Nursing & Health Sciences (CMNHS) through its College Human Health Research & Ethics Committee (CHHREC). This work has been approved by the CHHREC Committee of the CMNHS, FNU (CHHREC 030.21).

3. GOVERNANCE, POLICIES, AND INSTITUTIONS: WHAT EXISTED AND WHAT HAS CHANGED

3.1 Organization and Policy for Disease Surveillance and Response

3.1.1 Organizational Structure

The country's first-ever Fiji National Pandemic Plan was developed along with a National Health Emergencies and Disaster Management Plan (HEADMAP) in 2002 (MoHMS 2013b), almost two decades ago. HEADMAP was developed in response to the first (and current) Fiji Natural Disaster Act (1998), as well as the first National Disaster Management Plan (1995) and directs actions for the health sector at the national, divisional, and subdivisional levels for all health programs and activities linked to health emergencies and disaster management. Consequent reviews over the years have informed a more targeted and coordinated approach toward health emergencies (HEADMAP 2013–2017) (MoHMS 2013a), whose primary purpose is to inform and guide actions for the heath sector during public health emergencies and their phases (mitigation, preparedness, emergency responses, relief, and rehabilitation) in conjunction with other ministries, as well as national and international agencies. Examples of HEADMAP being activated in response to preparedness for COVID-19 in line with the Natural Disaster Act (1998) include the ministry's activation of its Emergency Operations Centre—a suitably equipped and staffed area or room from within which emergency operations are conducted at either the national,

Savusavu marina and Nawi islet, Vanua Levu island, Fiji

divisional, or district level (MoHMS 202a).[2] Another is the establishment of a COVID-19 Taskforce (as Fiji went into high alert in January 2020 (MoHMS 2020a) and later, with WHO assistance, a COVID-19 Incident Management Team (IMT) headed by the Ministry's Permanent Secretary on March 1, 2020. Similarly, during the preparation phase from February to April 2020, the Fiji government made at least 51 requests to the WHO for technical assistance, training, and support for Case Management, Incident Management, Infection Prevention and Control, Laboratory, Points of Entry, Risk Communications, Surveillance, Supplies, and other areas (Merianos 2020).

It must not be forgotten that Fiji did not have legislation specifically targeting health pandemics. The Fiji parliament led by the government added

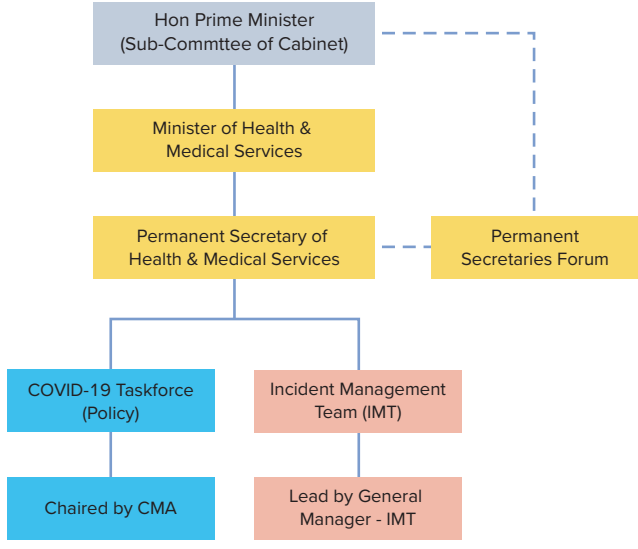
2 Fiji Natural Disaster Act (1998): Interpretation—Part 1(2).

the COVID-19 pandemic into the Employment and Relations legislation (Amendment 2020), to facilitate the government's national response to the pandemic. Therefore, the national response to the pandemic was crippled initially because of this and later remedied to facilitate actions based on the existing structure described below.

At the national level, the MoHMS is the lead agency for the Health and Nutrition Cluster for Fiji's National Disaster Management Office (NDMO). The actions of this cluster and seven others in the national response are determined by a National Disaster Management Council (NDMC). The composition of the NDMC includes a Council Chairperson (usually the minister responsible for disaster management activities) and all the permanent secretaries of the other ministries, the Commissioner of Police; Controller of Government Supplies; Director of Meteorology; Managing Director, Telecom Fiji Limited (TFL); Chief Executive, Energy Fiji Limited (EFL); Director-General, Fiji Red Cross Society; Director, Fiji Council of Social Services (FCOSS); and the Chief Executive, National Fire Authority (NFA).[3] Therefore, the Council is an intergovernmental body responsible for disaster management, development of strategies and policies for disaster mitigation and preparedness and training, management, and public education in disaster management. It also oversees the preparation and implementation of adequate rehabilitation programs after disasters; recommends policies, strategies, and alternatives to the Cabinet; and is responsible for the formation of subcommittees to execute specific tasks within their specific fields of competence (Ibid). Furthermore, there are three subcommittees within this national framework, with the Permanent Secretary of the MoHMS being a member of all three—the Emergency Committee, the Preparedness Committee, and the Mitigation and Prevention Committee—working in tandem with other ministries and statuary institutions. In the national organizational structure described above, the linkages between the MoHMS and other ministries were demonstrated during the COVID-19 pandemic, while ensuring that the whole-of-government approach was maintained during all phases of the pandemic. Those links are illustrated by instances of budgetary allocations and procurement processes during the pandemic. Although the Ministry of Economy allocated specific COVID-19 budget lines in the 2020/21 National Budget, processes dictated that the MoHMS access those lines through internal processes between the ministries.

3 Natural Disaster Management Act, 1998:19.

Figure 18: Fiji COVID-19 Management Team Governance Structure



Source: MOHMS 2020a

The COVID-19 Taskforce is chaired by the Chief Medical Advisor and is in place to provide advice to the Permanent Secretary for MOHMS on policy matters (MoHMS 2020a). The Incident Management Team (IMT) is led by the General Manager IMT and is responsible for the implementation of the COVID-19 Preparedness and Response Plan (COVID PRP). The Permanent Secretary for MoHMS is responsible for the COVID-19 Taskforce and the IMT, with the Hon. Prime Minister as the Chair of the Fiji MoHMS COVID-19 Response team (MoHMS 2020a) (see *Figure 18*).

For Fiji's economic recovery, the government established the COVID-19 Risk Mitigation Taskforce (CRMT). The team was jointly chaired by the Permanent Secretary for Economy and included the Permanent Secretary for Health and the Permanent Secretary for Commerce, Trade, Tourism and Transport. It worked closely with the Permanent Secretary for Immigration, the Health Protection Unit, the Incident Management Team (IMT), and the Fiji Military Forces. CRMT roles included the review of the Fijian COVID-Safe Economic Recovery Framework, to ensure that the country evolved alongside the changing global and local environments (Fiji Government 2020a).

Through the leadership of the government and support from development partners, Fiji successfully controlled the transmission of the COVID-19 virus during the first wave of the pandemic. The government imposed travel bans on highly affected countries such as China, Republic of South Korea, Italy, Iran, and Spain, and as the pandemic worsened all borders and ports were closed to nonresidents. To

limit the spread of the virus, nonessential businesses and schools were closed and Fiji Airways flights were suspended until the end of June 2021. Frontline workers such as health professionals, immigration and customs officials, and uniformed personnel including military, police, and prison officers were trained on COVID-19 protocols and adherence to strict guidelines including the proper donning and discard of personal protective equipment (PPE). Furthermore, the public was required to adhere to the curfew hours imposed by the government from 10 pm to 5 am daily. Fiji's success in the first wave (when the majority of infections were detected and treated at border quarantine facilities) was attributed to the early investment in testing capacity done locally at the Fiji Centre for Disease Control (Fiji CDC). This enabled the MoHMS to test, trace, and isolate cases, and to quickly limit local transmission. Additionally, active awareness campaigns in the media about the virus, its origins, modes of transmission, prevention through regular handwashing (20 seconds each time), two meters of social distancing, and using masks became routine for people. Simultaneously, about 37 fever clinics were set up around the country for temperature checks as well as to receive patients suspected of having contracted COVID-19.

From July 2020 to April 2021, fewer cases were recorded from managed border quarantine facilities and the government eased COVD-19 restrictions to boost its economic recovery. This led to the transmission between travelers under border quarantine and staff of a border quarantine facility. This further resulted in community transmissions and the beginning of the second wave. The township of Nadi and the city of Lautoka went into a lockdown, the national curfew hours were re-instigated, and schools were suspended until further notice upon receipt of information that a case had participated at a super-spreader event—a funeral with 500 attendees in Lautoka city. As the transmission of the Delta variant soared through the Central and Western divisions of Viti Levu, the government sealed off the main island and established the Suva, Lautoka, Nadi, Nausori, Rakiraki, and Lami containment areas. The MoHMS also deployed its WHO-accredited Fiji Emergency Medical Assistance Team (FEMAT) to Lautoka and later to Suva to assist in the increasing number of cases in the two divisions. The ministry also worked with the Fiji Police Force in developing and enforcing the Public Health Infringement notice for COVID-19 infection prevention (focusing on nonpharmaceutical interventions). However, there were a few gaps identified during this period.

One of the challenges faced during the pandemic was the slow dissemination of information from the administration level to the clinicians and health personnel in primary, secondary, and tertiary level of care regarding such things as new SOP's (standard operating procedures), Gazetted directives, and so forth.

Vaccination continues to play an important role in the reduction of COVID-19 cases and deaths in Fiji. The government introduced the "No Jab, No Job" policy, which was mandatory for all employers and employees in the public and private sectors. At the peak of the pandemic, customers were required by management to show their vaccination cards when entering supermarkets, stores, and restaurants, and a series of incentives and assistance were developed to boost vaccination coverage among the general population. These policies have contributed to the success of vaccination coverage in the country, leading to the ease of COVID-19 restrictions (around September, October, November, and December of 2021) such as the lifting of border closures and re-opening of containment areas, extension of curfew hours from 6 pm–4 am to 11 pm–4am, re-opening of businesses, and the school re-openings for years 12 and 13. The country started opening its borders to regional and international travelers in December 2021. This has led to the development of the "No Jab, No Flight" policy, published around October 2021 (Fiji Airways 2021).

3.1.1.1 Role of Local and Central Governments

The Ministry of Local Government, together with the MoHMS, municipal councils, and the National Fire Authority (NFA), provided a preparedness plan for COVID-19. Councils worked collaboratively with the MoHMS to ensure open spaces for temporary health services, and members of the public were informed that normal council services, such as grass cutting, street cleaning, garbage collection, and so on would not cease. Part of the preparedness plan was to ensure disinfection and hygienic practices in all councils in Fiji. Councils worked with the NFA to provide water blasting services during the disinfecting and cleaning stage/period. Market vendors were made aware of any changes in market operations, and NPIs such as spacing of tables were emphasized (Fiji Government 2020b).

Challenges were also faced by municipalities during the COVID-19 outbreak. This was due to several reasons: (i) lack of manpower to assist in the

deployment of their preparedness plans because staff were being sent home due to testing positive for COVID-19 or for being primary or secondary contacts for COVID-19, and/or allocation of workers into working bubbles, which was difficult for staff to comprehend; (ii) staff not being paid for overtime work, with this time being converted instead into time off in lieu; (iii) people not being available at home during awareness drives, although this was addressed to some extent by the government sharing COVID-19 -related information via social media and other national news coverage; and (iv) lack of equipment to assist workers on the ground.[4]

On August 8, 2021, the Local Government Act 1972 was amended so as to align the Council's financial year with that of the government's. This was to ensure that budget planning and financial reporting by the Council matched the government's timeline of implementation. Some of the changes made included: incentives given to ratepayers in the form of discount to encourage timely payment of their arears, stall fee waivers provided to market vendors (F$2.6 million), and base fees for Public Service Vehicles (PSV) provided by the government (F$2.5 million) (Fiji Government 2021a).

3.1.1.2 Disaster Management System

Background

In accordance with Fiji's National Disaster Management Act (1998), "a disaster means a natural disaster and includes the occurrence of a major misfortune which disrupts the basic fabric and normal functioning of the society or community, or an event or series of events which give rise to casualties, and/or damage or loss of property, infrastructure, essential services or means of livelihood on a scale which is beyond the normal capacity of the affected communities to cope with unaided, but does not include man-made disasters."

Thus, in May 2020, the Fiji parliament declared the COVID-19 pandemic as an "act of God" to facilitate government response. The following key change was inserted into the Employment Relations Act (2007) as an Amendment (2020): "'act of God'" includes a pandemic declared by the World Health Organization." Based on the legal amendment to the Employment Relations Amendment Act (2020), the pandemic was declared a natural disaster. The amendment therefore facilitated the government response to the COVID-19 pandemic as a natural disaster. This further meant that COVID-19 was also a national health emergency and obligated a whole-of-government response through the legal framework of the Fiji National Disaster Act (1998). The amendment also provided an avenue through which employers and employees would negotiate employment contracts as the pandemic began to take its devastating social and economic toll on the country during the second wave of COVID-19, from March to August 2021. Therefore, for this section, any reference to disaster refers to the COVID-19 pandemic as a health emergency and natural disaster.

Fiji National Disaster Management Clusters

Disaster management clusters were established to improve coordination in Fiji (MoHMS 2013b). The clusters consist of groups of organizations responding to humanitarian events and the needs of affected communities. These clusters allow partnerships between international humanitarian actors, national and local authorities, and civil society. The Fiji National Clusters model has closely followed that of global and regional clusters so that there is standardization and better understanding by everyone of the role of each cluster, its terms of reference, and standard operating procedures. It also enhances the potential for assistance, partnerships, training, and funding. Fiji has nine National Clusters[5], as follows.

1. **Health & Nutrition** (Lead: MoHMS; Co-Lead: WHO),
2. **Shelter** (Lead: Ministry of Housing and Community Development; Co-Lead: Habitat for Humanity Fiji and Country Cluster Delegation for the Pacific),
3. **Education** (Lead: Ministry of Education, Heritage, and Arts; Co-Leads: UNICEF, Save The Children Fiji),
4. **Food Security** (Lead: Ministry of Agriculture; Co-Lead: Ministry of Fisheries)
5. **Safety & Protection** (Lead: Ministry of Women, Children and Poverty Alleviation; Co-Lead: UN Women),
6. **WASH** (Lead: MoHMS—Environmental Health Unit; Co-Lead: UNICEF),

4 Rep-Min. Local Government, "COVID-19 Preparedness and Response (Interview)," interview via Zoom with Kaminieli Tawake, November 8, 2021.

5 https://www.ndmo.gov.fj/cluster-system/

7. **Logistics** (Lead: National Disaster Management Office; Co-Lead: Fiji Procurement Office and World Food Programme).
8. **Infrastructure** (Lead: Ministry of Infrastructure and Meteorological Services)
9. **Communication** (Lead: Communications; Co-Lead: Fiji Council of Social Services, UNICEF)

In the wake of COVID-19, the National Disaster Management Council (NDMC) for Fiji is currently in the process of remodeling its national crisis framework in terms of preparedness for future disasters such as cyclones and pandemics (Fiji Government 2021b). On July 8, 2021, the Fiji Council of Social Services (FCOSS) called on the Fiji government to activate its Disaster Management Committee (DISMAC). to address the COVID-19 crisis that the country was facing (RNZ 2021a). This was in response to the increasing number of COVID-19 deaths and cases recorded in July. Additionally, the health system was directly impacting access to essential services (RNZ 2021a).[6] [7] The MOHMS, through its IMT in collaboration with the WHO and the support of the Health and Nutrition Cluster, adopted the lead role in addressing the pandemic, while the other clusters such as Education, Food Security, Safety and Protection and WASH have played active supporting roles in the national response (*Annex 5).*

Fiji Emergency and Disaster Management

There are four (4) phases of risk reduction and risk management during emergencies (*Table 7* and *Annex 27).*

Table 7: Risk Reduction and Risk Management Components

Phase 1:	**Mitigation and Wellness (Prevention)**
Phase 2:	**Preparedness**
Phase 3:	**Response**
Phase 4:	**Recovery**

Source: MoHMS—Health Emergency and Disaster Management 2013b

Alert Levels

Additionally, the MoHMS has established an internal emergency management system that applies specific actions based on alert levels during disasters and humanitarian events *(Table 8).*

Table 8: Alert Levels for Health Emergency and Disaster Management

Level	Alert Level	MOH EOC Meeting	Actions to be taken by MOH EOC members
1	WHITE	White meeting	Meeting is only necessary when coming down from yellow, orange or red level. Otherwise, activities will be MOH awareness campaigns. MOH planning for evacuation and execution of simulation exercises.
2	YELLOW	Yellow meeting	Increase MOH staff awareness measures and advisories through the media announcing the immediate need for preparations when approaching a disaster. Revision and updating of emergency plans and preparations for evacuation. Execution of a simulation exercise if possible. When coming down from Orange or Red levels, analyses the possibility of letting the MOH services go back to almost normal depending on the situation.
3	RED	Red meeting	MOH EOC activated. Immediate assessment on all the division and inform the DMO's (Divisional Medical Officers) and MS's (Medical Superintendents). The activation of the Divisional EOC will be under the responsibility of the DMO.
4	GREEN	Green meeting	MOH EOC activated. Analysis of the situation. Response/recovery. Activities depending on the magnitude and duration of the disaster.

Source: MoHMS—Health Emergency and Disaster Management 2013b

6 Note: DISMAC operates in three levels: national, divisional, and district levels. It is an acronym that collates and encompasses the National Disaster Management Council (NDMC), the National Disaster Management Office (NDMO), and the National Emergency Operations Center (NEOC) at the national level.

7 http://www.ndmo.gov.fj/images/Fiji_National_Disaster_Management_Plan.pdf

Summary 3: Policy and Governance for Disease Surveillance and Preparedness

- In response to the pandemic, the government established the COVID-19 Response Team consisting of the Incident Management Team (IMT) and the COVID-19 Taskforce.
- The government also established the COVID-19 Risk Mitigation Team to ensure the country's safe economic recovery.
- The Ministry of Local Government worked with the MoHMS, municipal councils, and the National Fire Authority (NFA) in preparing the preparedness plan for COVID-19. The deployed preparedness plan included cleaning, disinfecting, and doing hygienic work in all councils in Fiji.

3.1.2 Legal Framework

Legal Framework dealing with infectious disease and health emergencies

Fijian and international laws and policies have governed and facilitated preparedness and response to COVID-19. Apart from the Public Health Act (1935) and its Amendment (2020), there are other policies related to infectious diseases, other related acts such as the Quarantine Act (1965) and the Health and Safety at Work Act (1998) (*Annex 11*). Others include outputs from international mechanisms such as the International Health Regulations (IHR) 2005 Emergency Regulation Committee Decision, UN Emergency Council Decision to support Fiji's COVID-19 Preparedness and Response Plan, 2020 (MoHMS 2020a, p. 20).

Section 7 of the Fiji Public Health Act (1935) contains clauses related to infectious diseases as subsections 67 through 83. There are four divisions in this section that cover Administration, Powers, General Provisions, and Expenses of Isolation. These sections stipulate the powers of the health minister, the Board, and the permanent secretary for health relating to isolation and quarantine, and mobilization of resources including human, funding, technical, and logistical ones, among others. The current preparedness and response actions are well covered within the law through a few key amendments such as including COVID-19 in the list of infectious diseases (amendment made in March 2020 to the Public Health Act 1935), as well as with the Infringement Notices amended in 2020 to the same Act, to increase the fines and corresponding prison terms for those who are not in compliance. The 2019 training for FEMAT and consequently their snap field hospitals in Suva, and earlier training in Lautoka in 2020 due to COVID-19 lay well within the ambit of the law.

The Quarantine Act of Fiji (1964, Cap. 112), while dated, stipulates relevant actions related to the arrival of suspected or infected persons, vessels, aircrafts, or goods into Fiji (MoHMS 2016a). The sections of the law that are relevant to outbreak response include procedures for infected or suspected vessel or aircraft, compulsory disease notifications by masters of vessels, measures to be undertaken in case of a case fatality, measures for dealing with vessels arriving from malaria-endemic and infected areas, provisions relating to quarantinable diseases, measures applied to persons/vessels arriving from infected places, and measures for preventing the transmission of quarantinable or other infectious diseases (also necessary to refer to protocols, if available, from the environment health unit).

The Quarantine Act Part VIII provided a list of brief actions that may be taken for persons arriving from an infected place; those in contact with an infected vessel; and those arriving from an area infected with acute anterior poliomyelitis, measles, influenza, or whooping cough.

Persons arriving from an infected place: "The Authority may take, after disembarkation, the measures which he considers appropriate to ensure the surveillance or observation of persons arriving on a vessel or aircraft coming from, or touching at, any place infected with a quarantinable disease, and who are not protected, to the satisfaction of the Authority, by vaccination against such disease."

Person in contact with an infected vessel: "Any person who without the permission of the Authority boards any infected or suspected vessel or aircraft or any vessel or aircraft which has come from, or touched at, any infected local area where a quarantinable or other infectious disease exists, or enters or lands at any quarantine station, may be detained under observation or subjected to surveillance for such a period as the Authority may deem necessary."

Persons arriving from an area infected with acute anterior poliomyelitis, measles, influenza, or whooping cough: "All persons arriving in Fiji by air from an area infected with acute anterior poliomyelitis, influenza, measles or whooping cough may at the discretion of the Authority be placed under surveillance or observation."

Government convened cabinet at the MoHMS headquarters in early 2020 at the beginning of the first wave (March 2020). The Honorable Prime Minister and all government ministers were present at the sitting. Cabinet papers were approved in these sittings, and senior managers at the MoHMS continued to discuss the best way forward with the health permanent secretary and the cabinet on ways to reduce the transmission of COVID-19. With that in place, notices, restrictions, policies, and new regulations were developed to curb the spread of the virus.

One of the milestones was the introduction of the Public Health (Infectious Diseases) (Infringement Notices) Regulation.[8] The regulation was developed, publicized, and enforced on July 8, 2021. The government mandated that people follow the COVID-19 protocols to prevent the transmission of the virus to the wider community. This facilitated the enforcement of COVID-19 interventions, and those who opposed or failed to oblige were penalized (*Annex 12*).

Current Gaps in Legal System

The legal system played an important role in the establishment of laws that governed people during the pandemic. However, there are a few flaws within the system that need improvement. Currently, there are no specific policies or protocols for quarantining people who refuse treatment for infectious diseases such as tuberculosis. It is recommended that policies and protocols be developed for managing people who refuse treatment if their refusal poses a health risk to the public. The same recommendation and a few others have been echoed by the HEADMAP (2013) for the MoHMS. Other recommendations include ensuring that medical indemnity issues are addressed; reviewing sections of the Public Health Act to strengthen powers to address important disaster responses such as quarantine; ensuring legislation for disaster management (such as for curfews) is drafted, reviewed, and passed; and ensuring guidelines and criteria are drawn up to address mass disposal or burial of the dead.[9]

The newly introduced Public Health (Infectious Diseases) (Infringement Notices) Regulation, under section 83 of the Public Health Act, has effectively controlled people's conduct in terms of COVID-19 restrictions. However, the legal system was not able to keep track of those who failed to pay the infringement notice penalty; nor was it able to trace the reported few violators, as they had given incorrect personal information.[10]

Government building in Suva, Fiji

The Immigration Act needs to be amended to include protocols for travelers who have been living in high-risk countries (such as China, where the initial COVID-19 outbreak occurred). The Act should also list the endemic diseases that can cause severe social, health, and economic impact to the country (*Annex 13*). Furthermore, COVID-19 led to the closure of schools for more than six months; hence the Education Ministry should establish processes (in the Education Act) and protocols that coordinate school activities and curriculum during future pandemics (*Annex 14*).

3.1.3 Control Mechanism

Levels of alerts from highest to lowest, focusing on what response activities need to be conducted at each level of alerts

The MoHMS has adopted three levels of alert in relation to the expected progression of the COVID-19 outbreak. These alert levels are predicated upon the nature of the COVID-19 outbreak in Fiji—from the initial situation of no cases, through the first cases, to the potential worst case of widespread community transmission *(Table 9)*.

8 https://www.fijivillage.com/documents/gazette-fines.pdf

9 HEADMAP 2013–2017:26

10 Rep-MoHMS 2021, "COVID-19 Preparedness and Response." Interview via Zoom with Kaminieli Tawake, November 10, 2021

Table 9: Alert Levels for COVID-19 Actions

LEVEL & ALERT LEVELS FOR COVID-19	ACTION TAKEN BY GOVERNMENT	GOVERNMENT RESPONSE (REALITY)	PERIOD OF COMMENCE-MENT
Level 1 Actions (No potential or confirmed cases of COVID-19 in Fiji)	Command and Coordinate: Formation and Development of the Fiji COVID-19 Taskforce, Development of Terms of Reference, Appointment od Chair and Secretariat and Appointment of Members.	Government appointed a Corona Virus Taskforce in January 2020 to oversee the Health Ministry response to the global COVID-19 outbreak.	30 January 2020
		The MoHMS formed the Incident Management Team (IMT)	1 March 2020
		A Joint Incident Management Team (JIMT) consisting of WHO and MoHMS was formed.	21 February 2020
	Surveillance, Risk Assessment and Response: Develop protocols and tools for enhanced surveillance and train providers.	The MoHMS developed the COVID-19 preparedness and response plan.	31 December 2019
		The UN team and the JIMT worked together to develop a multisectorial plan for COVID-19 response. The plan is for 10 countries in the Pacific.	August 2020
	Command and Coordinate: Monitor alert triggers for activation of protocols for level 2 of the COVID-19 preparedness and response plan and coordinate with divisional Response Team (DORT) and Rapid Contact Tracing Teams Implement extended hours (evenings/ weekends) operation of national health EOC.	First case was confirmed- March 2020.	March – December 2020
		Closing of borders	
		Opening of fever clinics around the country	
		Opening of isolation facilities	
		Suspension of schools and national events	
		Closing of non-essential businesses	
		Creation of toll free for COVID-19 response	
Level 2 Actions (Case/cases of imported potential or confirmed COVID-19 in Fiji – no local transmission)	• Surveillance, Risk Assessment and Response. Inform IHR (2005) through the Fiji national Focal Point and seek international assistance expertise as required FCDC / IMT. • Activate enhanced contact tracing teams for rapid investigation	Launching of the CareFiji App	March 2020 – December 2021
		Activation of the Contact Tracing and Swabbing team.	
		Different Government and Technical Agencies made donations to the Fiji Government to aid its response to COVID-19. Donations include medical equipment and monetary values.	
Level 3 Actions (Case/cases of potential or confirmed COVID-19 associated with local transmission in Fiji)	Command and Coordination: Monitor alert triggers for activation of protocols for level 3 of the COVID-19 preparedness and response plan and coordinate with divisional Response Team (DORT) and Rapid Contact Tracing Teams.	First community transmission was recorded- April 25, 2021.	March – December 2021
		Activation of the FEMAT.	
		Testing capacity was increased and the MoHMS received assistance from the ANZMAT.	
		Government approved and deployed the usage of Astra Zeneca vaccine.	
		Containment zones were deployed in Fiji's Central and Western division	
		House to house screening programs were conducted in the Western division.	
	Surveillance, Risk Assessment and Response: Revise case definition for Identification of cases and referral based on wide spread local transmission.	Response ramped up as cases of COVID-19 (mainly Delta variant) spread vastly across communities in Fiji. The country also recorded cases of Omicron variant (known as variant of concern) around December of 2021.	March – December 2021

Source: M0HMS 2020a—COVID-19 Fiji Preparedness and Response Plan

These alert levels are used to guide when and how to take the preparedness and response actions described in this plan. The actions to be implemented at each alert level are further described in *Annex 1.*

3.1.3.1 Response Strategies

Decision-making was vital during the pandemic; hence the MoHMS developed a model to anticipate how outbreak escalates in Fiji, particularly on severity, speed, and distribution. Table 10 discusses the three phases that explain how the outbreak developed over time and the anticipated preparedness and response actions in the containment and mitigating phases of the outbreak *(Annex 15)*.

Table 10: Scenarios and Response Strategies

CONTAINMENT PHASE	
Development of COVID-19 governance structure including the COVID-19 Taskforce, COVID-19 Risk Mitigation Taskforce, and the Joint Mitigation Taskforce Activation of FEMAT team and FEMAT hospitals Closure of borders and suspension of international and domestic travel Designation of COVID-19 hospitals Enforcement of 2m social distancing, wearing of masks, and restriction of social distancing Establishment of laboratories (testing of COVID-19 virus) around the country Closure of schools and nonessential businesses Establishment of containment areas, curfew hours, and nationwide lockdown Work-from-home initiative and emphasis on e-learning for students	Containment phase began as soon as Fiji confirmed its first COVID-19 case in March 2020. As cases increased, MoHMS had to re-strategize and focus on hospitalization and reducing COVID-19 mortality.
Non-health ministries and CSOs assisting the MoHMS	
Development of toll-free helplines (158 and 165)	
MITIGATION PHASE	
Establishment of the Pre-Hospital Coordination Care Centre (PHECCC) and the MoHMS Oxygen Unit were critical during the pandemic Development and enforcement of the Public Health (Infectious Diseases) Infringement Notice Regulations 2021 Enforcement of the "No Jab, No Job" policy Deployment of the NZMAT and AUSMAT to the Central and Western divisions of Viti Levu	Mitigation phase began around June 2021, with most reported cases and deaths from the Central division of Fiji. Fijians around the country continued with containment measures to limit the transmission.
Relapsed Back to CONTAINMENT PHASE	
Border restrictions lifted and containment areas reopened. Curfew hours extended from 11 pm to 4 am, and as time progressed curfew was increased (based on vaccination status), then removed. Businesses started operating and schools re-opened Country's border opened to regional and international travelers. Local citizens allowed to travel to Viti Levu, Vanua Levu, and maritime islands under risk reduction strategies	Vaccination played an important role in the easing of COVID-19 restrictions. As Fiji reached 70 to 90 percent vaccination coverage, the government eased nonpharmaceutical intervention measures.

Source: MoHMS 2020a, COVID-19 Fiji Preparedness and Response Plan

Summary 4: Legal Framework and Control Mechanism

- The Public Health Act and its Amendment is the law that governs and facilitates actions to deal with different diseases in the country. However, in addition, during the pandemic, other related acts such as the Quarantine Act, the Health and Safety at Work Act, and other inputs from international guidelines have supported Fiji's COVID-19 Preparedness and Response Plan.
- Presence of the cabinet at the MoHMS headquarters allowed timely approvals of the new laws and regulations, which are expected to curb the transmission of the COVID-19 virus.
- The newly established Regulation, Public Health (Infectious Diseases) (Infringement Notices) Regulation, has positively impacted the enforcement of COVID-19 restrictions among the public.
- Gaps within the legal system include the lack of policies or protocols for people refusing to be vaccinated, review of the Public Health Act, follow-up and enforcing people to pay the penalization fees, and the inclusion of a pandemic response in the Immigration and Education Act.
- The MoHMS adopted three levels of alerts to guide the overall framework for the preparedness and response actions to COVID-19. It also established two phases of control mechanisms during the COVID-19 pandemic: the containment and mitigation phases (*Figure 17*).

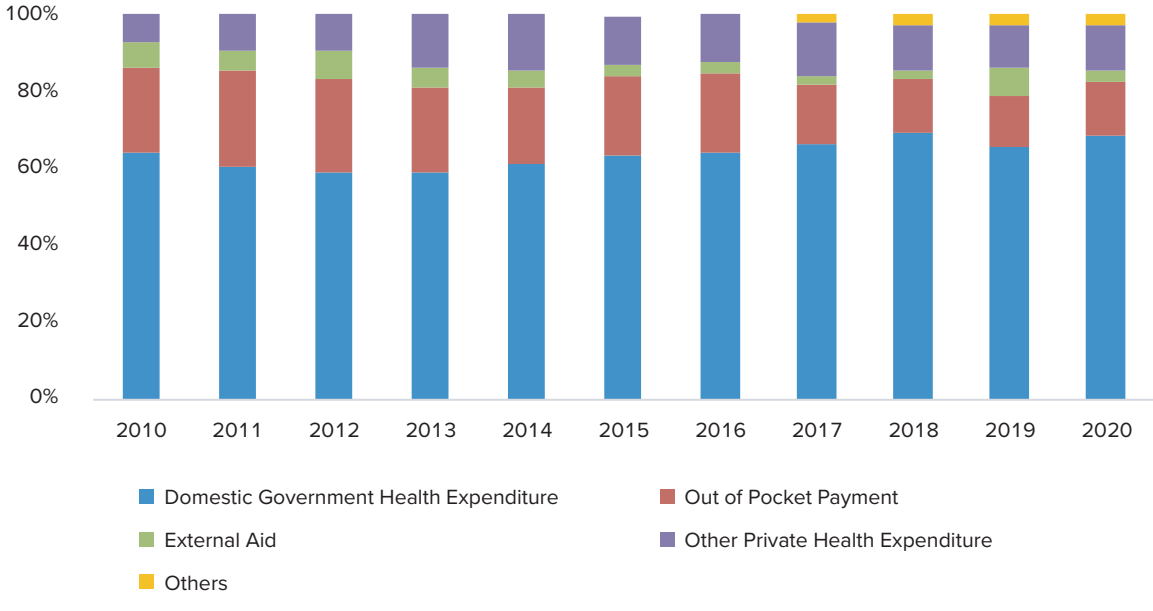
3.2 Health Systems

3.2.1 Health Financing

The WHO Global Health Expenditure Database noted the primary source of financing for the Fiji health sector originated from the central government domestic budget (WHO 2022c); this source is followed by household out-of-pocket costs, private expenditure (largely contributions to voluntary health insurance), and external development partners' (DP) financing.

Although global databases are yet to be updated for more recent years, we know that significant additional DP support was provided across all Pacific Island Countries (PICs) including Fiji, for COVID-19 preparedness and response. Most of it has been off-system (and largely off-budget), meaning that it is not funneled through a government budgetary or financial system, making it difficult to track.

Figure 19: Fiji—Health Expenditure by Finance Source (2010 to 2020)



Source: WHO 2022c, Global Health Expenditure Database

Health

The medium- to long-term impact of COVID-19 on the health of the general population in Fiji will be manifold and varied. Noncommunicable diseases (NCDs) have continued to be Fiji's main cause of morbidity and mortality over the last decade and account for more than 80 percent of deaths annually. COVID-19 has the potential to further adversely affect the general health prognosis of the country.

Fiji's national 5- and 20-years' development plans are aligned with the Sustainable Development Goals (SDGs), with its key performance indicators being measured against SDG 3 (Good Health & Wellbeing).

The majority of Fiji's health system services are funded by the Fiji government through tax.[11] Access to health services is not limited to Fiji citizens; hence everyone is able to access doctors, medicines, and high-level hospital care (Ibid). Health services in Fiji are free and at no cost to patients.

3.2.2 Extent to Which Universal Health Coverage Is achieved

Like other developing countries, Universal Health Coverage (UHC) remains an elusive quest for Fiji. Many low- and middle-income countries are reforming their health financing systems to align themselves with the UHC goals. Asante et al. (2017) revealed that more than 70 percent of government expenditure was allocated to hospital services, where 47 percent of the total health spending was for hospital outpatient care, less than 1 percent was allocated to nursing stations, and less than 7 percent went to private hospitals and clinics. Health care benefits in Fiji slightly favor the poor, who receive 61 percent of the benefits from nursing stations, with only 2.4 percent going to the richest groups. A study showed that 37 percent and 41 percent of the benefits, respectively, for private GP clinics and private outpatient hospitals are directed toward the rich. Only 0.7 percent and 2.2 percent of the benefits, respectively, for the GP clinics and private outpatient hospitals are directed toward the poor (Asante et al. 2017).

The pandemic has impacted Fiji's economy in the years 2020 and 2021. In terms of UHC in Fiji, all health services provided are subsidized and all costs are covered by the Fiji Government.[12]

> "During this crisis, people who have insurance can visit private hospitals, and General Practitioners (GPs) looked at cases which were mild/moderate. If the disease was severe, patients were transferred to hospitals. Hence, Government is responsible for the high-end cost of the care. In responding to access, the Fiji citizens are provided with actually no-cost by the Government" (Chief Medical Advisor, Key Informants Interview, August 20, 2021).

However, the pandemic has limited access to various health services. During the pandemic, most public transport has been suspended and people have not been able to visit nearby health centers and hospitals, and surgical outpatient departments (SOPDs) and clinics have been closed, with only emergency services operating. Important health programs such as vaccination in schools and mass drug administration campaigns have also been suspended.

The poor are the main recipients of services from nursing stations, as these were the first points of contact for rural residents in Fiji. However, the government allocated a significant amount of health expenditure to hospital-based services, even though nursing stations were the first points of contact for most rural residents. In 2009 and 2010, the government increased the health expenditure for nursing stations from 1.4 million to 1.9 million dollars. With around 47 percent of Fiji's population living in rural areas, a well-resourced and well-functioning nursing station network could contribute to the national goal of achieving health equity and UHC.

Health centers and hospital outpatient services are used by all Fiji citizens. Benefits are relatively evenly distributed among the rich and poor groups in Fiji. About 70 to 80 percent of the population has access to health services *(Table 11)*.

11 J. Tudravu, Chief Medical Officer, Key Informant Interview, August 30, 2021, Suva, Fiji

12 J. Tudravu, Chief Medical Officer, Key Informant Interview, August 30, 2021, Suva, Fiji.

Table 11: Distribution of Health Care Benefits in Fiji

CI = concentration index; GP = general practitioner

Income quintile	Public sector				Private sector			
	Nursing station	Health centre	Hospital outpatient	Hospital inpatient	GP/clinic	Hospital outpatient	Hospital inpatient	Total benefit
Share of government subsidy	0.7	16.2	46.5	30.1	1.8	4.3	0.5	100.0
Q1-poorest	61.2	17.6	15.9	25.5	0.7	2.2	0.0	18.5
Q2	24.7	23.8	26.9	21.3	7.1	30.9	16.9	24.5
Q3	7.2	26.9	23.3	27.3	20.0	9.8	10.4	24.3
Q4	4.6	15.2	16.2	12.2	35.3	15.6	14.0	15.1
Q5-richest	2.4	16.5	17.7	13.8	36.9	41.4	58.6	17.8
CI	-0.563	-0.033	-0.011	-0.128	0.436	0.278	0.524	-0.030

Source: Asante et al. 2017

Although the MoHMS has resources from various sources *(Figure 19),* it is primarily financed through general taxation revenue. However, due to the impact of COVID-19, the government's budget (including MoHMS resources) was mostly financed through loans from a wide range of development financial institutions including the Asian Development Bank, World Bank, International Monetary Fund, European Infrastructure Bank, and Asian Infrastructure Investment Bank (Fiji Government 2020c). Section 1.3 gives details on the macro- economic factors

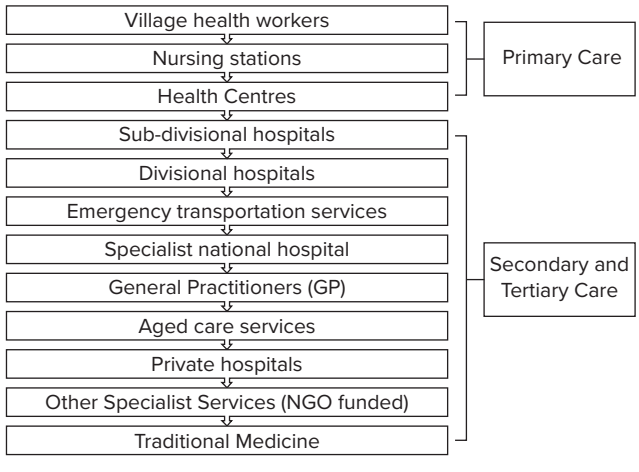
3.2.3 Health Service Delivery

Presently, health services in Fiji are free and at no cost to patients. When cases peaked in the Central and Western divisions, the government responded by developing a scheme known as the COVID-19 Engagement of Private Medical Practitioner Scheme (mid-September 2021) (Deo 2021). Through this the public can also access services provided by private practitioners, and health insurance is common as part of employment contracts. A total of 17 General Medical Practitioners (GPs) have been appointed by the government: seven (41 percent) in the Central division (four in the Nasinu area and three in Suva), and 10 (59 percent) in the Western division (five in Nadi, one in Lautoka, and four in Ba).

Since COVID-19, insurance companies have banned together and used various media platforms to create awareness on the potential financial benefits of owning health insurance, given the uncertainties surrounding COVID-19.

However, this benefit will only be available to those who have been able to keep their jobs during the pandemic. This will mainly be employees in the civil service (the government is the biggest employer) and sections of the private sector that have successfully weathered the pandemic's second wave. Health service delivery in Fiji is structured along three tiers *(Figure 20)*. The country has more than 200 health facilities with different roles and scopes of services. In addition, there are more than 300 GPs who complement the provision of health services. Primary health care comprises of nursing stations as the first level of contact with the public, health centers, and subdivisional hospitals. Services provided include basic health care; health promotion; domiciliary care; WASH; and maternal and child health, which includes immunization. The MoHMS uses a strong referral system to escalate the care of the patient, not only by consulting, but also by moving the patient to the next level of care when the situation is beyond their capability.

Figure 20: Levels and Types of Health Services Provided in Fiji



Source: WHO and Fiji MoHMS 2012

Lessons learned after the first wave of COVID-19 in Fiji provided impetus for the MoHMS to review its health service delivery for effectiveness and efficiency. The review has prompted a remodeling exercise of the ministry's framework of health service delivery. The new remodeled framework focuses on: (i) decentralizing health care services, (ii) integrating public health and clinical services during the pandemic; (iii) increasing outreach support and communication between and within the three different tiers of health services within a division and standardizing services offered to communities, and (iv) ensuring the inclusion of Community Health Workers in the model. Decentralization allowed health services to be operational during the COVID-19 pandemic. During the lockdown of the Western divisional hospital (Lautoka Hospital), the facility and trained personnel were inaccessible to the public and their families. In response, the ministry constructed a 150-bed field hospital for non-COVID-19 patients. Hence, all health personnel (public health and clinical) were advised to learn, share, and integrate to be able to reach out to the community during the pandemic. Positive changes include the increased health presence in the communities, reaching the most vulnerable populations, and strengthened communication and referrals between public health and clinical staff at all tiers of the health services delivery. The ministry acknowledges the need to strengthen its health information systems within this remodeling as there is potential to continue with this model beyond COVID-19 and into the future.

Prevention and Promotive Health

Fiji's MoHMS aims to ensure that people remain healthy by making right lifestyle choices and decisions. For this to be in place, there is a shift in focus from a disease or illness-based approach to a wellness-centered approach. The different departments (MoHMS 2020g) that fall under this category are:

1. Wellness Division. This was established with the focus on enhancing the usage of quality, accessible, and valuable information for supporting behavioral wellness choices at all levels. There is an overall shift from being disease focused to addressing the social determinants of health through a multisectoral approach.
2. Health Protection Division. This division focuses on prevention, preparedness, and response with respect to acute threats to public health, particularly communicable diseases. Health protection is Fiji's International Health Regulations (2005) National Focal Point.
3. Family Health Department. The key aim of this department is to manage, implement, monitor, and evaluate programs pertaining to Child Health, Maternal Health, HIV/STIs, and Reproductive Health and Gender.
4. Health System Strengthening. This department aims to strengthen health system standards across the key health system building blocks—leadership/governance, health care financing, health workforce, medical products, technologies, health information, and research.
5. Human Resource Department. This department oversees the effective management of all HR-related activities, programs, and issues and provides advice on recruitment, posting, leave administration, learning and development, strategic workforce planning process, and industrial relations matters.
6. Finance, Asset Management, and Digital Health. This department is responsible for the implementation of service-wide policies and procedures in relation to finance, budget, accounts, and asset management within the MoHMS.
7. Fiji Pharmaceutical and Biomedical Services (FPBS). The FPBS is the supply chain management of medical supplies and health commodities. It also focuses on improving access to essential medicinal products of assured quality, safety, efficacy, and cost-effectiveness.
8. Planning and Policy Development Division (PPDD). PPDD is responsible for policy development, analysis, and coordination of policy-related activities, as well as evidence-based health planning, including the development of medium- to long-term strategies and annual operational plans and facilitation of health services planning.
9. The Research, Innovation, Data Analysis, and Management Unit. This unit supports and strengthens research and innovation in the MoHMS. The unit aims to ensure that good quality evidence is used to guide decisions about health sector strategy, functioning, and oversight.
10. The Nursing and Midwifery Division. This division is responsible for the planning, coordination, and evaluation of the delivery of nursing services including the development, coordination, and monitoring of nursing standards, policies, guidelines, and protocols designed to direct and

inform patient care, community health services, specialist nursing care, and nursing management.

11. The Executive Support Unit. This unit is responsible for high-level executive support and administrative services for the ministry's Executive. The unit maintains awareness, identifies and investigates emerging corporate issues that may require the direct intervention of the Executive, and ensures they are properly briefed and advised.

Summary 5: Health Financing and Health Service Delivery

- Health financing in Fiji is largely public; the main source of financing is provided through the domestic government budget and some limited external financing. Out-of-pocket payments and voluntary health insurance provide the balance.
- Publicly provided services in Fiji are largely free at the point of care for patients (although patients may incur private travel costs to access care). Government also started a scheme where the public can access private GPs without any charges.
- The COVID-19 pandemic enabled the MoHMS to decentralize its health care services, integrate public health and clinical services, increase outreach support and communication between and within the three different tiers of health services, and include Community Health Workers in the health team.

3.2.3.1 Primary Health Care and Referral in Fiji

Primary health care (PHC) is mostly delivered through nursing stations and health centers in Fiji. Fiji has a total of 98 nursing stations, 84 health centers, and 19 subdivisional hospitals (Asante et al. 2017). The nursing stations are considered the lowest health facility, and they are mainly situated in rural areas to serve as a first point of contact with the health system for many rural Fijians.

The MoHMS is focusing on improving access, coverage, and quality of primary health care through an integrated approach: curative and rehabilitation health and prevention and promotive health. Curative and rehabilitation health services include those provided to people with disabilities, and the wider Clinical Services Network (CNS), which provides clinical services for various disciplines in private and general hospitals.

The health centers are staffed by either a doctor or a nurse practitioner (staff ranges from two to 20). Health centers provide the first level of referrals for nursing stations and are situated to serve a catchment population of between 3,500 in a rural area to 10,000 in urban settings. Subdivisional hospitals provide secondary care for the population of Fiji.

During the pandemic, nursing stations and health centers were used as screening facilities for COVID-19, while suspected cases were referred to secondary and tertiary facilities. FEMAT units were set up in divisions and subdivisions, which recorded increasing incidence of COVID-19-like symptoms. These included setups in the subdivisions of Lautoka, Rewa, and Suva. The public was requested to report their symptoms at any of these FEMAT sites. Each FEMAT unit consisted of teams of trained and qualified medical emergency health care workers. The FEMAT Field Hospital is open 24 hours a day. The three divisional hospitals and two specialized hospitals managed complex cases, while providing secondary and tertiary care to the general population. Fiji has a total of 130 private general practitioners who provide services to complement health services provided in the public sector.

3.2.3.2 The Role of Telemedicine in Health Emergencies

The pandemic pushed the telehealth agenda, and it has accelerated the need for the MoHMS to engage in digital technology since 2020.[13] The MoHMS's remodeled framework approaches health information and communication as a pillar within it. Thus, there is now an amplified need to set up telehealth and telemedicine capacity within the MoHMS. As part of the mitigation phase response, teams regularly exchanged information using virtual platforms through Zoom, Viber messaging/calling, and many other platforms. In terms of virtual care, doctors and nurses accessed patients (who were at home) through telephone calls, and the availability of information networks allowed them to track patient health status virtually—the ministry's strongest component of the mitigation response, so far.

Another development is the establishment and use of toll-free lines (dial 165) that direct a patient to a doctor (who will advise on the medication and other matters). It is currently being deployed in the Western

13 J.Tudravu, Chief Medical Officer, Key Informant Interview, August 30, 2021, Suva, Fiji.

and Central divisions in Fiji and is slowly reaching the other divisions. Patients now have virtual access to different specialists within the hospitals such as those in oncology, palliative care, gynecology, and mental health. As the public has responded positively to the use of digital technology within the hospitals during this pandemic, the ministry envisages expanded and further use within the other disciplines.

3.2.4 Physical Infrastructure and Work Capacity

Facilities available for infectious disease

A total of eight COVID-19 isolation facilities were initially set up across Fiji in April 2020, with five hospitals (two in the Central and three in the Western division) and three community isolation facilities (one in the Central and two in the Western division). However, the use of the community isolation unit was later reviewed by the COVID-19 Incident Management Team in the wake of community transmission as there were too many cases to handle. The MoHMS has established different departments to manage infectious disease *(Annex 28)*.

Capacity of laboratory testing and supplying medicines and PPE

Laboratory testing

With the start of the pandemic, COVID-19 testing was established at the Fiji CDC in March 2020. In January 2021, more testing sites were established in Fiji; two in the Central division (Twomey clinic and the main CWM [Colonial War Memorial] hospital), two in the Western division, and one in the Northern division. The Fiji CDC conducts two methods of testing: OpenPCR and GeneXpert molecular testing. As the demand on testing increases, private laboratories moved in to assist the MoHMS, and the ministry expanded testing through the use of rapid antigen kits by health facilities across Fiji. The government received support from donor agencies such as the WHO, DFAT (Australian Government—Department of Foreign Affairs, the European Union, SPC (Pacific Community), and many others, which allowed for widespread testing capacity of COVID-19 around the country. Initially, testing of COVID-19 was only done at the Fiji CDC, but when there was an abundance of testing kits, testing was decentralized.[14]

The turnaround time for getting test results is very important, as this helps in the COVID-19 response. The Fiji CDC laboratory can test around 2,000 samples within a 24-hour period, whereas the other laboratories can test 1,000 samples in the same period. As the country reached the containment and mitigation phases, the laboratory manager and heads of the Fiji CDC ensured that these daily targets were being met and that health care workers were provided with mental and psychosocial support, as stress and burnout were encountered by many.

In terms of availability and use of personal protective equipment (PPE), the MoHMS ensured that there was abundant supply of PPE in all the testing facilities and that staff followed the standard operating procedures (SOP) provided by the Fiji CDC in terms of wearing PPE.

With the abundance of testing equipment, the Centre faced a shortage of human resources to conduct testing. Hence, the MoHMS received support from the Australian government, as it funded 15 Australian nationals to assist the Fiji CDC. As the pandemic progressed, a few members of the facility had to be isolated; and the manager had to strategize to ensure workflow (Ibid.).

Supply of medicines and PPE

The Fiji Pharmaceutical and Biomedical Services (FPBS) Centre is responsible for coordinating, procuring, warehousing, and distributing supplies required for outbreak response (MoHMS 2016a). Supplies have included medicines, medical consumables, and medical laboratory reagents and consumables. The ministry believes that the undisrupted supply of materials critical to a successful response to an outbreak is dependent on effective planning and management with stakeholders at the preparedness phase.

To improve the efficiency of the supply chain management during the COVID-19 pandemic, the Fiji COVID-19 IMT, through the FPBS and development partners, has developed a system to manage forecast, procurement, and distribution of PPEs and other medical supplies (Parliament of the Republic of Fiji 2020). Other ministries have also provided support in delivering PPEs and medical supplies to primary and tertiary facilities, fever clinics, and isolation facilities.

14 T. Cabemaiwai, "COVID-19 Preparedness and Response," interview, November 26, 2021, Fiji CDC, Tamavua, Fiji.

PPE is an essential medical device used to protect health care workers (HCWs) during the COVID-19 pandemic. It is important, therefore, that HCWs be trained on the correct use, wear, doffing, and disposal of PPE. Fiji faced a shortage of supply of PPE during the first wave of the pandemic (Turaga 2020). PPE such as face masks (N95) and hand sanitizers were out of stock due to the high demand and use by the population. The government resorted to using locally produced face shields to protect HCWs (MoHMS 2020b), and it managed with support from different countries and agencies (note: the Fiji CDC did not face any shortage of PPE, as its use is vital tool in a laboratory). Additionally, the MoHMS in partnership with the World Bank Group (WBG) developed a framework—the Environmental and Social Management Framework (ESMF)—to provide a guide during the containment and mitigation phase of the pandemic (MoHMS 2020c). Part of the framework was to look at strategies to optimize the availability of PPE during the pandemic *(Annex 19)*.

Workforce capacity specialized in infectious diseases

Fiji has made significant improvements in the capability of its health systems to deal with infectious diseases based on major outbreaks of dengue (2013), meningococcal C (2018), and measles (2019). The government of Fiji through the MoHMS supported the training of a few doctors specializing in this field and in internal medicine, who provided guidance in terms of specialty care in hospitals. Apart from domestic support, Fiji also received technical assistance/expertise from several development partners including the WHO, CDC, DFAT, NZ-MFAT, and SPC in supporting the COVID-19 regional response. Through these networks, COVID-19-relevant standard operating procedures, guidelines, and pathways were developed to assist the MoHMS in the future. The MoHMS also worked with the Fiji military forces in setting up an intensive care unit (ICU) in the military hospital at the Nabua barracks to serve as an isolation facility for frontline workers who contract COVID-19. The delivery of health care is challenging, and the SOP sets out the standards for undertaking COVID-19 community awareness and communication to increase knowledge and understanding among the general population about the risk and potential impact of the pandemic. Numerous training sessions have been conducted for health professionals in the field. The ministry has been able to raise awareness concerning the new SOP and guidelines for the remodeled framework through weekly scheduled webinar sessions with groups of health workers. The MoHMS hopes to be able to standardize practice in each division this way, using virtual and physical platforms.

Health workers are one of the high-risk groups during this crisis. Hence, SOPs were in place to ensure the safety of staff and patients. PPEs were made accessible to staff, and the MoHMS continued to educate its staff on use and safe practices. Senior managers and executive-level personnel in the ministry were able to visit and counsel/motivate health workers on the ground.

Summary 6: Primary Health Care, Physical Infrastructure, and Work Capacity

- Fiji's PHC is mostly delivered through nursing stations and health centers, which are the first point of contact for most patients, whereas subdivisional hospitals provide secondary care and divisional hospitals/specialized hospitals provide secondary and tertiary level care to the population.
- FEMAT hospitals were established to handle patients who were normally seen/treated at hospitals. COVID-19 patients were transferred to CWM Hospital (those in Suva) and Lautoka Hospital.
- Telehealth has been well used during the containment and mitigation phase of the pandemic. Health teams have been using virtual platforms through webinars, Zoom calls, and Viber to converse daily. Doctors and nurses access patients through the toll-free line 165.
- The MoHMS established six testing sites and was conducting three methods of testing: rapid COVID-19 antigen testing, polymerase chain reaction (PCR), and GeneXpert molecular testing.
- The Fiji COVID-19 IMT worked with the FPBS and development partners to develop a system to manage forecast, procurement, and distribution of PPEs and other medical supplies.

4. RESPONSE TO CONTAIN THE OUTBREAK

4.1 Government Response to COVID-19

Like many other countries and territories, the government of Fiji mandated several NPIs to address COVID-19, including lockdowns, curfews, and travel restrictions.

According to the Permanent Secretary for Health, a lockdown in Fiji constitutes the following:

> "A lockdown—in the Fijian context—means a 24-hour curfew; It means no movement for any purposes except for medical emergencies; No shopping. No going out to get food. No going for a walk; No, nothing—it means total lockdown" (Dr. James Fong, Permanent Secretary, MoHMS, *Fiji Times,* June 27, 2021 [Chaudary 2021]).

4.1.1 Travel Restriction, Quarantine, and Lockdown

The government established its border control unit in response to the quarantine, isolation, and border control measures. International travel restrictions were imposed, placing a ban on inbound passenger flights, and allowing entry only for returning Fiji nationals and residents. All travelers were required to quarantine for 14 days upon arrival at a government facility located in Nadi in the Western division and were supervised by the MoHMS and the military. All quarantined individuals were required to undertake two COVID PCR tests while in quarantine before release after the 14th day. Quarantine and COVID test costs for Fijian citizens were initially covered by the government, whereas costs for resident noncitizens were covered by the individual *(Figure 21)*.

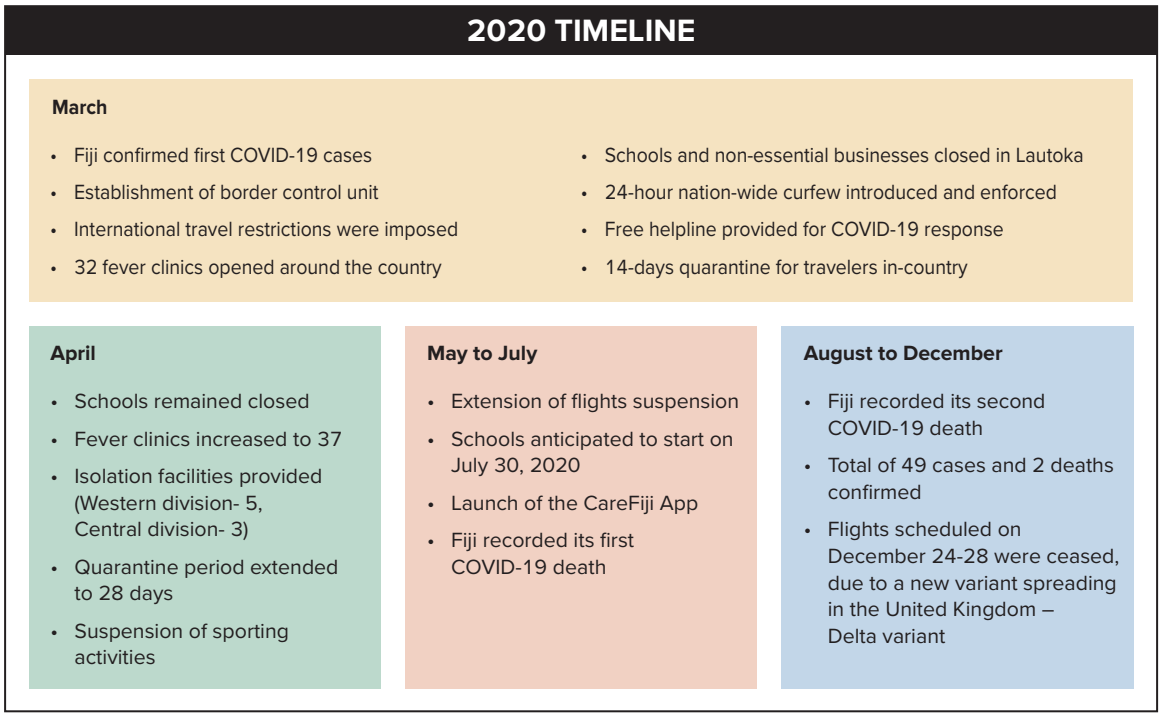
Domestically, the government of Fiji responded by imposing a national curfew, restricting large gatherings, closing schools and nonessential services, and imposing strict lockdowns in two of its largest cities in the Central and Western divisions. A national curfew was imposed in March 2020 at the onset of the pandemic, from 10 pm to 5 am, and varying curfew hours have since been implemented across the country. The government's strategy then was to revise the curfew hours with each successive increase in the percentage of fully vaccinated individuals. Curfew hours were revised to 11 pm to 4 am once 60 percent of the population was fully vaccinated. Since the second wave of COVID-19 in April 2021, the government has also implemented lockdowns on several occasions that entailed a 24-hour curfew, where movement outside the home was restricted to medical emergencies only. For instance, on May 4, 2021, the Suva-Nausori area was on a four-day lockdown. This was a stringent measure put in place to boost contact tracing by the MoHMS team, and to map out a mitigation plan.

At the beginning of the second wave, the MoHMS mandated containment zones within the Central division to control the rapid spread of the Delta variant. Check points were set up in strategic locations at the borders of lockdown zones.

The Fiji Police Force (FPF) enforces laws and orders in compliance with MoHMS guidelines on containment zones, as and when announced by way of legal notice(s) issued by the Permanent Secretary for the MoHMS. The operations team cordoned off the zones and the entry and exit points of containment areas. Police patrolled towns and cities, settlements, and villages to ensure that curfews were followed, social gatherings banned, and border restrictions upheld.

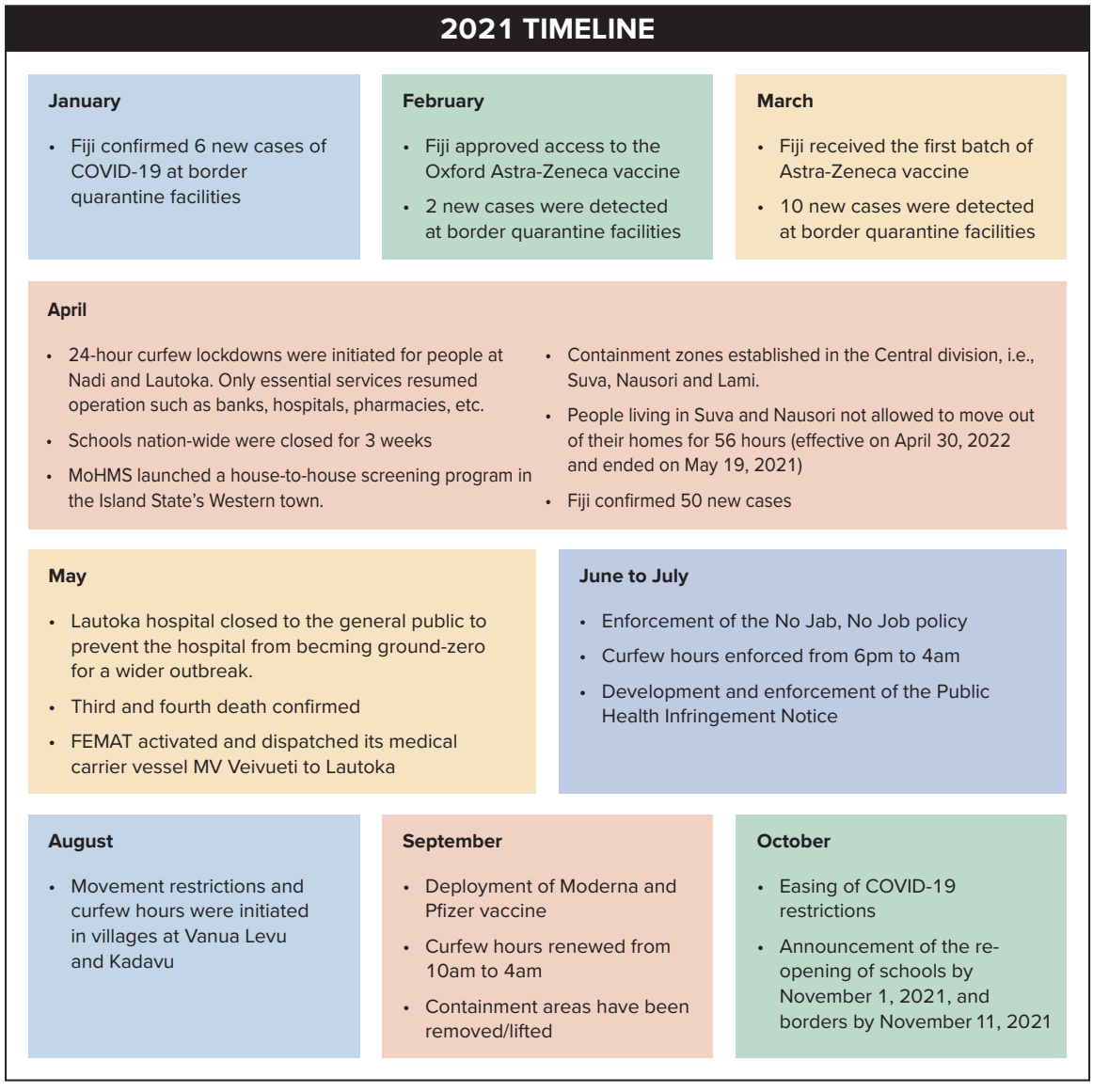
To maintain the country's economic activity and considering the movement of citizens of other countries, Fiji did not fully close its borders to travelers. Airports were not closed, as Fijian citizens were able to return to Fiji, as were repatriation flights for foreign nationals to their countries. Seaports remained opened to allow import and export between countries. Opening of the country's borders depended on top-level approval, negotiations, and assessments by the border health protection unit. The unit consisted of health and military personnel and other agencies/organizations. Through tremendous efforts, the country was able to prevent the presence of the Alpha and Beta variants, but the Delta variant made its way into the country in April 2021 *(Figures 22 and 23).*

Figure 21: COVID-19 Intervention Timeline (2020)



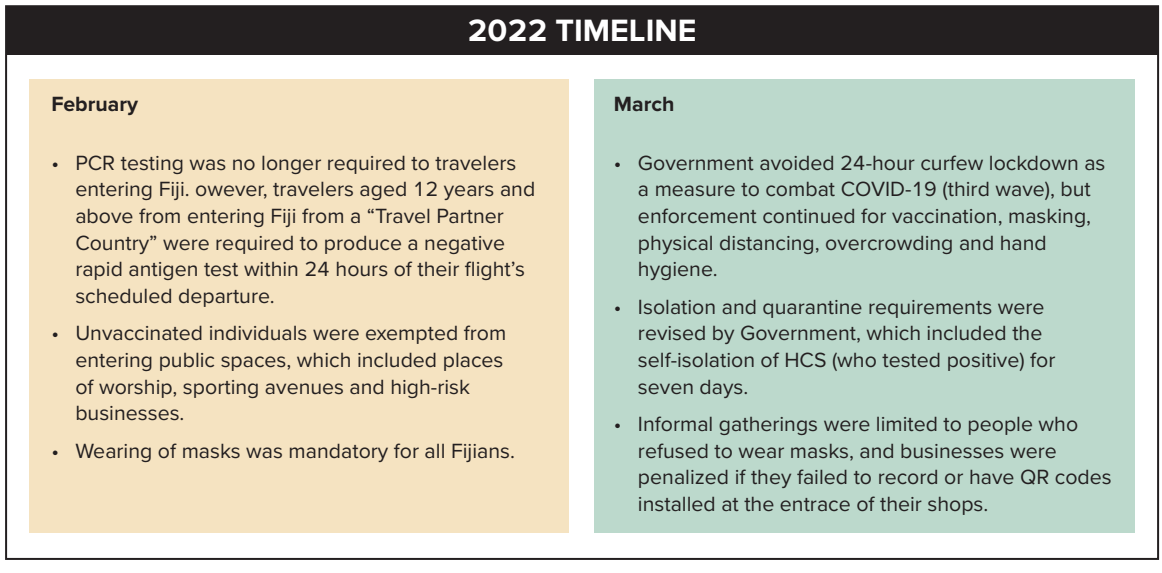
Source: MoHMS COVID-19 Updates.

Figure 22: COVID-19 Intervention Timeline (2021)



Source: MoHMS COVID-19 Updates.

Figure 23: COVID-19 Intervention Timeline (2022)



Source: MoHMS COVID-19 Updates.

One of the interventions instituted at this time, for a period of approximately three weeks, was the conversion of the CWM Hospital (Fiji's main referral hospital) to a COVID facility.

4.1.2 Screening, Testing, Contact Tracing, and Isolation

At the onset of the pandemic, the MoHMS established and operationalized 32 fever clinics around Fiji on March 2020 (MoHMS 2020d). This number was increased to 37 on April 2020, as Government ramped up its response to COVID-19 (Fiji Government 2020e). In the first wave, fever clinics were not fully utilized as fewer cases and deaths were recorded- March 2020 to March 2021 as infections were mostly reported from quarantine facilities with no community transmission. However, the MOHMS reactivated and alerted these fever clinics on April 2021 (Tadulala 2021a) as cases and deaths started peaking- presence of delta variant

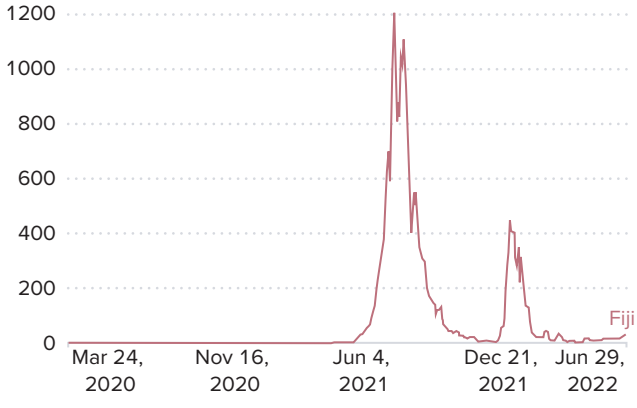
These clinics became critical additions to the health system structure, forming another layer of screening or triaging of patients who were presenting with COVID-like symptoms, at a time when the Central division (particularly) was inundated with extensive community transmission of COVID. One of the interventions instituted at this time, for a period of approximately three weeks, was the conversion of the CWM Hospital (Fiji's main referral hospital) to a COVID facility. This was when Fiji experienced the greatest number of severe COVID-19 cases needing ICU admission and the highest case fatalities. The presence of fever clinics in strategic locations extending radially from the CWM Hospital and Lautoka Hospital (on the western side) ensured that only cases who met specific clinical criteria were referred to these tertiary care hospitals for further management.

The COVID-19 screening protocols were applied to all patients who presented to the fever clinics, and COVID tests (nasopharyngeal swabs [NPS]) were to be taken when indicated by the protocol. Such patients would wait at the fever clinics while the tests were being processed at the appropriate laboratory. All these clinics had patient beds set up, like field hospitals, to accommodate patients who required prolonged observation and those who needed to wait for laboratory results.

COVID-19 laboratory testing began in Fiji on January 28, 2020, with samples taken to the WHO collaborating center reference laboratory at the Peter Doherty Institute for Infection and Immunity in Melbourne, Australia, for confirmation. On March 11, 2020, using the real-time reverse transcription polymerase chain reaction (RT-PCR) test, the country was able to test COVID-19 locally through the Fiji Centre for Disease Control (Fiji Government 2020d).

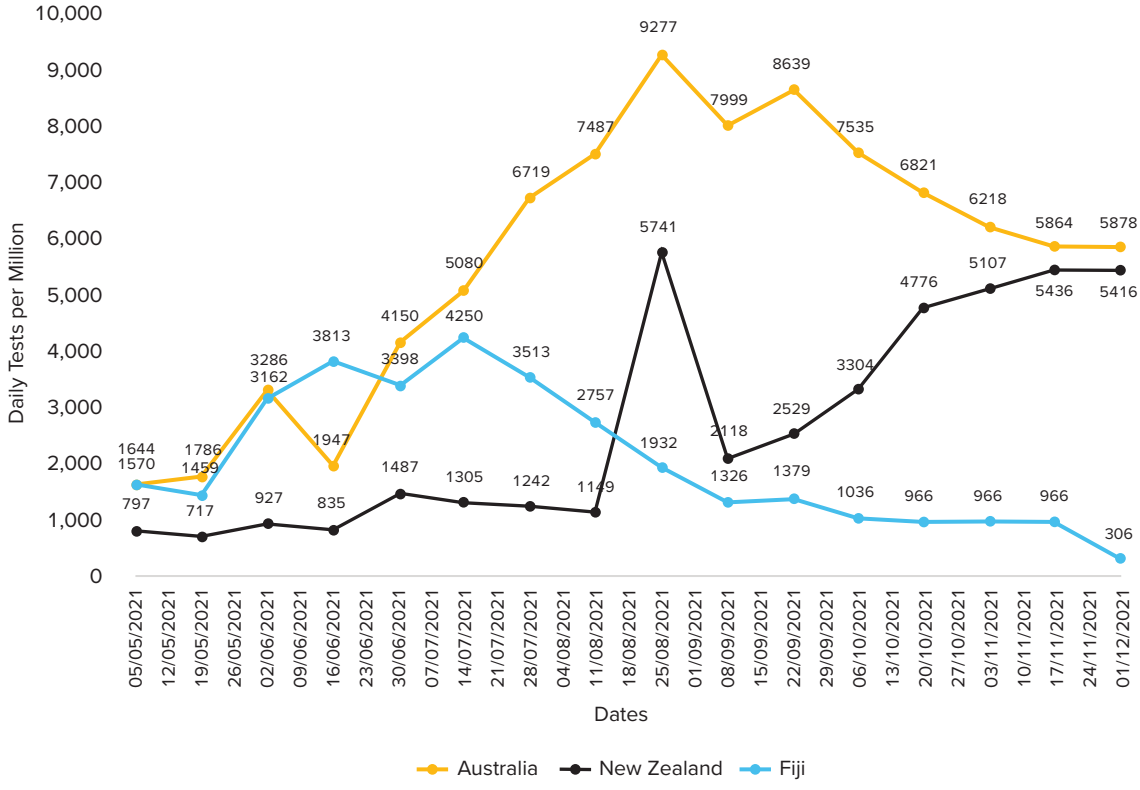
Samples were sent from health facilities around the country to the Fiji CDC for testing, and as the pandemic progressed, the MoHMS increased its testing capacity by placing several GeneXpert machines across the country. From March 2020 until June 30, 2022, Fiji conducted 567,192 tests, with 524,331 tests conducted from April 2021 to June 30, 2022 *(Figure 24)*.

Figure 24: Number of COVID-19 Tests per Day



Source: Johns Hopkins University CSSE COVID-19 Data

Figure 25: COVID-19 Daily Tests per Million



Source: https://ourworldindata.org/coronavirus/country/fiji#the-positive-rate

As depicted in *Figure 25,* the MoHMS conducted more than 3,000 to 4,000 tests per million population per day in the months of June and July, with tests starting to decline from August to December 2021, in line with the change in the testing policy. Australia had been conducting more than 4,000 tests per million population per day during these periods, while New Zealand conducted less than 1,400 tests per million population per day in the same period. During this period, Fiji was conducting more tests than New Zealand and almost the same amount as Australia. This testing feat illustrates the capacity of the MoHMS and the Fiji CDCS to efficiently coordinate and implement testing at a very high level. With six laboratories around the country, testing has been decentralized, and the MoHMS has been able to meet the daily requirement, which is 3,000 per day.

At the beginning of the second wave in Fiji, contact tracing was a critical component of Fiji's success in the early detection and breaking of the chains of COVID-19 transmission. The Fijian government introduced the CareFIJI App under the Digital FIJI initiative to assist the MoHMS in streamlining and speeding up their manual contact tracing efforts. The CareFIJI App, adapted from applications used in Singapore and Australia, uses Bluetooth technology to make contact tracing much faster and accurate, and it does not require people to recharge their phone for internet purposes.

Fiji established eight COVID-19 isolation centers in June 2020, in five hospitals and three community isolation facilities across Fiji (three facilities were in the Central division—CWM Hospital, Navua Hospital, and Forestry Training Centre; and five in the Western division—Nadi Hospital, Lautoka Hospital, Nadi Special School, Natabua High School, and Ba Mission School) (MoHMS 2020d These isolation wards were used to separate the sick individuals from uninfected people. However, as the number of cases increased, villagers would locate a separate building (such as a hall or school) to isolate or quarantine those infected.

Summary 7: Government Response

- The government established its border control unit to limit the transmission of the virus. Fiji's first response was the restriction of international travel and the quarantining of visitors for 14 days. Domestic restriction includes the imposing of curfew hours and suspension of schools, nonessential business, national events, and gatherings. The government also established containment zones in the Central and Western divisions of Viti Levu, with the aim of controlling the spread of the virus.
- Contact tracing and testing was a critical component of Fiji's success in the early detection and breaking the chains of COVID-19 transmission. Contact tracing was conducted mainly through traditional outbreak response methods, but Fiji also used the CareFIJI contact tracing app to trace people who have been in close contact with COVID-19 cases.
- A total of 32 fever clinics were established around the country. However, as the number of cases increased, the main divisional hospital—CWM Hospital—was designated as a COVID-19 facility. The MoHMS also established eight isolation facilities in June 2020; however, the number of facilities was increased as support was received from the community in establishing community isolation and quarantine facilities.
- The MoHMS implemented lockdown as a measure to speed up contact tracing efforts.
- Fiji's border (airport and seaport) was not fully closed to Fijian citizens. The government continues to open its seaport for export and import of goods.
- During the peak of COVID-19 cases in the second wave, Fiji was conducting more than 3,000 tests in the months of June and July 2021.

4.2 Health Systems Response

4.2.1 Primary Care and Hospital Response

Fiji's health care system consists of primary, secondary, and tertiary care. The first level of care (primary) has been instrumental during this pandemic, as health care workers continue to conduct health promotion, health prevention, and identification of cases through the agreed case definition. Additionally, primary care teams provided home-base cared and ensured that health facilities remained open, prioritizing health services such as immunization, and maternal and child health clinics and outpatient services continued to operate.[15] Secondary and tertiary facilities focused on providing the best care to patients who needed admission into health facilities. Additional work includes going out into the community and supporting primary health care teams in conducting awareness and outreach and running health programs.

Community capacity supported the MoHMS in establishing community isolation and quarantine facilities. In addition, the commissioner's office in each division facilitated the availability of schools and community halls for isolation and quarantine. According to the MoHMS, the designation of hospitals as COVID-19 facilities was determined by the number of COVID-19 cases in each division. However, the designations may change with the number of cases diagnosed in different settings.

In mobilizing beds for treating confirmed cases, the MoHMS has a good storage capacity for beds available for COVID-19 patients, as support was received from communities and technical agencies; for example, communities around Fiji supported the MoHMS by purchasing beds for community isolation facilities. The WHO also assisted by providing beds in the Vodafone arena.

The private sector has also been very supportive in mobilizing resources such as linen, food rations, beds, and so forth.

Fiji Emergency Medical Assistance Team (FEMAT)

FEMAT is the first team in the Pacific Islands established to respond to health emergencies domestically and across the Pacific. It provides a range of medical and emergency services to more than 100 patients a day (Reliefweb 2019). During the COVID-19 pandemic, FEMAT moved in to treat cases

15 J. Tudravu, Chief Medical Officer, "COVID-19 Preparedness and Response," interview with Gade Waqa, August 8, 2021.

that hospitals would normally treat. Services ranged from acute cases, childbirth, accidents, and other nonelective surgeries. This was done to avoid the spread of infection between infected and noninfected patients in hospitals (Fiji Government 2021c). In the Central division, the MoHMS established the Vodafone Arena as a FEMAT hospital. CWM Hospital was designated a COVID-19 hospital, at the same time also treating complex cases for non-COVID-19 patients. Emergency surgeries and deliveries for non-COVID patients were done onboard the MV Veivueti Ship, while maternity care was provided at the FEMAT hospital (MoHMS 2021a). In the Western division, the MoHMS established the Old Government Supplies building in Natokowaqa and Nadovu Park, Lautoka, as a FEMAT field hospital. COVID-19 patients were cared for at Lautoka Hospital (COVID-19 hospital), while deliveries were done at the Viseisei Health Center, and care for mothers and babies was provided at the Ba Hospital (MoHMS 2020c).

COVID-19 Facility

With cases peaking in the Central and Western divisions of Viti Levu (especially during the second wave), the MoHMS designated the CWM and Lautoka hospitals as the main COVID-19 care facilities. The ministry established the Pre-Hospital Emergency Coordination Care Centre (PHECCC), an ambulance transfer and retrieval service. As oxygen demand increased during this time, the MoHMS established an oxygen body that looks at restocking oxygen tanks in the mornings and evenings. Naval officers worked with the MoHMS to ensure the timely availability of stocks.

The whole-of-government approach has been a key factor in the daily operations at Fiji's health care facilities. Retired health personnel, volunteers, and civil servants assisted in the MoHMS services and operations. The Republic of Fiji Military Forces (RFMF) assisted the MoHMS in COVID-19 patient transfers and home retrievals (PHECCC), conducting examinations and medical assessments for COVID-19 patients at their individual homes, looking after quarantine facilities, and manning the Call Centre on a 24/7 hourly basis (toll-free line—165). The Fiji Police Force; Fiji Correction Services; National Fire Authority; St John Ambulance; Volunteer First Responders; and civil society organizations such as Medical Services Pacific, Empower Pacific, Red Cross Society, and many others were part of the team (Boila 2021b).

4.2.2 Human Resources for Health

Services by frontline health professionals have increased during the pandemic. To address the increasing number of people accessing health services, retired health personnel, volunteers, and civil servants outside the Ministry of Health were temporarily recruited to assist with MoHMS services and operations. Standard operating procedures were developed and implemented to guide services provision, as well as the use of PPEs. The government mobilized 867 civil servants (including municipal staff) to be part of the COVID-19 Divisional Emergency Response Team (Boila 2021a). Additionally, the Australia and New Zealand Medical Assistance Teams (NZMAT and AUSMAT) deployed 17 HCWs to help the Fiji MoHMS strengthen its COVID-19 prevention and control activities (Chaoke 2021). For example, the NZMAT and AUSMAT used their technical expertise and knowledge to convert non-COVID-19 facilities into COVID-19 facilities around the country.

To respond to the crisis, the MoHMS identified and established the response level and determined the skill set in each division. It also developed and mobilized the Fiji Emergency Medical Assistance Team (FEMAT) to support the COVID-19 response. For areas that were deemed high risk (because of increasing cases), the FEMAT identified staff with relevant skills and deployed them accordingly. Because cases were peaking at different periods of time in Fiji's four divisions, teams were trained and deployed to respond to and tackle issues on the ground.

To ensure that health services were not disrupted, health workers were grouped into work bubbles accommodated in hotels for months and discouraged from seeing their families for fear of infection spread. FEMAT members were accommodated on the Captain Cruise ship. Staff members were paid on a salary basis and provided with meals and subsistence allowances if relocated for COVID-19 duties. The government also recognized the need for coping mechanisms for workers during the pandemic. As an example, it has placed emphasis on professional development of its staff during this time, and training was offered to staff as personal development/gain. The ministry was also mindful of potential fatigue and burnout of its workers and through its human resources and planning division has encouraged workers to take leave when they can. Similarly, the ministry supports mental health and psychosocial services for its workers and has made those services readily available for them. It has also made special

arrangements with officials of the military hospital to provide dedicated ICU services for health workers should any fall sick on duty during the pandemic. Health workers have been informed about this provision and have been assured that the same specialists and the necessary equipment would be offered to them while in isolation at that other hospital. Furthermore, visiting health teams from Australia and New Zealand have been assigned specific duties—specifically to focus on infection control among health workers and to provide training and monitoring of COVID-19 safe measures within the workforce.

Summary 8: Health System Response

- Fiji has a three-tier primary health care system: primary, secondary, and tertiary care. Primary care is focused on improving the health status of people in communities through health promotion, health prevention, and case identification. Secondary and tertiary care is focused on providing the best services to patients admitted into hospitals.
- Establishment of the FEMAT has boosted Fiji's health system response during the pandemic.
- Engagement of the NZMAT and AUSMAT boosted the MoHMS's response during the pandemic.
- CWM Hospital and Lautoka Hospital were designated as COVID-19 facilities. However, complex cases were still referred to CWM Hospital, making it a COVID-19 and non-COVID-19 facility.
- The whole-of-government approach was key during the containment and mitigation phase of the pandemic. The Military Force, Police Force, Education Ministry, CSOs, and other government ministries assisted in the MoHMS operations.
- Community involvement has been shown to be of great value during the containment and mitigation phases of the pandemic. The community has supported the MoHMS through the purchase of beds and the establishment of community isolation and quarantine facilities.
- The MoHMS provided mental health and psychosocial services and has also been mindful of fatigue and burnout.

4.3 Public's Response

4.3.1 Social Distancing, Personal Hygiene, and Social Normal

The government escalated its COVID-19 containment measures in the second wave after the country confirmed its first case of community transmission (April 2021) in the capital of Suva. The government introduced the following restrictions to prevent the transmission of the virus (Fiji Government 2021f)

- Closing of bars, gyms, restaurants, movie theatres, video gaming shops, cyber cafes, taverns, billiard shops, and amusement centers;
- Suspension/closure of schools around the country;
- Funerals (deemed "super spreaders"): restricted to 10 people only;
- No other gatherings or contact sports allowed;
- Suspension of community engagement activities (the government initiated other ways of awareness through use of speakers and police media platforms);
- All protective equipment and any vehicle used for the conveyance of bodies to mortuaries or burial sites are sanitized before and after each use;
- The Fiji Police Force conducted vigorous awareness campaigns through community policing initiatives to safeguard people in adhering to the two meters social distancing, restricted social gatherings, and basic hygiene;
- Avoiding unnecessary contact with documents, using gloves if possible, or washing hands immediately after handling a document;
- Regular disinfection of office space, exposed office surfaces, and office equipment after use;
- Wearing PPE such as masks, gloves, and eye protection while interacting with other people;
- Awareness about not touching the face, eyes, nose, or mouth with unwashed hands; and
- Maintaining physical distance of at least two meters away from other people during social interactions or while working in police stations and offices.

According to the Fiji Police Force, the biggest challenge that the Fiji government is facing in terms of NPI is social distancing because of cultural factors.

> "Gathering is an important part of life making it a behavioral, traditional and of cultural importance in the Fiji community. Fijian people gather to celebrate, drink kava, help one another and many people practice communal living. Hence making it a biggest challenge for the government, and unfortunately this saw families, couples, villagers, being brought in for such breaches." (Police Officer. [16])

The guidelines used by the Fiji Police to ensure that people follow these practices are:

1. Public Health (Infectious Diseases) (Infringement Notices) Regulations 2021
2. Legal Notices
3. Fiji Police Force Plan for Infectious Disease
4. Public Health Advisories

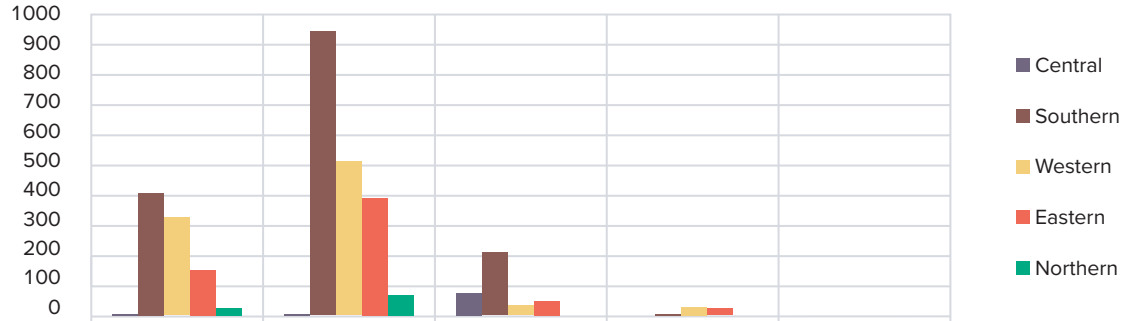
The Fiji Police Force has ensured that the public observes the laws issued by the government regarding COVID-19 restrictions. However, there has been resistance, recorded from various sections of society, to abiding by these laws, and as a result these individuals faced penalties mandated by the law or regulation relating to COVID-19.

A total of 1,458 cases were registered during the reporting period (April 19 to July 11, 2021), with a total of 3,359 accused persons. The Southern division recorded the highest number, with 645 cases, followed by the Western division (458 cases), Eastern division (232 cases), Central division (81 cases), and Northern division (42 cases).

The types of breaches of the total 3,359 offenders were *(Figure 26)*:

- 58 percent—social gatherings;
- 28—curfew breaches;
- 12 percent—failure to wear mask, maintain distance/restrictions; and
- 2 percent—lockdown and containment areas.

Figure 26: Fiji—Types of Breaches during COVID-19 outbreak (under the Failure to Comply with Orders Offence-FTCWO) - (April 19 to July 11, 2021)



	Curfew	Social Gathering	COVID-19 Restrictions (Mask/ Maintain Distance)	Lockdown/ Containment Areas	Isolation
Central	15	7	80	0	0
Southern	410	944	219	9	0
Western	334	518	42	34	1
Eastern	157	394	53	31	1
Northern	31	78	1	0	0

Source: Fiji Police Force Data 2021

16 Fiji Police Force, "COVID-19 Preparedness and Response," interview with Gade Waqa and Avelina Rokoduru, August 13, 2021.

The survey was conducted to help understand the effectiveness of risk communication in phase 1 of the COVID-19 response.

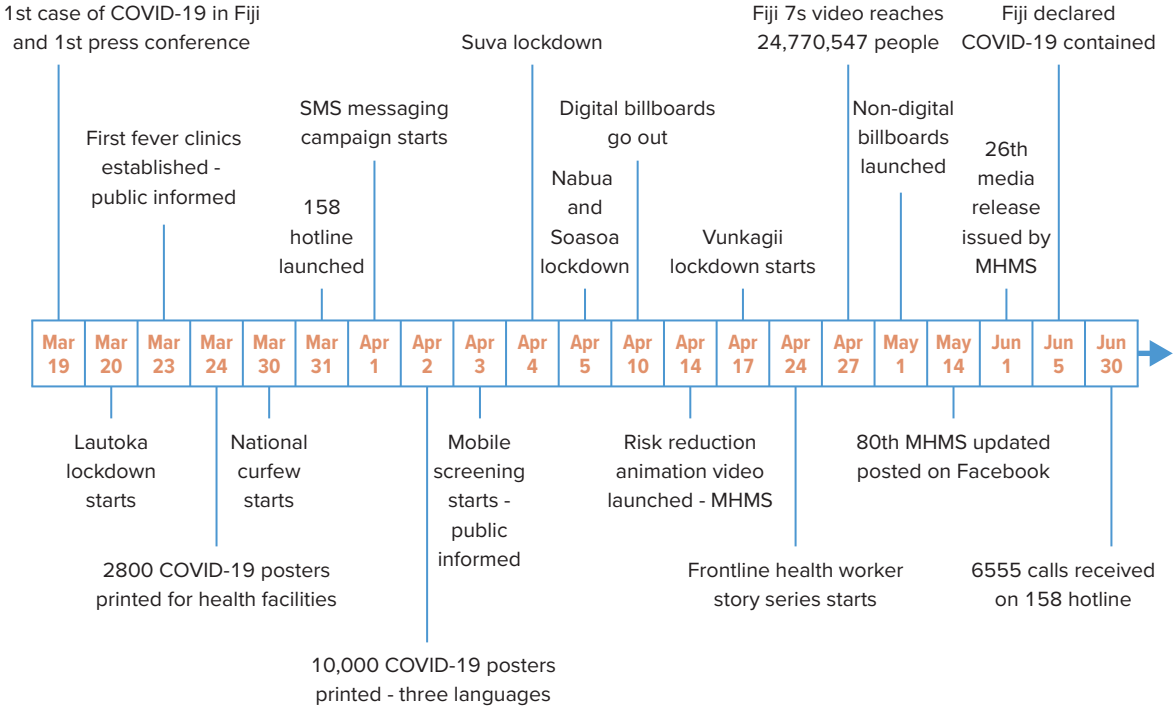
4.3.2 Trust in Government and Social Institutions

Survey sample size

This section of the case study was adopted from a KAP survey study conducted by the MoHMS (IMT) with the AusAID *(Annex 26)*. A total of 804 individuals took part in the survey: 466 responded online and 338 face to face. The survey was conducted to help understand the effectiveness of risk communication in phase 1 of the COVID-19 response *(Annex 26)*. Two groups of respondents were assessed in this survey: (i) face to face and (ii) online respondents.

The activities and corresponding timelines are illustrated in *Figure 27* below.

Figure 27: Timeline of Key Events—Communication Campaign



Source: MoHMS and AusAID, 2021

Public Response to Government Intervention and COVID-19 Interventions

In assessing the public's response to NPIs, the survey results showed that respondents were practicing washing of hands with soap and water and maintaining two meters of social distance. Low scores were identified for two protective behaviors: avoiding touching eyes, nose, and mouth; and avoiding close contact with people who are coughing or have fever. In the analysis of knowledge about pathways of infection, most of the respondents agreed that people contracted COVID-19 by contacting someone who has tested positive or shaking hands and sitting next to someone who is coughing *(Table 12)*.

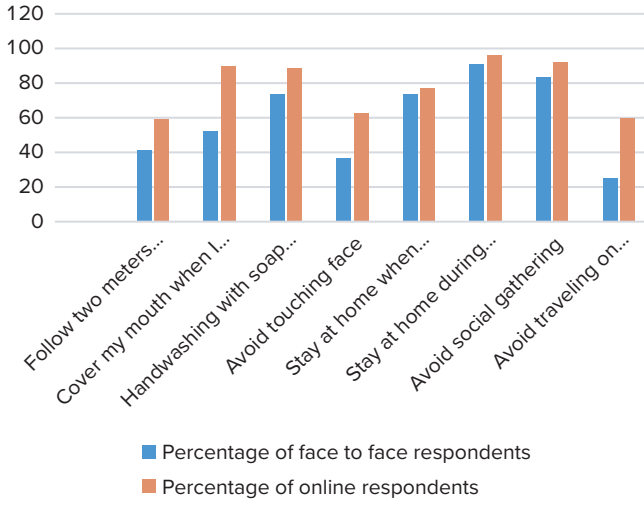
Respondents preferred to stay at home during curfew hours when experiencing flu-like symptoms and to avoid social gatherings of more than 20 people *(Figure 20)*.

Table 12: Public's Response on Nonpharmaceutical Interventions

Protective Behaviours	Face-to-Face	Online (N-447)
Wash hands with soap	87%	96%
Maintain two metre distance	81%	92%
Cover nose and mouth when sneezing or coughing	60%	92%
Avoid touching eyes, nose and mouth	37%	84%
Avoid close contact with anyone who has a fever or a cough	42%	84%
Avoid large gatherings of people	60%	87%
Clean hands with an alcohol-based hand rub	62%	89%

Source: MoHMS and AusAID, 2021.

Figure 28: COVID-19 Interventions



Source: MoHMS and AusAID, 2021

Public Trust in Government and Social Institution

Getting the right information from reliable sources is critical during the pandemic. Results showed that television, radio, Facebook, and online news sources were the prominent sources of information that people have been using during this period. It was also noted that online respondents use a wider range of information sources, such as the MoHMS website, internet sources, and word of mouth from friends and families *(Table 13)*.

Table 13: Sources of Information

Source	Face to face	Online
Television	87%	85%
Radio	72%	74%
Facebook	54%	76%
Online news sources	Not applicable	76%
Newspaper		65%
Internet search		62%
Fiji MHMS Website		60%
Text/SMS messages		56%
Word of mouth – family, friends		56%

Source: MoHMS and AusAID, 2021.

Public's response if they develop symptoms of COVID-19

The most common responses from online responders were self-isolation (81 percent) and calling the 158 hotline (84 percent). Other actions included visiting fever clinics and health facilities. Similar responses were elicited from people with disabilities. Face-to-face responders preferred calling the 158 hotline (32 percent) and visiting the nearest fever clinic or health facility (76 percent). Both groups of respondents (face to face and online respondents) understood the importance of contacting/connecting with health personnel when asymptomatic.

4.4 Vaccination

4.4.1 Status of Vaccination in Fiji

Fiji has made tremendous progress in vaccinating its population against COVID-19. The Oxford AstraZeneca and Moderna vaccines have been the predominant vaccines used in Fiji. Vaccination efforts began on March 2021 with the arrival of the first batch of Oxford AstraZeneca vaccines, obtained from the COVAX facility, a partnership between CEPI (Coalition for Epidemic Preparedness Innovations), GAVI (Global Alliance for Vaccines and Immunisation), UNICEF, and the WHO. The first batch of 12,000 doses of the Oxford AstraZeneca vaccines was administered to individuals most vulnerable to COVID-19. These included frontline workers in border control, seaports, and quarantine facilities; hoteliers; defense forces; health workers; and the elderly population ages 60 years and older.

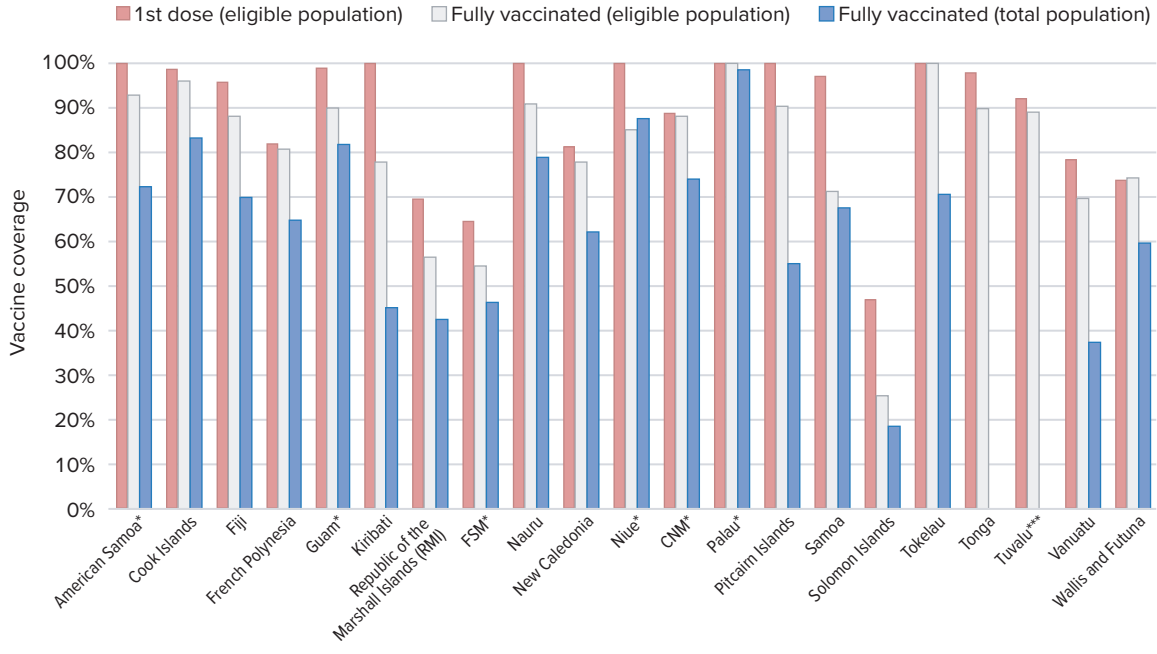
The MoHMS conducted nationwide COVID-19 vaccination campaigns around the country using several strategies. Health centers, community halls, and school sites were used for vaccination drives. Some teams had to traverse rivers, seas, or steep mountains to access and provide vaccination services to remote populations. In addition, the government was able to establish drive-through vaccination sites in towns and cities, where people were vaccinated in the comfort of their vehicles.

As COVID-19 vaccination programs rolled out all around the world, mainstream and social media began to report on the growing "antivaxxer" sentiments. In addition, there were questions about the safety of vaccines, particularly AstraZeneca, which was the only vaccine available in Fiji at the beginning of the vaccine rollout campaign. The easy access to all forms of online information (and misinformation) gradually triggered increasing vaccination hesitancy among the population, resulting in a slump in uptake of vaccination. This trend was of serious concern to the government as it recognized that a considerable number of public servants from various ministries were also choosing to not get vaccinated. In response and following various stakeholder consultations that were unanimous about the critical need to protect people from the ongoing Delta wave and reach herd immunity through vaccination, Prime Minister Voreqe Bainimarama introduced a "No Jab, No Job Policy" on July 9, 2021. This policy mandated that all civil servants and private employers and employees must have received their first dose by August 15 and their second dose by November 1, 2021. Those who refused were asked to take their outstanding leaves and decide before August 15. By September 18, 2021, the Ministry of Health had terminated the work contracts of 54 medical personnel, and the Ministry of Education had terminated 122 teachers. Individuals with medical conditions that are contraindications to vaccination were issued exemption letters endorsed by the Permanent Secretary for MoHMS. This included those who suffered adverse side effects following vaccination. The introduction of the "No Jab No Job" Policy boosted the vaccination rollout in Fiji, and by October 20, 2021, 592,904 individuals (95.9 percent of the eligible adult population) had received their first dose and 524,475 (84.4 percent of the eligible adult population) had received their second dose. However, in late December, the variant of concern, Omicron, made its way into the country, and people were advised to receive the booster shot. By June 30, 2022, the government managed to vaccinate 642,154 (100.3 percent) individuals with the first dose, 587,556 (95 percent) with the second dose, and 141,572 (45 percent) with the booster dose.

The Moderna vaccine has been used for children, pregnant women, and populations above the age of 60. Since September 24, 2021, the Moderna vaccine has been administered to children ages 15 to 17 years. Children ages 12 to 14 years started receiving the Pfizer vaccine on November 15, 2021, and onwards (Kate 2021). By June 30, 2022, 38,726 children (ages 15 to 17 years) had received the first dose and 32,061 the second dose. Among those ages 12 to 14 years, 25,738 received the first dose and 15,702 the second dose (MoHMS 2022).

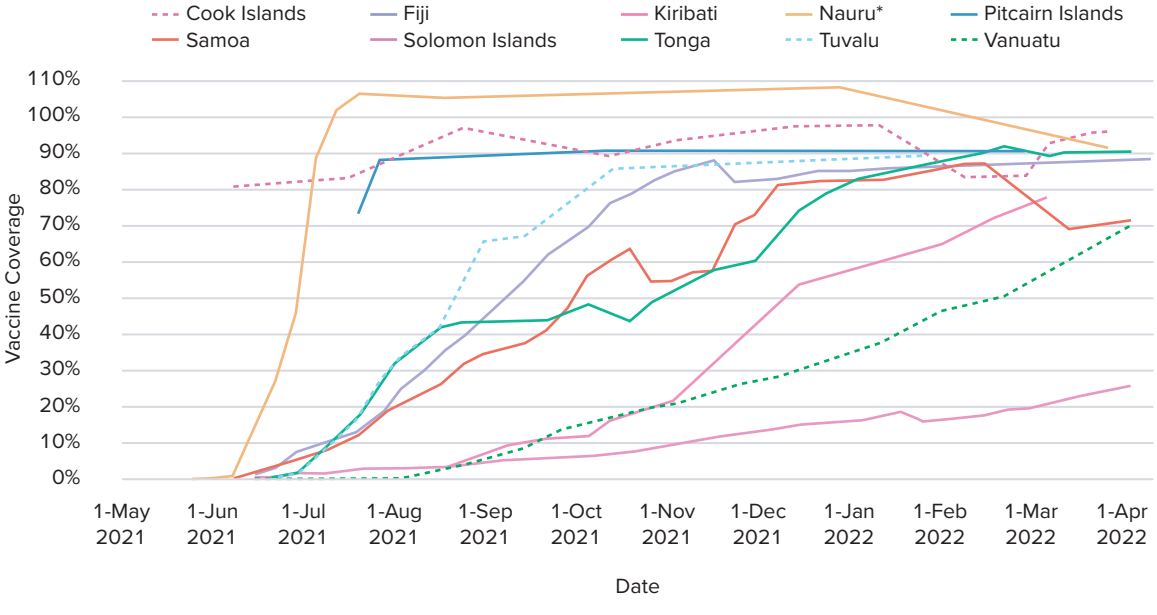
In the Pacific Island Countries (PICs), 62 percent (n = 13) out of the 21 island countries have vaccinated more than 90 percent of their population—as of April 19, 2022. These include American Samoa, Cook Islands, Guam, Fiji, Kiribati, and others. With respect to the second dose, 38 percent (n = 8) of the island countries have vaccinated more than 90 percent of the population; these include American Samoa, Cook Islands, Nauru, Palau, Pitcairn Island, Tokelau, Tonga, and Guam. With respect to the third dose, only one country has reached the 90 to 100 percent vaccination coverage (Palau), three countries have reached the 80 to 90 percent vaccination coverage, five have reached the 70 to 80 percent coverage, and 48 percent (n = 10) have attained less than 70 percent vaccination coverage (WHO 2022f) (see *Figures 29 and 30)*.

Figure 29: COVID-19 Pacific Vaccination Update (April 19, 2022)



Source: WHO 2022f

Figure 30: Percentage of Eligible Population Fully Vaccinated in Pacific Island Countries and Territories (April 19, 2022)



Source: WHO 2022f

Vaccine wastage and shelf life of vaccines were two of the key issues that the MoHMS has had to deal with during the vaccination drives.

4.4.2 Financing and Distribution

Fiji was the one of the first countries in the Pacific Islands to receive the COVID-19 vaccine doses on March 6, 2021, through the COVAX facility. An initial shipment of 12,000 doses of the AstraZeneca vaccine was received, followed by subsequent shipments of the AstraZeneca vaccine from the COVAX facility and various bilateral partners. *Table 14* presents a summary of the COVID vaccines received in Fiji from March to November 2, 2022. In addition to providing the vaccines, the bilateral partners, Australia and New Zealand, have also provided funding for vaccine deployment.

Vaccine wastage and shelf life of vaccines were two of the key issues that the MoHMS has had to deal with during the vaccination drives. There were instances where fewer people were turning up to vaccination drives, and one vial should be used by 10 people (Uluwai 2021). This issue is concerning as it could hinder the government's opportunity to secure more vaccines from donors.

Table 14: Financing for COVID-19 Vaccines

Source	Vaccine Type	Date of Arrival	Number of Doses
COVAX Facility	Oxford AstraZeneca	1st batch—March 6, 2021 2nd batch—April 19, 2021	36,000
India	COVISHIELD AstraZeneca	March 30, 2021	100,000
Australia	AstraZeneca	November 2, 2021	Over 1 million doses
New Zealand	AstraZeneca	August 4, 2021	100,000
USA	Moderna	July 16, 2021	150,080
Japan	AstraZeneca	August 24, 2021	56,000
New Zealand, Australia, and UNICEF	Pfizer	February 2, 2022	175,000
Australia	Pfizer	February 24, 2022	175,000
New Zealand	Pfizer Pediatric vaccine	March 31, 2022	50,000

4.4.3 Information, Communication, Compliance

Although Fiji has managed to achieve a high vaccination rate, initial vaccine hesitancy was a challenge. Hesitancy has been attributed to a general lack of confidence in the safety and efficacy of the vaccine; long queues at the vaccination sites (long hours of standing); people's constitutional right to refuse vaccination; negative comments and information on social media; distrust in the government, triggered by the inconsistent and unreliable information shared by the government; religious beliefs; and employment concerns, as reasons for non-vaccination (FWRM 2021).

Fiji's vaccination teams conducted awareness campaigns in different communities and villages, emphasizing the importance of the COVID-19 vaccine. The MoHMS has established a COVID-19 vaccine information hub on the MoHMS website that can be accessed by the public. The development partners, private sector, and civil society groups have also been providing their support to create awareness, as well as technical support with medical and other essential items.

Some of the actions instituted by the government to encourage vaccination include the "No Jab, No Job" policy, which requires all civil servants to be vaccinated by October 2021, and a "No Jab, No Government" initiative that provides F$120 per month for the next six months to eligible Fijians who receive their first dose of the vaccine by August 7, 2021, and a second dose by October 31, 2021.[17] The government also established a lottery draw (known as "Let's Win Together Sweepstakes"), where 10 people won F$5,100 (vaccinated adults are eligible to apply).

No Jab, No Job Policy

The "No Jab, No Job" policy was developed and established around July 2021. The policy was in place to encourage Fijians to get vaccinated and be immune to the COVID-19 virus (MoHMS 2021g). The policy mandated that all civil servants and employees and employers in the private sectors receive their first dose by August 1, 2021, and their second dose by November 1, 2021. The government even granted leave for civil servants to get booster shots before these tentative dates or face contract termination (Panapasa 2021). Employers and employees at private firms were advised to comply or either face fines or allow their businesses to stop operations. Due to nonadherence, the MoHMS and the MEHA terminated the contracts of 54 medical personnel (30 nursing and midwifery staff, 15 support staff, 4 medical officers, 2 oral health staff, 1 dietitian, 1 physiotherapist, and 1 health inspector) and 122 teachers (33 teachers in the Central division, 7 in the Eastern division, 20 in the Northern, and 62 in the Western) (Rabonu and Talebula-Nuku 2021). According to the Fiji Minister of Economy Hon. Aiyaz Sayed Khaiyum, the policy has had positive effect, as the country reached high rates of vaccination, schools are being re-opened, and the economy is gradually picking up steam (RNZ 2022).

Vaccine Hesitancy

Vaccine hesitancy is a growing challenge to achieving herd immunity in Fiji and thus a prominent public health concern. It is defined as the delay in acceptance, or refusal, of vaccination despite availability of vaccines (MacDonald 2015). Two important studies done by Kumar (2021a and 2021b), (i) "Determinants of COVID-19 Vaccine Hesitancy in Fiji" and (ii) "Parents' Intentions and Perceptions About COVID-19 Vaccination for Their Children," have quantified the levels of vaccine acceptance and vaccine hesitancy in Fiji. The first study found that age, ethnicity, gender, religion, and geographical location significantly influence vaccine acceptance. The Western division had high levels of vaccine acceptance compared to other divisions. People more than 24 years old were more likely to be vaccine hesitant, whereas people more than 65 years old showed high levels of vaccine acceptance. Females have high levels of vaccine acceptance (74.9 percent) compared to males. In terms of ethnicity, vaccine acceptance was high among Fijians of Indian descent (84.1 percent) and was lowest among the I-Taukei (52 percent). With respect to religious affiliation, Muslims and Hindus (88.6 percent and 83.4 percent, respectively) were more likely to be vaccinated, compared to Christians. Kant et al. (2021), stated that Christian influencers, including religious leaders, shared conspiracy theories that the vaccine was associated with demons and the "mark of the beast," which contributed to the low acceptance rates among Christians. Other reasons for vaccine hesitancy include fear of the vaccine's side effects; beliefs that the vaccines have metal chips connected to a 5G network or that they are magnetic; religious reasons; lack of trust in the health care system, government and public health agencies; conspiracy theories; and online misinformation.

17 Ministry of Economy, 2021, "COVID-19 Preparedness and Response," interview with Gade Waqa and Avelina Rokoduru, August 12, 2021.

The second study found that ethnicity, religion, geographical location, and parental education level were significantly associated with vaccine hesitancy. A total of 1,056 parents' survey data was analyzed and showed that 70.3 percent would get their child vaccinated with the COVID-19 vaccine, 13.5 percent were unsure, and 16.2 percent indicated that they would not get their child vaccinated. Fijians of Indian descent had the highest vaccine acceptance level, while I-Taukei parents were the most hesitant. In terms of age, parents above the age of 40 years have high levels of vaccine hesitancy, and degree of acceptance decreased with lower age groups. The Western division reported high levels of vaccine acceptance compared to other divisions. Muslims and Hindus reported high levels of vaccine acceptance compared to Christians. Further, parents who had university postgraduate degrees had the lowest levels of vaccine hesitancy, were fully vaccinated, and were most likely to allow their children to get a COVID-19 vaccine.

4.4.4 Vaccination Registration System/ GIS Vaccination Dashboard

In the past, vaccination programs rolled out by the MoHMS were always conducted manually, with "patient" information recorded on printed forms and large registers used for storage of population data. With technological advancement, the government introduced a digital system to support the vaccination program. In collaboration with the Ministry of Communication through Digital Fiji, the Vaccination Registration System (VRS) was launched on March 8, 2021. This "first-of-its-kind" system marked a new era, aligning with the Digital Transformation Pillar of the 5–20-year National Development Plan of the Fijian Government (MOE 2017). The launching on the VRS coincided with the arrival of the first batch of the Oxford AstraZeneca vaccines, which became an incentive to get registered, even though the vaccines were initially prioritized for vulnerable populations only.

The VRS is a user-friendly platform that can be accessed through any electronic device that can connect to the internet. Users are not required to create an account but need to provide a copy of their identification card for verification purposes and their birth or permit number for registration (MoHMS 2021g). Vaccination in Fiji is open to citizens who were either born and live in Fiji full time, attained citizenship through the Fijian Immigration Office, or hold a valid permit to reside in Fiji. This system is directly linked to the Births, Deaths, and Marriages Portal, so the user's personal details automatically get populated once the user enters the birth registration number. The user is required to choose the closest health facility from a drop-down menu, name any existing medical conditions, provide contact details, and upload a copy of a valid identification card. Upon successful registration, the user is given a reference number, which he/she presents to the health worker at the vaccination station, on the day of vaccination (Fiji Government 2021d)

In terms of administration, all information entered is verified by data managers to ensure all relevant fields have been populated. The system will not complete a registration successfully unless all fields have been filled appropriately. On the day of vaccination, the individual will need to be verified against the details in the VRS system before receiving the jab, and the vaccination nurse enters the details of the jab in the system including the date, the type of vaccine, and the batch number. All vaccinated individuals are issued a vaccination card as proof of vaccination (MoHMS 2021f).

On September 18, 2021, the MoHMS began the registration of students in the 15-to-17-year age group (Fiji Government 2021e), while registration and rollout of COVID-19 vaccination for children aged 12 to 14 years began on November 15, 2022 (Turaga 2021). Students are required to register with their parents/ guardians for consent, and vaccination is offered in the schools through collaboration with the MEHA. As of September 25, 2021, although vaccination for students was not mandatory, they were not allowed to enter school compounds unless fully vaccinated. They were encouraged to get vaccinated for the safety of their peers, and indoor masking was mandatory in schools.

Furthermore, for vivid visualization of the progress of the vaccination program, a geospatial component was incorporated to support the VRS. This includes the launching of a geographic information systems (GIS) dashboard that transforms the data from VRS to a geographic visual. The dashboard is open source and can be accessed by anyone on any device. Users are also encouraged to register to make full use of the portal, but most of the details are also displayed on the viewing interface. Users can view vaccination details by division and subdivisions and see a percentage representation of the vaccination rates. Users can also download the raw data for personal or research purposes (MoHMS 2021e)

Summary 9: Vaccination

- The AstraZeneca and Moderna vaccines were the predominant vaccines used in Fiji. Pfizer vaccines were deployed to children 12 to 14 years old.
- The No Jab, No Job policy has been effective in reducing the antivaxxers, and the use of incentives has contributed to the increase in vaccination coverage in Fiji.
- The government introduced a digital system known as Vaccination Registration System, which has made work efficient for the vaccination team, and is a milestone for the MoHMS—as previously patient information was recorded on printed forms and large registers.

4.5 Protecting Vulnerable People

4.5.1 Women and Children

The COVID-19 pandemic has exacerbated the already very high rates of violence against women and girls. A survey conducted by the COVID-19 Response Gender Working Group in 2020 reported that 64 percent of women who have ever been in an intimate relationship have experienced physical and/or sexual violence by a husband or intimate partner in their lifetime (COVID-19 Response Gender Working Group 2020). A rise in violence has been one of the COVID-19 impacts, with a significant increase in calls received by the National Domestic Violence helpline in April 2020, and 50 percent of them related to COVID-19. COVID-19 exponentially increased gender-based violence due to the deepening of economic and social stress coupled with restricted movement and social isolation measures (UN 2020). Many women were forced into lockdown at home with their abusers while services to support survivors were disrupted or inaccessible.

COVID-19 has also doubled the burden of workload for many women, particularly for those with paid jobs who are working from home while schools are closed; this has become a triple burden as many women are also expected to be responsible for their children's education (Cowley 2020). Women are responsible for caregiving (of children, ill or elderly family members, and people with disabilities) and household work. Additional unpaid work for women at home has been brought about by the closure of schools and workplaces and bans on social gathering have meant that everyone has had to stay home.

A thematic brief developed through the support of the Pacific Women Shaping Pacific Development (Pacific Women, DFAT) and in partnership with the Pacific Girl program (Cowley 2020) looks at the issues adolescent girls (14 to 19 years old) are facing because of COVID-19. Twenty-one Pacific girls offered their insights in the survey (including in Fiji, Papua New Guinea, Solomon Islands, and Vanuatu). The survey concluded that COVID 19 results in:

1. **Disrupted education**
   The closure of schools has disrupted girls' learning and they are less able to access online learning options. This has led to increased pressure to undertake domestic labor and care responsibilities for their families.
2. **Increased anxiety and loneliness**
   Impacts related to adolescent girls' age and developmental stage include: a loss of peer support, leading to depression and anxiety; an increased propensity to boredom and risk-taking behaviors; and for those with online access, an increased exposure to predators, online harassment, exploitation, and bullying.
3. **Feeling isolated and unsafe at home and online**
   Prolonged school closures and economic recession due to the COVID-19 pandemic have the potential to significantly increase the risk of gender-based violence, early and forced marriage, sexual exploitation, and child labor.
4. **Increased care burden at home**
   The COVID-19 pandemic has increased the burden of care on women and girls. Caring for siblings and children in the community, especially during school closures, and additional household work often fall on adolescent girls. This is because they are traditionally expected to assist their mothers and female relatives to undertake most of the unpaid domestic labor and childcare.
5. **Disrupted access to menstrual hygiene and sexual health services**
   Restricted movement decreases access to sexual and reproductive health information and services, while increasingly crowded living conditions impinge on girls' access to water, sanitation, and hygiene (WASH) and menstrual hygiene management.

Government intervention for women and girls during COVID-19 pandemic

1. Multisector COVID-19, Gender and Protection SOPs have been developed to ensure that frontline service providers can adapt quickly to this interagency coordination and to support girls, women, and families affected by gender-based violence.
2. Helpline services for girls and women were established, which include the Fiji Domestic Violence Helpline, Child Helpline, and Mental Health Helpline.
3. Centers or shelters for girls or women who faced domestic violence or other types of gender-based violence were also provided. These centers/shelters are in Lautoka, Labasa, and Sigatoka.
4. Counseling sessions for men were established. This is done to provide support for emotional health and relationship concerns of men affected by or considering using violence.
5. Gender Based Violence primary prevention approaches have been established.

Summary 10: Protecting Vulnerable People

- COVID-19 has exacerbated the very high rates of violence against women and girls in Fiji, according to a report from the COVID-19 Response Gender Working Group in 2020. It has also doubled/tripled the burden of workload for many women as some are required to work from home and look after the children and the elders—keeping in mind that schools were also closed.
- Some of the circumstances faced by adolescent girls during this crisis were disrupted education, increased anxiety and loneliness, feeling isolated and unsafe at home and online, having an increased care burden at home, and disrupted education access to menstrual hygiene and gynecological services.

4.6 Innovation Through Leapfrogging

4.6.1 Communication and Information Technologies

COVID-19 has triggered an unprecedented reliance on ICT in Fiji, as people were isolated in their individual homes, workers were mandated to work from home, students needed to use online learning platforms, and so forth. The Fiji MoHMS has been using ICTs in establishing internet connections, networks, apps, databases, phones, and other important developments that were pivotal during the pandemic (see *Table 15*). Below are some of the developments that have evolved around ICTs:

Risk Communication

Effective communication is an important tool in the COVID-19 daily operations in Fiji. The MoHMS executive members conduct daily meetings via Zoom to update strategies and consult on technical issues. The Fiji COVID-19 Taskforce and Development Partners conducted webinars to reach more than 400 health workers to update them on the current protocols and mechanisms. Furthermore, use of social media platforms such as Viber, Facebook, and Gmail were critical in notifying/reminding workers about the daily operations. The Medical Superintendent and Divisional Medical Officers were able to develop different groups on these social media platforms with the aim of transmitting information to health workers on the ground.

Contact Tracing

The practice of contact tracing has been a critical component of Fiji's success in the early detection and breaking of the chains of COVID-19 transmission. Apart from physical contact tracing teams and processes, the Fijian government introduced an app called the CareFiji App under the DigitalFIJI initiative to assist the MoHMS in streamlining and speeding up its manual contact tracing efforts (initially, much of the effort of contact tracing relied on people's memories of the places they went to and people they met) *(Annex 6)*. The app has eased the work of the contact tracing team, as civil servants, private sectors, and the

Hindu temple Sri Siva Subramaniya temple in Nadi, Fiji

public have been advised to download and use the app. Also, bar codes have been placed in different locations such as supermarkets, stores, pharmacies, and other locations. The app had positively assisted the MoHMS by generating mobile numbers that have come in proximity with suspected/confirmed cases of COVID-19. It also saves time as people were able to avoid filling out personal details via paper. The main challenge faced by CareFiji users was the failure of the QR scanner, as the QR scanner feature requires an internet connection to work. Although the app has been used nationwide in Fiji during the pandemic, there has been no formal assessment or evaluation of its effectiveness in supporting contact tracing processes in the whole national response.

Swabbing

The Tamanu system has been used to track and record test results of people who have successfully been swabbed. Tamanu is a patient-level electronic medical record (EMR) designed to provide support and ensure consistent management through the continuum of care.

It is used by practitioners in Fiji to insert details of an individual prior to a swabbing test. The Tamanu dashboard is accessed by command centers, the IMT, and laboratories. Once details have been submitted, a code is generated, and this will be sent to the individual's code for follow-ups on their test results. The use of this technology has prevented delays, and it allows individuals to know their test result, rather than going to hospitals/health centers/laboratories to obtain it. It has also allowed the MoHMS rapid access to timely data for analysis and decision-making.

Vaccination and tracking of activities in medical facilities

Vaccination plays an important role in Fiji. The MoHMS used the Vaccination Registry System (VRS) to register people who have decided to get the COVID-19 vaccine. Tupaia MediTrak is an official site used by the MoHMS to update and track activities in different medical facilities in Fiji *(Annex 8)*.

4.6.2 Public and Private Partnership

Local Support/Partnership

The government has been receiving support through collaboration with private companies in Fiji. Support has been received for improving the health information system that allows the health team to collect and analyze data electronically instead of manually. Further support was from the Digital FIJI Company, which developed the contact tracing app that was used in the initial contact tracing work in the Central division.

Telecommunication partners (such as Digicel) have also provided support by establishing toll-free lines that connect patients with doctors, and the government has been engaging general practitioners (GP) in the Western and Central divisions (through the COVID-19 Engagement of Private Medical Practitioner Scheme) to manage COVID-19 patients for free. Approved medical services include consultation, review, referrals, injections, dressings, and other minor procedures.

Intergovernmental and International Support

The government has received support from different countries and agencies. This includes the purchase of medical supplies (PPEs, GeneXpert machines, and so forth) and the release of funds (grants) to aid the government in its response to the pandemic *(Annex 29)*.

The Ministry of Economy received budget support of around F$430 million dollars, and, in addition to that, development partners such as the World Bank, JICA, and ADB provided concessional loans to the government (Kumar 2022).

Table 15: Software Used During COVID-19 Pandemic

Response	App/Software used	Detail
Contact Tracing	CareFiji app	Streamline and speed up manual contact tracing efforts.
Swabbing	Tamanu system	Track and analyze people who have successfully been swabbed.
Vaccination	Vaccination Registry System (VRS)	Register people who have decided to get COVID-19 vaccine.
Surveillance of incoming travelers—if they display symptoms of COVID-19.	Surveillance Outbreak Response Management and Analysis System (SORMAS)	Track and monitor health status of incoming travelers who were quarantined. Software is used by Border Health Unit, subdivisional medical officers (SDMOs), subdivisional health inspectors (SDHIs), and HCWs who are stationed at quarantine facilities.
Tracking activities in medical facilities	Tupaia MediTrak	To update and track activities in different medical facilities.

Summary 11: Innovation Through Leapfrogging

- ICTs have been well used during the COVID-19 pandemic, in establishing internet connection/networks, apps, databases, phones, and other important devices/software that were pivotal during the containment and mitigation phases of the pandemic.
- The MoHMS has been using Zoom calls, webinars, other social media platforms (such as Viber), and email to communicate. The use of software and apps has increased the efficiency of health staff in terms of collating, analyzing, and presentation of data/results *(Table 15)*.

4.7 Measure to Contain COVID-19 With a Human Capital Perspective

4.7.1 Education

The COVID-19 pandemic has disrupted the teaching roles and responsibilities of teachers and learning aspects for students.

In April 2020, teachers were required to report and liaise with their heads of schools to prepare for home-based educational activities, so that professional advancement and development of supportive learning resources for children were available at their home. As of May 4, 2020, parents who could not access online supplementary resources were advised to access resources from respective schools. The MEHA provided supplementary resources on the MEHA website, Google Shared drive, the Fiji Education Management Information System (FEMIS), and the ongoing radio programs on Radio Fiji One and Radio Fiji Two (Cowley 2020).

The MEHA removed all English, Vernacular, and Test Subject project work that formed the basis of internal assessment in the school curriculum in Fiji. However, Internal Examination was to be conducted for years 1 to 8., Literacy and Numeracy Assessment for years 5 to 7, Standard Examination for years 9 to 11, and External Examination for years 12 and 13, when school resumed classes As of April 27, 2020, the

ministry has also established the WALESI Free to Air Educational Channel, for children to tune into while at home (Cowley 2020, Gounder and Narayan 2021).

In 2021, the MEHA developed a digital platform to provide learning resources for students, and many schools and teachers have started using social media as a platform to provide learning resources to students (Gounder and Narayan 2021). The ministry has also launched a digital hub where parents can access work sheets for their children, and a charitable organization that owns 21 primary and five secondary schools, known as TISI Sangam, has established a digital portal that pools learning resources from across its 26 schools to make these available to students on one platform (Gounder and Narayan 2021, MEHA 2021c, TISI SANGAM 2021). For students who were not able to access online materials, teachers were able to provide hard copies of lessons and distribute these to villagers with the assistance of the village headman (known as Turaga ni Koro).

In getting students back to school, the MEHA developed a Safe Re-Opening of Schools Guidelines. The ministry worked with the MoHMS, WHO, and UNICEF to develop standard operating procedures and assessment of schools in line with COVID-19-safe measures. Consequently, all schools were assessed before November 2021. In addition to that, vaccination plays a significant role in the gradual return of normality and recovery of the Fiji economy. Increase in vaccine uptake led to the easing of COVID-19 restrictions such as the lifting of border closures in containment areas, easing of curfew hours, and the increasing number of people at social gatherings and has allowed the opening of schools around Fiji. Classes resumed for years 12 and 13 on November 1, 2021, and the MEHA realigned school curriculum to ensure that students who sat for external exams were able to proceed further to tertiary studies.

Classes for Early Child Education (ECE) to year 7 started on February 7, 2022, and classes for years 8 to 11 began on January 4, 2022. For ECE, the MEHA established a technical working group to assist in the development and implementation of the ECE program in Fiji (MEHA 2021a). Vaccination is not mandatory for students; however, the MEHA encourages students to be vaccinated to be protected and to save the lives of others (MEHA 2021b). As of June 30, 2022, 38,726 students (ages 15 to 17 years) have received the first dose of the Moderna vaccine, while 32,061 have received the second dose. For children ages 12 to 14, 25,738 have received the first dose, and 15,702 received the second dose (MoHMS 2022a).

4.7.2 Social Protection and Jobs

Government assistance was prioritized to assist vulnerable groups of people during the COVID-19 pandemic in Fiji. Several initiatives were established to provide income support to people who lost their jobs or were on reduced hours in both formal and informal sectors. The government developed and continued this support through social welfare payments and other social protection initiatives.

Social Protection Initiatives

Under the social protection initiatives, the government allocated funds to two groups or people: the formal sector and informal sector. People in the formal sector included those who were unemployed and those on reduced hours. The unemployed were eligible to withdraw F$220 per fortnight from their Fiji National Provident Fund (FNPF) General Account (GA), while those on reduced hours were eligible for a pro rata payment based on the number of days they were not working. Those who did not have enough money in their GA were accommodated by the government. A total of F$432.3 million was paid out to more than 400,000 Fijians since the start of the pandemic (March 2020) to July 2022, of which F$205 million was topped up by the government on the members' FNPF General Account (GA)—under the COVID-19 Unemployment Scheme[18] (Figure 31), and F$227.3 million was paid directly by the government in direct cash assistance through M-PAiSA and MyCASH mobile wallets (one round of F$90, two rounds of F$50, two rounds of F$360, and one round of F$100)[19] *(Figure 32)*.

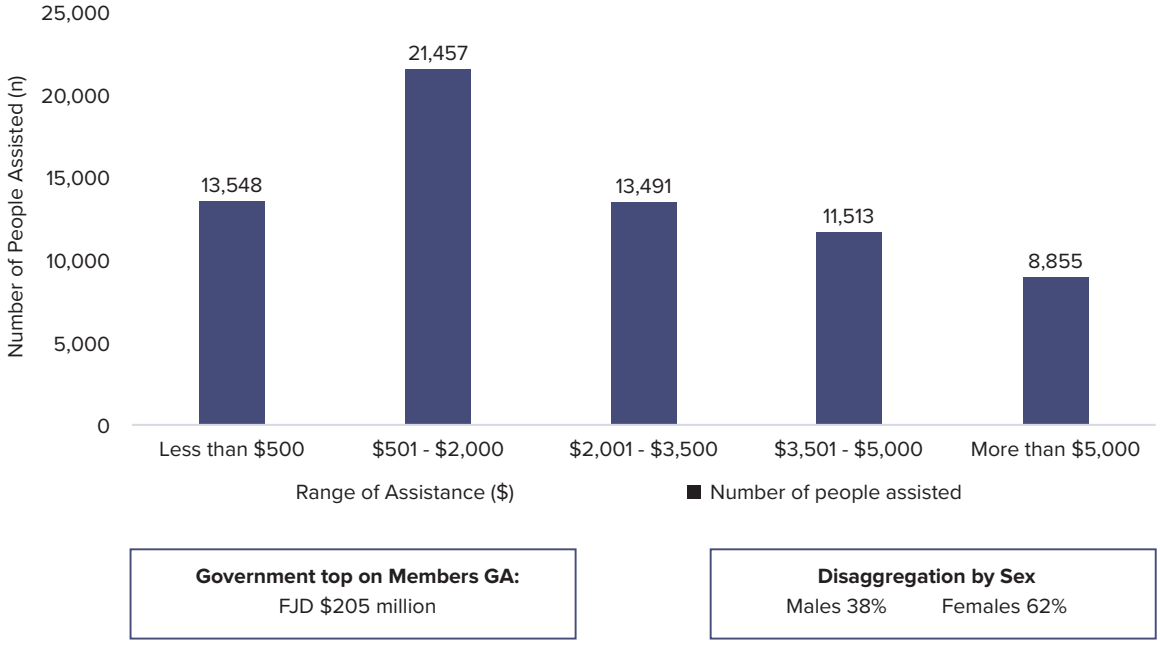
18 https://www.economy.gov.fj/images/Budget/budgetdocuments/supplements/2022-2023_Budget_Supplement_final.pdf

19 https://www.economy.gov.fj/images/Budget/budgetdocuments/supplements/Budget_Supplement_2021-2022_Web.pdf

In the FY2021/2022 budget, the government increased the unemployment support by increasing the funding allocation by F$200 million.

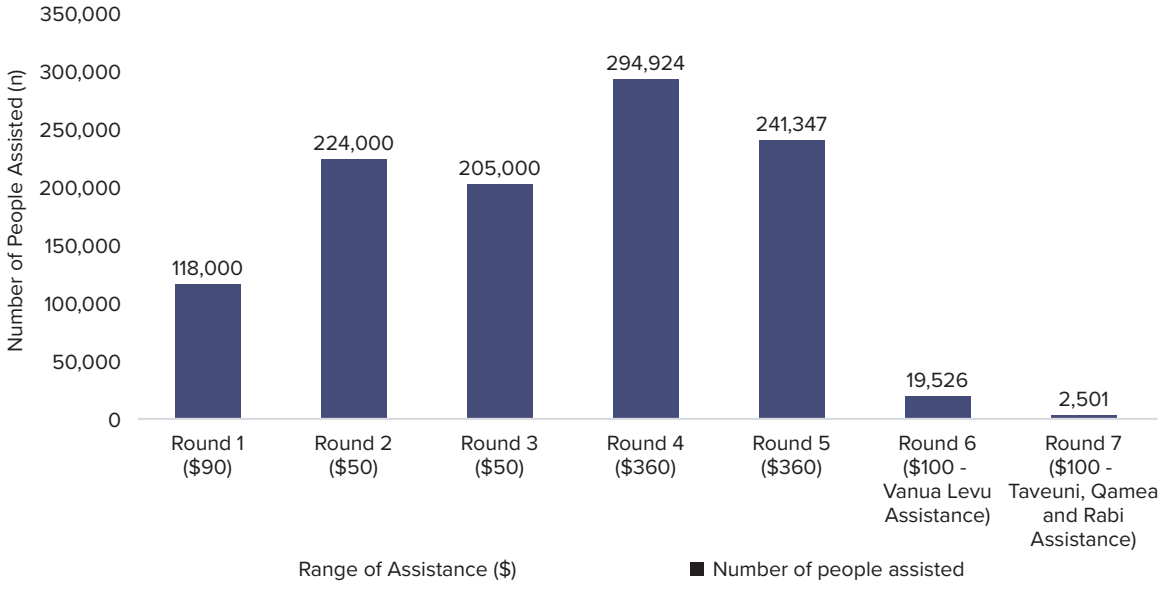
In the FY2021/2022 budget, the government increased the unemployment support by increasing the funding allocation by F$200 million. People with sufficient GA balances in their FNPF continued with the monthly withdrawal of F$220 and pro rata assistance for those on reduced hours. People with insufficient GA balance and those affected in the informal sector were assisted by the government in the initiative, where the payout of F$120 per month was made for a period of six months. The first payout of F$360 occurred in August 2021 to cater for three months until October 2021. However, this assistance was only available to people who received the first dose of the COVID-19 vaccine. The second payout of F$360 was done in November 2021, to cater for the three months ending January 2022; and those who had received the first and second doses before October 31, 2021, were eligible to apply for further government assistance. This strategy boosted vaccine uptake around the country.

Figure 31: Government Assistance to the Formal Sector



Source: Republic of Fiji 2021b

Figure 32: Government Assistance to the Informal Sector



TOTAL - Direct Cash Assistance: FJD $227.3 million	**Detail of Government Assistance**

Round 1 - FJD $10.6 million (May, 2021)
Round 2 - FJD $11.2 million (Jun, 2021)
Round 3 - FJD $10.2 million (Jul, 2021)
Round 4 - FJD $106 million (Aug - Oct, 2021
Round 5 - FJD $87 million (Nov, 2021 - Jan, 2022)
Round 6 and 7 - FJD $2 and $0.26 million (Jun - Jul, 2022)

Source: Republic of Fiji 2022.

Social Welfare Support

The government continued to support more than 130,000 Fijians through the social welfare scheme of F$145.5 million. *Table 16* presents the details of the subsidy:

Table 16: Social Welfare Schemes

Support	FJD ($) Million	Detail
Social Pension Scheme	55.3	Supported more than 40,000 elderly Fijians above the age of 65. Receive monthly payment of F$100.
Poverty Benefit Scheme	36	Supported more than 20,000 people who are poor and vulnerable. Consists of a monthly cash transfer ranging from F$35 to F$127, and F$50 food voucher.
Disability allowance	10.8	Given to people with disability. Monthly payout of F$90.
Child Protection Allowance	11.3	Supported vulnerable children.
Bus Fare Support	5	Bus fare support for the elderly and disabled persons. Monthly top- up of F$10.
Food Voucher	1	Food voucher for rural pregnant mothers.

Source: Republic of Fiji 2021d

Other government Initiatives that were provided during COVID-19 are described in *Table 17*.

Table 17: Other Government Assistance

Support	FJD ($) million	Detail
Electricity and Water Subsidy	11	Family households with income less than F$30,000 were assisted through this subsidy. Government provided a subsidy of 16.34 cents per unit for the first 100 kwh of electricity. The subsidy has assisted more than 50,000 households. Government also assisted people earning less than F$30,000 by establishing the Free Water Initiative. More than 30,000 households were assisted under this initiative.
Stronger Together Job Support Scheme and Jobs for Nature	12	Scheme was provided to assist and create jobs for people in the informal sector and those who have lost their jobs. Around 48 employers have been engaged and 831 new jobs have been created.
Supply of food to those in quarantine or Isolation	12	Government provided household food packs to Fijians who have been isolated/ quarantined after being suspected of having COVID-19 or have tested positive.
Access to Private General Practitioners (GPSs)	5	Established to lighten patient load and risk at public hospitals and at the same time ensures that Fijians are not deprived of essential medical care. Seventeen GPs were involved in the initiative.
Stall Fees/ Fishing Fees	2.9	Government paid out F$2.6 million (full market stall fees) to cater for permanent and temporary market vendors. F$200,000 was allocated to pay the full fishing license fees for two years, and an additional F$100,000 went to pay the fees for training and certification of seafarers.
Support for Transportation	13.7	Government allocated F$11 million to waive accidents levy charge for 12 months. This includes buses, taxis, minibuses, rentals, carriers, and private vehicles. F$2.5 million allocated to assist public transportation providers to pay the base fee or entry fee paid to the municipal councils by taxis, minibuses, carriers, and omnibuses for one year. An additional F$0.2 million was allocated to pay Public Service Vehicle (PSV) drivers' license fee and defensive driving course fee for all those needing renewal.
Provision of sanitary pads	1.5	Government provided sanitary pads to female students in year 7 to year 13 (Forms 1–7). Over 55,000 females were expected to be assisted.

Source: Republic of Fiji 2021d

Self-employed/small-to-medium and microfinance enterprises

To support businesses during the challenging times, the Fiji government was able to provide unemployment support with concessional loan funding for micro, small, and medium enterprises (MSMEs) (Republic of Fiji 2021d). MSMEs are defined according to their concessional loan eligibility as described in *Table 18* below:

Table 18: Concessional Loan Funding for Micro, Small, and Medium Enterprises (MSMEs)

Category	Annual Turnover	Maximum Loan Limit	% of Loan Guarantee
Micro	Less than 50,000	$10,000	90
Small	$50,001 to $300,000	$20,000	85
Medium	$300,001 to $1,250,000	$50,000	80
Large	Above $1,250,000	$100,000	75
Total Available Funding		$200 million	
Interest rate		3.99 percent	

Source: Republic of Fiji 2021d.

Apart from this, loan repayment holidays were provided to both businesses and personal customers. Other forms of cash flow relief including deferment of tax payments, targeted wage support, and low interest rate financing through the Reserve Bank of Fiji (RBF) were made available to businesses (see *Table 19*).

Table 19: Assistance Provided by Fiji Government During COVID-19 Pandemic

Scheme	Total Budget	Explanation
COVID-19 recovery credit guarantee facility	FJ$200 million	FJ$200 million facility was available to meet people's operational needs, including payment of wages and salaries, rental costs, utility bills, purchase of stocks and other working capital requirement,
Stronger Together Job Support Scheme	FJ$1 million	Under this scheme, employers were guaranteed a wage subsidy by Government equivalent to the minimum wage rate of $2.68 an hour for three-month period when they employ eligible Fijians, in particular those in the informal sector.
Business Assistance Fiji Grant	FJ$250K	Government partnered with the Fiji Institute of Accountants (FIA), the Fiji Chambers of Commerce and Industry (FCCI), the Fiji Commerce and Employers Federation (FCEF) and Women in Business (WiB) for assessment and disbursement of the concessional loan to MSMEs. FJ$250,000 was allocated to provide training and advisory services to assist MSMEs with the newly announced COVID-19 Recovery Credit Guarantee Scheme.
Bio-security Fee for Exports	FJ$1 million	To support local exporters, Government paid Biosecurity Authority of Fiji (BAF) fees on all exporters for 12 months effective from 1 August 2021.
Stall Fees for Market Vendors	FJ$2.6 million	Government paid stall fees for all market vendors (both permanent casual) in Fiji for one year, effective from 1 August 2021. Fiji has around 7,800 market vendors and total stall fees collected by City Town Councils totaled around FJ$2.6 million per year.
Base Fees for Taxis, Minibuses, Carriers and Stand Fees for Omni buses	FJ$2.5 million	Government paid base fees for taxis, minibuses and carriers and sand fees for Omni buses for one year effective from 1 August, 2021. Around 8586 permit holders were assisted
Inshore fishing license and MSAF fees	FJ$200K	Government paid inshore fishing licensed (mooring license book fees, etc.) and other associated MSAF fees for the local fishing industry for the next 2 years for the benefit of all fishing license holders and registered boat owners with an allocation of $200,000. This benefitted more than 3,000 license holders and boat owners

Source: Republic of Fiji 2021d.

Traditional houses of Navala village, Viti Levu island

4.7.3 Water, Sanitation, and Hygiene (WASH)

There is still an important gap in the delivery of water supply and sewerage services (Cowley 2020). Most urban areas have access to piped water, while more than half of the rural population still lacks it.

The Water Authority of Fiji (WAF) is the implementing agency responsible for sanitation and provision of clean water across communities. Tasked with implementing over 60 percent of the WASH strategy, the WAF has focused on improving WASH facilities by providing septic tanks and access to wastewater treatment at the Kinoya Treatment Plant. The WAF is also working with the Town Country Planning and the RISE (Revitalizing Informal Settlements Environment) project to further improve on this. Through its Ecological Purification System (EPS) program and the installation of chlorine tablets at water sources, the WAF has provided clean water to rural communities prone to contamination.

The RISE project team is working in partnership with UN-Habitat and Fiji government agencies to provide rapid response support to more than 70 informal settlements to help alleviate the impacts of COVID-19 on these households (RISE 2020a) They worked with council health inspectors to visit settlements to hand out information and education materials on practicing social distancing, for those living in communal housing, and on how to wash one's hands regularly, despite having little or no running water (RISE 2020b).

To ensure that basic hygiene standards were maintained in the urban areas, the Suva City Council (SCC) installed hand sanitizers at the Suva bus stand, decontaminated and fumigated public domains such as the Suva bus station, Suva Municipal Market, and retail outlets, and is now extending its efforts to the minimarkets.

Summary 12: Human Capital Perspective

- The MEHA switched to digital learning platforms, and support was provided to students who were not able to access the internet.
- The government assisted two vulnerable groups of population during the COVID-19 pandemic. The government allocated F$200 million to the unemployed vulnerable groups, and F$145.5 million to the socially vulnerable groups.
- Businesses were also supported as the government provided support through concessional loan funding for MSMEs. Loan repayment holidays were also provided to businesses and customer service personnel, and there were deferments of tax payments, targeted wage support, and low-interest rate financing through the Reserve Bank of Fiji (RBF).

5. COVID-19 IMPACT ON UHC AND SUSTAINABILITY

5.1 Service Coverage

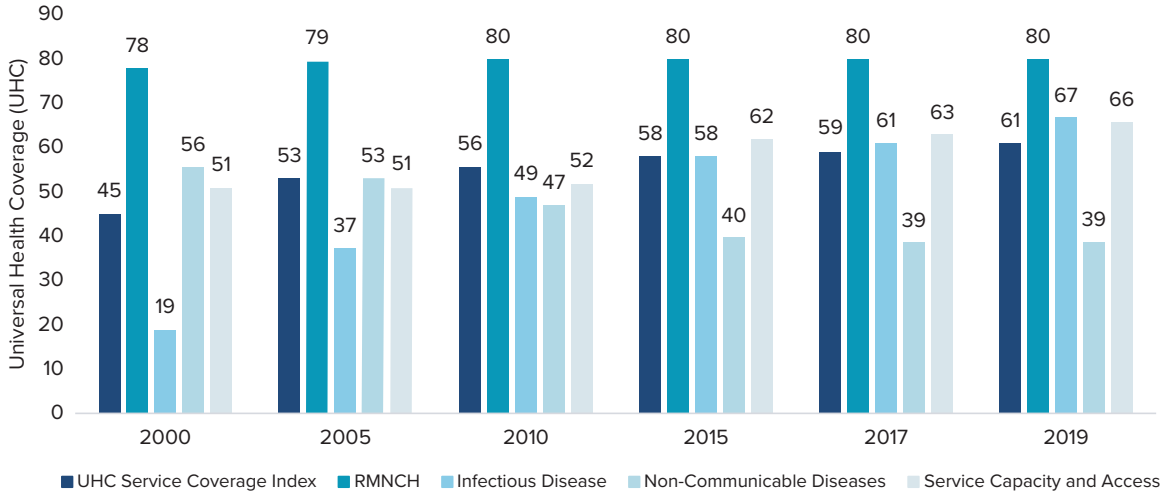
5.1.1 UHC index

According to the WHO, at least half of the world's population does not receive proper health services, and approximately 100 million people suffer extreme poverty due to out-of-pocket payment on health (WHO 2022d). The health status in Fiji and other Pacific Island countries has improved substantially in the last 20 years; however, progress has been slower compared to that of other countries (Kate 2019). The setback is caused by multiple factors such as intense tropical cyclones (location of country is vulnerable to such disasters), continuous outbreak of arboviral/zoonotic diseases, and increase in incidence of noncommunicable diseases. These factors have strained the Fiji government-resourced health systems (Kate 2019).

Data has shown that Fiji's UHC index continues to slowly improve/increase since the year 2000, with the country placing at 61 in 2019, 59 in 2017, 58 in 2015, 56 in 2010, 53 in 2005, and 45 in 2000. Out of the four UHC services in the services coverage index (SCI) reported in 2019, Fiji scored the highest in reproductive, maternal, newborn, and child health (RMNCH with 80 points, and the lowest in noncommunicable diseases with 39 points *(Figure 33)*. In comparing the UHC indexes among the Pacific Island countries in 2019, Fiji recorded the highest one, with 61 points, followed by Tonga and Samoa, and with the lowest one recorded by Papua New Guinea, with 33 points *(Figure 34)*.

Fijian child visit his home destroyed by Severe Tropical Cyclone Winston in 2016 in the Yasawa Islands.

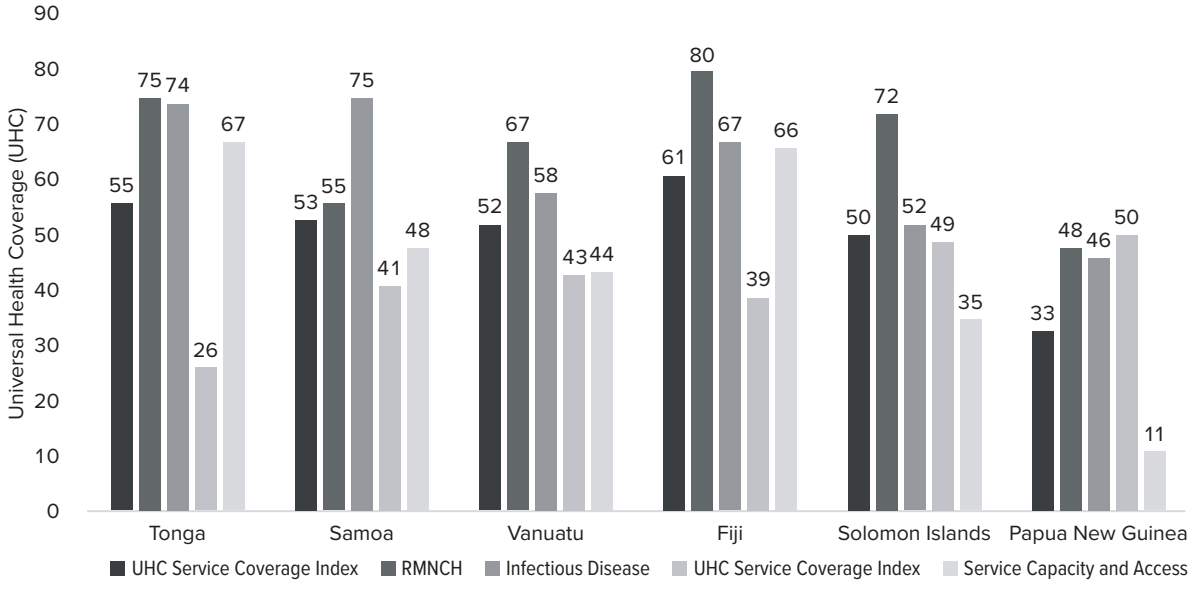
Figure 33: UHC Service Index—Fiji (2000 to 2019)



Source: WHO, Global Health Observatory Data Repository

The decrease in the UHC services index (from 2015 to 2019) is attributed to the impact caused by five intense tropical cyclones in the last five years, continuous outbreak of arboviral/zoonotic diseases, and noncommunicable diseases. These factors have strained the Fiji government-resourced health systems (Kate 2019).

Figure 34: UHC Services Index—Middle-Income Countries in the PICTs (2019)



Source: Global Monitoring Report, WHO, and WB

Fiji is among the most at risk in the Pacific countries in terms of global economic contraction caused by COVID-19.

5.2 Impact of COVID-19 on the Use of Health Services

The COVID-19 pandemic has had widespread impact on services provided to the public. First, the enforcement of lockdowns and establishment of containment areas restricted movement of public service vehicles such as taxis, buses, and other vehicles, as well as water transport modes such as small punts, boats, and bigger vessels. This has also contributed to the difficulty in accessing health services. For instance, health programs such as immunization and mass drug administration were altered during this period as health workers had to locate children by visiting their homes. Second, because many health professionals were out in the field or sick from the infection, many hospitals' SOPD clinics were closed and surgeons were not able to do elective surgery (numbers on surgical waiting list increased), with only emergency services functioning. Some dental procedures were not available, because of the risks of aerosolization of the COVID-19 virus in the atmosphere.

Third, the pandemic has had an impact on people's income. As people lost their jobs or experienced reduced working hours, they had little or no earnings at all. Hence, diets and nutritious food choices have been compromised and visits to health facilities forgone as these have become costlier. Fourth, fear of the disease and its transmission also had an impact on accessing health services. Healthy people are afraid to visit health clinics and other non-health services because of the risk of contracting the virus. Also, people tend to believe various conspiracy theories, which tend to hinder the uptake of services provided by the MoHMS. These theories were derived from religious/traditional beliefs that inform behaviors. As an example, in Fiji, the public prefers to use herbal medicines and religion rather than medical treatment at hospitals. Furthermore, the new standard operating procedure for patients visiting emergency centers/GOPD/SOPD also affected the delivery of health services. The process stipulated that patient need to be screened first at fever clinics before entering those units. This process has meant long waiting times in line. As a direct result, patients are anxious about standing in line and have returned home without receiving the essential treatment they need.

The "No Mask, No Entry" policy also influenced access to health services. In the maritime zones, health workers noticed that villagers were not wearing masks because they either could not afford them or because rural areas had not been supplied with the same. However, only people with masks were able to access the nearest health and non-health facilities.

5.3 Financial Protection

Fiji is among the most at risk in the Pacific countries in terms of global economic contraction caused by COVID-19. Most health systems in the Pacific are government funded, while others are sourced from donor agencies and from households' out-of-pocket financing. The Fiji National Health Expenditure report showed that almost 60.2 percent of Fiji government health expenditure is government funded (expenditure from 2011 to 2015) (MoHMS 2017). Hence this should not expose people to financial hardship or threaten their living standard

(Ibid). However, Ruest and Tandon (2020) stipulated that the impact of COVID-19 on health financing will depend on the extent, duration, and severity of the economic contraction and it will also influence government revenue and borrowings (Ruest and Tandon 2020). Fortunately, most countries in the Pacific Islands were prepared for the pandemic, and resources (financial and human) were mobilized specifically for COVID-19. In Fiji, the government announced a COVID-19 response budget, valued at F$1 billion dollars, where F$40 million were allocated to the MoHMS (MOE 2020). Further, health resources have been made available through the support of development partners such as the WHO, SPC, and many others, and indications show that ongoing support will depend on the revenue and economic impacts of COVID-19. Out-of-pocket payment has also been affected due to lower use of health services and lower household incomes.[20]

5.4 Financing for Vaccination

Securing COVID-19 vaccines has been equally important for the Pacific Small Island Developing States (PSIDS), as the devastation caused by COVID-19 has spared no country in the world. Fiji and other small island countries were able to secure batches of COVID-19 vaccines through working with the WHO and the COVAX facility. Vaccines used in Fiji have been donated by the COVAX facility and other countries such as Australia, India, New Zealand, and many others (Table 14). The Fiji government has administered more than a million doses of the COVID-19 vaccines.

Summary 13: COVID-19 Impact on UHC and Sustainability

- Fiji's UHC index was at 61 in 2019, with RMNCH having the highest coverage, followed by infectious disease, service capacity and access, and finally noncommunicable diseases with the least coverage.
- In the Pacific Islands Countries and Territories (PICTs), Fiji scored the highest with 61 points, followed by Tonga, Samoa, and Papua New Guinea with the least.
- COVID-19 has hindered the usage of medical facilities and access to health personnel. Reasons for this include the restricted movement of public service vehicles due to enforcement of lockdowns and establishment of containment areas, lack of health specialists/ professionals when they are out sick or working out in the field, and the suspension of certain medical procedures due to the risk of transmitting the COVID-19 virus.
- Fiji's health system is primarily government funded, with some support from donor agencies and household out-of-pocket financing. During the pandemic, the government announced a COVID-19 response budget, valued at F$1 billion dollars, where F$40 million was allocated to the MoHMS, and support has also been received from development partners such as the WHO, SPC, and many others.

20 https://www.who.int/health-topics/financial-protection#tab=tab_1

6. LESSONS LEARNED AND KEY TAKEAWAYS FOR OTHER COUNTRIES

Fiji managed the first and second waves of the COVID-19 pandemic effectively and demonstrated several good practices that resulted in successful mitigation, preparedness, and response and that may be adopted by other countries. The government pushed up its response as the number of cases increased during the second wave. Some of the best practices are described below:

6.1 CONTAINMENT PHASE

6.1.1 **Early formation of the Incident Management Team (IMT) was important for the coordination of the whole-of-government response.** The IMT is responsible for the implementation of the COVID-19 Preparedness and Response Plan (COVID PRP).

6.1.2 **Early activation of FEMAT was critical to ensure a continuum of health services delivery during the pandemic.** FEMAT moved in to treat cases that hospitals would normally treat during the pandemic.

6.1.3 **Early closure of borders and strict implementation of border control measures helped keep the COVID-19 virus out of the country.** Fiji was successful in keeping out the COVID-19 virus through quick containment of the few cases that were found in the community between March and April 2020 and prompt closure of its air and seaports. Ensuring that these border restrictions and measures were not just in place, but also monitored and adhered to, enabled the country to enjoy early success in 2020. Also, given that the borders were not closed to returning citizens, an effective border quarantine facility system was important.

6.1.4 **The role of the Fiji CDC in facilitating good testing capacity led to the early detection of cases, which prevented the direct transmission of the virus to the community.** Initially, testing for COVID-19 was only done at the Fiji CDC laboratory, Mataika House, Tamavua. Testing was decentralized, implemented across the country as GeneXpert machines kits became available. As demand for testing increased, private laboratories later came on board with testing.

6.1.5 **Intensive testing, contact tracing, and timely treatment are important in preventing further spread of infection.** Through support and aid from different countries' governments, private organizations/ companies, and donor agencies, the Fiji government was able to obtain and use the GeneXpert machines and use the CareFiji App as a complement to traditional contact tracing methods. These enabled health workers to track and test for primary and secondary contact in a short period of time.

6.1.6 **Streamlining alignment and focus of the national pandemic response, mainstreaming WHO guidelines, and adopting international standards to suit local context in the national planning, strategy, and policy are very crucial.** The MoHMS has closely followed recommendations from the WHO and other international practices to inform its actions as necessary. For example, to meet WHO standards, a validation exercise was carried out on the testing facilities, protocols, and strategies used by the Fiji CDC, during the containment and mitigation phases of the outbreak. Fiji also recognized the role of airborne transmission earlier than officially embraced by the WHO. The government involved international academic institutions (such as the University of Melbourne) to assist and inform the country of the protocols to take during the pandemic.

6.1.7 **Publicizing of cases using spot maps was critical in informing people about the location of cases and to prevent the spread of the virus.** To prevent the spread of the virus, the MoHMS used spot maps to inform people on the location of cases.

6.1.8 **The establishment of the Border Health Protection Unit was critical in the response to the pandemic**. Fiji did not close its borders to returning citizens, and the Border Health Protection Unit was formed to manage inbound passenger quarantine. The unit includes personnel from the health , military, and other agencies. There was no quota for the return of citizens to Fiji (unlike in countries like Australia and New Zealand)—this was essentially dependent on flight schedules. And citizens were not restricted from leaving Fiji. Citizens were free to return if requirements for testing and quarantine were met. They managed to keep out the Alpha, Beta, and all other variants for an entire year since the last community case in April 2020. The Delta was the only variant that made its way through in April 2021.

6.1.9 **Dispatching of the MoHMS Mobile Response Unit was vital in the MoHMS response to COVID-19.** The unit went from house to house to locate patients who had tested positive for COVID-19. The chain of command began with the receipt of information from the Fiji CDC laboratory to the Risk Assessment Team, then to the FEMAT, and finally to the Mobile Response Unit.

6.2 MITIGATION PHASE

6.2.1 **ICT applied to track COVID-19 infections and vaccine uptake in real time is useful in informing decision-making.** ICTs have been well used during the pandemic, especially in the new norm of working from home (connection is vital) and with the daily updates of COVID-19 infections and vaccines. The MoHMS staff appreciated the efficiency and effectiveness of technologies and new apps, as data collected was analyzed and made available in a short period of time. Hence, the MoHMS executives were able to make decisions based on this data, and the public was able to view the trends of infections and vaccines through the MoHMS daily updates.

6.2.2 **The use of incentives has been effective in boosting vaccination coverage in Fiji.** The COVID-19 pandemic has driven people to seek financial support. Hence the government introduced a series of initiatives in the form of incentives. The eligible applicants had to be 18 years of age and older and should have received the first and second doses of the AstraZeneca or Moderna vaccine. The vaccination coverage is reported to have increased during the period that incentives were provided.

6.2.3 **Retaining the trust of community institutions and leaders (especially religious leaders and health care professionals) was pivotal in the government's success in combating COVID-19.** Leaders and health care professionals play an important role in the acceptance of an intervention in a community. This was

evident, as most religious leaders in Fiji helped disseminate vaccine acceptance messages to many communities in the country. In addition, health experts have been conducting panel discussions in English, Hindi, and I-Taukei to transmit information to the wider public. Social media platforms such as Facebook and software such as Zoom have also been used.

6.2.4 **Aggressive risk communication during the second wave was conducted to combat vaccine hesitancy.** Social media platforms such as Facebook and Viber, as well as Zoom calls, were used to get information out to the public. Panel discussions were conducted between academia and health experts in Fiji and other countries. Discussions were also carried out in I-Taukei and Hindi.

6.2.5 **Establishment of the Pre-Hospital Coordination Care Centre (PHECCC) and the MoHMS Oxygen Unit were critical during the pandemic.** These were components of the Care Flow Pathway, which was critical in bringing down death rates during the second wave of the pandemic in Fiji. The PHECCC strengthened the country's health system during the pandemic. People who were in severe distress at home were able to reach a hospital through the deployment of ambulance services. As cases increased, so did demand for oxygen. Hence, through the operation of the oxygen unit, the MoHMS was able to meet daily needs.

6.2.6 **The government's varied vaccination locations enabled the successful vaccination of more than 90 percent of Fiji's population.** The health ministry established drive-through vaccination facilities. In addition, mobile vaccination drives were set up at identified in health centers, schools, and village/community halls. For people living in the interior of Viti Levu, health personnel worked with community health care workers and Turaga ni Koro to locate and vaccinate people.

6.3 CONTAINMENT AND MITIGATION PHASES

6.3.1 **The development of a remodeled framework toward a remodeled health services provision structure was crucial during the pandemic.** The MoHMS was able to look at:

6.3.1.1 **Decentralization of Services**—Services were decentralized from the main divisional hospitals to the subdivisional hospitals, health centers, and further down the hierarchy.

6.3.1.2 **Integration of Services**—Prior to COVID-19, there was limited interaction between clinical and public health services. Integration improved services where health professionals provided both clinical and public health services to patients.

6.3.1.3 **Increasing Outreach**—Outreach services at all facilities were increased—that is, from tertiary to primary levels—to ensure easy accessibility and also to standardize care across all levels. This also addressed how to maximize the role of CHWs in providing information and basic care at the community level.

6.3.2 **Timely and well-coordinated management plans are critical during a health crisis.** This helped in the mitigation and response to avoid delay and use all opportunities, leading to improved cost-efficiency and/or solutions to problems.

6.3.3 **The whole-of-government approach,** involving stakeholders from the government, private sectors, and local and international nongovernmental organizations, combines important tools in the fight against COVID. This includes the Fiji Military and Police Forces, who were engaged in enforcing nonpharmaceutical interventions.

6.3.4 **Continuous capacity developments at the institutional, legislative, and individual levels were critical in the overall understanding of the preparedness and mitigation process in order to ensure trust.** The coordination of activities requires engagement at a practical level with the different stakeholders in local government administrations. This facilitated capacity-building activities related to

Fiji's health care system allowed everyone to access health services for free without any burden during the pandemic.

strengthening and improving administrative and operational management, service delivery, and improved transparency and accountability toward constituencies.

6.3.5 **Fiji's health care system allowed everyone to access health services for free without any burden during the pandemic.** Unlike in several other countries, Fijians were able to access free services during the pandemic.

6.3.6 **MoHMS established mental health and psychosocial services for its workers.** The pandemic has placed tremendous burden on health workers. This was evident during the second wave of the COVID-19 outbreak, as workers had to be away from their homes for nearly four to five months (due to continuous work shifts). To monitor safety and well-being of health workers, the MoHMS was able to provide mental health and psychosocial support.

6.3.7 **Good leadership was a prominent factor in the fight against COVID-19.** The Hon. Prime Minister, together with other resident ministers (whole-of-government approach), worked to contain and mitigate the impacts of COVID-19. Government ministries also worked with technical agencies, tertiary institutions, and CSOs.

6.3.8 **Full support from bilateral partner countries, technical agencies, private organizations/ nongovernmental organizations, and communities enabled the MoHMS to function effectively during the pandemic.** Agencies such as the WHO, DFAT, UNICEF, the European Union, World Bank, Asian Development Bank, New Zealand Ministry of Foreign Affairs and Trade (MFAT), Korea International Cooperation Agency (KOICA), and many others provided support in the form of cash assistance, equipment, and infrastructure. Countries such as Australia, New Zealand, China, Japan, India, and many others assisted Fiji during the pandemic.

6.3.8.1 **Support from civil society organizations (CSOs) enabled the MoHMS to battle through the pandemic.** The MoHMS partnered with CSOs including Medical Services Pacific (MSP), the Reproductive & Family Health Association of Fiji (RFHAF), the Fiji Red Cross Society, and many others in ensuring that daily deliverables were operationalized during the pandemic. Support ranged from human resources to use of equipment and facilities.

6.3.8.2 **Arrival and contribution of AUSMAT and NZMAT Teams boosted morale and services delivery.** They were able to convert non-COVID-19 facilities into COVID-19 facilities and facilitated the correct use of PPEs.

6.3.8.3 **Decentralization of workload has enabled health workers to battle through the containment and mitigation phases of the COVID-19 pandemic.** With the increasing number of cases in the Central and Western divisions (especially from June to August 2021), the MoHMS was able to decentralize services to avoid burnout among health workers. For instance, during the first wave, the Fiji CDC was the only facility used to test

COVID-19. However, as the number of cases increased (due to community transmission), testing capacity increased and the GeneXpert machines were sent to different areas in Fiji. Other health services such antenatal care (ANC) clinics were provided by civil society organizations (CSOs) such as Medical Services Pacific and the Reproductive & Family Health Association of Fiji (RFHAF) to assist the MoHMS.

6.3.9 **The MoHMS continued to train the health workforce on how to read, understand, and translate COVID-19 data.** With support from Fiji National University, workshops on data entry, analysis, and translation were conducted among health care workers.

6.3.10 **The existence of toll-free helplines was critical during the pandemic.** The pandemic has caused the absence of personnel from their offices, due to work-from-home initiatives/ lockdowns; thus people were resorting to helplines (158) to ask for directions/ information/assistance regarding vaccination, screening clinics, domestic repatriation, government financial assistance, and so forth. Toll-free line 165 was a pre-hospital care hotline.

6.3.11 **The strengthening of Fiji's legal system** helped address prominent issues during the pandemic. The establishment and enforcement of the "No Jab, No Job" policy, while controversial, has encouraged uptake of COVID-19 vaccines, and the mandate of the Public Health Infringement Notice contributed to the enforcement of nonpharmaceutical interventions.

6.3.12 **The peak of cases for each health division and maritime zone occurred at different times.** This allowed time for the MoHMS to mobilize and move health staff to affected areas.

6.3.13 **The government continued to publicize daily COVID-19 updates on the health ministry website.** People were being informed on the number of COVID-19 cases, hospitalizations, and deaths. Separate sections were publicized for vaccination and testing. In addition to that, the government responses/ interventions were also announced in this setting for the public's attention.

6.4 OTHER LESSONS LEARNED

6.4.1 **Continuous development of the surveillance system is pivotal in improving the health system.** The MoHMS continues to develop and extend its surveillance system to the community level. As part of the primary health care approach, the MoHMS established community-based surveillance around Fiji's four main divisions. Community health care workers are being trained to recognize and report symptoms of diseases or unusual events.

6.4.2 **The pandemic has highlighted the dominance of the traditional communal lifestyle of the I-Taukei.** Solesolevaki (communal gathering) and the need to do things communally—for example, gathering communally for traditional events and rituals, deaths, weddings, and all religious events—were evident during the pandemic and boosted transmission of infection. Some of these events were labeled super spreaders, such as the funeral in Lautoka (Western division) that preceded community transmission into the Central division at the beginning of the second wave.

6.4.3 **Youth ages 18 to 33 years were identified as the most vulnerable population in terms of policing during the pandemic.**

Drawaqa Island coastline and Nanuya Balavu Island, Yasawa Islands, Fiji

7. PREPAREDNESS RECOMMENDATIONS

The COVID-19 pandemic has raised a few key legal issues for the ministry and the nation in their response. The same issues were raised as concerns to be addressed in HEADMAP 2013, as follows:

7.1 **The development, adoption, and exercise of a national collaborative whole-of-government framework** that coordinates and synchronizes the various ministries' action plans to achieve a common response and goal are important when responding to future pandemics.

7.2 **The government and the MoHMS must develop and adapt a messaging framework to counter misinformation,** because social media plays an important role in transmitting information on COVID-19 and its vaccine.

7.3 **Guidelines must be developed to prevent abuse and exploitation of office when non-health personnel are selected to assist during a pandemic response.** This is in response to the issue of vaccination cards having been given to people who were not vaccinated—which was a breach of government policies and guidelines relating to uptake of COVID-19 vaccines.

7.4 **Awareness is an effective tool to prevent hesitancy.** Uptake of vaccines has been a controversial issue in most places, and fortunately Fiji was able to combat this through stringent government measures and policies, awareness sessions using ICT tools such as Zoom meetings and webinars led by Fiji National University (Explain the Science), provincial discussions, and the use of health experts from international academic institutions in public fora.

7.5 **Training and pilot testing should be conducted to support staff members** who are handling new software in data entry (as some data was not entered or has gone missing).

7.6 **The health information system needs to be upgraded and digitized,** for access to timely health information.

7.7 **The government should plan and develop management systems on quarantining returning Fiji citizens and health care workers during a health crisis,** as this can become a huge financial burden for the country. During the pandemic, the MoHMS heavily relied on hotels to quarantine returning Fiji citizens and its health care workers. As the pandemic progressed, schools, community halls, and national arenas were opened to accommodate citizens who were infected.

7.8 **Wastewater surveillance needs to be developed, maintained, and regularly monitored by the Water Authority of Fiji (WAF) and allied partners.** For early warning, detection, and prevention of viral/bacterial diseases, wastewater surveillance needs to be developed and maintained.

7.9 **The switch from containment to mitigation phase should have been done earlier.** To transit from one strategy to another takes a while, hence there is a need to begin changing phases/ strategies early so that by the time peak is reached, HCWs can manage the change effectively. During the containment phase of the COVID-19 outbreak, the MoHMS reached a stage where it had exhausted its resources in pursuing containment of transmission in the community, hence clinical teams were called back to hospitals to manage the expected wave of cases with severe disease. The testing policy was also changed (because mass testing and contact tracing were no longer possible based on case numbers and lab staff shortages, swabbers and contact tracers were beyond capacity and exhausted).

7.10 **Strengthening of Infection Prevention Control (IPC) is critical during a health crisis.** Due to the higher potential for contracting the virus among health professionals and non-health frontliners who help during such a response, it is important to strengthen IPC.

7.11 **Proper management of PPEs,** from their procurement to their waste management, is very important.

7.12 **Contact tracing for moderate- and low-risk groups can be done by non-health assistants.**

7.13 **The MoHMS should continue to develop, strengthen, and use the Remodeling Framework** even after the pandemic

7.14 **The government should expand telehealth, telemedicine, and online learning** into all health disciplines in the country through the provision of virtual platforms for engaging patients.

7.15 **There is a need for processes that clearly define and demarcate when an event is a health issue** and when it becomes a national security issue.

7.16 **Psychosocial support through individual or group counseling and training** is critical to provide respite for health care professionals and to continually motivate them to provide services when they are dealing with lack of time, fatigue, and constant threat of infection.

7.17 **Clear policies and protocols should be in place for data sharing between ministries during a pandemic.** Information should be shared between ministries during a pandemic—as the culture of protecting one's own turf (gate keeping) is still alive within the ministries and is a barrier to effective responses. COVID-19 has illustrated the importance of collaboration between government ministries. Hence, gate-keeping attitudes must be addressed for each ministry.

7.18 **More research is needed to determine cause of vaccine hesitancy among HCWs in Fiji.** HCWs are the key people in health crisis response and should support any intervention introduced by the government with the intention of benefiting the public.

7.19 **Dissemination of correct and reliable information by HCWs is critical to ensure full cooperation by the public during a health crisis.**

7.20 **Online capability training should be conducted for health care workers and other non-health ministries.** During the COVID-19 outbreak, many people were required to work from home and connect via internet, thus training on the use of communication software such as Zoom, Teams, webinars, and many others is critical to ensure continuous flow of work.

7.21 **A switch to digital learning platforms and support for students without access** can be replicated in future shocks or as an option for education (MEHA).

7.22 **The COVID-19 Engagement of Private Medical Practitioners Scheme** is a model that can be replicated in natural disasters, future pandemics, and other crises, ensuring that routine health services continue to be provided.

ANNEXES

Annex No.	**Description** Page Numbers Link
1	**Alert Levels for COVID-19 Action** Level 1 action: pages 22–25 Level 2 action: pages 26–27 Level 3 action: pages 28–29 https://www.health.gov.fj/wp-content/uploads/2020/08/COVID-19-Fiji-Preparedness-and-Response-Plan-2020.pdf
2	**The Local Government System in Fiji** Distribution of councils and population: page 69 Summary of service provision in different spheres of government in Fiji: page 72 http://www.clgf.org.uk/default/assets/File/Country_profiles/Fiji.pdf
3	**COVID-19 Update: cases, deaths, and vaccination** *Cases and Deaths* October 11, 2021—Link 1 (L1) September 25, 2021—Link 2 (L2) September 5, 2021—Link 3 (L3) *Vaccination* October 20, 2021—Link 4 (L4) L1- https://www.health.gov.fj/11-10-2021/ L2- https://www.health.gov.fj/25-09-2021/ L3- https://www.health.gov.fj/03-09-2021/ L4- https://www.health.gov.fj/20-10-2021/
4	**Health Emergencies and Disaster in Fiji** See subheading: Cluster Approach to Disaster Management; flow diagram is under the topic: Fiji National Disaster Management Clusters https://www.health.gov.fj/health-emergency-disaster-management/

Annex No.	Description Page Numbers Link	
5	**List of Key Informants Interview**	
	Numbers	Organization/Ministry/Agency Position Date of Interview
	5.1	**Water Authority of Fiji** Chief Operating Officer for the Water Authority of Fiji August 13, 2021
	5.2	**Water Authority of Fiji** Acting Manager for Laboratory and Water Treatment, Water Authority of Fiji August 13, 2021
	5.3	**Police** Director Strategic Planning, Policy, Research & Development Division, Fiji Police Force August 13, 2021
	5.4	**Ministry of Economy** Head of Budget and Planning, Ministry of Economy. August 13, 2021,
	5.5	**MoHMS** General Manager COVID Response Unit, MoHMS September 16, 2021,
	5.6	**MoHMS** Chief Health Inspector, MoHMS September 16, 2021,
	5.7	**Ministry of Women** Director for Department of Women September 20, 2021
	5.8	**MoHMS** Chief Medical Advisor, MoHMS September 30, 2021
	5.9	**The Ministry of Local Government** Health Inspector, Nausori Town Council November 8, 2021
	5.10	**MoHMS** Senior Assistant Health Inspector & Prosecution Officer November 10, 2021
	5.11	**MoHMS** Manager Laboratory, Fiji CDC November 26, 2021
6	**CareFIJI app** Available online https://play.google.com/store/apps/details?id=fj.gov.carefiji&hl=en&gl=US https://www.fbcnews.com.fj/news/carefiji-app-foundation-of-phase-2-recovery-pm/	

Annex No.	Description Page Numbers Link	
7	**Vaccination Registry System** Pages 1–11 https://www.health.gov.fj/wp-content/uploads/2021/03/VRS_Manual.pdf	
8	**Tupaia** Available online—Last updated: September 21, 2021 https://tupaia.org/supplychain_fiji/FJ/COVID-19%20Fiji?overlay=FJ_COVID_TRACKING_Dose_1_SubDistrict_Percentage_Vaccinated	
9	**WBG Budget Breakdown** *ADB, UNICEF* (March 1, 2021) UNICEF, together with the ADB, supported health care workers in Fiji by handing over more than 22,000 Cepheid GeneXpert test kits to the Fijian MoHMS. The ADB provided 20,000 of the test kits at a cost of F$396,000, while UNICEF provided the remaining 2,220 at a cost of F$43,000. The kits were financed through an ADB grant of F$7.9 million to UNICEF to support Pacific Island countries in their preparedness and response plans for COVID-19. *ADB, Japan, UNICEF* (August 31, 2020) The ADB and the government of Japan delivered personal protective equipment and other medical supplies/equipment to the Fiji MoHMS to strengthen the country's capacity to respond to the novel Coronavirus disease. The medical supplies and equipment include masks, face shields, coveralls, and gowns to improve infection prevention control, as well as biomedical devices such as thermometers, oxygen concentrators, and electrocardiogram recorders to improve the clinical management of COVID-19 patients. The medical supplies were procured by UNICEF.	
10	Component 1—US$4.85 million	This is an emergency COVID-19 response with the aim of strengthening Fiji's capacity to respond to COVID-19. It also provides immediate support to implement prevention, preparedness, and emergency response activities for COVID-19.
	Component 2—US$1.40 million	This is the second component of the project titled "Health Systems Strengthening." It focuses on medium- and long-term health care system strengthening, with three main priorities: (i) enhancing health care waste management, including procurement and installation of a medical waste incinerator at the Naboro landfill to serve the Central division health facilities; (ii) training for health care workers on health care waste management; and (iii) construction of a warehouse to supplement storage facilities at the Fiji Pharmaceutical and Biomedical Services (FPBS) Center in Suva.
	Component 3—US$1.10 million	The third component is titled "Implementation Management, Monitoring and Evaluation." This component provides technical and operational assistance on project management, including supporting monitoring and evaluation (M&E), supervision and reporting, financial management, procurement, and environmental and social risk mitigation activities; and sharing lessons learned from response exercises and joint learning, domestically and internationally.
	Total: US$7.35 million	
11	**Public Health Act** http://www.paclii.org/fj/legis/consol_act/pha126/	
12	**Public Health (Infectious Diseases) (Infringement Notices) Regulations 2021** https://www.fijivillage.com/documents/gazette-fines.pdf	

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<tr><td>13</td><td>Immigration Act 2003
http://www.immigration.gov.fj/images/pdfs/immigration_act_2003.pdf</td></tr>
<tr><td>14</td><td>The Education Act
http://www.education.gov.fj/wp-content/uploads/2019/04/EDUCATION-ACT.pdf</td></tr>
<tr><td>15</td><td>Fiji Coronavirus Preparedness and Response Plan
Scenarios and Strategies can be found on page 18
https://www.health.gov.fj/wp-content/uploads/2020/08/COVID-19-Fiji-Preparedness-and-Response-Plan-2020.pdf</td></tr>
<tr><td>16</td><td>Prime Minister Voreqe Bainimarama’s Statement on COVID-19
MoHMS—easing of COVID-19 restrictions
https://www.fiji.gov.fj/Media-Centre/Speeches/English/PM-JVB-STATEMENT-ON-COVID-19-160921</td></tr>
<tr><td>17</td><td>Easing of COVID-19 Restrictions
MoHMS—easing of COVID-19 restrictions
https://www.health.gov.fj/ease-of-covid-19-restrictions/</td></tr>
<tr><td>18</td><td>90 Percent Full Vaccination
MoHMS—easing of COVID-19 restrictions
https://www.health.gov.fj/90-full-vaccination/</td></tr>
<tr><td>19</td><td>Fiji COVID-19 Emergency Response Project—ESMF
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<tr><td>20</td><td>MoHMS—Strategic Plan 2016–2020
See strategic pillars and priority areas, pages 9 to 13
https://www.health.gov.fj/PDFs/Corporate%20Plan/Strategic%20Plan%202016-2020%20Executive%20Version.pdf</td></tr>
<tr><td>21</td><td>
MoHMS Budget Allocation (2017 to 2022)
<table>
<tr><th>Year</th><th>Operation ($F)</th><th>Capital ($F)</th><th>Total ($F)</th><th>Total Gov. Budget ($F)</th><th>% of allocation</th></tr>
<tr><td>2017– 2018</td><td>251,572.70</td><td>56,693.80</td><td>308,266.50</td><td>4,356,830.80</td><td>7.10%</td></tr>
<tr><td colspan="6">Link: http://www.parliament.gov.fj/wp-content/uploads/2017/03/Budget-Estimate-2017_2018.pdf</td></tr>
<tr><td>2018– 2019</td><td>259,989.70</td><td>60,461.90</td><td>320,451.60</td><td>4,650,546.00</td><td>6.90%</td></tr>
<tr><td colspan="6">Link: http://www.parliament.gov.fj/wp-content/uploads/2019/02/2018-2019-Budget-Estimates.pdf</td></tr>
<tr><td>2019– 2020</td><td>303,529.10</td><td>34,748.50</td><td>338,277.60</td><td>3,674,604.10</td><td>9.20%</td></tr>
<tr><td colspan="6">Link: http://www.parliament.gov.fj/wp-content/uploads/2019/06/2019-2020-budget-estimates.pdf</td></tr>
<tr><td>2020–2021</td><td>316,218.30</td><td>66,050.80</td><td>382,269.10</td><td>3,840,928.90</td><td>10.00%</td></tr>
<tr><td colspan="6">Link: http://www.parliament.gov.fj/wp-content/uploads/2020/07/Budget-Estimates-2020-2021_1.pdf</td></tr>
<tr><td>2021– 2022</td><td>332,557.40</td><td>59,425.20</td><td>391,982.60</td><td>3,690,545.60</td><td>10.60%</td></tr>
<tr><td colspan="6">Link: https://www.economy.gov.fj/images/Budget/budgetdocuments/estimates/BUDGET_ESTIMATES_2021-2022_Web.pdf</td></tr>
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<tr><td>22</td><td>Recovery During a Pandemic Health Concerns, Supply Disruptions, and Price Pressures
See page 115 to 117—Table A4 contains real GDP for emerging markets and developing economies.
Link:https://www.imf.org/en/Publications/WEO/Issues/2021/10/12/world-economic-outlook-october-2021</td></tr>
<tr><td>23</td><td>Funds for COVID-19 National Deployment and Vaccination Plan
<table>
<tr><th>Intended for</th><th>Funded by</th><th>Amount</th></tr>
<tr><td>Fiji's COVID-19 National Deployment and Vaccination Plan</td><td>(New Zealand Ministry of Foreign Affairs and Trade (NZMFAT)</td><td>NZ$2,890,400</td></tr>
<tr><td>COVID-19 Vaccine Assistance</td><td>NZMFAT</td><td>NZ$765,043</td></tr>
<tr><td>COVID-19 Response and Preparedness</td><td>ADB</td><td>US$3,018,218</td></tr>
<tr><td>COVID-19 PPE Assistance</td><td>Indonesia</td><td>US$200,000</td></tr>
<tr><td>Fiji COVID-19 Emergency Response Project</td><td>World Bank</td><td>US$5,374,894</td></tr>
</table></td></tr>
<tr><td>24</td><td>Interview Questions—Case Study on Containing, Mitigating, and Responding to COVID-19: Knowledge Generation and Exchange on COVID-19 Preparedness and Response—Fiji Case Study, 2021
Ministry: Ministry of Health and Medical Services
Interviewee: Dr. Jemesa Tuidravu

Introduction
Please introduce yourself—your name, your position in the ministry, how long you have worked in this position, and what your specific role is with regards to the ministry's COVID-19 response.

Topic 1: Primary Care and Hospital Response
1. Please briefly describe how primary care and hospitals have responded to the surge of confirmed cases.
2. Have some hospitals been designated as COVID 19 hospitals while others as hospitals for treating non-COVID-19 patients? Please briefly list how many hospitals in different divisions have been listed as COVID-19 hospitals.
3. Has it been easy to mobilize beds for treating confirmed cases?
4. Has the private sector been cooperative in resource mobility?

Topic 2: Infrastructure and Work Capacity
1. Please describe what type of health care facilities are available for infectious diseases, and what measures can be taken to separate patients with infectious disease from those without it.
2. Provide the number of negative pressure isolation rooms, ventilators, intensive care units, etc. (Actions—He will get the numbers to us). If possible. Also describe the capacity for laboratory testing and supplying medicines and personal protective equipment (PPE).
3. Please describe workforce capacity who are specialized in infectious diseases, including training programs for capacity building, and what measures can be taken for mobilizing and protecting health personnel during pandemic.</td></tr>
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Annex No.	**Description** Page Numbers Link
24 (continued)	**Topic 3: Human Resources for Health** 1. Please briefly describe the distribution of health personnel in the containment of COVID-19. 2. Please briefly explain how health personnel have been mobilized to cope with the outbreak of COVID-19. 3. Please briefly describe how health personnel have been remunerated and what measures have been taken to protect them from tremendous burden including burnout. 4. Please briefly describe how the Ministry of Health ensures that medical/quarantine professionals are protected at screening facilities (without making such sites potential clusters of infection). **Topic 4: Health Service Delivery** 1. Please briefly describe health service delivery system, focusing on how strong primary care is in the country, access to hospital services, and the role of public and private providers in health service delivery. 2. Please describe to what extent telemedicine is allowed in case of health emergencies. **Topic 5: Service Coverage** 1. Please briefly describe a potential impact of COVID-19 on UHC index, for instance (WB/WHO indicator) in terms of service coverage. 2. Please describe the extent of disruption in provision and access to health services. cancer, mental health conditions, etc.), and antenatal care and childbirth, how have priorities been given to some health services over others? **Topic 6: Ensuring Access to Essential Health Services** 1. Please briefly describe how access to essential health services for non-COVID-19 patients has been ensured since the outbreak of COVID-19. 2. Given that there are various types of essential health services, including prevention and treatment of communicable diseases (TB, HIV/AIDS, measles, etc.), noncommunicable diseases (hypertension, diabetes, Has any modification been made to deliver those essential services? 3. To what extent has digital health or telemedicine been used flexibly? **Topic 7: Health Financing** 1. Please briefly describe the major financing mechanism for health care, tax, or social health insurance, and to what extent universal health coverage (UHC) is achieved. 2. Please describe how treatment cost for infectious diseases is subsidized and if copayment and/or insurance premium is reduced in circumstances of pandemic. **Topic 8: Public and Private Partnership** 1. Please describe any collaboration between governmental agencies and private companies to cope with the outbreak of COVID-19, particularly in contact tracing, test-kit development, and risk communication. 2. Can you provide some examples of the government using private information on credit card transactions, cellphone GPS records, and transportation history to rapidly trace the potential case? (Note: The interview question attached is a sample from the MoHMS).
25	**Levels and Types of Health Services Provided in Fiji** **Health Service Delivery profile (2012)t** Details can be seen on page 3 of 12—Table 2. https://pdf4pro.com/cdn/fiji-health-service-delivery-profile-26nov-10d21.pdf

Annex No.	Description Page Numbers Link	
26	**KAP Study Done by the MoHMS and AusAID**	
	Understanding knowledge, attitudes, and practices in the context of COVID-19 in Fiji. https://www.health.gov.fj/wp-content/uploads/2020/08/COVID_KAP_Summary-Report.pdf	
27.	Link: https://www.health.gov.fj/health-emergency-disaster-management/ See subheading: Comprehensive Emergency & Disaster Management	
28	https://www.health.gov.fj/wp-content/uploads/2018/08/Fiji-Communicable-Disease-Surveillance-and-Outbreak-Response-Guidelines-2016-1.pdf See pages 38–41	
29	**Intergovernmental and International Support**	
	Intergovernmental Organizations	
	World Health Organization	• Provided medical supplies worth F$750K; consists of 888,500 surgical masks, 53,400 N95 masks, 29,200 face shields, 2,000 protective goggles, 4,000 isolation gowns, and 26,750 GeneXpert testing cartridges.[21]
	World Bank	• Provided funding of US$7.35 million to support the government of Fiji in preventing, detecting, and responding to the threat posed by COVID-19 and strengthening national systems for public health in Fiji by improving emergency preparedness and response, strengthening health systems, and managing implementation and monitoring and evaluation. Breakdown of funding can be seen in Annex 10. • Provided medical supplies including personal protective equipment (PPE) and intensive care unit beds and ventilators, as well as the installation of a medical incinerator that will serve three divisional hospitals in Fiji.[22]
	Asian Development Bank	• In 2020, a total grant of US$2.4 million has been provided by the Asia Pacific Disaster Response Fund (under ADB) to respond to COVID-19 and Tropical Cyclone Harold. The ADB also prepared a US$65 million facility to provide liquidity support for Fiji Airways. This funding assisted Fiji Airways through the COVID-19 crisis (ADB, 2021). Other information can be seen in Annex 9.
	European Union	• Provided F$50 million to support the government budget during the COVID-19 phase.[23] • The government of Austria, as part of the Team Europe, provided PPEs worth F$156K, to assist the MoHMS in containing COVID-19.[24]

21 https://www.who.int/westernpacific/about/how-we-work/pacific-support/news/detail/24-09-2020-fiji-receives-more-medical-supplies

22 As above

23 https://www.fbcnews.com.fj/news/covid-19/more-projects-in-line-by-eu-to-help-assist-fiji-through-covid-19-phase/

24 https://reliefweb.int/report/fiji/government-austria-donates-ppes

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29 (continued)	**International Organizations**	
	Australia	–Australia and Fiji set out the 2019 Vuvale Partnership to embrace a new era of enhanced cooperation, consultation, and friendship. This partnership enables Australia to support Fiji in responding to and recovering from COVID-19 and to lay a foundation for a stronger and more prosperous nation. –Australia also supports the Pacific, including Timor-Leste, in providing COVID-19 supplementary funding of AU$304.7 million, as part of the COVID-19 response package. This package is aimed at providing support to deliver critical, temporary, economic support to address pandemic impacts (DFAT 2020a). –The government of Australia moved quickly to respond to the impact of COVID 19 on the Fijian economy. In May and June, Australia provided AU$19.5 million to promote stability in Fiji's position. The budget was delivered in coordination with the ADB, WB, and New Zealand, and the budget was in place to ensure that Fiji would finance spending priorities (DFAT 2020b)
	China	Donated more than F$200,000 worth of medical supplies. President of the Fiji China Friendship Association Fang Jamnadas says most of the medical supplies were donated by the Chinese government and various private Chinese businesses (Filipo 2020).
	Japan	Provided F$200 million (approximately 10,000,000,000 yen) emergency loan. This money is directed to strengthening health and medical services (MOFA 2021) (Vishaal 2021).
	New Zealand	New Zealand and the UNDP donated PPE worth F$85,500 to the Fiji Police Force to help protect individual police officers from potential health risks. The PPE items consist of 10,000 KN95 masks, 30,000 gloves, and 300 bottles of hand sanitizers (Reliefweb 2021)
	Korea International Cooperation Agency (KOICA)	The KOICA Fiji Office has donated medical supplies containing personal protective equipment (PPE), together with noncontact infrared body and surface thermometers worth F$290,000, to the MoHMS to support Fiji's response to COVID-19. The agency has also donated an additional F$130,000 worth of PPE kits to the Fiji MoHMS. These totaled up KOICA's donation to F$420,000 worth of medical supplies to the MoHMS for COVID-19 response (MoHMS 2020f)
	United States of America	The US government, through the United States Agency for International Development (USAID), partnered with UNICEF to respond to the Fiji government's request for critical assistance needed to confront the development of COVID-19. The USAID project, titled "Preventing and Responding to COVID-2019 in the Pacific," has a total funding of US$1.85 million and is implemented in Fiji, the Federated States of Micronesia, Kiribati, Solomon Islands, Tonga, Tuvalu, and Vanuatu. USAID was able to provide emergency provision of disinfectants, sanitizers, soaps, and other infection prevention supplies to assist the government of Fiji in quelling the localized outbreak before it spread further (USAID, 2021).

Annex No.	Description Page Numbers Link				
30	**Fiji's Summary Estimates—Household Income Expenditure Survey (HIES) Report 2019 to 2020**				
	Area	**Estimated population**	**Absolute Poverty**	**Poverty rate**	**Distribution of the poor**
	National	864,132	208,021	24.1%	100.0%
	Rural	386,632	141,301	36.5%	67.9%
	Urban	477,500	66,720	14.0%	32.1%
	Sex				
	Male	434,914	108,705	25.0%	52.3%
	Female	429,218	99,317	23.1%	47.7%
	Geographical Division				
	Central	361,459	67,779	18.8%	32.6%
	Eastern	36,274	14,233	39.2%	6.8%
	Northern	135,965	39,433	29.0%	19.0%
	Western	330,434	86,577	26.2%	41.6%
	Geographical Areas				
	Rural Central	101,422	36,753	36.2%	17.7%
	Rural Eastern	32,724	13016	39.8%	6.3%
	Rural Northern	98,550	33,588	34.1%	16.1%
	Rural Western	153,936	57,944	37.6%	27.9%
	Urban Central	260,037	31,025	11.9%	14.9%
	Urban Eastern	3,550	1,217	34.3%	0.6%
	Urban Northern	37,415	5,845	15.6%	2.8%
	Urban Western	176,498	28,632	16.2%	13.8%
	Marital Status				
	Never married	162,418	39,822	24.5%	30.0%
	Legally married	357,524	77,349	21.6%	58.3%
	De-facto	10,978	2,748	25.0%	2.1%
	Widowed	46,606	9,288	19.9%	7.0%
	Separated	12,375	2,466	19.9%	1.9%
	Divorced	7,087	1,010	14.2%	0.8%

Annex No.	**Description** Page Numbers Link
31	**Key Multidimensional Poverty and Deprivation Results—HIES Report 2019 to 2020**
	Multidimensional Poverty
	In 2019-20, three out of every ten adults and children (30%) were multidimensionally poor–they lived on low incomes and were deprived of essential things that they needed.
	Over a quarter of a million people (256,000) in Fiji are multidimensionally poor.
	Multidimensional poverty rates in rural areas (38%) are higher than in urban areas (23%) of Fiji.
	Deprivation results
	There is a broad consensus among the general public in Fiji on the necessities of life for a minimum decent standard of living.
	Almost one in four adults (23%) were deprive from the essential clothes they needed.
	Over two in five adults (43%) suffer from financial deprivations.
	Half of the adults (50%) suffer from social deprivations – they cannot fulfil their social obligations and fully participate in Fijian society due to a lack of money.
	One in five children (20%) do not have the essential food they need – their diet is inadequate by Fijian standards.
	• More than one in five children (22%) of school age suffer from educational deprivation. • Nearly one third of children (28%) do not have the new clothes they need. • Almost four in ten children (38%) suffer from material deprivation – their parents cannot afford to buy them the essential things they need.

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