INFRASTRUCTURE ASSESSMENT REPORT FOR SUVA-NAUSORI SCHOOLS

FINAL REPORT

PREPARED FOR: MINISTRY OF EDUCATION
January 2025

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Abbreviations

DFAT	Australian Government Department of Foreign Affairs and Trade
FDPF	Fiji Disabled Peoples Federation
FNBC	Fiji National Building Code
FPSF	Fiji Program Support Facility
GoF	Government of Fiji
MHM	Menstrual Health Management
MoE	Ministry of Education
UNICEF	United Nations International Children’s Emergency Fund
WASH	Water, Sanitation and Hygiene

Executive Summary

This infrastructure assessment report was conducted at the request of the Government of Fiji (GoF). GoF requested the Australian Government's support to conduct an audit of 86 primary and secondary schools across the Suva-Nausori area to provide data to prioritise future infrastructure investments. The assessment aims to improve educational outcomes and build resilience by identifying critical infrastructure compliance gaps and classroom overcrowding. Recommendations are included.

Context

Urgent infrastructure improvements are needed to ensure access to quality education for all Fijian students. The Suva-Nausori area, Fiji's most densely populated region, is experiencing rapid urbanisation, putting pressure on existing schools. Many school buildings were constructed more than 50 years ago. These buildings are deteriorating, do not meet modern education needs and cannot cope with growing student numbers. In addition, the structures have poor accessibility for students with disability; heightened vulnerability to cyclones; and inadequate water, sanitation and hygiene (WASH) facilities, leading to student absenteeism.

To enable prioritisation of infrastructure investments to be based on evidence, this assessment creates a baseline understanding of infrastructure needs, presents key findings, and suggests a way forward.

Assessment Objectives

The primary objective of this assessment was to identify the critical infrastructure needs at selected schools and create a baseline to guide future investment decisions. The assessment focused on the following key areas:

Overcrowding	Analysis of classroom size relative to the proposed sizing of 1.5m^2/student[1].
WASH facilities	Evaluation of the adequacy and condition of sanitation facilities, with a focus on gender-specific needs and accessibility for all students. Adequacy was determined based on Ministry of Education minimum standards.
Accessibility	Review of infrastructure to assess compliance with disability access requirements, in line with Fiji National Building Code guidance on accessible infrastructure and the Fiji Disabled Peoples Federation Access Audit Tool.
Disaster resilience	Assessment of disaster resilience of the schools, particularly adequacy of cyclone roofing, cyclone screws, cyclone shutters and cyclone brackets at windows for compliance with Fiji National Building Code guidelines on building cyclone resistance.

This assessment also provides a snapshot of existing infrastructure conditions at these schools, to support decision-making regarding future planning, maintenance, upgrades, rehabilitation, and capital works.

A cost guideline to address the most urgent needs identified during the assessment is included in the report. The costs are indicative only and are based on a standard cost/m^2 calculation, rather than real costs as derived from an approach to market.

A series of recommendations have been made to address policy inconsistencies that make school maintenance and capital investment challenging. These policy changes should be considered in parallel to any investment in upgrading school infrastructure.

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[1] ***FNBC*** specifies 2m^2/student, which is assessed as too large for the Fiji context whereby there is often upwards of 50 students/classroom.

MoE policy states that primary school classrooms shall comprise an area of not less than 33m^2 of floor space for the first 30 students and 0.38m^2 for each additional student; and secondary school classroom shall comprise an area of not less than 39m^2 of floor space for the first 30 students and 1.12m^2 for each additional student. The Ministry of Education policy is assessed as being insufficient.

This report uses the measure of 1.5m^2 /student, which is recommended as an appropriate spacing guideline for Fijian schools.

Key Observations

All findings and analysis are based on 2024 enrolment data and the recommended classroom sizing of 1.5m^2/student and guidelines for WASH facilities (based on toilet to student ratios and accessibility requirements).

Overcrowding: 70 per cent of schools are overcrowded.

There is inconsistency in classroom sizing between the FNBC and the MoE, with extreme results either way, depending on which is applied. Based on the current student population, application of the FNBC results in almost 100 per cent schools being deemed severely overcrowded. By contrast, application of the MoE specifications results in only six schools being deemed overcrowded.

A ratio of 1.5m^2/student is recommended as a more appropriate benchmark for the Fiji context. This specification aligns with the recommended classroom sizing in several middle-high income countries globally.

Based on the recommended spacing of 1.5m^2/student, to meet the current student population, 249 additional classrooms are needed:

- 168 additional classrooms are required for primary schools
- 81 additional classrooms are required for secondary schools.

If utilising the FNBC guidelines of 2m^2/student, to meet the current student population, 745 additional classrooms are needed.

To address current and future overcrowding, construction of the additional classrooms needs to be considered in conjunction with the available land, staffing and teaching requirements, and enrolment growth rates.

WASH facilities: WASH facilities are in poor condition in most schools, and additional facilities are required, particularly for girls.

Most schools surveyed have insufficient toilets and taps, preventing proper hygiene practices during school attendance, particularly for female students. Teachers interviewed throughout the audit spoke of the correlation between absenteeism and poor WASH facilities for students and staff.

- 47 per cent of schools do not meet FNBC's toilet to student ratio. Aggregated across all schools:
  - Primary schools require 17 new male toilet cubicles and 97 new female toilet cubicles.
  - Secondary schools require 2 new male toilet cubicles and 67 new female toilet cubicles.
- Accessible WASH facilities for students with disability are not present at any of the schools.

Existing conditions: Many school buildings are reaching the end of design life and are no longer fit for purpose.

Many schools have buildings that were not constructed in line with current FNBC or MoE guidelines.

- 55 per cent of schools surveyed exhibited defects (cracks in walls, floors, and beams, broken fixtures, water damage), deteriorating infrastructure (corrosion, likely presence of asbestos, deteriorating structural elements) and damaged infrastructure.
- Primary schools were observed to be in poorer condition than secondary schools.
- The structures' condition indicated that maintenance had not occurred at frequent or regular intervals.

Accessibility: None of the 86 schools have adequate accessible infrastructure.

It has been articulated as a priority of the Fiji Government to provide opportunities for children with disability to develop to their full potential, integrate into the community and contribute to society through inclusive education. To support delivery of Fiji Government's Special and Inclusive Education Policy, investment is needed to construct accessible school infrastructure.

- All schools lack accessible infrastructure, including ramps and WASH facilities.

Of the student population – 56,908 students enrolled in the 86 schools surveyed – only 31 students identified as having a disability. This demonstrates the prohibitive impact of inaccessible infrastructure.

Disaster resilience: Over 50 per cent of schools are used as evacuation centres.

It is common practice for schools to act as evacuation centres for communities where residential housing may not withstand cyclones. Over 50 per cent of the schools surveyed are used as evacuation centres in the event of a disaster.

Most of the schools surveyed have cyclonic roofing; have anecdotally withstood cyclones and floods with minimal damage; and have adequate evacuation, emergency, and safety plans in place. However, this alone does not indicate the infrastructures' resilience to future weather or climatic conditions, and further assessment may be required.

There are low-value/high-impact infrastructure investments that should be prioritised to improve community safety and school building resilience in future weather events, including fixing rusting roof cladding and roofing screws at most schools, providing cyclone shutters for windows, and installing cyclone brackets at window frames.

Way Forward

A weighted multi-criteria assessment was used to score each school against the following criteria:

Table 1: Weighted multi-criteria

Criteria	Percentage weighting	Measure
Overcrowding	40%	Classrooms facilitating students beyond room capacity, determined through number of students per classroom and classroom size, assessed against standard of 1.5m2/student.
WASH	10%	Student/toilet ratio based on the FNBC specification.
	10%	Quality of facilities and current condition such as functionality and maintenance.
Structural assessment	10%	Building structure and condition of walls, floors, ceilings, overall structural integrity.
	10%	Maintenance and assessment of the upkeep of facilities including painting and repairs.
Disability access	10%	Accessibility features such as the presence of ramps, handrails, accessible toilets, as determined by the Fiji Disabled Peoples Federation Disability Audit Tool.
Disaster resilience	10%	Presence and quality of measures for disaster resilience of buildings including structural measures, cyclone shutters and fire safety systems.

Urgent action is required to ensure safe and equitable access to education. The findings underscore the need to address the most critical infrastructure gaps, particularly in WASH facilities. The report outlines a prioritised approach to address gaps, with schools categorised as follows:

Table 2 : Priority rating definition

Priority rating	Definition
One	Urgent attention required. The school exhibits a combination of severe overcrowding, has a deficit of WASH facilities and/or is not structurally sound and needs to be demolished and replaced with a new building or rehabilitated.
Two	Upgrades are needed. Overcrowding is present and refurbishments are needed to bring the school infrastructure up to a good and compliant condition.
Three	The infrastructure is likely to be structurally sound. There are infrastructure investments that should be considered by School Management Committees.

Of the 86 schools assessed:

- 14 schools require urgent attention.
- 40 schools are assessed as a high priority for upgrades.
- 32 schools are rated as moderate priority, with infrastructure investments that should be considered by School Management Committees.

This assessment did not include invasive inspections. Prior to any planned construction, a full and thorough assessment of all buildings must be completed.

Table 3: Schools priority listing

Rank	Name of School	Total Score (100%)
1	Vatuwaqa Primary School	100
2	Suva Primary School	99
3	Dudley Intermediate School	91
4	Bainivalu Primary School	85
5	St Annes Primary School	84
6	Nasinu Gospel Primary	83
7	John Wesley Primary School	83
8	Samabula Primary School	82
9	Lelean Memorial School	82
10	Rishikul Primary School	80
11	Suva Methodist Primary School	78
12	Assemblies of God High School	78
13	Adi Cakobau School	78
14	Davuilevu Methodist Primary	77
15	Nehru Primary School	76
16	Holy Trinity Anglican Primary School	76
17	Suva Grammar School	74
18	Jagindar Primary School	73
19	Ratu Sukuna Memorial School	72
20	Gospel Primary School	71
21	Dudley High School	69
22	Nabua Secondary School	68
23	Rishikul Sanatan Secondary School	68
24	Marist Brothers High School	67
25	William Cross College	66
26	MGM Primary School	65
27	St Joseph the Worker	65
28	Assemblies of God Primary	65
29	Kalabu Secondary School	65
30	Dilkusha Methodist High School	63
31	Nabua Primary School	60
32	Gospel High School	60
33	Nakasi High School	60
34	Tacirua Primary School	59
35	St Agnes Primary School	59
36	St Marcellin Primary School	57
37	Marist Brothers Primary School	57
38	Bhawani Dayal Arya College	57
39	DAV College	57
40	Nakaikogo Sanatan Dharam School	56
41	Bhawani Dayal Primary	56
42	Jeremiah Raibevu College	56
43	Nasinu Sangam School	55

Rank	Name of School	Total Score (100%)
44	William Cross Primary	55
45	Pt Vishnu Deo Memorial	53
46	Wainibuku Hut Primary School	52
47	Bishop Kempthorne Memorial	51
48	Draiba Primary School	51
49	MGM High School	51
50	Delainamasi Govt School	50
51	Ahmadiyya Muslim College	50
52	St John Bosco	49
53	Basden College	49
54	John Wesley College	49
55	Veiuto Primary School	48
56	Kalabu Fijian Primary School	47
57	Rambisessar Primary School	46
58	Annesley Infant School	46
59	Nasinu Secondary School	46
60	Arya Samaj Primary	45
61	Makoi Muslim Primary	43
62	Ahmadiyya Muslim Primary	42
63	Dr. Ram Lakhan Memorial	42
64	Rishikul Nadera Primary School	40
65	Newtown Christian Primary School	40
66	Suva Muslim Primary School	40
67	Suva Sangam College	40
68	Indira Gandhi Memorial Primary School	39
69	Stella Maris School	39
70	Dilkusha Girls Primary	39
71	Saraswati Primary School	39
72	Davuilevu Methodist High School	39
73	Jai Narayan School	39
74	Swami Shraddanand Memorial Primary School	38
75	Saraswati College	38
76	Dilkusha Boys Primary	36
77	Narere Primary School	36
78	DAV Girls School	35
79	Deenbhandoo Memorial School	32
80	Nasinu Muslim Primary School	32
81	Yat Sen Secondary School	29
82	Yat Sen Primary School	26
83	Suva Muslim College	22
84	St Josephs Secondary School	15
85	Nasinu Muslim High School	15
86	Christian Mission Fellowship Secondary	10

Recommendations

Recommendation one: adopt the Audit Report.

This report provides a comprehensive infrastructure audit of schools located in the Suva-Nausori area. A rigorous multi-criteria assessment was developed to enable comparison of infrastructure needs between schools. The final prioritisation list was produced using the evidence collected from physical assessments of each school.

It is recommended that the report be adopted by GoF as an evidence base for making decisions about infrastructure investments at schools in the Suva-Nausori area.

Recommendation two: distribute the individual school reports.

Included in the report are comprehensive individual infrastructure assessments for each school. The individual assessments provide a detailed breakdown of the infrastructure needs of all existing buildings in the school and recommendations relevant to school master planning.

It is recommended that the School Management Committee of each school be provided with its individual infrastructure assessment report to help inform school in the maintenance and capital works planning.

It is also recommended that each individual infrastructure assessment report be uploaded and stored on Fiji Education Management Information System (FEMIS).

Recommendation three: identify funding sources for urgent remediation at priority schools.

This report provides the information needed to develop infrastructure remediation plans for each school.

With an initial focus on 'priority one' schools, it is recommended that GoF, in partnership with its development partners, identify funding sources to address the most critical upgrades needed to:

a) Reduce classroom overcrowding;
b) Increase the number and quality of WASH facilities;
c) Improve general maintenance and strengthen cyclone resilience of buildings; and
d) Improve disability accessibility of school facilities.

Remediation plans should be categorised as urgent, intermediate or long-term, and should include a demolition and decanting plan for all schools to identify buildings in poor condition which can be demolished, and areas where existing classrooms can be decanted (and whether temporary classrooms will be required). This will allow for greater flexibility in master planning new classrooms, WASH facilities, staff rooms and accessibility to address compliance gaps.

Upgrades to WASH facilities at schools should be prioritised. This is the greatest area of need and is critical to student retention, particularly for female students.

Recommendation four: legislate a standard size requirement for classrooms in Fiji.

The FNBC and the MoE specify vastly different sizing on a student-to-square metre ratio. The inconsistency of Government policy makes it challenging to accurately assess the prevalence of classroom overcrowding.

It is recommended that a single, agreed, student-to-square metre ratio is developed. A ratio of 1.5m^2/student is recommended as an appropriate benchmark for the Fiji context. This specification aligns with classroom sizing in several middle-high income countries globally.

Compliance with the agreed sizing should be enforced for all new infrastructure investment at schools in Fiji.

Recommendation five: deliver maintenance training to School Management Committees.

General maintenance of school facilities has been identified as a common challenge, particularly as school infrastructure reaches the end of its design life.

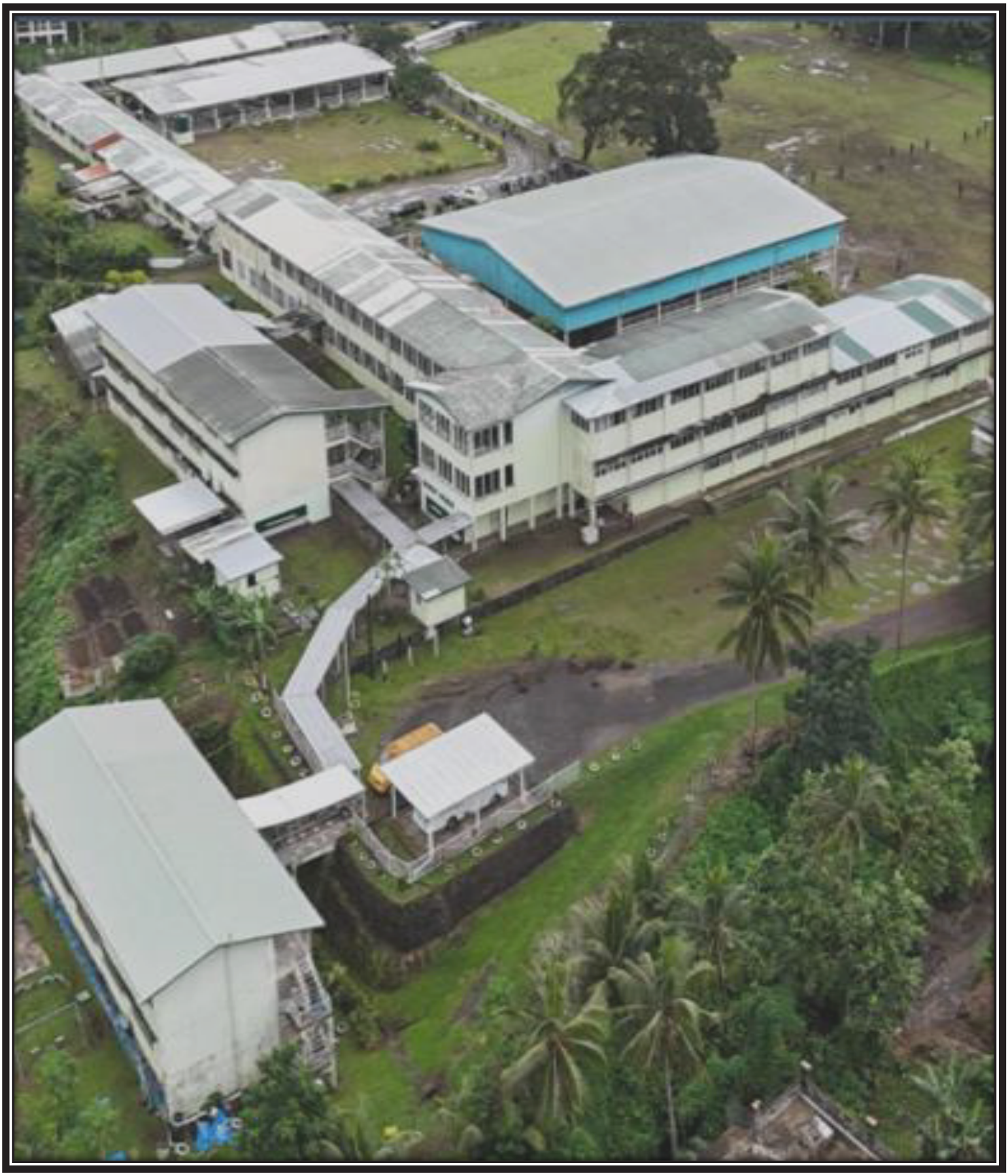
In partnership with development partners, it is recommended that a '*maintenance essentials'* workshop be designed and delivered to all School Management Committees. The training should focus on how to develop maintenance schedules, pipelines and budgeting.

The training should be designed and delivered in partnership with the MoE Asset Management Unit.

Recommendation six: develop strategy to address infrastructure accessibility limitations.

The inaccessibility of infrastructure was identified as prohibitive for students with disability to access mainstream education at schools audited in the Suva-Nausori area. Retrofitting ramps and accessible facilities to existing schools would be cost prohibitive and structurally challenging. Any new classrooms should therefore incorporate accessible infrastructure at the outset in line with FNBC requirements and the Global Inclusive Education Standard.

It is recommended that all new infrastructure investment at schools in Fiji be required to meet the Global Inclusive Education Standard, as it applies to school infrastructure.



Gospel High School

1 Introduction

The Australian Government Department of Foreign Affairs and Trade (DFAT) has supported Fiji's MoE to increase access to quality education infrastructure in urban, rural and remote areas across Fiji. Primary and secondary schools in the Suva-Nausori area are experiencing increasing enrolments, with anecdotal reports suggesting the schools are operating beyond capacity.

NRW Macallan Fiji Ltd has been contracted to conduct a physical infrastructure assessment of 86 primary and secondary schools in the Suva-Nausori area to assess infrastructure needs at each school. This assessment seeks to inform a high-level infrastructure plan and establish an objective evidence base for the MoE to draw on to guide school infrastructure related investment decisions. This report includes key observations from the physical audits; high-level assessments for overcrowding, water, sanitation and hygiene (WASH) facilities, accessibility and disaster resilience; and recommendations for future consideration.

1.1 Background and Context

The Suva-Nausori area represents the most densely populated region in Fiji and is situated on the southeast coast of Viti Levu, the nation's largest island. This area includes all urban and peri-urban zones under the jurisdiction of the Lami Town Council, Suva City Council, Nasinu Town Council, and Nausori Town, extending to the corridor leading to Nausori Airport and its immediate surroundings. Suva City is located on a peninsula, characterised by hilly and undulating terrain, which, alongside numerous streams and rivers, creates natural barriers to urban development and transportation networks. The region is susceptible to natural hazards such as coastal and riverine flooding, earthquakes, landslides, and cyclones. The study area comprises a mix of freehold, crown and native land.

A considerable volume of urban development is present along both sides of Kings Road in Nasinu and Nausori. The corridor comprises urban villages, informal and squatter settlements, as well as residential subdivisions developed by private entities and housing authorities, including high-density housing estates. There is notable growth in informal settlements, which are often marked by elevated poverty levels and substandard living conditions. The demand for urban services in these regions is substantial; however, the absence of legal land tenure and the inability to collect rates pose significant obstacles for the government in funding these services.

While anecdotal evidence exists regarding classroom capacity and overcrowding, sufficiency and adequacy of this infrastructure to accommodate current and future school age population is unknown. This infrastructure audit is designed to provide an information baseline that can lead to safer and more conducive learning environment for both students and teachers. An important step in realising these aims is to understand the infrastructure needs across agreed schools in the area, to enable evidence-based decision-making and investment prioritisation.

1.2 Purpose of the Assessment

The purpose of this assessment is to report on the infrastructure needs at 86 selected schools within the Suva-Nausori area to establish an evidence base that the GoF can draw on to guide future investments for critical school improvements. In response to the challenges facing schools in the Suva-Nausori area, the key areas of focus for this assessment include:

Overcrowding	Analysis of classroom size relative to the proposed sizing of 1.5m2/student.
WASH facilities	Evaluation of the adequacy and condition of sanitation facilities, with a focus on gender-specific needs and accessibility for all students. Adequacy was determined based on MoE minimum standards.
Accessibility	Review of infrastructure to assess compliance with disability access requirements, in line with FNBC guidance on accessible infrastructure and the FDPF Access Audit Tool.
Disaster resilience	Assessment of disaster resilience of the schools, particularly adequacy of cyclone roofing, cyclone screws, cyclone shutters and cyclone brackets at windows for compliance with FNBC guidelines on building cyclone resistance.

1.3 Scope

The scope of this assessment included government, community-owned, faith-based, and private schools at both the primary and secondary levels. For the list of assessed schools, refer to Annex 1.

The assessment gathered disaggregated student enrolment data (using Ministry of Education data and verified by inspection), conducted physical inspections of existing school infrastructure including WASH facilities, and identified land available for additional classrooms to inform:

1. Baseline understanding of existing school infrastructure condition (refer Section 2).
2. A school infrastructure gap analysis (refer Annex 5) to understand critical gaps in infrastructure to satisfy minimum requirements on overcrowding, WASH facilities, accessibility and disaster resilience.
3. A school prioritisation plan (refer Section 4) provides a high-level understanding of which schools face the most critical gaps and therefore requiring the most urgent action.

The cost of delivering on the recommendations of this report have not been calculated in full, however a high-level indicative cost guide, based on a standard square metre pricing, has been calculated from schools identified as most critically in need of upgrades. This is provided at Section 3.

The following documents have been reviewed and referenced as part of this assignment:

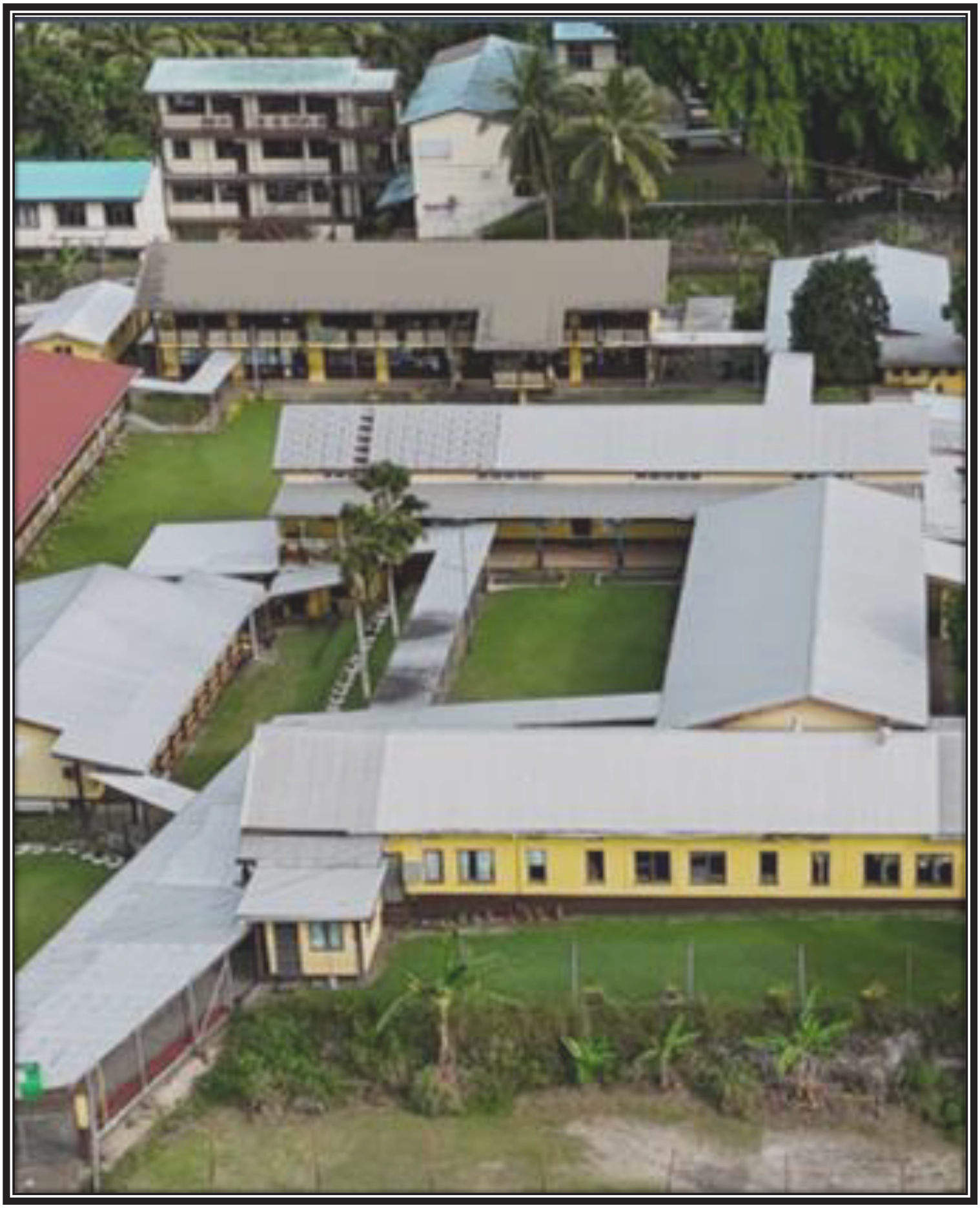
- Fiji National Building Code (FNBC) (relevant excerpts are provided in Annex 6)
- Ministry of Education Minimum Standards on Water, Sanitation and Hygiene (WASH) in Schools Infrastructure 2012 (relevant excerpts are provided in Annex 6)
- Compliance to Fiji Statutory Regulatory Bodies
- DFAT Prevention of Sexual Exploitation Abuse and Harassment (PSEAH) policy
- DFAT Child Protection Policy

1.4 Assumptions

The assessment relies on the following assumptions:

- All data (including enrolment numbers) provided by the MoE was assumed to be accurate and up-to date.
- Interviews with school management committee were carried in good faith, and all answers are considered to be truthful.
- Overcrowding analysis is undertaken based on FNBC guidance on area per student allowance (2m^2 per student).
- The assessment included a visual inspection of building surfaces only from ground and floor levels, no at height inspections were undertaken, nor was any engineering analysis undertaken other than what can be visually determined to verify the structural condition or integrity of the structures. Any critical defects that require urgent engineering or design attention have been raised with Tetra Tech are listed in Section 4.
- Pricing has not been market tested and is indicative only, calculated on a standard price per square metre rate. Indicative costs have only been calculated for schools with an overall ranking of 'Poor'.

Indira Gandhi Memorial Primary School



Annesley Methodist Infant School

Methodology

The assessment of the schools drew on a mixed methods approach, incorporating quantitative and qualitative methods for data collection and analysis. These data collection methods, along with the stages of the assessment and limitations of the assessment, are detailed in the sections below. The site inspections of the 86 schools for this report were undertaken from June to October 2024.

The inspections and assessment were carried out by engineers from NRW Macallan. To support greater insights regarding disability access and universal design, the FDPF were invited to support school inspections. The FDPF actively participated in the inspections, data collection, discussions and assessment concerning infrastructure needs for improved accessibility.

1.5 Data Collection Methods

The data collection methods employed in this assessment are listed in Table 4 below.

Table 4: Data collection methods

Data collection method	How this supported analysis
Desktop review	A desktop review of school enrolment data, key guidelines and audit checklists was undertaken to support analysis and provide a baseline understanding of the adequacy of school infrastructure. The documents and data reviewed by the team are listed below, with details of how this supported the analysis and infrastructure assessment: • School enrolment data disaggregated by gender and students with disability reviewed to inform classroom capacity and overcrowding analysis, WASH facility capacity adequacy and accessibility requirements. • FNBC disability guidelines as well as the FDPF Access Audit Tool reviewed and incorporated into school inspection reports to provide a snapshot of existing accessible infrastructure at each school. • Cyclone resistance checklists and an NRW Cyclone Certificate Checklist reviewed and incorporated into the assessment to provide a high-level understanding of the current ability of the schools to withstand severe weather events (i.e. disaster resilience).
Structured interviews	Structured interviews with school staff were undertaken to understand insights and experiences regarding the school environment and school infrastructure. Interviews were also conducted with individuals with disability to understand their experience of school infrastructure accessibility.
Survey forms	The survey forms were designed to gather contextual and demographic information regarding the schools (i.e. disaggregated school enrolment data, classroom roll data per grade to be validated by onsite inspection) from school staff.
Visual inspections (including onsite measurement)	Visual inspections (non-invasive) were conducted to physically inspect the existing infrastructure conditions of 86 school facilities, verify enrolment data and understand land availability for additional classrooms. Onsite measurement was undertaken for: • Classrooms to support overcrowding analysis. • WASH facilities and ablution blocks to assess capacity adequacy. • Ramps, walkways, and doorway width to assess compliance with accessibility guidelines.
Drone imagery	Drone imagery was utilised to capture aerial images of the schools (while ensuring to avoid inadvertently capturing students and staff) to demonstrate indicative layouts for potential additional classrooms on school property. While drone images were also used to assess roofing conditions, not all images taken are clear enough to thoroughly identify and assess roofing conditions and cannot be considered a substitute for a roof inspection.

1.6 Assessment Stages

The assessment consisted of three stages: Inception and Planning, Site Inspections and Analysis and Reporting. The duration and activities for each of the stages is described in Table 5 below.

Table 5: Assessment stages

Assessment Stage		Timing	Activities
Stage 1	**Inception and planning**	April to May	Internal inception meeting, inception briefing with DFAT and MoE, team briefing on safeguarding and GEDSI, planning for inspections.
Stage 2	**Site inspections**	June to September	Pre-inspection meetings with schools, collection of enrolment data, visual inspections, interviews, photography, onsite measurements
Stage 3	**Analysis and reporting**	October to December	Compiling individual school reports based on visual inspections, assessing compliance against standards and guidelines, overcrowding analysis, WASH adequacy analysis, disability and cyclone resilience checklist reviews, land availability analysis, infrastructure gap analysis and indicative prioritisation, preparing final report.

1.7 Constraints

During the assessment process, the team encountered several challenges that impacted the timeliness of assessment and reporting. These include:

- **Inspections timed to minimise student disruption:** the inspection teams proactively co-ordinated with school administration to ensure physical inspections did not disrupt students or school operations. This frequently necessitated rescheduling of inspections to accommodate recess, lunch, and duty breaks. This created additional time constraints on inspections, limiting the ability to gather comprehensive information from the physical inspections.
- **Delays in obtaining social survey information:** delays in obtaining social survey information from individual schools arose primarily due to the time required for schools to compile comprehensive data, such as enrolment figures and other relevant information. Consequently, the reporting process was hindered, as schools needed additional time to gather and submit the necessary documentation.
- **Site accessibility and inspection team availability:** inspections required careful scheduling and contingency plans due to varying availability of the inspection team during the assessment period, delays in obtaining drone navigation permit approvals, and adverse weather conditions inhibiting visual inspections. Impacts to the site inspections and aerial photography were limited by advance planning, schedule flexibility and personnel backstopping to accommodate scheduling conflicts for the inspection team.

1.8 Criteria for Assessment

The MoE Minimum Infrastructure Standards (2018) notes a minimum of 1.1m^2/student, noting that primary schools must not have less than 33m^2 per classroom of 30 students, with an additional 0.38m^2 for each additional pupil. For secondary schools, the minimum area for classrooms increases to 39m2 per classroom of 30 students, with an additional 1.12m^2 per extra student. This requirement equates to approximately 1.1m^2 per student.

The FNBC specifies a minimum of 2m^2/student. This requirement aligns with the Australian National Construction Code (NCC) which is also set at 2m^2/student, however the context differences in Fiji whereby there are often upwards of 40-50 students in each classroom makes this ratio too large.

A recommended sizing of 1.5m^2/ student has been applied throughout this report to determine the presences of overcrowding. This spacing aligns with several middle-high income countries globally and is considered an approporate size for schools in Fiji.

Through discussions, presentations of preliminary data and reflections on preliminary analysis, it was agreed that the assessment required a consistent approach to analysing overcrowding, WASH, accessibility and disaster resilience. The FNBC standards were applied to form the basis for assessing WASH facility adequacy. This also aligns with the MoE standards. Checklists and guidelines were developed for assessing accessible infrastructure compliance and provided a baseline understanding of school disaster resilience, particularly cyclone resilience.

The agreed criteria forms the basis of the assessment for this report is listed in Table 6 below. Relevant excerpts from the guidelines as well as tools and checklists are provided in Annexes 5, 6, 7 and 8, and referenced in the table below.

Table 6: Agreed criteria for school infrastructure assessment

Area of assessment	Guiding document	Annex reference	Agreed criteria / compliance
Overcrowding	n/a	n/a	Area allowance of 1.5m^2 / student
WASH facilities	FNBC	Excerpts provided in Annex 6	Toilet to student ratios: 1:20 females; 1:30 males Tap to student ratios: 1:60 all students
	MoE Minimum Standards on WASH in Schools Infrastructure 2012	Excerpts provided in Annex 6	
Accessibility	FNBC disability guidelines	Excerpts provided in Annex 6	As per FDPF Access Audit Tool for physical infrastructure at schools
	FDPF Access Audit Tool	Annex 7	
Disaster resilience	FNBC cyclone resistance guidelines	Excerpts provided in Annex 6	As per FNBC requirements
	NRW Cyclone Certificate Checklist	Annex 8	

1.9 Criteria for Prioritisation

As part of this assessment, conditions at the schools have been categorised based on an agreed condition rating classification. This is provided in Table 7 below.

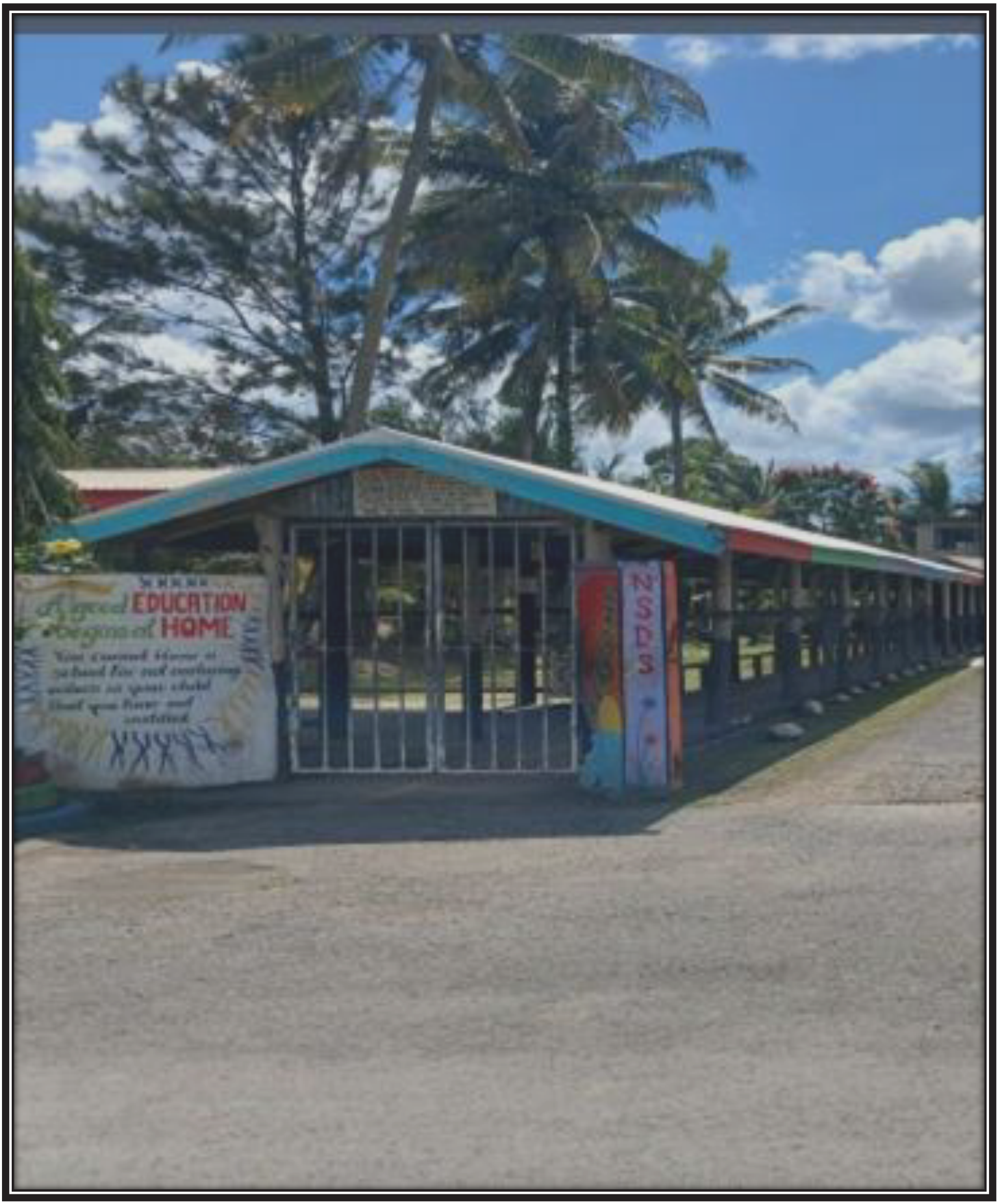
Table 7: Condition ratings classification

Priority rating	Definition
One	Urgent attention required. The school exhibits a combination of severe overcrowding, has a deficit of WASH facilities and/or is not structurally sound and needs to be demolished and replaced with a new building or rehabilitated.
Two	Upgrades are needed. Overcrowding is present and refurbishments are needed to bring the school infrastructure up to a good and compliant condition.
Three	The infrastructure is likely to be structurally sound. There are infrastructure investments that should be considered by School Management Committees.

The ratings have been applied to the schools based on the results of the assessment. The condition ratings provide a comparative framework to present schools in order of worst condition (requiring most critical or urgent attention) to best condition (requiring minimal upgrades to achieve compliance).

The overall ranking of the schools from worst condition to best condition forms the basis of the prioritisation plan (see Section 4). Priority corresponds to the condition ratings of the schools as follows:

- Priority One**:** schools identified to be in very poor condition, requiring critical or urgent attention and action
- Priority Two: schools identified to be in poor condition, requiring upgrades that can be carried out in the medium term
- Priority three: schools identified to be in fair condition low priority, requiring ongoing maintenance to upkeep current standard



Nakaikogo Sanatan Dharam School

2 Findings

This section of the report presents the key findings of the assessment, based on the physical inspections and subsequent analysis. These are presented below, categorised into the following sections: existing conditions, overcrowding, WASH facilities, accessibility, and disaster resilience.

A school infrastructure gap analysis is provided in Annex 5, which compiles the findings across the schools to identify and quantify, where possible, the infrastructure gaps that must be addressed to achieve compliance with FNBC guidelines and good practice.

2.1 Existing Conditions

Through surveys and interviews, it was found that most school buildings in the area were constructed in the 1970s with an estimated design life of 50 years. The school buildings consist of single-storey to triple-storey structures primarily made from local materials such as timber and masonry block walls. During the visual inspections, a significant number of schools were identified to have buildings that did not appear to be constructed in line with FNBC or MoE guidelines. This became apparent through compliance assessments that were undertaken based on the agreed criteria shown in table 7 above as well as onsite measurements.

Aging infrastructure and general defects observed. Defects that impact school functionality, student and staff safety and structural longevity were observed at all schools to varying degrees. Common defects included cracks in walls, floors, and beams, broken door handles, malfunctioning electrical fixtures, exposed wiring, leaking taps, unpainted walls, plaster peeling, and rain-soaked ceilings from roof leaks. General deterioration of structural elements due to aging, wear and tear and corrosion was also observed, particularly rust on steel columns and railings, and deteriorating concrete footings. The aging infrastructure at the schools was also apparent through inadequate drainage at many of the schools as well as the likely presence of asbestos. Misalignment issues with door fittings have resulted in gaps at the base of the doors. These conditions were observed at approximately 55 per cent of the schools inspected, with the remaining 45 per cent of schools displaying defects to a lesser extent and lower risk profile. The condition of aging heritage structures presented significant defects and hazards, including broken or missing tiles affecting timber roofing, rusted corrugated roofing, damaged gutters leading to leaks, and a lack of cyclone-proof shutters. Generally, **primary schools were observed to be in poorer condition** than secondary schools, which could be attributed towards the challenges of maintenance with younger children who may have a lesser appreciation of how to take care of their own environments. This was the case for existing conditions of the schools and defects observed, as well as across the key assessment criteria of overcrowding, WASH facilities, accessibility and disaster resilience.

Classrooms are overcrowded. Visual inspections as well as overcrowding analysis in line with the agreed student to classroom ratios of 1.5m^2 / student confirmed that **many schools in the Suva-Nausori area are overcrowded**, operating at or beyond capacity. The schools experience varying degrees of overcrowding, with primary schools facing this more so than secondary schools. The results of the assessment are detailed further in Section 2.2.

WASH facilities in poor condition. Across both primary and secondary schools, **WASH facilities were observed to be in poor condition**, particularly for female students (this is expanded on in Section 2.3). Visual inspections highlighted defects and other operational issues ranging from damaged toilet seats, damaged plumbing, broken doors, poor drainage, and ineffective waste disposal. These observations indicated a lack of routine upkeep, cleaning and maintenance of WASH facilities. Visual inspections and analysis against FNBC toilet to student ratios found that current WASH facility provision is inadequate at many schools, particularly for girl students. This has significant implications on female students and their health and wellbeing while at school, particularly for adolescent girls in managing menstrual health and hygiene with privacy, dignity, and safety (see Section 2.3).

Impacts of inconsistent maintenance. Through visual inspections, it was apparent that **maintenance of school facilities occurred at infrequent and irregular intervals**. The inconsistency in maintenance practices across these schools has resulted in many of the defects and conditions listed above impacting accessibility, adequacy of facilities, structural condition of the buildings and safety of students and school staff. Nearly all schools inspected lacked formal maintenance programs. Although the MoE allocates an annual budget for maintenance, evidence suggests that these funds are not well utilised for the intended purposes of maintenance. During onsite interviews, school administrators affirmed this, reporting that maintenance funding was insufficient and there were instances where no maintenance occurred, even when limited funds were available.

2.2 Overcrowding

The schools are listed in the table below in order of poorest condition to best condition, with regards to overcrowding.

Table 8: Schools listing with the three levels of overcrowding

Priority one	4 or more new classrooms needed to meet current school population
Priority two	1-3 new classrooms needed to meet current school population
Priority three	School very minimal to no overcrowding based on current school population

School	Rating
Rishikul Primary School	One
Lelean Memorial School	One
Bainivalu Primary School	One
Davuilevu Methodist Primary School	One
Nasinu Gospel Primary School	One
St Annes Primary School	One
John Wesley Primary School	One
Jagindar Primary School	One
Nasinu Secondary School	One
Holy Trinity Anglican Primary School	One
Nehru Primary School	One
Adi Cakobau School	One
Rishikul Sanatan Secondary School	One
Suva Grammar School	One
Gospel Primary School	One
MGM Primary School	One
AOG Primary School	One
Veiuto Primary School	One
Suva Primary School	One
Pt Vishnu Deo Memorial	One
Dudley High School	One
Marist Brothers High School	One
Dudley Intermediate School	One
Gospel High School	One
St Joseph The Worker Primary School	One
Nasinu Sangam School	One
Bhawani Dayal Primary School	One
Ratu Sukuna Memorial School	One
MGM High School	Two
Nabua Secondary School	Two
Nakaikogo Sanatan Dharam School	Two
DAV College	Two
Suva Methodist Primary School	Two
St Marcellin Primary School	Two
Assemblies of God High School	Two
Nabua Primary School	Two
St Agnes Primary School	Two
Bishop Kempthorne Memorial School	Two
Nakasi High School	Two
Jeremiah Raibevu College	Two
Marist Brothers Primary School	Two
Tacirua Primary School	Two
St John Bosco Primary School	Two

School	Rating
William Cross Primary School	Two
Delainamasi Government School	Two
Kalabu Secondary School	Two
Bhawani Dayal Arya College	Two
Dr Ram Lakhan Memorial School	Two
Wainibuku Hut Primary School	Two
William Cross College	Two
Jai Narayan College	Two
Kalabu Fijian Primary School	Two
Rishikul Nadera Primary School	Two
Draiba Primary School	Two
Newtown Christian Primary School	Two
Rambisessar Primary School	Two
Nasinu Muslim Primary School	Two
Suva Muslim Primary School	Two
John Wesley College	Two
Dilkusha Methodist High School	Two
Stella Maris School	Three
Indira Gandhi Memorial Primary School	Three
Ahmadiyya Muslim Primary School	Three
Samabula Primary School	Three
Dilkusha Boys Primary School	Three
Swami Sharddanand Memorial Primary School	Three
Basden College	Three
Dilkusha Girls Primary School	Three
Narere Primary School	Three
Deenbhandoo Memorial School	Three
Arya Samaj Primary	Three
Suva Muslim College	Three
Annesley Infant School	Three
Davuilevu Methodist High School	Three
St Josephs Secondary School	Three
Christian Mission Fellowship Secondary	Three
Suva Sangam College	Three
Yat Sen Primary School	Three
Vatuwaqa Primary School	Three
Makoi Muslim Primary School	Three
Saraswati Primary School	Three
DAV Girls College	Three
Yat Sen Secondary School	Three
Ahmadiyya Muslim College	Three
Nasinu Muslim High School	Three
Saraswati College	Three

Overcrowded classrooms impact students' learning experience by straining teacher capacity and resources, reducing focus on student-centred learning, and increasing student absenteeism due to a lack of sense of belonging. This leads to poor academic performance, low attendance rates, and teachers' inability to comprehensively support learning. For this reason, as well as anticipated population growth and subsequent enrolment growth, overcrowding is a key focus of this assessment.

Schools in Suva-Nausori are operating at levels exceeding capacity. From the assessment, based on current enrolment data and the recommended ration of 1.5m^2 / student for classroom capacity, it was found that 70 per cent of the schools audited are exhibiting overcrowding issues.

A total of 249 additional classrooms are required due to overcrowding across the 86 schools.

- 168 additional classrooms are required for primary schools
- 81 additional classrooms are required for secondary schools

This assessment is based on physical measurement of the classroom buildings to ascertain floor area, a minimum classroom size of 9m by 8m, and verified enrolment data as at 2024. It is important to consider this information in conjunction with teaching staff capacity, implications on student enrolment and retention, land availability and site suitability at schools to accommodate additional classrooms in single or multiple-storey form.

Noting that it is not feasible to construct a new classroom for every one student above a school's current capacity, a cut off has been applied whereby the first new classroom is not recommended until the school is accommodating 10+ students in any one stream above its current spacing capacity (i.e. 10 students over the 1.5m^2 / student ration). Additional classooms are then calculated on the basis of 40 students per classroom.

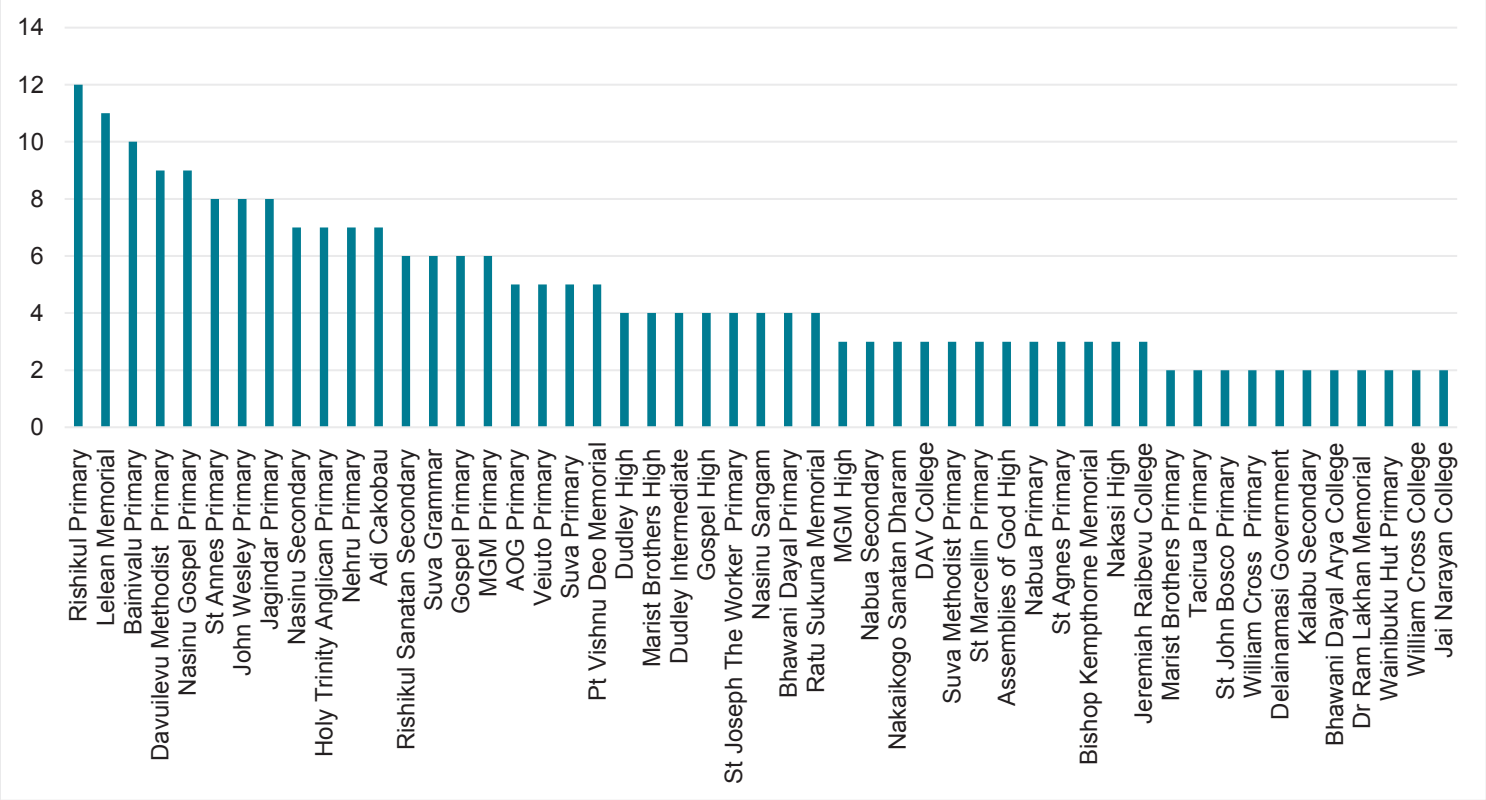
The breakdown of schools and additional classrooms required is presented in the table below.

Table 9: Breakdown of additional classrooms required due to overcrowding as at 2024

No. of additional classrooms required	No of schools
0 – 2 additional classrooms	46
3 – 6 additional classrooms	28
7 – 10 additional classrooms	10
11 – 15 additional classrooms	2

The availability and suitability of land within school property needs to be considered when determining potential sites for additional classrooms. To support this, a high-level land availability assessment was undertaken, as part of the infrastructure assessment, to provide a preliminary and indicative identification of land available on school property for additional classrooms. The assessment is based on aerial imagery captured by drones during the visual inspections and is included within the individual school reports in Annex 9. This assessment is indicative only, and should be validated by further site inspections, scoping, and planning.

Figure 1: Additional number of classrooms required per school



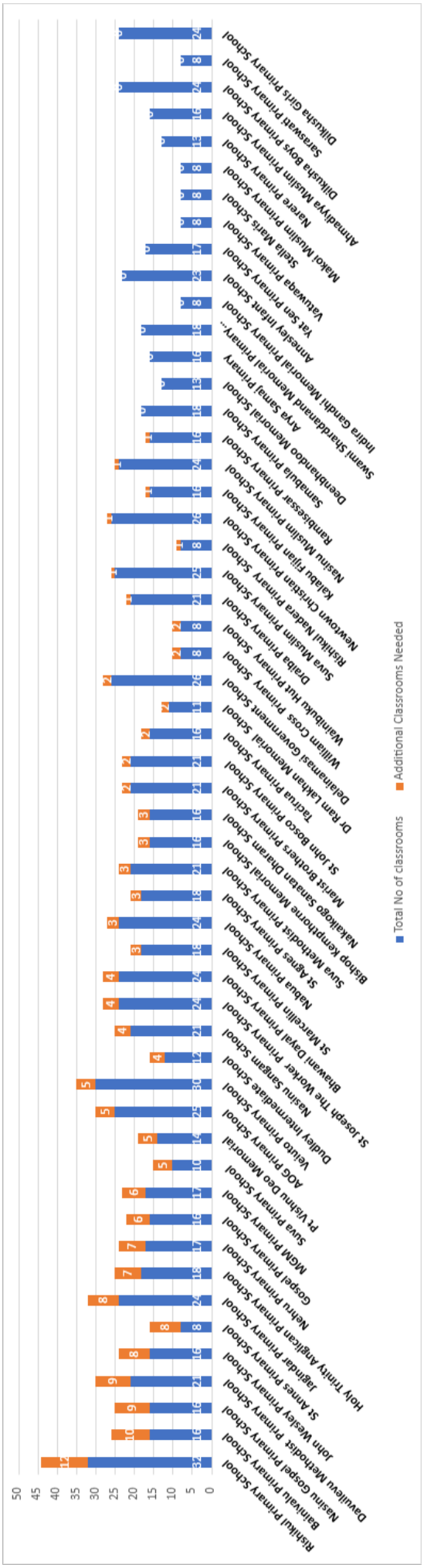


Figure 2: Analysis of current and additional classrooms needed in Primary Schools

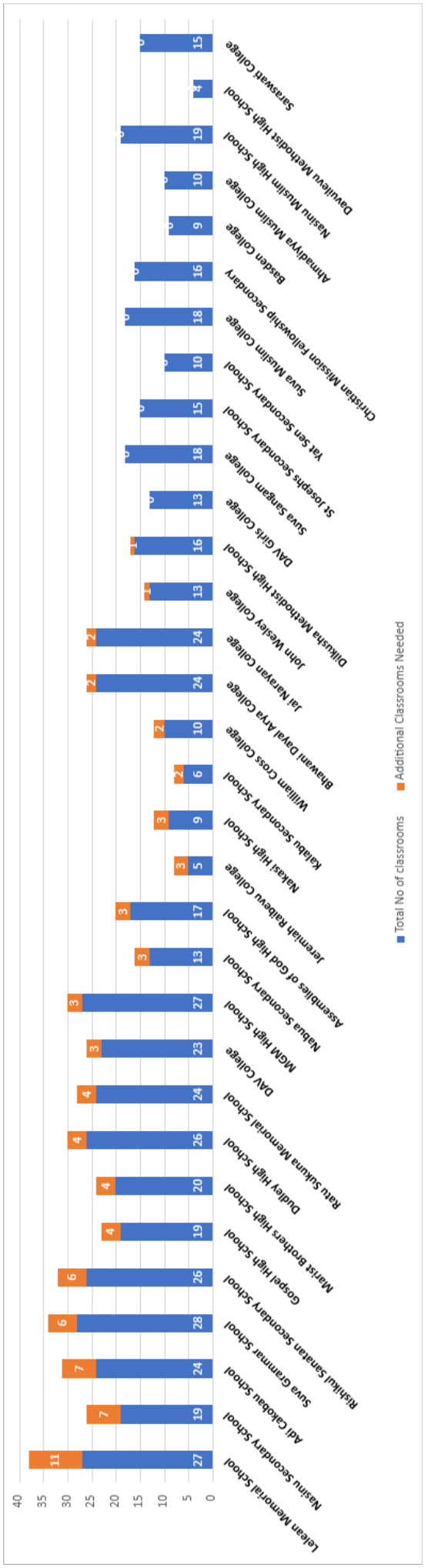


Figure 3: Analysis of current and additional classrooms needed in Secondary Schools

2.3 WASH Facilities

WASH facilities are critical to student and teacher health and hygiene when at school. Access to adequate WASH facilities, including toilets, basins to wash hands, and taps or availability of drinking water, impacts the health, dignity of students as well as teachers.[2] This is felt most acutely by girl students, where poor WASH facilities, combined with a lack of focus on menstrual health management (MHM) education, patriarchal norms leading to shame or disrespect, and self-exclusion mean that menstrual health cannot be managed with privacy, dignity or safety at school. This leads to reduced participation, poor academic performance, absenteeism, and increased dropout rates for girls, presenting a barrier to them receiving quality education and exposing them to greater health risks.[3] For these reasons, WASH facility adequacy has been elevated as a key focus of this assessment. The adequacy of WASH facilities at the schools was assessed based on FNBC toilet to student ratios and tap to student ratios, visual inspections of WASH facility conditions and cleanliness and enrolment data as of 2024.

Additional WASH facilities are required, particularly for girls. From the assessment of toilet to student ratios across the schools, it was found that over 50 per cent of schools require additional toilet cubicles to achieve compliance with the FNBC toilet to student ratio. A total of 183 additional toilet cubicles are required. This is broken down in 10 below.

Table 10: Breakdown of additional toilet cubicles required as at 2024

No. of additional toilet cubicles required	No of schools
0 additional toilet cubicles	45
1 – 5 additional toilet cubicles	25
6 – 10 additional toilet cubicles	11
11 – 15 additional toilet cubicles	3
16 – 20 additional toilet cubicles	2

In 10 above, the two schools requiring 16-20 additional toilets consists of the Jagindar Singh Primary School, a co-educational primary school, requiring five additional cubicles for boys and 11 additional cubicles for girls, and Adi Cakobau School, an all-girls secondary school, requiring 18 additional cubicles.

The assessment can also be broken down by primary and secondary schools, reflecting the differences in requirements for WASH facilities for primary and secondary students:

- Primary schools require 17 new boys toilet cubicles and 97 new girls toilet cubicles
- Secondary schools require 2 new boys toilet cubicles and 67 new girls toilet cubicles

This demonstrates the need for additional WASH facilities across schools in Suva-Nausori for girl students in particular, at both primary and secondary schools, to achieve minimum compliance with FNBC toilet to student ratios. This is broken down further for both primary schools and secondary schools in Figure 6 and 7 below, respectively.

[2] WASH in Schools – Insights from Water for Women, Learning Brief, Australian Aid, DFAT, 2023. Water-for-Women-WASH-in-Schools-web.pdf accessed 18 November 2024.
[3] WASH in Schools Empowers Girls' Education in Fiji, An Assessment of Menstrual Hygiene Management, United Nations International Children's Emergency Fund (UNICEF) Pacific, Fiji, 2017. WASH-in-Schools-Empowers-Girls-Education.pdf accessed 18 November 2024.

The audit also assessed the upkeep and general maintenance of existing WASH facilities shown in Figures 4 and 5. Results showed that primary schools WASH facilities are in a worse condition, than that of secondary schools. A greater emphasis on maintenance, cleaning and upkeep of WASH facilities is essential to ensure the health, hygiene and wellbeing of students and teachers.

Figure 4: General maintenance conditions of WASH facilities in Primary Schools

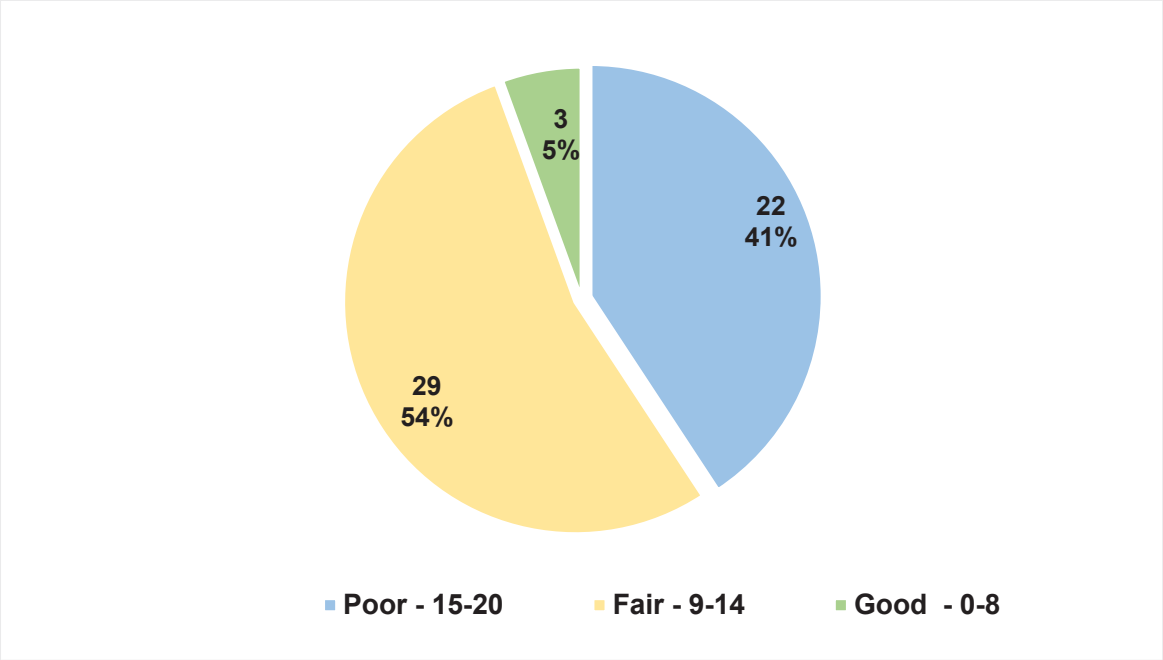


Figure 5: General maintenance conditions of WASH facilities in Secondary Schools

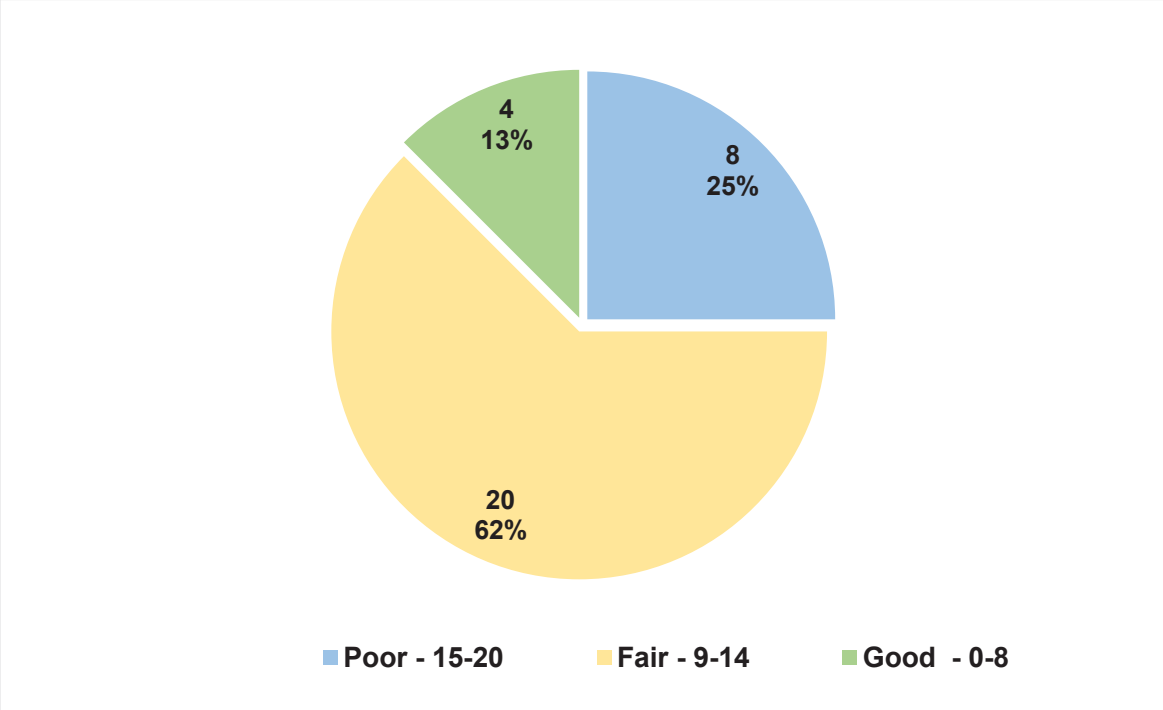
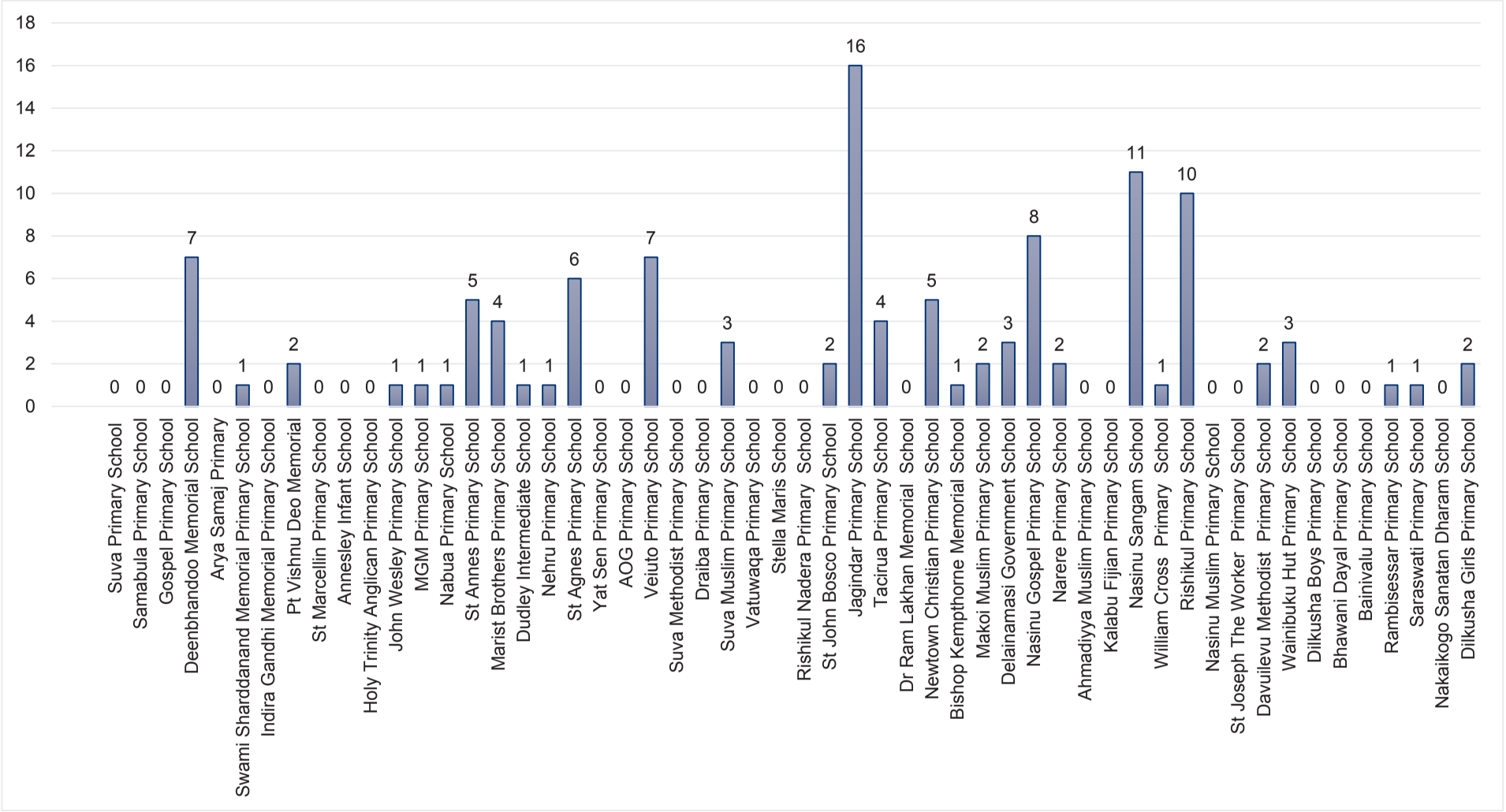


Figure 6: Number of additional toilets required in Primary Schools



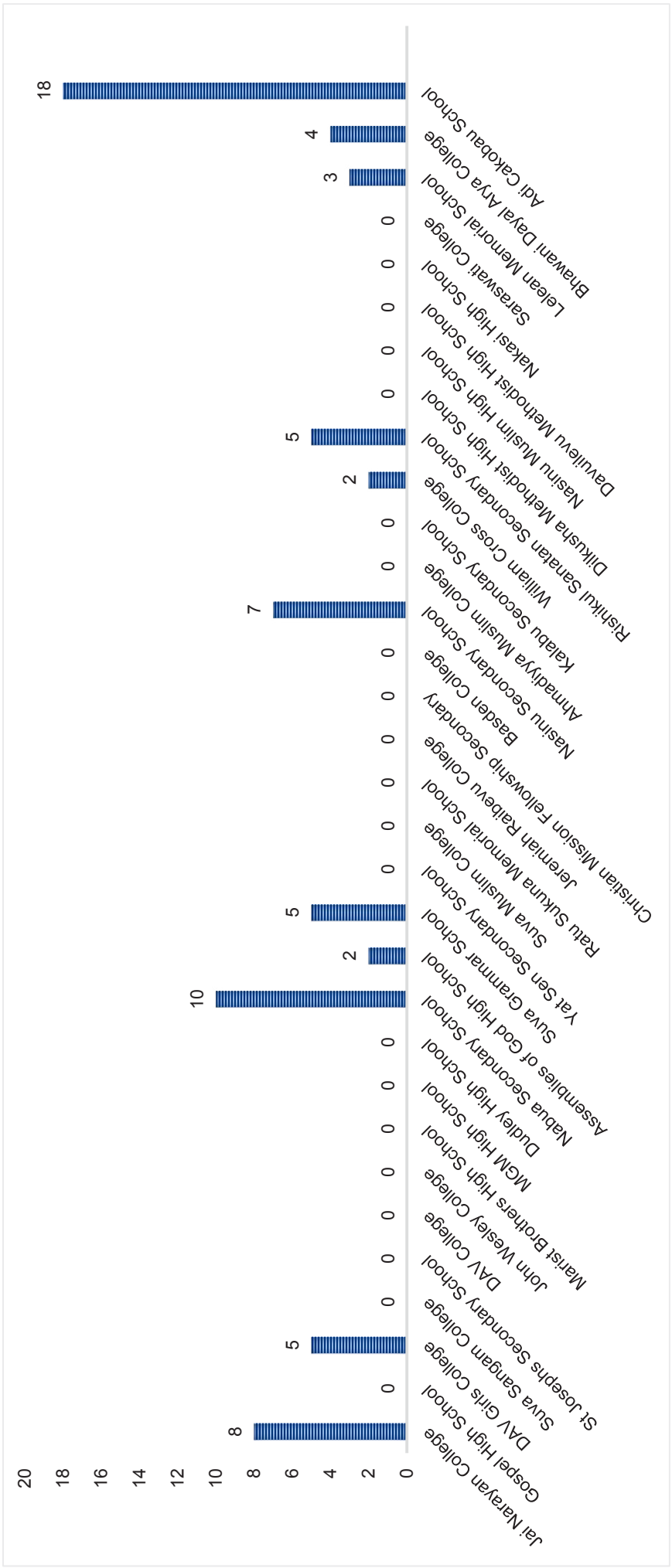


Figure 7: Number of additional toilets required in Secondary Schools

WASH facilities in poor condition, impacting MHM for girl students. During visual inspections at the schools to ascertain WASH facility adequacy with FNBC toilet to student ratios, WASH facilities were observed to be in poor condition. Many cubicles across the schools exhibited damaged toilet seats and cubicle doors, poor drainage, poor lighting and ventilation, damaged or missing taps and showerheads. Outside of required infrastructure-related maintenance, operational issues were also observed at some schools, including toilets not being cleaned properly, no soap available, and missing sanitary bins. This indicated a lack of regular maintenance, upkeep and cleaning of WASH facilities. These conditions can make MHM difficult, unsafe and unhygienic for girl students, impacting their school experience, attendance and academic performance. This negatively impacts on gender equality, further preventing girls from their equal access to hygiene and a means for sanitation, with long-term impacts into education and future livelihoods.

Poor accessibility of WASH facilities. None of the WASH facilities were observed to accommodate accessibility requirements for students that use wheelchairs. Although the disaggregated data shows a low number of students with disability enrolled at the schools in the Suva-Nausori area, schools that enrol students requiring wheelchairs or with diverse mobility needs are required to provide at least one accessible toilet and hygiene facilities, as per the MoE Minimum Standards on Water, Sanitation and Hygiene (WASH) in Schools Infrastructure 2012 (see Annex 6). From the visual inspections, it was observed that all toilet doors, pathways and toilet cubicles are not accessible to wheelchair users. Further details on accessible infrastructure observed at the schools is provided in Section 2.4.

2.4 Accessibility

Accessible infrastructure supports inclusive education. All persons with disability have a right to an education. This principle is enshrined in the Rights of Persons with Disabilities Act 2018.[4] Accessible school infrastructure is an important element of inclusive education for students with disability. Inaccessible school infrastructure can exclude students with disability, particularly those with diverse mobility needs, which hinders their engagement, attendance and participation. This is compounded by the existing marginalisation students with disability face in Pacific Island countries, with disproportionately lower numbers of students with disability completing school, having fewer years of education than students without disabilities, and being less likely to have basic literacy skills. Integration of students with disability with children within the community is also foundational towards supporting healthy development and relationships which all people should have access to. For this reason, it is critical to ensure students with disabilities are not excluded from the transformational benefits of education.[5]

Gaps in accessible school infrastructure. While this assessment could not assess all aspects of accessibility regarding students' with disability experience at the schools inspected, it provides a baseline to understand the current infrastructure gaps. Representatives from FDPF participated in selected inspections, supporting data collection, assessment and discussion. This provided additional insights regarding infrastructure needs for improved accessibility, based on the lived experiences of the FDPF representatives.

Accessibility of school infrastructure was assessed based on FNBC disability guidelines and the FDPF Access Audit Tool, as highlighted in table 6 and provided in Annex 6 and Annex 7. None of the 86 assessed provided adequate accessible infrastructure for students with disability, particularly those with diverse mobility needs or wheelchair-users. It should be noted that as of 2024, the total enrolment of students with disability across the 86 schools was 31 students out of a total of 56,908 students. The key gaps observed included terrain unsuitable for wheelchair usage, varying floor levels and heights within classrooms and across buildings, narrow doorway widths, and a lack of accessible WASH facilities. To address these gaps and work towards compliance with FNBC guidelines, the appropriate provision of ramps, handrails, and accessible toilet cubicles, as well as adjusted doorway, door and walkway widths are required at most of the schools inspected. A detailed review of accessibility and disability inclusion needs, paired with increased awareness of the benefits of accessible and universal design, can support addressing these gaps and ensuring an inclusive, safe and accessible educational environment for all students.

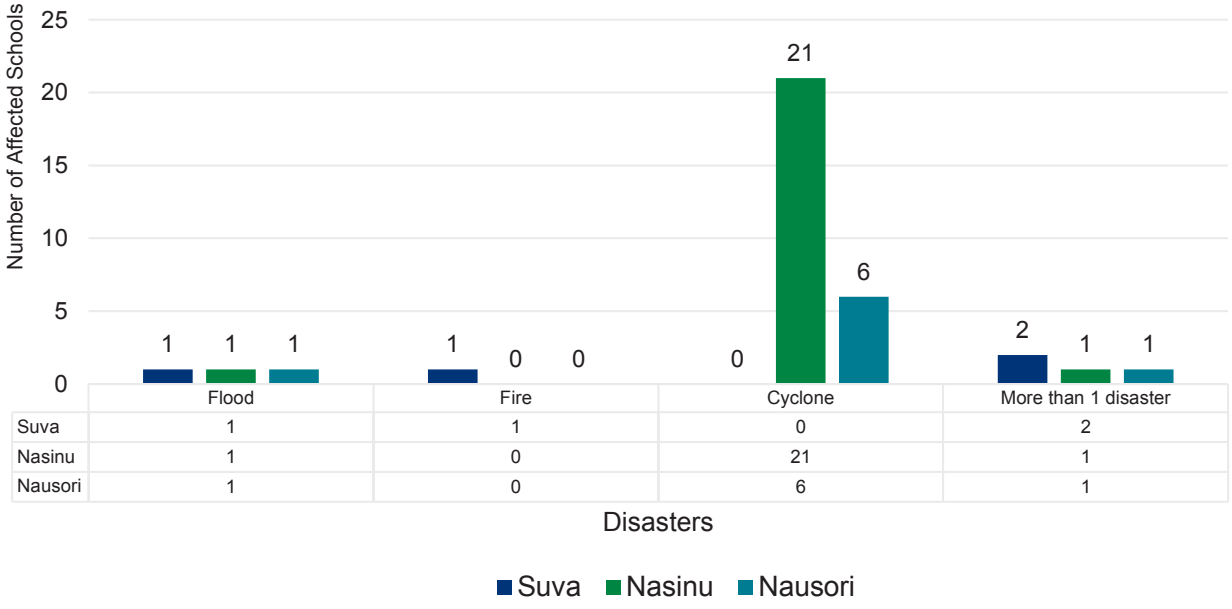
[4] Rights of Persons with Disabilities Act 2018, The Laws of Fiji, Office of the Attorney General, Government of the Republic of Fiji, 2018. RIGHTS OF PERSONS WITH DISABILITIES ACT 2018 - Laws of Fiji accessed 21 November 2024.
[5] Pacific Regional Inclusive Education Review, UNICEF, 2022. Pacific-IE-Report_2022.pdf accessed 20 November 2024.

2.5 Disaster Resilience

There is a need to strengthen disaster resilience in schools. Fiji faces increasing frequency and severity of extreme weather events, which can significantly impact livelihoods, infrastructure, education and health. School-aged children and adolescents are greatly affected by these disasters, through a loss in continuity in education, being forced to care for other children or earn money to support their families.[6] Extreme weather events will also increase interruptions to infrastructure operations and increase the risk of damage. In this context, schools become critical centres for refuge in times of disaster, providing additional space for people to seek refuge in addition to already capacity constrained relief centres. Best practice in the Pacific involves designing schools from the outset to withstand Category 5 cyclonic action and act as an evacuation centre. Existing schools, should, at a minimum, be equipped to withstand heavy rains and winds in the case they are used as evacuation centres, through retrofitting upgrades, proactive maintenance, and repairs.[7]

Cyclones are the most significant disaster threat in Suva-Nausori. This assessment considered disaster resilience of the schools based on visual inspections from ground, interviews with school staff, analysis of recent weather events in the Suva-Nausori area and disaster preparedness responses of the schools. Structural elements that could be inspected from ground were assessed against FNBC cyclone resistance guidelines and an NRW Cyclone Certificate Checklist, as described in 6 and provided in Annex 6 and Annex 8.

Figure 8: Disasters affecting Suva-Nausori schools



Cyclones were identified as the most significant disaster threat in the Suva-Nausori area, through interviews with school staff, and analysis of weather events from the past ten years in the Suva-Nausori area. Many of the schools reported experiencing low severity cyclones and flooding and were able to recover fully from the damage caused. Only three schools reported experiencing moderate to high severity cyclones, causing damage that they have not yet been able to recover from. These are the Assemblies of God High School (Annex 9 Report No. 57), the Vatuwaqa Primary School that also experienced a fire in 2022 (Annex 9 Report No. 50) and the Lelean Memorial School (Annex 9 Report No. 71). Schools also reported having disaster response and management plans in place.

[6] Disaster Risk Reduction in the Republic of Fiji – Status Report 2019, Asian Disaster Preparedness Center and United Nations Office for Disaster Risk Reduction, 2019. FIJI-10.15.2019-32pgs.indd accessed 21 November 2024.
[7] Thematic Report on Climate and Disaster-Resilient Infrastructure in the Pacific – Midterm Review of the Sendai Framework for Disaster Reduction 2015-2030, United Nations Office for Disaster Risk Reduction, 2023. Thematic Report on Climate and Disaster-Resilient Infrastructure in the Pacific accessed 21 November 2024.

Table 11: Summary of Disaster Resilience

Severity of Disaster	Low	Moderate	High	Evacuation Centre (YES)	Flood	Fire	Cyclone	More than 1 disaster
Suva	47	5	2	26	1	1	0	2
Nasinu	21	2	0	18	1	0	21	1
Nausori	6	2	1	5	1	0	6	1
Primary	50	3	1	31	2	1	47	3
Secondary	24	6	2	18	1	0	27	1

Figure 9: Severity of damages from disasters

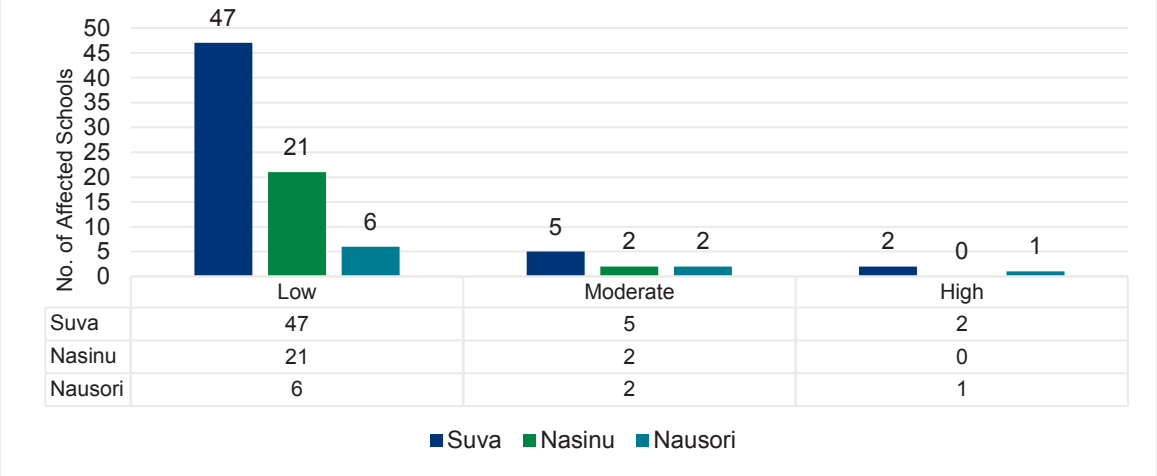
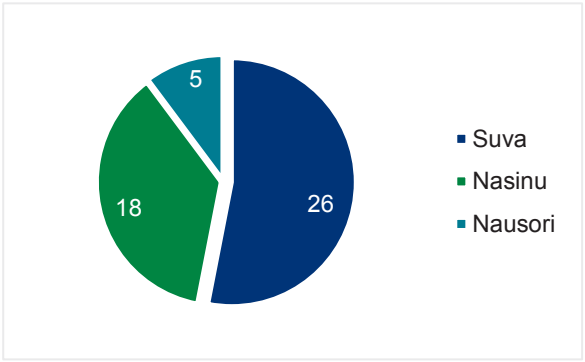


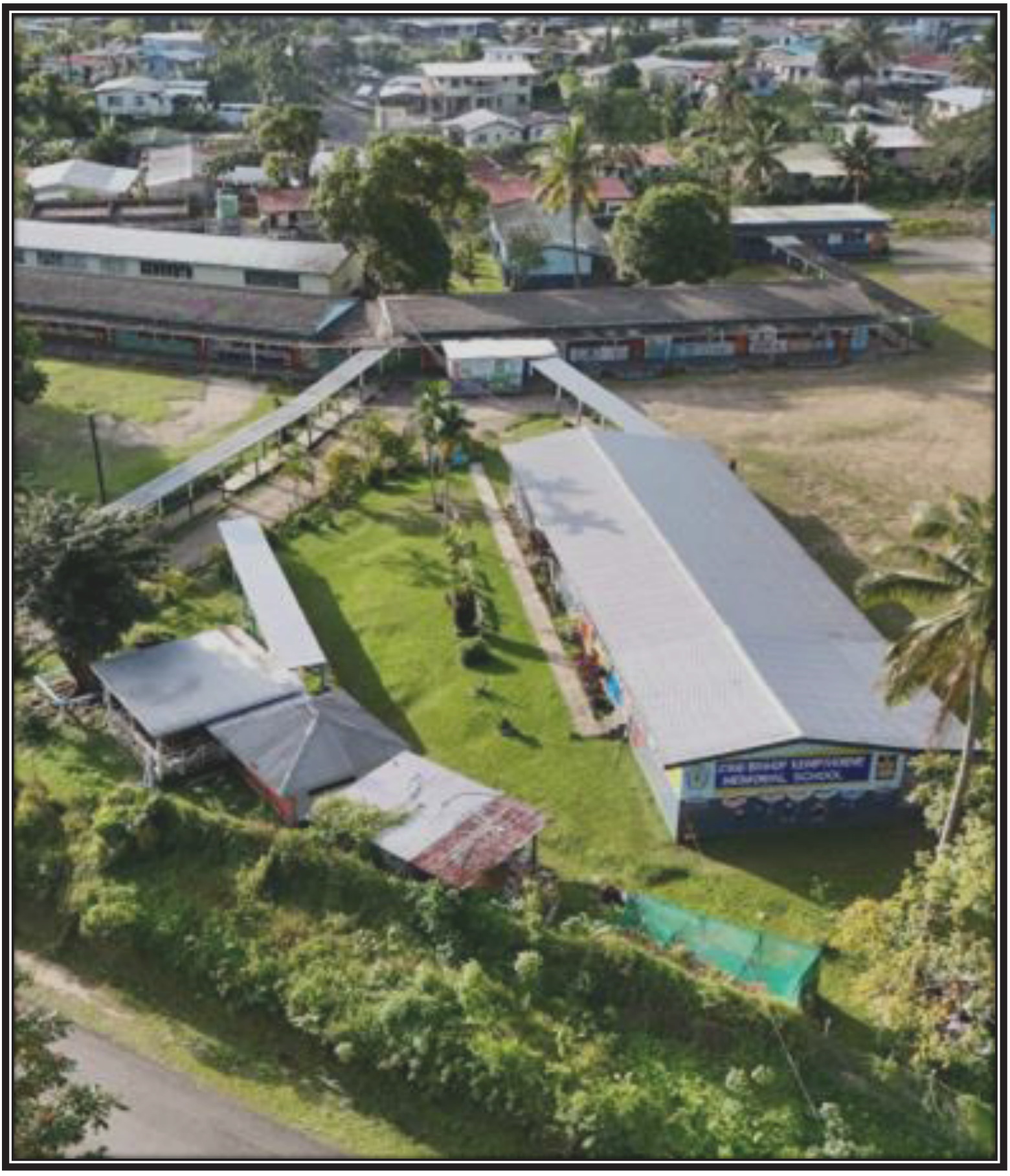
Figure 10: Evacuation Centres Based on Location



Over 50 per cent of schools are used as evacuation centres. Over 50 per cent of the schools inspected were observed to be used as evacuation centres, which can be attributed to the increasing frequency and severity of cyclones and extreme weather in the Suva-Nausori area. The broad locations and numbers of evacuation centres across the 86 schools is shown in the table below:

Retrofitting and upgrading for resilience. Due to the construction of majority of school buildings approximately 50 years ago, and much of the infrastructure reaching the end of design life, many schools exhibited conditions that no longer comply with FNBC guidelines for cyclone resistance, were not fit-for-purpose and showed signs of deterioration. This increases the vulnerability of the schools to damage in extreme weather events, hinders disaster resilience and reduces the safety and appropriateness of the school as an evacuation centre. From the visual inspections of the schools and analysis of the aerial drone imagery, the inspection team found that many schools have cyclone resistant roofing that display signs of corrosion. In many cases, cyclone-resistant roofing screws were not in use or displayed signs of corrosion, cyclone brackets were not used at window frames, and cyclone shutters were not in place. These conditions are not compliant with FNBC guidelines on cyclone resistance (see Annex 6), which stipulate that roof cladding should be free from rust and fastened using type 17 cyclonic screws, cyclone brackets to be fixed to every window frame, and adequate provision of cyclone shutters at windows.

Further investigation and attention can support deeper understanding of the level of upgrades required to achieve compliance the FNBC guidelines on cyclone resistance. As a starting point, regular maintenance and inspection of roof cladding, roofing nails, brackets and shutters, can help identify the magnitude of upgrades required and in which locations. In addition to this, low-value high-impact infrastructure gaps exist which can be readily addressed to enhance the disaster resilience of school buildings for community safety. These include fixing rusting roof cladding and roofing screws at most schools, providing cyclone shutters for windows, and installing cyclone brackets at window frames.



Bishop Kempthom Memorial Primary School

3 Indicative Pricing

Costing the recommendations made through this audit report was not included within the scope of works contracted by the consultant. True costs require more detailed site investigations, architectural and structural designs, and market testing.

To assist with planning, an indicative cost, as advised by a Fijian quantity surveyor, has been attributed to addressing two key components of the report:

- Cost to construct required WASH facilities, calculated on a standard rate of F$6,000/ square metre
- Cost to construct classrooms needed for schools identified as severely overcrowded, calculated on a standard rate of F$4,000/ square metre (with a provision of 1.5m^2/student)

WASH facilities. An additional 183 toilet cubicles are needed to meet the current FNBC specification. With a standard sizing of 2.5m^2 the following formula has been applied to cost this component of the report:

(Number of toilet cubicles needed X square metre per toilet cubicle) X m^2 cost

(183 X 2.5) X 6,000 = **F$2,745,000**

Additional classrooms are required in 60 of the 86 schools audited, of these, 28 schools are assessed as severely overcrowded and should be prioritised for additional infrastructure investment.

An additional 182 classrooms are needed to meet the current student population in these 28 priority schools, with a new classroom recommended on the following basis:

- once the school has 10+ students in any stream above its currency capacity
- with additional classrooms recommended at intervals of 40 students

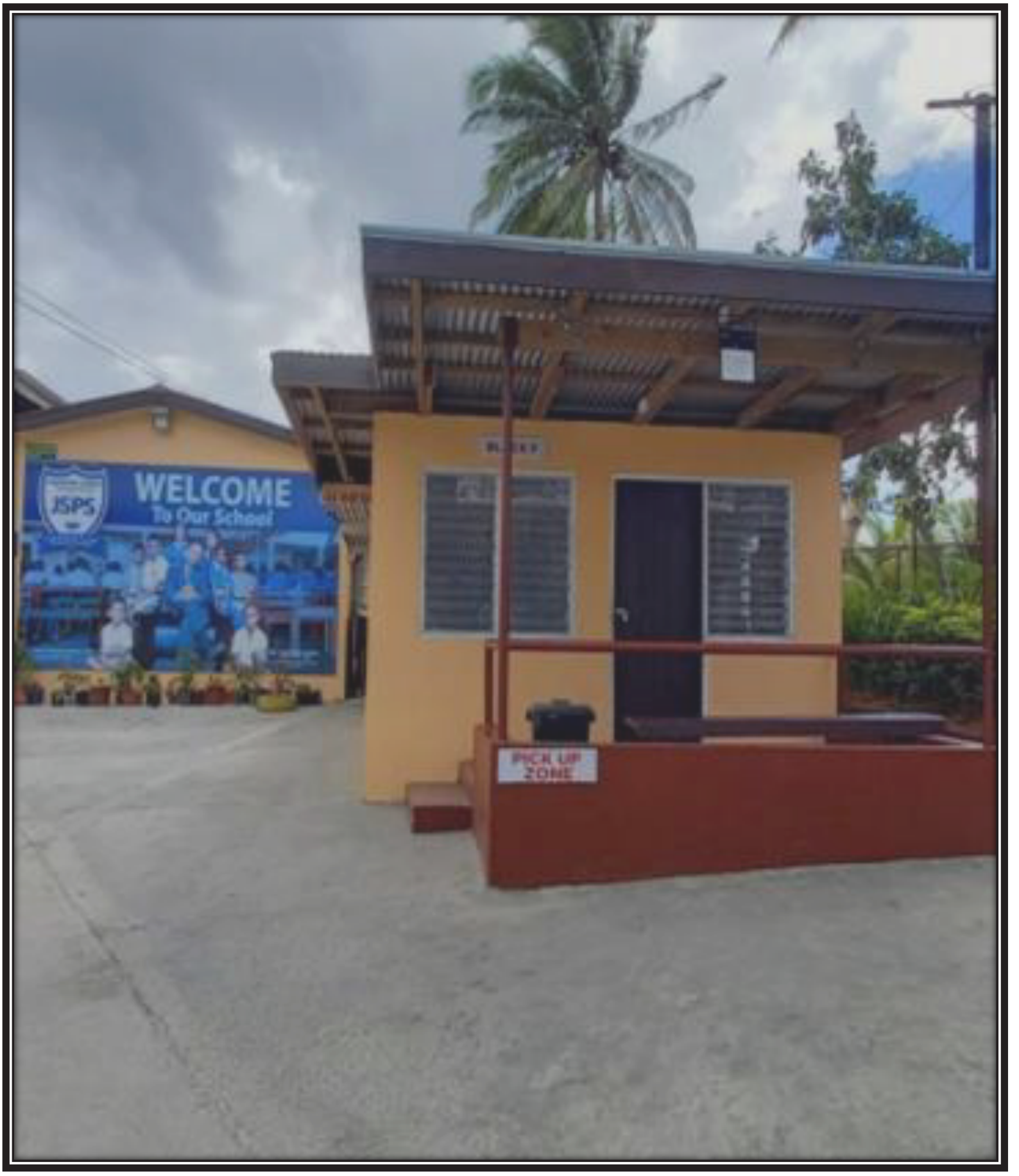
With an assumption that new classrooms will be 60m^2 and therefore each able to accommodate 40 students, the following formula has been applied to cost this component of the report:

(Number of new classrooms required X square metre sizing for new classroom) X m^2 cost

(182 X 60) X 4,000 = **F$43,680,000**

Costs identified above are indicative only. There are many variables that will impact true cost of implementing this report, including:

- Complexity of architectural designs and structural engineering.
- Site variables, including geotech engineering and earthworks requirements.
- Requirement for demolition of existing school buildings
- Decanting and temporary accommodation costs.
- Tender packaging and size of construction packages.
- Material availability and costs fluctuation.
- Method of procurement.
- Method of construction (pre-fabrication).
- Construction delays.
- Site supervision.



Jagindra Singh Primary School

4 School Prioritisation Plan

An indicative prioritisation plan (see below and Annex 5) has been derived from condition ratings assigned as part of the assessment of the existing condition of the school infrastructure. The indicative prioritisation plan is intended to support decision-making on how any future funding or focus areas should be prioritised.

It should be noted that the indicative prioritisation plan is a basic analysis of each school's existing conditions and has not been costed. Resourcing requirements, land availability, environmental concerns, school priorities, MoE priorities, verified demographic growth rates should be considered together to develop a contextualised prioritisation plan which provides a more holistic picture of each school.

The condition ratings used to categorise the schools in the prioritisation plan are as follows:

Table 12: Condition ratings for prioritisation plan

Priority rating	Definition
One	Urgent attention required. The school exhibits a combination of severe overcrowding, has a deficit of WASH facilities and/or is not structurally sound and needs to be demolished and replaced with a new building or rehabilitated.
Two	Upgrades are needed. Overcrowding is present and refurbishments are needed to bring the school infrastructure up to a good and compliant condition.
Three	The infrastructure is likely to be structurally sound. There are infrastructure investments that should be considered by School Management Committees.

The indicative prioritisation is based on results of the assessment and presents the schools in order of worst condition (requiring most critical or urgent attention) to best condition (requiring minimal upgrades to achieve compliance).

Of the 86 schools:

- 14 schools are assessed as priority one
- 40 schools are assessed as priority two
- 32 schools are assessed as priority three

Table 13: Schools priority listing with critical infrastructure needed

School	Priority	Critical infrastructure needed
Vatuwaqa Primary School	ONE	The structures have been damaged due to the fire. Urgent demolition and rebuilding is needed to ensure they meet the safety and structural integrity requirements. Additionally, strengthening the unstable structures is crucial to prevent future risks and to provide a safe, durable learning environment for the students.
Suva Primary School	ONE	8 additional classrooms are needed, WASH facilities – 2 male cubicles and 5 female cubicles.
Dudley Intermediate School	ONE	4 additional classrooms are needed along with accessible walkway, doorway, ramps, be added to the new and existing buildings.
Bainivalu Primary School	ONE	10 additional classrooms are needed. WASH facilities should also be considered due to the growing student population.
St Annes Primary School	ONE	8 additional classrooms are needed. Ensure school has sufficient land space available for construction which should be near to WASH facilities. WASH: 5 additional girls cubicles required to be constructed. School must ensure WASH facilities to be near classrooms and accessible by all students.
Nasinu Gospel Primary	ONE	9 additional classrooms needed. Class C fire extinguishers and 2no. 50m fire hose reels needed to cover whole school premises.
John Wesley Primary School	ONE	8 additional classrooms needed. WASH: 1 additional female cubicle needed. Install ramps for accessibility. Replace/fix rusted cladding to meet FNBC 1990 standards.
Samabula Primary School	ONE	Renovation to the existing educational facilities is needed
Lelean Memorial School	ONE	11 additional classrooms are needed. WASH Facilities: Female: 3 cubicles required

School	Priority	Critical infrastructure needed
Rishikul Primary School	ONE	12 additional classrooms are needed. WASH Facilities: Female: 10 cubicles required
Suva Methodist Primary School	ONE	3 additional classrooms needed along with accessible walkway, doorway, ramps be added to the new and existing buildings.
Assemblies of God High School	ONE	3 additional classrooms are needed along with accessible walkway, doorway, ramps be added to the new and existing buildings.
Adi Cakobau School	ONE	7 additional classrooms are needed. Upgrade tie down connections for the rest of the 8no. timber structures.
Davuilevu Methodist Primary	ONE	9 additional classrooms are needed along with accessible walkway, doorway, ramps be added to the new and existing buildings.
Nehru Primary School	TWO	7 additional classrooms are needed. WASH Facilities: Female: 1 cubicle required
Holy Trinity Anglican Primary School	TWO	7 additional classrooms are needed.
Suva Grammar School	TWO	6 additional classrooms are needed along with accessible walkway, doorway, ramps be added to the new and existing buildings.
Jagindar Primary School	TWO	8 additional classrooms are needed along with accessible walkway, doorway, ramps be added to the new and existing buildings. WASH: 5 male additional washroom cubicles and 11 female cubicles. Additional taps required.
Ratu Sukuna Memorial School	TWO	4 additional classrooms are needed. The school needs to engage an Engineer for Engineering certification of the structures and upgrade all firefighting equipment and obtain NFA Compliance.
Gospel Primary School	TWO	6 additional classrooms needed. Ensure school has sufficient land space available for construction which should be near to WASH facilities
Dudley High School	TWO	4 additional classrooms are needed along with accessible walkway, doorway, ramps be added to the new and existing buildings.
Nabua Secondary School	TWO	3 additional classrooms needed along with accessible walkway, doorway, ramps be added to the new and existing buildings.
Rishikul Sanatan Secondary School	TWO	6 additional classrooms needed. WASH Facilities: Female: 5 cubicles required
Marist Brothers High School	TWO	4 additional classrooms needed along with renovation to the existing educational facilities.
William Cross College	TWO	2 additional classrooms are needed. WASH facilities: 2 female cubicles.
MGM Primary School	TWO	6 additional classrooms needed and renovation to the existing educational facilities.
St Joseph the Worker	TWO	4 additional classrooms are needed.
Assemblies of God Primary	TWO	5 additional classrooms needed along with accessible walkway, doorway, ramps be added to the new and existing buildings.
Kalabu Secondary School	TWO	2 additional classrooms are needed. Disaster Resilience - replacement of roof cladding, roofing nails and permanent cyclone mesh shutters to be installed.
Dilkusha Methodist High School	TWO	1 additional classroom needed.
Nabua Primary School	TWO	3 additional classrooms needed. The existing building requires renovation to ensure it meets safety and structural integrity standards while also upgrading other facilities to enhance durability and functionality.
Gospel High School	TWO	4 additional classrooms needed. Ensure school has sufficient land space available for construction which should be near to WASH facilities
Nakasi High School	TWO	3 additional classroom needed. Replace/fix rusted cladding and create clear pathways for accessibility.
Tacirua Primary School	TWO	2 additional classrooms are needed. WASH Facilities: Female: 4 cubicles required

School	Priority	Critical infrastructure needed
St Agnes Primary School	TWO	3 additional classrooms needed. WASH facilities: 6 female cubicles (ensure rust-free cladding throughout the (school). Install cyclone brackets and ramps to meet accessibility and safety requirements.
St Marcellin Primary School	TWO	3 additional classrooms are needed along with accessible walkway, doorway, ramps be added to the new and existing buildings.
Marist Brothers Primary School	TWO	2 additional classrooms are needed. WASH Facilities: 4 male cubicles.
Bhawani Dayal Arya College	TWO	2 additional classrooms needed along with accessible walkway, doorway, ramps be added to the new and existing buildings.
DAV College	TWO	3 additional classrooms needed along with accessible walkway, doorway, ramps be added to the new and existing buildings.
Nakaikogo Sanatan Dharam School	TWO	3 additional classrooms needed. along with accessible walkway, doorway, ramps be added to the new and existing buildings Upgrade all firefighting equipment and obtain NFA Compliance
Bhawani Dayal Primary	TWO	4 additional classrooms needed along with accessible walkway, doorway, ramps be added to the new and existing buildings.
Jeremiah Raibevu College	TWO	3 additional classrooms are needed along with accessible walkway, doorway, ramps be added to the new and existing buildings.
Nasinu Sangam School	TWO	4 additional classrooms are needed along with accessible walkway, doorway, ramps be added to the new and existing buildings.
William Cross Primary	TWO	2 additional classrooms are needed. WASH Facilities: Female: 1 cubicle required
Pt Vishnu Deo Memorial	TWO	5 additional classrooms needed & new ablution block for Boys and Girls.
Wainibuku Hut Primary School	TWO	2 extra classrooms are needed. WASH Facilities: Female: 3
Bishop Kempthorne Memorial	TWO	3 additional classrooms needed along with accessible walkway, doorway, ramps be added to the new and existing buildings. Upgrade all fire fighting equipment and obtain NFA Compliance.
Draiba Primary School	TWO	1 additional classroom needed. Ensure school has sufficient land space available for construction which should be near to WASH facilities.
MGM High School	TWO	3 additional classrooms needed and renovation to the existing educational facilities.
Delainamasi Govt School	TWO	2 additional classrooms needed. WASH facilities: 3 female cubicles. Replace/fix rusted cladding and install cyclone-rated glazing/shutters. Ensure adequate purlin to top chord/rafter strapping, ramps, and clear pathways.
Ahmadiyya Muslim College	TWO	Accessible walkway, doorway, ramps be added to the new and existing buildings.
St John Bosco	TWO	2 additional classrooms needed along with accessible walkway, doorway, ramps be added to the new and existing buildings.
Basden College	TWO	Engage an Engineer for Engineering certification of the structures and upgrade all fire fighting equipment and obtain NFA Compliance.
John Wesley College	TWO	1 additional classroom needed.
Veiuto Primary School	THREE	5 additional classrooms needed & new ablution block for Boys and Girls.
Kalabu Fijian Primary School	THREE	1 additional classroom needed along with accessible walkway, doorway, ramps be added to the new and existing buildings. B2 timber building need upgrade work to meet cyclone standard.
Rambisessar Primary School	THREE	1 additional classroom needed. WASH Facilities: 2 female cubicles.
Annesley Infant School	THREE	Accessible walkway, doorway, ramps be added to the new and existing buildings.
Nasinu Secondary School	THREE	7 additional classrooms are needed.

School	Priority	Critical infrastructure needed
Arya Samaj Primary	THREE	Renovation required to the existing educational facilities.
Makoi Muslim Primary	THREE	WASH facilities : 2 female cubicles.
Ahmadiyya Muslim Primary	THREE	Renovation to the existing educational facilities is required.
Dr. Ram Lakhan Memorial	THREE	2 additional classrooms needed. Ensure school has sufficient land space available for construction which should be near to WASH facilities.
Rishikul Nadera Primary School	THREE	1 additional classroom is needed.
Newtown Christian Primary School	THREE	1 additional classroom needed. 4 feet ceiling tube lights with frame required for classrooms (total of 60no). Classroom doors to be replaced (total of 12no). Ablution block cubicle doors including jambs to be replaced. School will require 10no. Class C fire extinguishers and 4no. 50m fire hose reels to cover whole school premises.
Suva Muslim Primary School	THREE	1 additional classroom needed. WASH Facilities: 3 female cubicles.
Suva Sangam College	THREE	Accessible walkway, doorway, ramps be added to the new and existing buildings.
Indira Gandhi Memorial Primary School	THREE	Accessible walkway, doorway, ramps be added to the new and existing buildings.
Stella Maris School	THREE	Accessible walkway, doorway, ramps be added to the new and existing buildings.
Dilkusha Girls Primary	THREE	Disability ramp access need in all building.
Saraswati Primary School	THREE	WASH Facilities: 1 female cubicle.
Davuilevu Methodist High School	THREE	Accessible walkway, doorway, ramps be added to the new and existing buildings.
Jai Narayan College	THREE	2 additional classrooms needed. Ensure school has sufficient land space available for construction which should be near to WASH facilities.
Swami Sharddanand Memorial Primary School	THREE	WASH facilities: 1 female cubical.
Saraswati College	THREE	Since the WASH ratio is same as present girl's toilet cubicles, additional cubicles are required to support growing population.
Dilkusha Boys Primary	THREE	Accessible walkway, doorway, ramps be added to the new and existing buildings.
Narere Primary School	THREE	Accessible walkway, doorway, ramps be added to the new and existing buildings.
DAV Girls College	THREE	WASH Facilities: 5 female cubicles.
Deenbhandoo Memorial School	THREE	WASH facilities: 2 male cubicles and 5 female cubicles.
Nasinu Muslim Primary School	THREE	1 additional classroom needed. Add proper signage. Install wheelchair-accessible restrooms, ramps, and ensure disability access with appropriate signage and pathways. Replace/fix rusted cladding and install cyclone-rated glazing's/shutters.
Yat Sen Secondary School	THREE	An immediate structural analysis is required on the structural member to ensure the safety and structural integrity of the building
Yat Sen Primary School	THREE	Accessible walkway, doorway, ramps be added to the new and existing buildings.
Suva Muslim College	THREE	Accessible walkway, doorway, ramps be added to the new and existing buildings.
St Josephs Secondary School	THREE	Accessible walkway, doorway, ramps be added to the new and existing buildings.
Nasinu Muslim High School	THREE	Accessible walkway, doorway, ramps be added to the new and existing buildings.
Christian Mission Fellowship Secondary	THREE	Accessible walkway, doorway, ramps be added to the new and existing buildings.

Assemblies of God High School

5 Recommendations

Following the inspections, analysis and review of data, the following recommendations are put forward by a multidisciplinary infrastructure team, including architects and engineers. It is important to recognise the data collected, analysed and reviewed is taken at a single point in time and due to the schools being in active use. A full and thorough assessment of all buildings and/or schools (including invasive inspections, if necessary) would be prudent to confirm the full extent of existing conditions prior to any planned construction at any school.

The recommendations below are to be led by the Ministry of Education but require engagement from across Government, including the Ministries of Finance and Public works, and will require support from a broad range of development partners.

Recommendation one: adopt the Audit Report

This report provides a comprehensive infrastructure audit of schools located in the Suva-Nausori area. A rigorous multi-criteria assessment was developed to enable comparison of infrastructure needs between schools. The final prioritisation list was produced using the evidence collected from physical assessments of each school.

It is recommended that the report be adopted by GoF as an evidence base for making decisions about infrastructure investments at schools in the Suva-Nausori area.

Recommendation two: distribute the individual school reports

Included in the report are comprehensive individual infrastructure assessments for each school. The individual assessments provide a detailed breakdown of the infrastructure needs of all existing buildings in the school and recommendations relevant to school master planning.

It is recommended that the School Management Committee of each school be provided with its individual infrastructure assessment report to help inform school maintenance and capital works planning.

It is also recommended that each individual infrastructure assessment report be uploaded and stored on Fiji Education Management Information System (FEMIS).

Recommendation three: identify funding sources for urgent remediation at priority schools

This report provides the information needed to develop infrastructure remediation plans for each school.

With an initial focus on ‘priority one’ schools, it is recommended that GoF, in partnership with its development partners, identify funding sources to address the most critical upgrades needed to:

a) Reduce classroom overcrowding
b) Increase the number and quality of WASH facilities
c) Improve general maintenance and strengthen cyclone resilience of buildings
d) Improve disability accessibility of school facilities.

Remediation plans should be categorised as urgent, intermediate or long-term, and should include a demolition and decanting plan for all schools to identify buildings in poor condition which can be demolished, and areas where existing classrooms can be decanted (and whether temporary classrooms will be required). This will allow for greater flexibility in master planning new classrooms, WASH facilities, staff rooms and accessibility to address compliance gaps.

Upgrades to WASH facilities at schools should be prioritised. This is the greatest area of need and is critical to student retention, particularly for female students.

Recommendation four: legislate a standard size requirement for classrooms in Fiji

The FNBC and the MoE specify vastly different sizing on a student-to-square metre ratio. The inconsistency of Government policy makes it challenging to accurately assess the prevalence of classroom overcrowding.

It is recommended that a single, agreed, student-to-square metre ratio is developed. A ratio of 1.5m^2/student is recommended as an appropriate benchmark for the Fiji context. This specification aligns with classroom sizing in several middle-high income countries globally.

Compliance with the agreed sizing should be enforced for all new infrastructure investment at schools in Fiji.

Recommendation five: deliver maintenance training to School Management Committees

General maintenance of school facilities has been identified as a common challenge, particularly as school infrastructure reaches the end of its design life.

In partnership with development partners, it is recommended that a '*maintenance essentials'* workshop be designed and delivered to all School Management Committees. The training should focus on how to develop maintenance schedules, pipelines and budgeting.

The training should be designed and delivered in partnership with the MoE Asset Management Unit.

Recommendation six: develop strategy to address infrastructure accessibility limitations

The inaccessibility of infrastructure was identified as prohibitive for students with disability to access mainstream education at schools audited in the Suva-Nausori area. Retrofitting ramps and accessible facilities to existing schools would be cost prohibitive and structurally challenging. Any new classrooms should therefore incorporate accessible infrastructure at the outset in line with FNBC requirements and the Global Inclusive Education Standard.

It is recommended that all new infrastructure investment at schools in Fiji be required to meet the Global Inclusive Education Standard, as it applies to school infrastructure.

Jai Narayan College

Annex 1 – List of Schools Assessed

The schools included in this assessment, and the corresponding individual assessment report numbers, are listed in the table below.

Table 14: List of schools assessed

Report No.	School Name	School type	School location
1	Ahmadiyya Muslim Primary School	Primary	Nasinu
2	Annesley Infant School	Primary	Suva
3	Assemblies of God Primary School	Primary	Suva
4	Arya Samaj Primary	Primary	Suva
5	Bainivalu Primary School	Primary	Nasinu
6	Bhawani Dayal Primary School	Primary	Nasinu
7	Bishop Kempthorne Memorial School	Primary	Suva
8	Davuilevu Methodist Primary School	Primary	Nasinu
9	Deenbhandoo Memorial School	Primary	Suva
10	Delainamasi Government School	Primary	Nasinu
11	Dilkusha Boys Primary School	Primary	Nausori
12	Dilkusha Girls Primary School	Primary	Nausori
13	Dr Ram Lakhan Memorial School	Primary	Suva
14	Draiba Primary School	Primary	Suva
15	Dudley Intermediate School	Primary	Suva
16	Gospel Primary School	Primary	Suva
17	Holy Trinity Anglican Primary School	Primary	Suva
18	Indira Gandhi Memorial Primary School	Primary	Suva
19	Jagindar Primary School	Primary	Suva
20	John Wesley Primary School	Primary	Suva
21	Kalabu Fijian Primary School	Primary	Suva
22	Makoi Muslim Primary School	Primary	Nasinu
23	Marist Brothers Primary School	Primary	Suva
24	MGM Primary School	Primary	Suva
25	Nabua Primary School	Primary	Suva
26	Nakaikogo Sanatan Dharam School	Primary	Nausori
27	Narere Primary School	Primary	Suva
28	Nasinu Gospel Primary School	Primary	Suva
29	Nasinu Muslim Primary School	Primary	Nasinu
30	Nasinu Sangam School	Primary	Nasinu
31	Nehru Primary School	Primary	Suva
32	Newtown Christian Primary School	Primary	Suva
33	Pt Vishnu Deo Memorial	Primary	Suva

Report No.	School Name	School type	School location
34	Rambisessar Primary School	Primary	Suva
35	Rishikul Nadera Primary School	Primary	Nasinu
36	Rishikul Primary School	Primary	Nasinu
37	Samabula Primary School	Primary	Suva
38	Saraswati Primary School	Primary	Nausori
39	St Agnes Primary School	Primary	Suva
40	St Annes Primary School	Primary	Suva
41	St John Bosco Primary School	Primary	Suva
42	St Joseph The Worker Primary School	Primary	Nasinu
43	St Marcellin Primary School	Primary	Suva
44	Stella Maris School	Primary	Suva
45	Suva Methodist Primary School	Primary	Suva
46	Suva Muslim Primary School	Primary	Suva
47	Suva Primary School	Primary	Suva
48	Swami Sharddanand Memorial Primary School	Primary	Suva
49	Tacirua Primary School	Primary	Suva
50	Vatuwaqa Primary School	Primary	Suva
51	Veiuto Primary School	Primary	Suva
52	Wainibuku Hut Primary School	Primary	Nasinu
53	William Cross Primary School	Primary	Nasinu
54	Yat Sen Primary School	Primary	Suva
55	Adi Cakobau School	Secondary	Nausori
56	Ahmadiyya Muslim College	Secondary	Nasinu
57	Assemblies of God High School	Secondary	Suva
58	Basden College	Secondary	Suva
59	Bhawani Dayal Arya College	Secondary	Nasinu
60	Christian Mission Fellowship Secondary	Secondary	Suva
61	DAV College	Secondary	Suva
62	DAV Girls College	Secondary	Suva
63	Davuilevu Methodist High School	Secondary	Nasinu
64	Dilkusha Methodist High School	Secondary	Nausori
65	Dudley High School	Secondary	Suva
66	Gospel High School	Secondary	Suva
67	Jai Narayan College	Secondary	Suva
68	Jeremiah Raibevu College	Secondary	Suva
69	John Wesley College	Secondary	Suva
70	Kalabu Secondary School	Secondary	Suva
71	Lelean Memorial School	Secondary	Nausori

Report No.	School Name	School type	School location
72	Marist Brothers High School	Secondary	Suva
73	MGM High School	Secondary	Suva
74	Nabua Secondary School	Secondary	Suva
75	Nakasi High School	Secondary	Nasinu
76	Nasinu Muslim High School	Secondary	Nasinu
77	Nasinu Secondary School	Secondary	Suva
78	Ratu Sukuna Memorial School	Secondary	Suva
79	Rishikul Sanatan Secondary School	Secondary	Nasinu
80	Saraswati College	Secondary	Suva
81	St Josephs Secondary School	Secondary	Suva
82	Suva Grammar School	Secondary	Suva
83	Suva Muslim College	Secondary	Suva
84	Suva Sangam College	Secondary	Suva
85	William Cross College	Secondary	Nasinu
86	Yat Sen Secondary School	Secondary	Suva

Annex 2 – General Overview

Table 15: General Overview of Schools

	Number of additional classrooms	Number of additional boys toilets	Number of additional girls toilets	Disability accessibility	Used as an evacuation centre	Flood	Fire	Cyclone	More than 1 disaster
Primary Schools	168	17	97	54	31	2	1	47	3
Primary Schools (%) / 54	72.22%	13%	50%	100%	57%	4%	2%	87%	6%
Secondary Schools	81	2	67	32	18	1	0	27	1
Secondary Schools (%) / 32	65.36%	3%	34%	100%	56%	3%	0%	84%	3%
Total (%) / 86	69.76%	9%	44%	100%	57%	3%	1%	86%	5%

Current Infrastructure Condition of Schools

Primary Schools

Table 16: Worst 10 Current Infrastructure Condition of Primary Schools

Rank	Schools	Structural Integrity (10%)	Maintenance (10%)	Disaster Resilience (10%)	TOTAL
1 - Worst	Suva Primary School	10	10	10	30
2	Vatuwaqa Primary School	10	10	10	30
3	Nasinu Sangam School	9	8	9	26
4	Arya Samaj Primary	9	7	9	25
5	AOG Primary School	7	8	10	25
6	Suva Methodist Primary School	8	8	9	25
7	St Marcellin Primary School	8	7	9	24
8	Annesley Infant School	8	6	10	24
9	Dudley Intermediate School	8	7	9	24
10	John Wesley Primary School	5	8	10	23

Table 17: Best 10 Current Infrastructure Condition of Primary Schools

Rank	Schools	Structural Integrity (10%)	Maintenance (10%)	Disaster Resilience (10%)	TOTAL
1 - Best	Pt Vishnu Deo Memorial	5	0	0	5
2	Veiuto Primary School	5	0	0	5
3	Suva Muslim Primary School	0	0	5	5
4	Nasinu Muslim Primary School	0	5	5	10
5	Deenbhandoo Memorial School	5	0	7	12
6	Dilkusha Girls Primary School	4	5	5	14
7	MGM Primary School	5	5	5	15
8	Rishikul Nadera Primary School	5	5	5	15
9	Newtown Christian Primary School	5	5	5	15
10	Narere Primary School	5	5	5	15

Secondary Schools

Table 18: Worst 10 Current Infrastructure Condition of Secondary Schools

Rank	Schools	Structural Integrity (10%)	Maintenance (10%)	Disaster Resilience (10%)	TOTAL
1 - Worst	Ahmadiyya Muslim College	9	9	9	27
2	Basden College	8	9	9	26
3	Kalabu Secondary School	8	9	9	26
4	Assemblies of God High School	8	9	8	25
5	Lelean Memorial School	8	8	8	24
6	John Wesley College	5	8	10	23
7	Jeremiah Raibevu College	8	8	7	23
8	Ratu Sukuna Memorial School	7	7	8	22
9	Yat Sen Secondary School	6	9	6	21
10	Nasinu Secondary School	8	5	8	21

Best 10 Current Infrastructure Condition of Secondary Schools

Table 19: Best 10 Current Infrastructure Condition of Secondary Schools

Rank	Schools	Structural Integrity (10%)	Maintenance (10%)	Disaster Resilience (10%)	TOTAL
1 - Best	Christian Mission Fellowship Secondary	0	0	0	0
2	Nasinu Muslim High School	1	1	2	4
3	St Josephs Secondary School	0	0	5	5
4	Suva Muslim College	0	0	5	5
5	DAV Girls College	5	0	5	10
6	Jai Narayan College	2	5	5	12
7	DAV College	0	5	7	12
8	Dudley High School	3	5	5	13
9	MGM High School	5	5	5	15
10	Rishikul Sanatan Secondary School	5	5	5	15

Annex 3 – Individual Ratings Per School

School	WASH - Standards Compliance (10%)	Rating	WASH Quality (10%)	Rating	Structural Integrity (10%)	Rating	Structural Maintenance (10%)	Rating	Disability Accessibility (10%)	Rating	Disaster Resilience (10%)	Rating	Total Criteria (100%)	Rating
Vatuwaqa Primary School	10	POOR	10	POOR	10	POOR	10	POOR	10	POOR	10	POOR	100	POOR
Suva Primary School	10	POOR	9	POOR	10	POOR	10	POOR	10	POOR	10	POOR	99	POOR
Dudley Intermediate School	9	POOR	8	POOR	8	POOR	7	FAIR	10	POOR	9	POOR	91	POOR
Bainivalu Primary School	10	POOR	6	FAIR	7	FAIR	7	FAIR	10	POOR	5	GOOD	85	POOR
St Annes Primary School	8	POOR	5	GOOD	5	GOOD	9	POOR	9	POOR	8	POOR	84	POOR
John Wesley Primary School	5	GOOD	7	FAIR	5	GOOD	8	POOR	8	POOR	10	POOR	83	POOR
Lelean Memorial School	8	POOR	10	POOR	8	POOR	8	POOR	6	FAIR	8	POOR	83	POOR
Assemblies of God High School	8	POOR	9	POOR	8	POOR	9	POOR	10	POOR	8	POOR	83	POOR
Nehru Primary School	10	POOR	5	GOOD	6	FAIR	5	GOOD	10	POOR	5	GOOD	81	POOR
Nasinu Gospel Primary	10	POOR	5	GOOD	8	POOR	5	GOOD	10	POOR	5	GOOD	81	POOR
Rishikul Primary School	10	POOR	5	GOOD	5	GOOD	5	GOOD	10	POOR	5	GOOD	80	POOR
William Cross Primary	10	POOR	6	FAIR	8	POOR	6	FAIR	10	POOR	5	GOOD	80	POOR
Suva Methodist Primary School	8	POOR	8	POOR	8	POOR	8	POOR	10	POOR	9	POOR	80	POOR
Indira Gandhi Memorial Primary School	7	FAIR	5	GOOD	5	GOOD	5	GOOD	10	POOR	7	FAIR	79	FAIR
Nasinu Sangam School	6	FAIR	10	POOR	9	POOR	8	POOR	10	POOR	9	POOR	79	FAIR
Kalabu Secondary School	3	GOOD	8	POOR	8	POOR	9	POOR	8	POOR	9	POOR	79	FAIR
Davuilevu Methodist Primary	6	FAIR	5	GOOD	6	FAIR	5	GOOD	8	POOR	9	POOR	78	FAIR

School	WASH - Standards Compliance (10%)	Rating	WASH Quality (10%)	Rating	Structural Integrity (10%)	Rating	Structural Maintenance (10%)	Rating	Disability Accessibility (10%)	Rating	Disaster Resilience (10%)	Rating	Total Criteria (100%)	Rating
Holy Trinity Anglican Primary School	0	GOOD	8	POOR	7	FAIR	7	FAIR	10	POOR	8	POOR	78	FAIR
Nasinu Secondary School	7	FAIR	5	GOOD	8	POOR	5	GOOD	9	POOR	8	POOR	78	FAIR
Adi Cakobau School	10	POOR	5	GOOD	8	POOR	5	GOOD	10	POOR	5	GOOD	78	FAIR
Rishikul Nadera Primary School	5	GOOD	6	FAIR	5	GOOD	5	GOOD	10	POOR	5	GOOD	76	FAIR
Jagindar Primary School	8	POOR	6	FAIR	6	FAIR	7	FAIR	8	POOR	6	FAIR	76	FAIR
MGM Primary School	7	FAIR	5	GOOD	5	GOOD	5	GOOD	10	POOR	5	GOOD	75	FAIR
Suva Grammar School	5	GOOD	8	POOR	8	POOR	5	GOOD	10	POOR	7	FAIR	75	FAIR
Dudley High School	8	POOR	8	POOR	9	POOR	5	GOOD	10	POOR	7	FAIR	75	FAIR
Stella Maris School	6	FAIR	5	GOOD	6	FAIR	5	GOOD	9	POOR	8	POOR	74	FAIR
Nakaikogo Sanatan Dharam School	7	FAIR	6	FAIR	5	GOOD	5	GOOD	10	POOR	8	POOR	74	FAIR
St Marcellin Primary School	5	GOOD	5	GOOD	8	POOR	7	FAIR	10	POOR	9	POOR	73	FAIR
Kalabu Fijian Primary School	6	FAIR	6	FAIR	7	FAIR	7	FAIR	10	POOR	6	FAIR	72	FAIR
St Joseph the Worker	10	POOR	8	POOR	5	GOOD	8	POOR	9	POOR	5	GOOD	72	FAIR
Ratu Sukuna Memorial School	7	FAIR	8	POOR	7	FAIR	7	FAIR	10	POOR	8	POOR	72	FAIR
Gospel Primary School	10	POOR	5	GOOD	5	GOOD	6	FAIR	10	POOR	5	GOOD	71	FAIR
Marist Brothers High School	5	GOOD	8	POOR	6	FAIR	8	POOR	10	POOR	6	FAIR	71	FAIR
Assemblies of God Primary	5	GOOD	5	GOOD	9	POOR	7	FAIR	10	POOR	9	POOR	69	FAIR
St Agnes Primary School	8	POOR	8	POOR	6	FAIR	5	GOOD	9	POOR	10	POOR	69	FAIR

School	WASH - Standards Compliance (10%)	Rating	WASH Quality (10%)	Rating	Structural Integrity (10%)	Rating	Structural Maintenance (10%)	Rating	Disability Accessibility (10%)	Rating	Disaster Resilience (10%)	Rating	Total Criteria (100%)	Rating
Tacirua Primary School	10	POOR	7	FAIR	8	POOR	6	FAIR	10	POOR	8	POOR	69	FAIR
Rishikul Sanatan Secondary School	10	POOR	5	GOOD	5	GOOD	5	GOOD	10	POOR	5	GOOD	68	FAIR
Nabua Secondary School	5	GOOD	8	POOR	8	POOR	6	FAIR	10	POOR	6	FAIR	68	FAIR
Wainibuku Hut Primary School	10	POOR	6	FAIR	6	FAIR	5	GOOD	10	POOR	5	GOOD	67	FAIR
Nabua Primary School	7	FAIR	7	FAIR	7	FAIR	7	FAIR	10	POOR	9	POOR	66	FAIR
Jeremiah Raibevu College	5	GOOD	7	FAIR	8	POOR	8	POOR	5	GOOD	7	FAIR	64	FAIR
Bhawani Dayal Primary	2	GOOD	5	GOOD	7	FAIR	5	GOOD	10	POOR	7	FAIR	63	FAIR
Marist Brothers Primary School	8	POOR	8	POOR	7	FAIR	8	POOR	8	POOR	8	POOR	63	FAIR
Pt Vishnu Deo Memorial	10	POOR	5	GOOD	5	GOOD	0	GOOD	10	POOR	0	GOOD	62	FAIR
Bishop Kempthorne Memorial	7	FAIR	5	GOOD	6	FAIR	5	GOOD	7	FAIR	8	POOR	61	FAIR
St John Bosco	6	FAIR	7	FAIR	7	FAIR	6	FAIR	8	POOR	7	FAIR	61	FAIR
MGM High School	5	GOOD	5	GOOD	5	GOOD	5	GOOD	10	POOR	5	GOOD	61	FAIR
Gospel High School	5	GOOD	5	GOOD	5	GOOD	7	FAIR	10	POOR	5	GOOD	61	FAIR
Nakasi High School	6	FAIR	6	FAIR	6	FAIR	7	FAIR	7	FAIR	6	FAIR	61	FAIR
Delainamasi Govt School	10	POOR	5	GOOD	5	GOOD	5	GOOD	6	FAIR	10	POOR	60	FAIR
Ahmadiyya Muslim Primary	6	FAIR	5	GOOD	6	FAIR	6	FAIR	10	POOR	9	POOR	60	FAIR
Rambisessar Primary School	10	POOR	6	FAIR	5	GOOD	5	GOOD	10	POOR	5	GOOD	59	GOOD
Draiba Primary School	7	FAIR	8	POOR	8	POOR	8	POOR	10	POOR	6	FAIR	59	GOOD
Samabula Primary School	5	GOOD	5	GOOD	7	FAIR	7	FAIR	10	POOR	8	POOR	58	GOOD

School	WASH - Standards Compliance (10%)	Rating	WASH Quality (10%)	Rating	Structural Integrity (10%)	Rating	Structural Maintenance (10%)	Rating	Disability Accessibility (10%)	Rating	Disaster Resilience (10%)	Rating	Total Criteria (100%)	Rating
William Cross College	10	POOR	6	FAIR	6	FAIR	5	GOOD	10	POOR	5	GOOD	58	GOOD
Basden College	7	FAIR	6	FAIR	8	POOR	9	POOR	10	POOR	9	POOR	58	GOOD
Dr. Ram Lakhan Memorial	5	GOOD	5	GOOD	5	GOOD	5	GOOD	6	FAIR	9	POOR	57	GOOD
Bhawani Dayal Arya College	6	FAIR	6	FAIR	6	FAIR	7	FAIR	10	POOR	5	GOOD	57	GOOD
John Wesley College	5	GOOD	7	FAIR	5	GOOD	8	POOR	8	POOR	10	POOR	56	GOOD
Veiuto Primary School	8	POOR	5	GOOD	5	GOOD	0	GOOD	10	POOR	0	GOOD	55	GOOD
Swami Sharddanand Memorial Primary School	7	FAIR	6	FAIR	5	GOOD	6	FAIR	7	FAIR	7	FAIR	54	GOOD
DAV College	0	GOOD	9	POOR	0	GOOD	5	GOOD	10	POOR	7	FAIR	54	GOOD
Dilkusha Boys Primary	5	GOOD	5	GOOD	5	GOOD	6	FAIR	10	POOR	5	GOOD	53	GOOD
Annesley Infant School	5	GOOD	7	FAIR	8	POOR	6	FAIR	10	POOR	10	POOR	52	GOOD
Ahmadiyya Muslim College	7	FAIR	6	FAIR	9	POOR	9	POOR	10	POOR	9	POOR	50	GOOD
Dilkusha Girls Primary	7	FAIR	8	POOR	4	GOOD	5	GOOD	10	POOR	5	GOOD	49	GOOD
Davuilevu Methodist High School	5	GOOD	5	GOOD	6	FAIR	5	GOOD	10	POOR	8	POOR	49	GOOD
Arya Samaj Primary	5	GOOD	7	FAIR	5	GOOD	8	POOR	8	POOR	10	POOR	48	GOOD
Narere Primary School	10	POOR	5	GOOD	5	GOOD	5	GOOD	6	FAIR	5	GOOD	46	GOOD
Dilkusha Methodist High School	5	GOOD	5	GOOD	5	GOOD	5	GOOD	8	POOR	5	GOOD	46	GOOD
Deenbhandoo Memorial School	10	POOR	0	GOOD	5	GOOD	0	GOOD	10	POOR	7	FAIR	45	GOOD
Newtown Christian Primary School	5	GOOD	5	GOOD	5	GOOD	5	GOOD	10	POOR	5	GOOD	45	GOOD
Jai Narayan College	6	FAIR	4	GOOD	2	GOOD	5	GOOD	7	FAIR	5	GOOD	44	GOOD

School	WASH - Standards Compliance (10%)	Rating	WASH Quality (10%)	Rating	Structural Integrity (10%)	Rating	Structural Maintenance (10%)	Rating	Disability Accessibility (10%)	Rating	Disaster Resilience (10%)	Rating	Total Criteria (100%)	Rating
Makoi Muslim Primary	10	POOR	6	FAIR	6	FAIR	6	FAIR	10	POOR	5	GOOD	43	GOOD
Suva Sangam College	5	GOOD	7	FAIR	7	FAIR	6	FAIR	10	POOR	5	GOOD	43	GOOD
Suva Muslim Primary School	6	FAIR	5	GOOD	5	GOOD	5	GOOD	9	POOR	5	GOOD	42	GOOD
Saraswati Primary School	5	GOOD	5	GOOD	5	GOOD	5	GOOD	10	POOR	9	POOR	39	GOOD
Saraswati College	5	GOOD	5	GOOD	6	FAIR	5	GOOD	10	POOR	7	FAIR	38	GOOD
Nasinu Muslim Primary School	10	POOR	0	GOOD	0	GOOD	5	GOOD	7	FAIR	5	GOOD	36	GOOD
DAV Girls School	10	POOR	5	GOOD	5	GOOD	0	GOOD	10	POOR	5	GOOD	35	GOOD
Suva Muslim College	6	FAIR	5	GOOD	0	GOOD	0	GOOD	6	FAIR	5	GOOD	31	GOOD
Yat Sen Secondary School	0	GOOD	5	GOOD	5	GOOD	5	GOOD	9	POOR	5	GOOD	29	GOOD
Yat Sen Primary School	0	GOOD	0	GOOD	5	GOOD	5	GOOD	10	POOR	6	FAIR	26	GOOD
St Josephs Secondary School	0	GOOD	0	GOOD	0	GOOD	0	GOOD	10	POOR	5	GOOD	18	GOOD
Nasinu Muslim High School	0	GOOD	2	GOOD	4	GOOD	1	GOOD	6	FAIR	2	GOOD	15	GOOD
Christian Mission Fellowship Secondary	0	GOOD	0	GOOD	0	GOOD	0	GOOD	10	POOR	0	GOOD	13	GOOD

Annex 4 – Disaster Resilience Analysis Per School

Name	Type	Location	Evacuation centre	Disaster Management Plan	Severity of damages	Type of disaster	Has the school completely?
Adi Cakobau School	Secondary	Nausori	YES	NO	LOW	NONE	YES
Ahmadiyya Muslim College	Secondary	Nasinu	YES	NO	LOW	CYCLONE	YES
Ahmadiyya Muslim Primary	Primary	Nasinu	NO	NO	LOW	CYCLONE	YES
Annesley Infant School	Primary	Suva	NO	NO	LOW	CYCLONE	YES
Arya Samaj Primary	Primary	Suva	YES	NO	LOW	CYCLONE	YES
Assemblies of God High School	Secondary	Suva	NO	YES	HIGH	CYCLONE	NO
Assemblies of God Primary	Primary	Suva	YES	NO	LOW	CYCLONE	YES
Bainivalu Primary School	Primary	Nasinu	YES	YES	LOW	CYCLONE	YES
Basden College	Secondary	Suva	YES	NO	LOW	CYCLONE	YES
Bhawani Dayal Arya College	Secondary	Nasinu	YES	NO	LOW	CYCLONE	YES
Bhawani Dayal Primary	Primary	Nasinu	NO	NO	LOW	CYCLONE	YES
Bishop Kempthorne Memorial	Primary	Suva	YES	NO	LOW	CYCLONE	YES
Christian Mission Fellowship Secondary	Secondary	Suva	YES	NO	LOW	NONE	YES
DAV College	Secondary	Suva	NO	NO	MODERATE	CYCLONE	YES
DAV Girls School	Secondary	Suva	YES	YES	LOW	CYCLONE	YES
Davuilevu Methodist High	Secondary	Nasinu	NO	NO	MODERATE	FLOODING / CYCLONE	YES
Davuilevu Methodist Primary	Primary	Nasinu	YES	NO	LOW	CYCLONE	YES
Deenbhandoo Memorial School	Primary	Suva	NO	YES	LOW	CYCLONE	YES
Delainamasi Govt School	Primary	Nasinu	YES	NO	LOW	CYCLONE	YES
Dilkusha Boys Primary	Primary	Nausori	YES	NO	LOW	CYCLONE	YES
Dilkusha Girls Primary	Primary	Nausori	NO	NO	LOW	CYCLONE	YES
Dilkusha Methodist High	Secondary	Nausori	NO	YES	HIGH	CYCLONE	YES
Dr. Ram Lakhan Memorial	Primary	Suva	NO	NO	LOW	NONE	YES
Draiba Primary School	Primary	Suva	NO	NO	LOW	NONE	YES
Dudley High School	Secondary	Suva	NO	NO	LOW	CYCLONE	YES
Dudley Intermediate School	Primary	Suva	NO	NO	LOW	CYCLONE	YES
Gospel High School	Secondary	Suva	YES	NO	LOW	CYCLONE	YES
Gospel Primary School	Primary	Suva	YES	YES	MODERATE	CYCLONE	YES
Holy Trinity Anglican Primary	Primary	Suva	NO	YES	LOW	CYCLONE	YES
Indira Gandhi Memorial Primary School	Primary	Suva	YES	NO	LOW	CYCLONE	YES
Jagindar Primary School	Primary	Suva	YES	NO	LOW	CYCLONE	YES
Jai Narayan School	Secondary	Suva	NO	YES	LOW	CYCLONE	YES
Jeremiah Raibevu College	Secondary	Suva	NO	YES	MODERATE	CYCLONE	YES
John Wesley College	Secondary	Suva	NO	NO	MODERATE	CYCLONE	YES
John Wesley Primary School	Primary	Suva	YES	NO	LOW	CYCLONE	YES
Kalabu Fijian Primary School	Primary	Suva	NO	NO	MODERATE	CYCLONE	YES

Name	Type	Location	Evacuation centre	Disaster Management Plan	Severity of damages	Type of disaster	Has the school completely?
Kalabu Secondary School	Secondary	Suva	YES	NO	LOW	NONE	YES
Lelean Memorial School	Secondary	Nausori	YES	NO	MODERATE	CYCLONE	NO
Makoi Muslim Primary	Primary	Nasinu	NO	YES	LOW	CYCLONE	YES
Marist Brothers High School	Secondary	Suva	YES	NO	LOW	CYCLONE	YES
Marist Brothers Primary	Primary	Suva	NO	NO	LOW	CYCLONE	YES
MGM High School	Secondary	Suva	NO	NO	LOW	CYCLONE	YES
MGM Primary School	Primary	Suva	NO	NO	LOW	CYCLONE	YES
Nabua Primary School	Primary	Suva	YES	NO	LOW	CYCLONE	YES
Nabua Secondary School	Secondary	Suva	YES	NO	LOW	CYCLONE	YES
Nakaikogo Sanatan Dharam	Primary	Nausori	YES	NO	MODERATE	CYCLONE, FLOOD	YES
Nakasi High School	Secondary	Nasinu	YES	NO	LOW	CYCLONE	YES
Narere Primary School	Primary	Nasinu	YES	YES	LOW	CYCLONE	YES
Nasinu Gospel Primary	Primary	Nasinu	YES	NO	LOW	NONE	YES
Nasinu Muslim High School	Secondary	Nasinu	YES	YES	LOW	NONE	YES
Nasinu Muslim Primary	Primary	Nasinu	YES	NO	LOW	CYCLONE	YES
Nasinu Sangam School	Primary	Nasinu	YES	NO	LOW	CYCLONE	YES
Nasinu Secondary School	Secondary	Nasinu	YES	NO	MODERATE	CYCLONE	YES
Nehru Primary School	Primary	Suva	NO	YES	LOW	CYCLONE	YES
Newtown Christian Primary	Primary	Suva	YES	NO	LOW	NONE	YES
Pt Vishnu Deo Memorial	Primary	Suva	YES	NO	LOW	NONE	YES
Rambisessar Primary	Primary	Nausori	YES	YES	LOW	CYCLONE	YES
Ratu Sukuna Memorial	Secondary	Suva	YES	NO	LOW	CYCLONE	YES
Rishikul Nadera Primary	Primary	Nasinu	YES	YES	LOW	CYCLONE	YES
Rishikul Primary School	Primary	Nasinu	YES	YES	LOW	CYCLONE	YES
Rishikul Sanatan Secondary	Secondary	Nasinu	NO	YES	LOW	CYCLONE	YES
Samabula Primary School	Primary	Suva	YES	NO	LOW	CYCLONE	YES
Saraswati College	Secondary	Nausori	NO	NO	LOW	NONE	NO
Saraswati Primary School	Primary	Nausori	NO	NO	LOW	NONE	NO
St Agnes Primary School	Primary	Suva	YES	NO	LOW	CYCLONE	YES
St Annes Primary School	Primary	Suva	NO	NO	LOW	CYCLONE	YES
St John Bosco	Primary	Suva	YES	YES	LOW	CYCLONE	YES
St Joseph the Worker	Primary	Nasinu	YES	YES	LOW	CYCLONE	YES
St Josephs Secondary	Secondary	Suva	NO	YES	LOW	CYCLONE	YES
St Marcellin Primary School	Primary	Suva	YES	NO	LOW	FLOODING / CYCLONE	YES
Stella Maris School	Primary	Suva	NO	YES	LOW	CYCLONE	YES
Suva Grammar School	Secondary	Suva	YES	NO	LOW	CYCLONE	YES
Suva Methodist Primary School	Primary	Suva	NO	NO	LOW	CYCLONE	YES
Suva Muslim College	Secondary	Suva	NO	NO	LOW	CYCLONE	YES
Suva Muslim Primary School	Primary	Suva	NO	NO	LOW	CYCLONE	YES
Suva Primary School	Primary	Suva	YES	YES	LOW	CYCLONE	YES
Suva Sangam College	Secondary	Suva	YES	NO	LOW	CYCLONE	YES
Swami Sharddanand Memorial Primary School	Primary	Suva	NO	NO	LOW	CYCLONE	YES

Name	Type	Location	Evacuation centre	Disaster Management Plan	Severity of damages	Type of disaster	Has the school completely?
Tacirua Primary School	Primary	Suva	NO	NO	LOW	CYCLONE	YES
Vatuwaqa Primary School	Primary	Suva	NO	NO	HIGH	FIRE & CYCLONE	NO
Veiuto Primary School	Primary	Suva	YES	NO	LOW	NONE	YES
Wainibuku Hut Primary	Primary	Nasinu	YES	YES	LOW	CYCLONE	YES
William Cross College	Secondary	Nasinu	YES	YES	LOW	CYCLONE	YES
William Cross Primary	Primary	Nasinu	YES	YES	LOW	CYCLONE	YES
Yat Sen Primary School	Primary	Suva	NO	YES	LOW	CYCLONE	YES
Yat Sen Secondary School	Secondary	Suva	NO	NO	LOW	CYCLONE	YES

Annex 5 – School Infrastructure Gap Analysis

The school infrastructure gap analysis compiles the findings across the schools to identify and quantify, where possible, the infrastructure gaps that must be addressed in order to achieve compliance with FNBC guidelines and good practice.

The following should be noted:

- All analysis is based on 2024 school enrolment data
- The number of overcrowded classrooms and additional classrooms required to accommodate current student populations have been determined using the specification of 1.5m2/ student ratio
- Additional WASH facilities have been determined using the FNBC toilet to student ratio of 1:30 for boys toilets and 1:20 for girls toilets
- Accessible infrastructure requirements apply for the majority of schools, particularly those that are multi-storey or on hilly or undulating land (i.e. not one-storey buildings on flat land). This includes, but is not limited to ramps, handrails, accessible WASH facilities, appropriate walkway and doorway width, and accessible doors, as stipulated in the FNBC
- Infrastructure needs for disaster resilience are difficult to quantify due to the level of assessment undertaken. Further investigation and planning is recommended to ascertain the scale of disaster resilience upgrades required. For example, a quick-win could include providing window shutters to all schools, while a longer-term action involves planning and designing new buildings to withstand Category 5 cyclone resistance.
- The gap analysis is based on raw data. Number of classrooms required does not factor in application whereby the first new classroom is not recommended until the school is accommodating 10+ students in any one stream above its current spacing capacity (i.e. 10 students over the 1.5m^2 / student ration). Additional classooms are then calculated on the basis of 40 students per classroom.

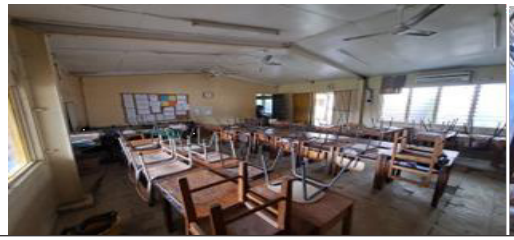
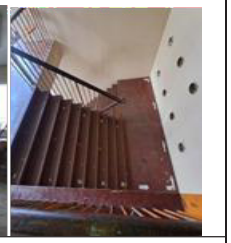
Table 20: Infrastructure gap analysis for individual schools

School	Existing Infrastructure	Required infrastructure	Gap between existing and required infrastructure	Evidence
Suva Primary School	Overcrowding: 10/10 classrooms (100%) overcrowded. WASH facilities: 8 Girls cubicles.	18 total classrooms are to be present utilizing the Recommended sizing (1.5m2) requirement. Girls – 8 cubicles	8 extra classrooms are needed since current 10 classrooms are not sufficient to support the total roll. Additional 1 girls toilet cubicle could be made to cater growing population despite existing being par with the required WASH number.	 
Samabula Primary School	Overcrowding – 7/18 classrooms (38.89%) overcrowded	21 total classrooms are to be present utilizing Recommended sizing (1.5m2) requirement	3 extra classrooms are needed since current 18 classrooms are not sufficient to support the total roll	

School	Existing Infrastructure	Required infrastructure	Gap between existing and required infrastructure	Evidence
Gospel Primary School	Overcrowding - 12/16 classrooms (75%) overcrowded	22 total classrooms needed under recommended sizing (1.5m^2)	6 extra classrooms are needed since current 16 classrooms are not sufficient to support the total roll	
Jai Narayan School	Overcrowding – 9 /24 classrooms (38%) overcrowded	28 total classrooms are to be present utilizing Recommended sizing (1.5m2) requirement	4 extra classrooms are needed since current 24 classrooms are not sufficient to support the total roll	
Gospel High School	Overcrowding: 11/19 classrooms (58%) overcrowded. WASH facilities: Boys - 14 cubicles ; 19 Girls cubicles.	23 total classrooms are to be present utilizing Recommended sizing (1.5m2) requirement. WASH Facilities: Boys – (7 cubicles) Girls – (15cubicles)	4 extra classrooms are needed since current 19 classrooms are not sufficient to support the total roll.	
Deenbhandoo Memorial School	Overcrowding: 4/13 classrooms (30.8%) overcrowded. WASH facilities: Boys - 4 cubicles ; 4 Girls cubicles.	17 total classrooms are to be present utilizing Recommended sizing (1.5m2) requirement. WASH Facilities: Boys – (6 cubicles) Girls – (9 cubicles)	4 extra classrooms are needed since current 13 classrooms are not sufficient to support the total roll. WASH Facilities: Boys : 2 cubicles required. Girls: 5 cubicles required	 

School	Existing Infrastructure	Required infrastructure	Gap between existing and required infrastructure	Evidence
Arya Samaj Primary	Overcrowding – 2/16 classrooms (12.5%) overcrowded	17 total classrooms are to be present utilizing Recommended sizing (1.5m2) requirement	1 extra classroom are needed since current 16 classrooms are not sufficient to support the total roll	
DAV Girls School	WASH Facilities: Girls: 19 cubicles.	WASH Facilities: Girls – (24 cubicles)	WASH Facilities: Girls: 5 cubicles required	 
Suva Sangam College	Overcrowding - 1/18	19 total classrooms are to be present utilizing Recommended sizing (1.5m2) requirement	1 extra classroom is needed since current 18 classrooms are not sufficient to support the total roll	
Swami Sharddanand Memorial Primary School	Overcrowding - 7/18	22 total classrooms are to be present utilizing Recommended sizing (1.5m2) requirement. Girls: 1 Cubicles required	4 extra classrooms are needed since current 18 classrooms are not sufficient to support the total roll	 

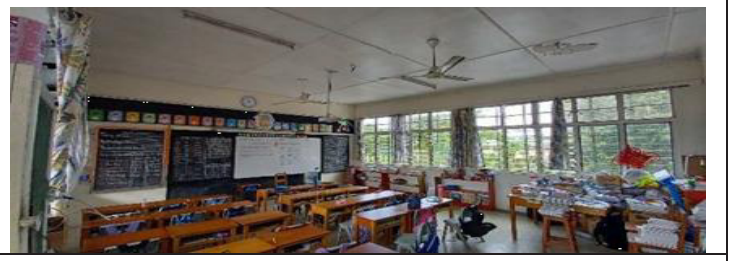
School	Existing Infrastructure	Required infrastructure	Gap between existing and required infrastructure	Evidence
Indira Gandhi Memorial Primary School	Overcrowding - 100% of classrooms were overcrowded, Disability Accessibility - 100% not accessible to disabled people.	Overcrowding - 16 classrooms are required to meet Recommended sizing (1.5m2)s; Disability Accessibility - Ramps, signs, accessible toilets and wider doorways are required to meet compliance.	Overcrowding - 8 classrooms are needed based on Recommended sizing (1.5m2)s; Disability Accessibility - not compliant with FDPF Disability audit tool.	
St Josephs Secondary School	Overcrowding: 1/15 classrooms (6.7%) overcrowded.	16 total classrooms are to be present utilizing Recommended sizing (1.5m2) requirement.	1 extra classroom is needed since current 15 classrooms are not sufficient to support the total roll.	
Pt Vishnu Deo Memorial	Overcrowding- 11/14 classrooms (78.5%), WASH cubicles for Boys 4,	21 total classrooms needed under FNBC, WASH cubicles for Boys 6 under FNBC	Extra 7no. Classrooms & new ablution block with boys having 2no. WC,2no. SHW,2no.	

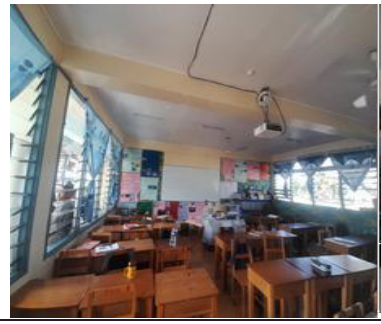
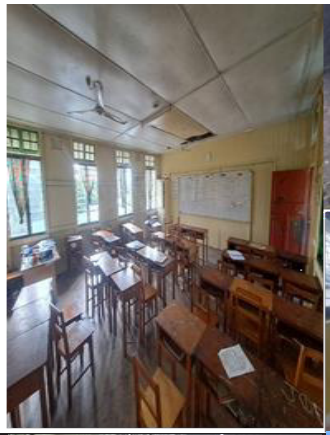
School	Existing Infrastructure	Required infrastructure	Gap between existing and required infrastructure	Evidence
DAV College	total of 23 classroom with total of 843 students with average of 37 student in each classroom. B3 Timber structure building doesn't comply with cyclone standard. School doesn't comply disability access ..	Total of 28 classroom will be need to meet Recommended sizing (1.5m2) and meet the overcrowding issue in school. Provide ramp access in all building.	5 addition classrooms needed to address the overcrowding issue. Provide disability ramp access.	 
St Marcellin Primary School	Overcrowding – 13/18 (72.2%) of classrooms were overcrowded, Disability Accessibility - 100% not accessible to disabled people.	Overcrowding - 24 classrooms are required to meet Recommended sizing (1.5m2); Disability Accessibility - Ramps, signs, accessible toilets and wider doorways are required to meet compliance.	Overcrowding - 6classrooms are needed based on Recommended sizing (1.5m2); Disability Accessibility - not compliant with FDPF Disability audit tool.	 
Annesley Infant School	Disability Accessibility - 100% not accessible to disabled people, Disaster Resilience - 100% not resilient.	Disaster Resilience - roof cladding and roofing nails are rusted and there weren't any permanent mesh shutters on the windows. For cyclone certification these will need to be amended, Disability Accessibility - Ramps, signs, accessible toilets and wider doorways are required to meet compliance.	Disaster Resilience - rusting of roof cladding, roofing nails and permanent cyclone mesh shutters contradicts to the cyclone certification requirement requiring replacement, Disability Accessibility - not compliant with FDPF Disability audit tool.	 

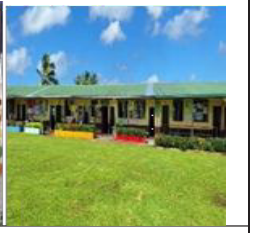
School	Existing Infrastructure	Required infrastructure	Gap between existing and required infrastructure	Evidence
Holy Trinity Anglican Primary School	Overcrowding: 17/18 classrooms (94.4%) overcrowded.	25 total classrooms are to be present utilizing Recommended sizing (1.5m2) requirement.	7 extra classrooms are needed since current 18 classrooms are not sufficient to support the total roll.	 
John Wesley College	Overcrowding: 4/13	16 total classrooms are to be present utilizing Recommended sizing (1.5m2) requirement.	3 extra classrooms are needed since current 13 classrooms are not sufficient to support the total roll.	 
John Wesley Primary School	The school has 16/16 overcrowded classrooms, limited disability features, and rusted cladding.	RECOMMENDED SIZING (1.5M2)1990 standards for structural safety, additional classrooms, proper washroom ratios, and accessibility are required.	The school needs 8 extra classrooms, six additional washroom cubicles for girls, cyclone upgrades, and ramps.	 
Marist Brothers High School	Overcrowding - 14/20 classrooms (70%) overcrowded	26 total classrooms are to be present utilizing Recommended sizing (1.5m2) requirement	6 extra classrooms are needed since current 20 classrooms are not sufficient to support the total roll	

School	Existing Infrastructure	Required infrastructure	Gap between existing and required infrastructure	Evidence
MGM High School	Overcrowding - 17/27 classrooms (62.9%) overcrowded	32 total classrooms are to be present utilizing Recommended sizing (1.5m2) requirement	5 extra classrooms are needed since current 27 classrooms are not sufficient to support the total roll	
MGM Primary School	Overcrowding -16/17 classrooms (94.1%) overcrowded	25 total classrooms are to be present utilizing Recommended sizing (1.5m2) requirement	8 extra classrooms are needed since current 17 classrooms are not sufficient to support the total roll	
Nabua Primary School	Structure - the timber structures used as classrooms were in poor condition and displayed weak structural integrity like damaged timber walls and floors with the floor framing deteriorating.	- Structural Integrity – Columns, slabs, beams, rafters, purlins sizes to follow FNBC1990. - General upkeep –routine checkup as per MOE policies with major defects requiring immediate intervention.'	Structures need to be renovated and require timely maintenance and repair works of all structures.	
St Annes Primary School	Overcrowding - 8/8 classrooms (100%) overcrowded / WASH Facilities - 10 current cubicles not compliant	16 total classrooms are to be present utilizing Recommended sizing (1.5m2) requirement / 15 total cubicles are to be present as per FNBC 1990 1:20 student to toilet ratio	8 extra classrooms are needed since current 8 classrooms are not sufficient to support the total roll / 5 extra cubicles are needed as the current 10 are not sufficient for the total roll	

School	Existing Infrastructure	Required infrastructure	Gap between existing and required infrastructure	Evidence
Marist Brothers Primary School	Overcrowding: 8/ 21 / WASH Facilities - 10 current cubicles not compliant	25 total classrooms are to be present utilizing Recommended sizing (1.5m2) requirement. Boys: 14 Cubicles required.	4 extra classrooms are needed since current 21 classrooms are not sufficient to support the total roll. Boys: 4	
Dudley Intermediate School	Overcrowding: 12/12 classrooms (100%) overcrowded.	15 total classrooms are to be present utilizing Recommended sizing (1.5m2) requirement.	3 extra classrooms are needed since current 12 classrooms are not sufficient to support the total roll.	
Dudley High School	Overcrowding: 18/26 classrooms (69.2%) overcrowded.	32 total classrooms are to be present utilizing Recommended sizing (1.5m2) requirement.	6 extra classrooms are needed since current 26 classrooms are not sufficient to support the total roll.	
Nehru Primary School	Overcrowding: 17/17 classrooms (100%) overcrowded. Girls: 12	25 total classrooms are to be present utilizing Recommended sizing (1.5m2) requirement. Girls: 13 total WASH Cubicles are needed	8 extra classrooms are needed since current 17 classrooms are not sufficient to support the total roll. Girls: 1	

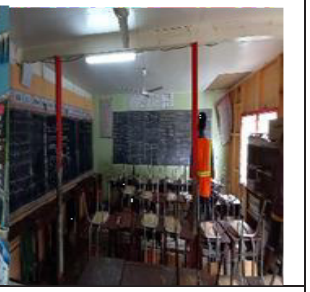
School	Existing Infrastructure	Required infrastructure	Gap between existing and required infrastructure	Evidence
Nabua Secondary School	Disability Accessibility - 100% not accessible to disabled people.	Disability Accessibility - Ramps, signs, accessible toilets and wider doorways are required to meet compliance.	Disability Accessibility - not compliant with FDPF Disability audit tool.	
St Agnes Primary School	The school has 10/18 overcrowded classrooms, and incomplete disability features.	RECOMMENDED SIZING (1.5M2)1990 standards for structural integrity, adequate classroom size, proper washroom ratios, and accessibility features.	6 extra classrooms, five additional cubicles for girls, cyclone upgrades, and ramps are required.	
Yat Sen Primary School	Disability Accessibility - 100% not accessible to disabled people.	Disability Accessibility - Ramps, signs, accessible toilets and wider doorways are required to meet compliance.	Disability Accessibility - not compliant with FDPF Disability audit tool.	
Assemblies of God Primary	Overall, 25 classrooms available with total of 1095 students with average of 44 students in each classroom	Build additional 5 classrooms to occupancy to have 1.5m^2	total of 40 classroom need to meet Recommended sizing (1.5m2) to address overcrowding in school.	

School	Existing Infrastructure	Required infrastructure	Gap between existing and required infrastructure	Evidence
Veiuto Primary School	Overcrowding- 20/30 classrooms (67%), WASH cubicles for Boys 10, Girls 17	36 total classrooms needed under Recommended sizing (1.5m2), WASH ratio for girls 23, Boys 11 under FNBC	Extra 6no. Classrooms & new ablution block with boys having 1no. WC,4no. SHW,4no. HB. Girls to have 6no. WC,4no. SHW,4no. HB.	 
Suva Methodist Primary School	Overcrowding – 15/21 (71.4%) of classrooms were overcrowded, Disability Accessibility - 100% not accessible to disabled people. Disaster Resilience - 90% not resilient.	Overcrowding - 23 classrooms are required to meet Recommended sizing (1.5m2); Disability Accessibility - Ramps, signs, accessible toilets and wider doorways are required to meet compliance. Disaster Resilience - Structural Integrity such as columns, slabs, beams, rafters and purlin sizes to follow FNBC 1990.	Overcrowding - 2 classrooms are needed based on Recommended sizing (1.5m2); Disability Accessibility - not compliant with FDPF Disability audit tool; Disaster Resilience - the architectural fractures and structural cracks visible are required maintenance.	  
Assemblies of God High School	Overcrowding - 13/17 classrooms (76.5%) classrooms overcrowded / Disability - No accessible facility	22 total classrooms needed under RECOMMENDED SIZING (1.5M2)/ Doorways, walkway, railings, ramps etc needed as per Fiji Disabled People's Federation Access Audit Tool	5 extra classrooms are needed since current 24 classrooms are not sufficient to support the total roll / No compliance to Disability Audit Tool.	 

School	Existing Infrastructure	Required infrastructure	Gap between existing and required infrastructure	Evidence
Suva Grammar School	Overcrowding - 22/28	34 total classrooms are to be present utilizing Recommended sizing (1.5m2) requirement	6 extra classrooms are needed since current 28 classrooms are not sufficient to support the total roll	
Draiba Primary School	Overcrowding - 6/21 classroom (28.6%) overcrowded	24 total classrooms are to be present utilizing Recommended sizing (1.5m2) requirement	3 extra classrooms are needed since current 20 classroom are not sufficient to support the total roll	
Suva Muslim Primary School	Overcrowding - 4/25 Girls: 13 Cubicles present	26 total classrooms are to be present utilizing Recommended sizing (1.5m2) requirement. Girls: 16 Cubicles total required	1 extra classroom are needed since current 25 classroom are not sufficient to support the total roll. Girls: 3 Cubicles required	 
Yat Sen Secondary School	Structural integrity and disaster resilience - 15%	Structural does not comply to FNBC 1990 as there is a severely deteriorated structural member (B1 beam) that may compromise the structural integrity of the building	Immediate Structural analysis required for structural element (beam at B2)	 

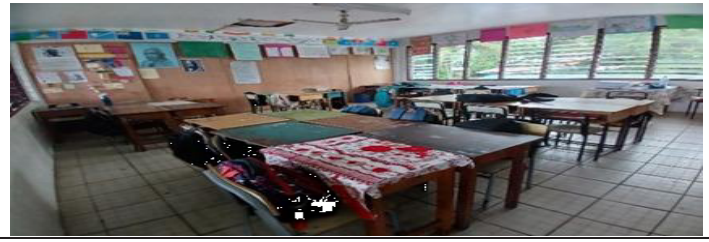
School	Existing Infrastructure	Required infrastructure	Gap between existing and required infrastructure	Evidence
Suva Muslim College	Overcrowding - 4/18	20 total classrooms are to be present utilizing Recommended sizing (1.5m2) requirement.	2 extra classrooms are needed since current 18 classroom are not sufficient to support the total roll	 
Vatuwaqa Primary School	Structures are all damaged due to a fire outbreak in building labelled B2 and majority of the structures require attention.	- Structural Integrity – Columns, slabs, beams, rafters, purlins sizes to follow RECOMMENDED SIZING (1.5M2)1990. - General upkeep –routine checkup as per MOE policies with major defects requiring immediate intervention.'	Structures requires demolition of the damaged and unstable structures and rebuilding to the required standards and building codes.	
Stella Maris School	Overcrowding: 7/8 classrooms (87.5%) overcrowded.	15 total classrooms are to be present utilizing 2m² Recommended sizing (1.5m2) requirement.	7 extra classrooms are needed since current 8 classrooms are not sufficient to support the total roll.	

School	Existing Infrastructure	Required infrastructure	Gap between existing and required infrastructure	Evidence
Rishikul Nadera Primary School	Overcrowding: 8/8 classrooms (100%) overcrowded.	16 total classrooms are to be present utilizing 2m² Recommended sizing (1.5m2) requirement.	8 extra classrooms are needed since current 8 classrooms are not sufficient to support the total roll.	
Ratu Sukuna Memorial School	Existing infrastructure in bad condition and No Fire compliance	Upgrade Infrastructure to minimum standards. Fire Safety Compliance	Engage Engineer for structural assessment and rehabilitation. Upgrade all fire fighting equipment and obtain NFA Compliance	 
St John Bosco	Overcrowding – 10/21 (47.6%) of classrooms were overcrowded, Disaster Resilience - 90% not resilient.	Overcrowding - 26 classrooms are required to meet Recommended sizing (1.5m2); Disaster Resilience - roof cladding and roofing nails are rusted and there weren't any permanent mesh shutters on the windows. For cyclone certification these will need to be amended	Overcrowding - 5 classrooms are needed based on Recommended sizing (1.5m2); Disaster Resilience - rusting of roof cladding, roofing nails and permanent cyclone mesh shutters contradicts to the cyclone certification requirement requiring replacement.	 

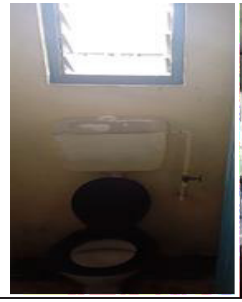
School	Existing Infrastructure	Required infrastructure	Gap between existing and required infrastructure	Evidence
Jagindar Primary School	The school has 21/24 overcrowded classrooms, inadequate washroom cubicles with 4 boys and 8 girls toilet cubicles, and disability features.	RECOMMENDED SIZING (1.5M2) requires 31 total classrooms, 9 boys and 19 girls toilet cubicles, and accessibility were to be present under FNBC 1990.	The school needs 7 extra classrooms, 5 additional washroom cubicles for boys, 11 for girls, and ramps.	 
Jeremiah Raibevu College	Overcrowding - 3/5 classrooms (60%) overcrowded	8 total classrooms are to be present utilizing Recommended sizing (1.5m2) requirement	3 extra classrooms are needed since current 5 classrooms are not sufficient to support the total roll	
Tacirua Primary School	Overcrowding - 8/16 Girls WASH: 6 Cubicles present	21 total classrooms are to be present utilizing Recommended sizing (1.5m2) requirement. Girls: 10 Cubicles required	5 extra classrooms are needed since current 16 classrooms are not sufficient to support the total roll. Girls WASH: 4 extra Cubicles required	 
Dr. Ram Lakhan Memorial	Overcrowding - 6/11 classroom (54.55%) overcrowded	17 total classrooms are to be present utilizing Recommended sizing (1.5m2) requirement	6 extra classrooms are needed since current 11 classroom are not sufficient to support the total roll	

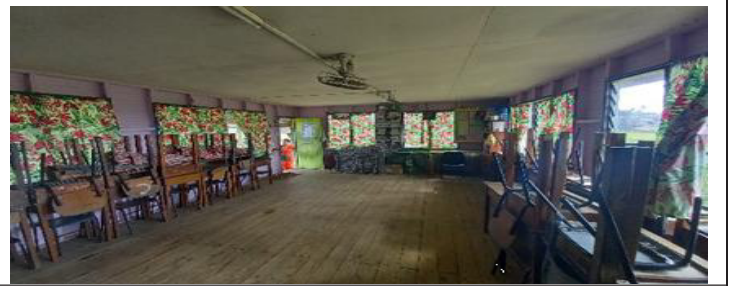
School	Existing Infrastructure	Required infrastructure	Gap between existing and required infrastructure	Evidence
Newtown Christian Primary School	Structure - classroom doors deteriorated, classroom lighting inadequate, limited fire fighting equipment.	Protection of doorway Type C construction requirement under FNBC, requirements for artificial lighting under FNBC, Requirements for fire fighting equipment under FNBC.	all classroom doors to be replaced with quality solid core frame, new light frames required for classrooms, new fire hose reels with separate water supply & fire extinguishers to be provided.	
Christian Mission Fellowship Secondary	No Issue Observed	N/A	N/A	
Bishop Kempthorne Memorial	Disability Access and Fire	Upgrade Infrastructure to include disability access. Fire Safety Compliance	construct ramps, provide space, etc, or disability. Upgrade all fire fighting equipment and obtain NFA Compliance	 

School	Existing Infrastructure	Required infrastructure	Gap between existing and required infrastructure	Evidence
Makoi Muslim Primary	Girls WASH: 4 Cubicles present	Girls WASH: 6 Cubicles required to support the total girls roll	Girls WASH: 2 extra Cubicles required	
Delainamasi Govt School	The school has 12/26 overcrowded classrooms and inadequate washroom facilities – Girls WASH: 16 Cubicles present	Recommended Sizing (1.5m^2) requires 30 total classrooms to be present while FNBC 1990 standards requires for structural safety, Girls WASH: 19 Cubicles required, and accessibility are required.	The school needs 4 extra classrooms, 3 additional girls' cubicles and ramps.	
Nasinu Gospel Primary	Overcrowding- 15/16 classrooms (93.75%), Structure - no fire fighting equipment.	25 total classrooms needed under Recommended Sizing (1.5m^2), Requirements for fire fighting equipment under FNBC.	9 no. Classrooms, new fire hose reels with separate water supply & fire extinguishers to be provided.	
Basden College	Existing infrastructure in bad condition and No Fire compliance	Upgrade Infrastructure to minimum standards. Fire Safety Compliance	Engage Engineer for structural assessment and rehabilitation. Upgrade all fire fighting equipment and obtain NFA Compliance	 

School	Existing Infrastructure	Required infrastructure	Gap between existing and required infrastructure	Evidence
Narere Primary School	Overcrowding – 3/13	16 total classrooms are to be present utilizing Recommended sizing (1.5m2) requirement	3 extra classrooms are needed since current 13 classrooms are not sufficient to support the total roll	
Nasinu Secondary School	Overcrowding - 17/19 classrooms (84%) overcrowded	24 total classrooms are to be present utilizing Recommended sizing (1.5m2) requirement	5 extra classrooms are needed since current 19 classrooms are not sufficient to support the total roll	
Ahmadiyya Muslim Primary	Overcrowding – 7/16 classrooms (43.75%) overcrowded	19 total classrooms are to be present utilizing Recommended sizing (1.5m2) requirement	3 extra classrooms are needed since current 16 classrooms are not sufficient to support the total roll	
Kalabu Fijian Primary School	Total of 12/16 overcrowded classroom with total of 655 students with average of 42 student in each classroom. B2 Timber structure building doesn't comply with cyclone standard.	total 22 classroom need to meet Recommended sizing (1.5m2). Upgrade work required on B2 to meet cyclone standard.	additional 6 classroom need to meet Recommended sizing (1.5m2) to address overcrowding in school and upgrade works on B2 Timber structure to meet cyclone standards	

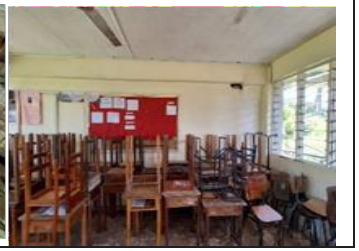
School	Existing Infrastructure	Required infrastructure	Gap between existing and required infrastructure	Evidence
Nasinu Sangam School	Overcrowding – 14/21	28 total classrooms are to be present utilizing Recommended sizing (1.5m2) requirement	7 extra classrooms are needed since current 21 classrooms are not sufficient to support the total roll	
Ahmadiyya Muslim College	Disability Accessibility - 100% not accessible to disabled people, Disaster Resilience - 90% not resilient. Condition of Infrastructure - 80% structural integrity failure.	Disaster Resilience - roof cladding and roofing nails are rusted and there weren't any permanent mesh shutters on the windows. For cyclone certification these will need to be amended, Disability Accessibility - Ramps, signs, accessible toilets and wider doorways are required to meet compliance. Condition of Infrastructure - building structure require more intervention to improve structural integrity and condition.	Disaster Resilience - rusting of roof cladding, roofing nails and permanent cyclone mesh shutters contradicts to the cyclone certification requirement requiring replacement, Disability Accessibility - not compliant with FDPF Disability audit tool. Condition of Infrastructure - building structure require more intervention to improve structural integrity and condition.	  

School	Existing Infrastructure	Required infrastructure	Gap between existing and required infrastructure	Evidence
Kalabu Secondary School	Disaster resilience - rusted roof cladding and roofing elements, absence of cyclone shutters.	Disaster Resilience - roof cladding and roofing nails are rusted and there weren't any permanent mesh shutters on the windows. For cyclone certification these will need to be amended,	Disaster Resilience - rusting of roof cladding, roofing nails and permanent cyclone mesh shutters contradicts to the cyclone certification requirement requiring replacement,	
William Cross Primary	Overcrowding: 7/8 classrooms (87.5%) overcrowded. WASH Facilities: Girls: 6 cubicles.	15 total classrooms are to be present utilizing Recommended sizing (1.5m2) requirement. WASH Facilities: Girls – (7 cubicles)	7 extra classrooms are needed since current 8 classrooms are not sufficient to support the total roll. WASH Facilities: Girls: 1 cubicles required	 
William Cross College	Overcrowding: 4/10 classrooms (40%) overcrowded. WASH Facilities: Girls: 6 cubicles.	12 total classrooms are to be present utilizing Recommended sizing (1.5m2) requirement. WASH Facilities: Girls – 8 cubicles	2 extra classrooms are needed since current 10 classrooms are not sufficient to support the total roll. WASH Facilities: Girls:2 cubicles required	

School	Existing Infrastructure	Required infrastructure	Gap between existing and required infrastructure	Evidence
Rishikul Primary School	Overcrowding: 32/32 classrooms (100%) overcrowded. WASH facilities: Girls - 14 toilet cubicles;	41 total classrooms are to be present utilizing Recommended sizing (1.5m2) requirement. WASH Facilities: Girls – 24 cubicles	9 extra classrooms are needed since current 32 classrooms are not sufficient to support the total roll. WASH Facilities: Girls: 10 cubicles required	
Rishikul Sanatan Secondary School	Overcrowding: 18 /26 classrooms (69.23%) overcrowded. WASH facilities: 15 Girls cubicles.	32 total classrooms are to be present utilizing Recommended sizing (1.5m2) requirement. WASH Facilities: Girls –20 cubicles	6 extra classrooms are needed since current 26 classrooms are not sufficient to support the total roll. WASH Facilities: Girls: 5 cubicles required	
Nasinu Muslim Primary School	The school has 5/24 overcrowded classrooms.	RECOMMENDED SIZING (1.5M2) for 26 total classrooms and FNBC1990 standards for structural safety, proper washroom ratios, and accessibility are required.	The school needs 2 extra classrooms, and cyclone upgrades.	
St Joseph the Worker	Overcrowding: 16/24 classrooms (66.67%) overcrowded.	30 total classrooms are to be present utilizing Recommended sizing (1.5m2) requirement.	6 extra classrooms are needed since current 24 classrooms are not sufficient to support the total roll.	

School	Existing Infrastructure	Required infrastructure	Gap between existing and required infrastructure	Evidence
Davuilevu Methodist Primary	Overcrowding – 20/21 (95.24%) of classrooms were overcrowded, Disability Accessibility - 80% not accessible to disabled people.	Overcrowding - 28 classrooms are required to meet Recommended sizing (1.5m2); Disability Accessibility - Ramps, signs, accessible toilets and wider doorways are required to meet compliance.	Overcrowding – 7 classrooms are needed based on Recommended sizing (1.5m2); Disability Accessibility - not compliant with FDPF Disability audit tool.	
Dilkusha Methodist High School	Overcrowding - 5/16 classrooms (31.25%) overcrowded	21 total classrooms are to be present utilizing Recommended sizing (1.5m2) requirement	2 extra classrooms are needed since current 16 classrooms are not sufficient to support the total roll	
Nasinu Muslim High School	Multiple floor levels without ramps, walkways having different heights, WASH facilities and classroom doors not accommodating for wheelchair users	Disability Accessibility - Ramps, signs, accessible toilets and wider doorways are required to meet compliance.	Disability Accessibility - not compliant with FDPF Disability audit tool	

School	Existing Infrastructure	Required infrastructure	Gap between existing and required infrastructure	Evidence
Wainibuku Hut Primary School	Overcrowding: 5/8 classrooms (62.5%) overcrowded. WASH Facilities: Girls: 4 cubicles.	13 total classrooms are to be present utilizing Recommended sizing (1.5m2) requirement. WASH Facilities: Girls – 7 cubicles	5 extra classrooms are needed since current 8 classrooms are not sufficient to support the total roll. WASH Facilities: Girls: 3 extra toilet cubicles	
Davuilevu Methodist High School	Overcrowding – ¼ (25%) of classrooms were overcrowded, Disability Accessibility - 100% not accessible to disabled people.	Overcrowding - 5 classrooms are required to meet Recommended sizing (1.5m2); Disability Accessibility - Ramps, signs, accessible toilets and wider doorways are required to meet compliance.	Overcrowding – 1 extra classroom is needed based on Recommended sizing (1.5m2); Disability Accessibility - not compliant with FDPF Disability audit tool.	
Dilkusha Boys Primary	Overcrowding - 10/24	27 total classrooms are to be present utilizing Recommended sizing (1.5m2) requirement	3 extra classrooms are needed since current 24 classrooms are not sufficient to support the total roll	
Bhawani Dayal Primary	The school has structural defects, 16/24 overcrowded classrooms	Recommended Sizing (1.5m^2) requires 30 additional classrooms while FNBC 1990standards requires for structural safety, and accessibility are required.	6 extra classrooms are needed since current 24 classrooms are not sufficient to support the total roll	

School	Existing Infrastructure	Required infrastructure	Gap between existing and required infrastructure	Evidence
Nakasi High School	The school has structural defects, 5/9 overcrowded classrooms and 8 girls washroom facilities	Recommended sizing (1.5m^2) requires 12 total present classrooms while FNBC 1990 standards requires for structural safety, 8 total present girls WASH facilities, and accessibility are required.	The school needs 3 extra classrooms, cyclone and structural upgrades, ramps, and clear pathways. Some consideration could be taken to add extra girl's toilet cubicles since its exactly par with the requirement inorder to cater for growing population.	 
Bainivalu Primary School	Overcrowding: 16/16 classrooms (100%) overcrowded. WASH Facilities: Boys: 4 cubicles. Girls: 8 cubicles.	25 total classrooms are to be present utilizing Recommended sizing (1.5m2) requirement. WASH Facilities: Boys - 4 cubicles. Girls -8 cubicles	9 extra classrooms are needed since current 16 classrooms are not sufficient to support the total roll. WASH Facilities: To cater for growing student population, some consideration of building 1 extra cubicles for boys and girls' toilets is needed since existing is in par with the required number of cubicles.	
Saraswati College	Girls WASH Facilities: 7 cubicles	FNBC 1990 requires current girls WASH Facilities: 7 cubicles	since existing number of girls toilet cubicles is in par with requirement, additional 1 toilet cubicle could be made to cater for growing population.	
Lelean Memorial School	Overcrowding – 23/27 classrooms. Girls WASH Facilities: 17 cubicles. WASH facilities in very poor condition with broken structures and unhygienic.	37 total classrooms are to be present utilizing Recommended sizing (1.5m2) requirement. Girls -20 cubicles required. WASH to be equipped with up-to-date facilities with regular maintenance.	10 extra classrooms are needed since current 27 classroom are not sufficient to support the total roll. Girls WASH Facilities: 3 extra cubicles required. WASH does not meet the requirement requiring immediate intervention and upgrading works.	 

School	Existing Infrastructure	Required infrastructure	Gap between existing and required infrastructure	Evidence
Bhawani Dayal Arya College	Overcrowding - 10/24	26 total classrooms are to be present utilizing Recommended sizing (1.5m2) requirement	2 extra classrooms are needed since current 24 classrooms are not sufficient to support the total roll	
Rambisessar Primary School	Overcrowding: 7/16 classrooms (43.75%) overcrowded. WASH Facilities: Boys: 3 cubicles.	19 total classrooms are to be present utilizing Recommended sizing (1.5m2) requirement. WASH Facilities: Boys - 4 cubicles	3 extra classrooms are needed since current 16 classrooms are not sufficient to support the total roll. WASH Facilities: Boys: 1 extra cubicle required	
Saraswati Primary School	No Disability Accessibility	Upgrade Infrastructure to include disability access and compliance with Engineering Standards	construct ramps, provide space, etc, or disability. Upgrade Infrastructure to	
Nakaikogo Sanatan Dharam School	Disability Access and No Engineered Certificate	Upgrade Infrastructure to include disability access and compliance with Engineering Standards	construct ramps, provide space, etc, or disability. Upgrade Infrastructure to	 

School	Existing Infrastructure	Required infrastructure	Gap between existing and required infrastructure	Evidence
Adi Cakobau School	Disaster resilience - 3no. old timber structures used as classrooms have deteriorated. Almost all timber structures require upgrading works.	Structure Integrity to comply requirements under FNBC.	Demo & rebuild 3no. old timber structures. Upgrade tie down connections for the rest of the 8no. timber structures.	
Dilkusha Girls Primary	No disability ramp access provides in all buildings. Total of 6/24 overcrowded classrooms with 857 students average of 36 students in each classroom.	30 total classrooms needed under Recommended sizing (1.5m2). Provide disability ramp access in all buildings	6 additional classroom is needed to meet Recommended sizing (1.5m2) to address overcrowding issue in school. Provide ramp access in all building.	

Annex 6 – Relevant Excerpts From FNBC and MoE Minimum Standards on WASH

The tables below compile relevant excerpts from FNBC and MoE Minimum Standards on WASH in Schools Infrastructure used to support analysis for the schools infrastructure assessment.

Table 21: Relevant excerpts from FNBC

FIJI NATIONAL BUILDING CODE COMPLIANCE (FNBC 2023)	
STUDENT TO CLASSROOM RATIO	**Page No.**

D1 MAXIMUM OCCUPANCY

Class 1 buildings and sole-occupancy residential units in Class 1 buildings

.1 Occupancy of residential buildings and sole-occupancy residential units shall be based on two persons per bedroom or sleeping area.

Class 2 to 9 buildings

.2 Expected occupancy used to determine appropriate size for a room, floor or mezzanine and the appropriate emergency evacuation routes can be determined by:

a) Calculating the sum of the occupants obtained by dividing the floor area of each part of the storey by the number of square metres per person listed in Table D3.1 below according to the use of the part, excluding spaces set aside for:

(i) Lift, stairs, ramps and escalators, corridors, hallways, lobbies, and the like

(ii) Service ducts and the like, sanitary compartments or other ancillary uses

(iii) Reference to the seating capacity in an assembly building or room, or

(iv) Any other suitable means of assessing its capacity

b) Expected occupancy for mixed use buildings shall have the occupancy load of each use calculated separately and summed together

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Table D3.1 Occupancy Table: Area Per Person According to Use

Type of Use	m² per person
Art gallery, exhibition area, museum	4
Bar – standing	0.5
Bar – other	1
Board room	2
Boarding house	15
Cafe, church, dining room	1
Carpark	30
Computer room	25
Court room – Judicial area	10
Court room – Public seating	1
Dance floor	0.5
Dormitory	5
Early childhood centre	4
Factory:	
(a) Machine shop, fitting shop, or like place for cutting, grading, finishing or fitting of metals or glass, except in the fabrication of structural steelwork or manufacture of vehicles or bulky products	5
(b) Areas used for the fabrication and processing other than those in (a)	50
(c) A space in which the layout and natural use of fixed plant or equipment determine the number of persons which will occupy the space during working hours	Area per person determined by the use of the plant or equipment
Gymnasium	3
Hospital ward area	10
Hostel, hotel, motel, guest house	15
Indoor sports stadium- arena	10
Kiosk	1
Kitchen, laundry (other than	10

Type of Use	m² per person
Office, including one for typewriting or document copying	10
Plant room – Ventilation, electrical or other service units	30
Plant room – Boilers or power plant	50
Reading room	2
School – General Classroom	2
School – Multi-purpose hall	1
School – Staff room	10
School – Trade and practical area: Primary	4
School – Trade and practical area: Secondary	As for workshop
At a level entered direct from the open air or any lower level	3
All other levels	5
Showroom – display area, covered mall or arcade	5
Skating rink, based on rink area	1.5
Spectator stand, audience viewing area:	
Bench seating	450 mm/person
Fixed seating	Per number of seats
Removable seating	1
Standing view area	0.3
Storage space	30
Swimming pool, based on pool area	1.5
Switch room, transformer room	30
Telephone exchange – private	30
Theatre and public hall	1
Theatre dressing room	4
Transport terminal	2
Workshop:	
For maintenance staff	30 (in the whole area)
For manufacturing processes	As for factory

D3 OCCUPANCY AND MEASUREMENT

[3]

NOTE: As per above requirements, general classrooms should have a spacing of 2 m² per person.

D7 DOOR DIMENSIONS AND PLACEMENT

All buildings

.1 All interior and exterior doorways satisfy performance criteria if they comply with standards in Table D1.3 and Figures D1.1 to D1.5:

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Accessible Entry Doors

.3 Accessible doorways and doors are required in:

a) All non-residential parts of in Class 2 to10 buildings used by the general public or employees

b) All residential parts of Class 2 to 10 used by the general public, except in sole occupancy units

c) All building entries used as a fire exit in Class 1 to 10 buildings including entries to sole occupancy units

.6 All accessible doorways must have a smooth, non-slip surface that can be traversed by a person in a manual wheelchair, walker, cane, crutches, or other assisted mobility device.

Table D1.3: Door dimensions

Door	Accessible	Not Required to be Accessible
Door - width	• 915 mm minimum	• 750 mm minimum
Door width – patient care area Class 9a	• 1200mm if corridor width <2.2m • 1070 mm if corridor width >2.2 m • 915 mm for openable double door leaf	Same as Accessible
Door width – aged and child care Class 9c	• 1070 mm min at the entrance to a sole-occupancy unit from a public corridor • 915 mm in other resident use areas • 915 mm for openable double door leaf	Same as Accessible
Setback from top and bottom of a stairway or ramp	• 1200 mm minimum setback from tread or ramp that is clear of the opened door (see Figure D1.2)	• 750 mm minimum setback from tread or ramp that is clear of the opened door (see Figure D1.2)
Door handle and latching	• 800 - 900 mm from finished floor • Horizontal lever type handle only	• 900 – 1200 mm from finished floor • Any handle type
Threshold	• 1500 mm level (maximum 12mm rise) threshold on both sides of a doorway	• Level threshold (maximum 12 mm rise) on both sides of door; must be at least the width of the door to which it serves
Viewing Panel	• Zone of visibility between 0.5m to 1.5m, minimum width of 200 mm, see Safety Glass standards in Section G4	• No greater than 150 mm from the top or sides of the door and 600mm from the bottom of the door, see Safety Glass standards in Section G4
Manifestation	• Between 0.5 to 1.0m and 1.3 to 1.6m • See Section G4.	• Between 0.8 m and 1.2m, see Section G4

STAIRWAY DIMENSIONS

D3 HANDRAIL

.1 Except in a sole-occupancy residential building or unit, a handrail provided for fall protection must be at a height of 850 mm to 1,000 mm measured from the ground surface or nosing of a riser.

.2 For a designated accessible route, a handrail must be provided at a height of 760mm in addition to fall protection provided.

.3 A handrail must have a smooth surface and be continuous.

.4 Handrails for a stairway or ramp must be:

a) Located along at least on one side of a flight of stairs for Class 1 buildings and within sole occupancy residential units of Class 2 – 5 buildings

b) Located on both sides of a stairway within a public path of travel or on an accessible route, or if the stairway is 2m wide or more

c) Located on both sides of a ramp, unless fall protection is provided on one side

d) Continuous between stair flight landings and have no obstruction that will break a hand-hold

e) Free from any obstruction on or above the stairway or ramp that could break a handhold, except for newel posts, ball type stanchions, or the like.

.2 Handrails in a Class 9a health-care building must be provided along at least one side of every passageway or corridor used by patients, and must be:

a) Fixed not less than 100 mm clear of the wall

b) Continuous for the full length

.3 For a Class 9b building used as an early childhood centre or a primary school, one handrail must be fixed at a height of 865 mm to 1,000 mm, and a second handrail must be fixed at a height between 565 mm and 750 mm. Both must be measured from the nosing of a stair tread or the floor surface of a ramp, landing, and the like.

.4 Handrails serving an area required to be accessible must be designed and constructed to comply with AS 1428.1 Design for Access and Mobility, Part 1: General Requirements for Access - New Building Work.

.5 A balustrade with a height exceeding 1,000 mm must have a separate handrail installed with:

a) A smooth surface that is attached to the balustrade at a height between 850 mm to 1,000 mm from the ground surface, and/or a height of 760 mm to meet accessibility requirements

b) A 100 mm clear space must be maintained between the balustrade and the inside of the handrail

D1 STAIRWAY SIZE AND CONFIGURATION

.1 Stairways must comply with standards in Table D2.1 and Figures D2.1 to D2.4:

Table D2.1 Stairway Dimensions

Stairway	Accessible	Non-Accessible
Stairway width	• 1,200 mm minimum (one-way) • 2,000 mm minimum (two-way)	Same as accessible
Top and bottom landings	• 1,200 mm min. (one-way) • 2,000 mm minimum (straight, zigzag, L-shared and scissor stairways) for two-way movement for wheelchairs	• 1,100 mm - Class 2 to 9, or width of stairway, whichever is greater • 750 mm - Class 1 and 10, Class 2 to 4 (residential sole occupancy units), or width of stairway, whichever is greater
Mid-flight landing	• 1,200 mm minimum plus width of the adjacent treads (straight + zigzag stairs) • 1,500 mm minimum plus width of adjacent treads (L-shaped, scissor, curved stairways) • Not applicable to circular stairways	• 900 mm minimum plus the width of the adjacent treads (all stairway types) • Not applicable to circular stairways
Handrail	• Both sides required • 60 – 100 mm setback from wall, • 910 – 1,000 mm ht. from nosing	• Both sides required for Class 2 – 9 • One side required for Class 1, 10, and Class 2 to 4 (residential single occupancy) • No setback required
Tread width	• 310 mm to 400 mm (straight, zigzag, L-shaped, scissor stairways) • 150 mm for inner tread width for curved stairways • 300 mm at mid-point of circular stairway	• 250 mm to 400 mm (straight, zigzag, L-shaped, scissor stairways) • 150 mm inner tread width for circular stairways • 300 mm at mid-point of spiral stairway
Riser height	• 100 mm to 180 mm	• 100 mm to 190 mm
Pitch	• 23° to 42°	• 23° to 45°
Encroachment into a corridor	• 1,200 mm minimum setback from corridor (including tread width)	• 400 mm

Performance Requirements

(1) Reasonable provision must be made in the design of all buildings to facilitate use, access, and circulation by people with disabilities, except for the following:

a) Class 10 buildings that are non-habitable

b) Areas where access would be inappropriate or unsafe for people with disabilities

c) Instances where unjustifiable hardship would fall upon a person due to compliance with accessibility standards

(2) Required accessible buildings must provide access and use of the building and site to people with disabilities according to:

a) Function scale, layout, use and occupancy

b) Provisions in approved accessibility standards and guidelines acceptable to the Government of Fiji

D4 BUILDING ENTRANCE

.1 An unobstructed, hard surface path of travel to the building entrance must be provided that will accommodate people with disabilities.

.2 A threshold with a maximum rise of 5 mm must be installed on both sides of the building entrance door for a distance of at least 1.0m on both sides of the doorway.

.3 A ramp, if needed, must be setback a minimum of 1,100 mm from the threshold.

.4 The door should be easy to open and close, and preferably automatic.

.5 An accessible door must have glazing installed at a height that will permit a person in a wheelchair to be easily seen.

.6 The doorway must have a colour contrast between the door, door frame, wall and path of travel to assist people with vision impairments.

.7 A tactile ground indicator (see Section D6.1 D5 above) must be installed on both sides of the doorway.

.8 Where an accessible building entrance has multiple doorways:

a) If the pedestrian entrance consists of 3 doorways or less, at least one of those doorways must be accessible

b) If a pedestrian entrance consists of more than 3 doorways, at least 50% of those doorways must be accessible.

D6 WHEELCHAIR SPACES IN ASSEMBLY BUILDINGS

.1 Where fixed seating is provided in a Class 9b assembly building, wheelchair seating spaces complying with AS 1428.1 Design for Access and Mobility, Part 1: General Requirements for Access - New Building Work must be provided in accordance with the following criteria:

a) The number and grouping of wheelchair seating spaces must be in accordance with Section D3 Occupancy and Measurement per building type

b) In a cinema:

(i) With not more than 300 seats — wheelchair seating spaces must not be located in the front row of seats

(ii) With more than 300 seats — not less than 75% of required wheelchair seating spaces must be located in rows other than the front row of seats

Table D6.2 Wheelchair seating spaces in Class 9b assembly buildings

Number of fixed seats in a room or space	Number of wheelchair seating spaces	Grouping and location
Up to 150	3 spaces	1 single space 1 group of 2 spaces
151 to 800	3 spaces, plus	Not less than 1 single spaces
	1 additional space for each additional 50 seats or part thereof in excess of 150 seats	Not less than 1 group of 2 spaces
		Not more than 5 spaces in any other group
801 to 10,000	16 spaces, plus	Not less than 2 single spaces
	1 additional space for each additional 100 seats or part thereof in excess of 800 seats	Not less than 2 groups of 2 spaces
		Not more than 5 spaces in any other group The location of spaces is to be representative of the range of seating provided
More than 10,000	108 spaces, plus	Not less than 5 single spaces
	1 additional space for each additional 200 seats or part thereof in excess of 10,000 seats	Not less than 5 groups of 2 spaces
		Not more than 10 spaces in any other group The location of spaces is to be representative of the range of seating provided

D3 ACCESSIBLE CARPARKING

.1 Accessible carparking must be provided in accordance with Table D6.3, and:

a) Be on the same allotment as the building required to be accessible

b) Must comply with AS/NZS 2890.6 Parking Facilities, Part 6: Off-street Parking for People with Disabilities

.2 Accessible carparking spaces need not be provided in a Class 7a building or a carparking area where a parking service is provided and direct access to any of the carparking spaces is not available to the public.

.3 The accessible route within a carparking area must be:

a) Appropriately demarcated with a painted colour and/or texture that contrasts with the pavement

b) Have directional signage and/or traffic control signals with appropriately-located push buttons, audible and visual signals, and time intervals to allow safe crossing, where deemed appropriate

Table D6.3 Accessible Carparking

Class of building to which carpark or carparking area is associated	Number of accessible carparking spaces required
Class 1b and 3	
(a) Boarding house, guest house, hostel, lodging house, backpackers accommodation, or the residential part of a hotel or motel.	To be calculated by multiplying the total number of carparking spaces by the percentage of: (i) Accessible sole-occupancy units to the total number of sole-occupancy units, or (ii) Accessible bedrooms to the total number of bedrooms the calculated number is to be taken to the next whole figure.
(b) Residential part of a school, accommodation for the aged, disabled or children, residential part of a health-care building which accommodates members of staff or the residential part of a detention centre.	1 space for every 100 carparking spaces or part thereof.
Class 5, 7, 8 or 9c	
	1 space for every 100 carparking spaces or part thereof.
	1 bedroom and associated sanitary facilities
Class 6	
(a) Up to 1000 carparking spaces	1 space for every 50 carparking spaces or part thereof.
(b) For each additional 100 carparking spaces or part thereof in excess of 1000 carparking spaces.	1 space
(c) A boarding house, bed and breakfast, guest house, hostel or the like, other than those described in (a)	To and within
Class 9a	
(a) Hospital (non-outpatient area)	1 space for every 100 carparking spaces or part thereof.
(b) Hospital (outpatient area):	1 space for every 50 carparking spaces or part thereof.
(c) Nursing home	1 space for every 100 carparking spaces or part thereof.
(d) Clinic or day surgery not forming part of a hospital.	1 space for every 50 carparking spaces or part thereof.
(i) Up to 1000 carparking spaces	1 space for every 50 carparking spaces or part thereof.
(ii) For each additional 100 carparking spaces or part thereof in excess of 1000 carparking spaces.	1 space.
Class 9b	
(a) School	1 space for every 100 carparking spaces or part thereof.
(b) Other assembly building:	
(i) Up to 1000 carparking spaces	1 space for every 50 carparking spaces of part thereof.
(ii) For each additional 100 carparking spaces or part thereof in excess of 1000 carparking spaces.	1 space.

D1 RAMP CONFIGURATION

.1 A ramp may be used in place of a stairway if all spatial and safety standards are satisfied.

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.2 All ramps satisfy performance criteria for size if they comply with standards in Table D2.2 and Figures D2.10:

.5 A ramp serving as a required exit must have a gradient of not more than:

a) 1:12 for all accessible ramps

b) 1:8 for ramps not required to be accessible

.6 Maximum rise for a ramp between landings is:

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a) 750 mm for an accessible ramp

b) 1,500 mm for a ramp not required to be accessible

And the ramp cannot be greater than 9.0 m horizontal distance

.7 On an accessible route, a series of connected ramps must not have a combined vertical rise of more than 3.6 m.

.8 Where a ramp replaces a step in a path of travel, the landing for the ramp must not overlap a landing for another ramp.

.9 All ramps must be protected at the edge so there is no risk of falling off.

.10 The surface of a ramp must be slip-resistant in accordance with AS 4586 Slip Resistance Classification of New Pedestrian Surface Materials.

.11 All ramps must be designed to resist loading forces in accordance with Section B.

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D6 ACCESSIBLE RAMP AT FRONT ENTRANCE

.1 An accessible ramp complying with AS 1428.1 Design for Access and Mobility can serve a single storey in the building entrance of a Class 5, 6, 7b or 8 building where it:

a) Contains 3 storeys or less

b) Has a floor area maximum size of 200 m^2 on each storey, excluding the entrance storey

Table D2.2 Ramp Dimensions

Ramp	Accessible	Non-Accessible
Ramp width	• 915 mm between handrails (1-way) • 1850 mm between handrails (2-way)	• Same as accessible
Top and bottom landings	• 1,200 mm minimum (straight and zigzag ramp) • 1,500 mm (L-shaped and scissor ramp)	• Same as accessible
Mid-flight landing	• 1,200 mm minimum (straight and zigzag ramps) • 1,500 mm minimum (L-shaped, scissor ramps)	• Same as accessible
Handrail	• Both sides required • 60 – 100 mm setback from wall, where applicable • 900 – 1,000 mm ht. from ramp surface	• Both sides required for Class 2 – 9 • One side required for Class 1, 10, and Class 2 to 4 (residential single occupancy units) • No setback required • 910 – 1000 mm ht. from ramp surface
Encroachment into a corridor	• 1,500 mm minimum setback from ramp to corridor	• Same as accessible

D8 FIRE EXTINGUISHERS

.1 Fire extinguishers must be installed to the degree necessary to allow occupants to undertake initial attack on a fire appropriate to:

a) Function or use of the building

b) Any other fire safety systems installed in the building

c) Fire hazard

.2 Portable fire extinguishers must be:

a) Provided as listed in Table C4.3 Fire Extinguisher Requirements

b) For a Class 2, 3, or 5 building or Class 4 part of a building, provided:

(i) To serve the whole Class 2, 3 or 5 building or Class 4 part of a building where one or more internal fire hydrants are installed

(ii) Where internal fire hydrants are not installed, to serve any fire compartment with a floor area greater than 500 m², and for the purposes of this clause, a sole-occupancy unit in a Class 2 or 3 building or Class 4 part of a building is considered to be a fire compartment

c) Subject to (b), selected, located and distributed in accordance with Sections 1 to 4 of AS 2444 Portable Fire Extinguishers and Fire Blankets – Selection and Location

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Table C4.3 Fire Extinguisher Requirements

Fire Extinguisher Type	Application
Class A: for fires involving ordinary combustibles such as wood, paper, textiles	In the following building types that are not protected with a fire hose reel or sprinkler system: ○ Common areas in **Class 2, 3, or 5 buildings** and **Class 4 part of a building** ○ Overnight accommodation rooms in **Class 9a, 9c**, and in detention or correctional occupancy rooms ○ **Class 6, 7, 8, and 9** buildings in common areas, corridors and near exits ○ **Class 9b** buildings in classrooms and meeting rooms
Class B: for fires involving flammable liquids such as petrol, oil, paints	**Class 6, 7, 8, 9 or 10** building storing, manufacturing or extensively using flammable liquids in excess of 50 litres (not including fuel tanks in vehicles)
Class C: for fires involving flammables gases	**Class 6, 7, 8, 9 or 10** building storing, manufacturing or extensively using flammable gases
Class D: for fires involving combustible metals	**Class 6, 7, 8, 9 or 10** buildings that produce or operate with combustible metals such as a foundry, metalworking plant, laboratory, metal storage, mining equipment
Class E: for fires involving live electrical equipment	○ Any building with an emergency services switchboard, electrical room and the like ○ Class 6, 7, 8 or 9 building with IT facilities, laboratories, medical equipment, and the like ○ Nursing station, supervisory station, common area and the like in a **Class 9** building
Class F: for fires involving cooking oils and fats	○ **Class 1, 2, 3, 4 and 5** shared kitchens ○ **Class 2, 3 or 5 hote**l building in overnight accommodation rooms containing a kitchen ○ **Class 6, 7, 8, and 9** commercial kitchens
Notes: *(i) For the purposes of this Table, an emergency services switchboard is one which sustains emergency equipment operating in the emergency mode.* *(ii) The fire risks in a Class 2 or 3 building or Class 4 part of a building must include risks within any sole-occupancy units, however, portable fire extinguishers are not required to be located within a sole-occupancy unit unless the sole-occupancy unit has a floor area greater than 500 m².*	

FIJI NATIONAL BUILDING CODE COMPLIANCE (FNBC 2023)		
D6 FIRE HOSE REELS .1 A fire hose reel system must be installed to the degree necessary to allow occupants to safely undertake initial attack on a fire appropriate to: a) The size of the fire compartment b) The function or use of the building c) Any other fire safety systems installed in the building d) The fire hazard	**C-29**	.4 A fire hose reel must not be located within a fire-isolated passageway. .5 A fire hose reel must serve only the floor on which it is located except: a) A fire hose reel may serve a sole-occupancy unit of not more than 2 storeys at the level of egress from the sole-occupancy permit provided sufficient coverage is achieved b) A unit with a mezzanine floor if the fire hose reel is located at the level of egress from that unit .7 A fire hose reel must be located so that the fire hose will not need to pass through doorways fitted with fire or smoke doors, except: a) Doorways in walls referred to in DTS provision C2 D4 in a Class 9a and Class 9c Building, separating ancillary use areas of high potential fire hazard b) Doorways in walls referred to in DTS Provision C2 D11 or C2 D12 separating equipment or electrical supply systems c) Doorway openings to shafts referred to in DTS Provision C3 D12

Table 22: Relevant excerpts from the Sphere Handbook for WASH

THE SPHERE HANDBOOK (*Humanitarian Charter & Minimum Standards in Humanitarian Response – 2018 Edition*)		
MENSTRUAL HYGIENE HEALTH STANDARD:	**Page Number**	
Hygiene promotion standard 1.3: **Menstrual hygiene management and incontinence** Women and girls of menstruating age, and males and females with incontinence, have access to hygiene products and WASH facilities that support their dignity and well-being.	**103 & 104**	***Minimum supplies:*** *For both menstrual hygiene management and incontinence:* ▪ a dedicated container with lid for soaking cloths and storing pads/cloths; and ▪ rope and pegs for drying. *For menstrual hygiene:* ▪ either absorbent cotton material (4 square metres per year), disposable pads (15 per month) or reusable sanitary pads (six per year), as preferred by women and girls; ▪ underwear (six per year); ▪ extra soap (250 grams per month) ⊕ *see Hygiene promotion standard 1.2: Identification, access to and use of hygiene items.*
Menstrual hygiene management: Toilets should include appropriate containers for the disposal of menstrual materials in order to prevent blockages of sewerage pipes or difficulties in desludging pits or septic tanks. Consult with women and girls on the design of toilets to provide space, access to water for washing, and drying areas.		

Quantifying toilet requirements: Consider how to adapt toilet requirements in context to reflect changes in the living environment before and after the crisis, requirements in public areas and any specific public health risks. During the first phases of a rapid-onset crisis, **communal toilets are an immediate solution with a minimum ratio of 1 per 50 people**, which must be improved as soon as possible. A **medium-term minimum ratio is 1 per 20 people**, with a ratio of 3:1 for female to male toilets. For planning figures and number of toilets ⊕ *see Appendix 4.*

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WATER SUPPLY STANDARD 2.1:

Access and water quantity

People have equitable and affordable access to a sufficient quantity of safe water to meet their drinking and domestic needs.

Key actions

1. Identify the most appropriate groundwater or surface water sources, taking account of potential environmental impacts.
   - Consider seasonal variations in water supply and demand, and mechanisms for accessing drinking water, domestic water and water for livelihoods.
   - Understand different sources of water, suppliers and operators, and access to water within communities and households.
2. Determine how much water is required and the systems needed to deliver it.
   - Work with stakeholders to locate waterpoints that allow safe and equitable access for all community members.
   - Establish operation and maintenance systems that assign clear responsibilities and include future needs for sustainable access.
3. Ensure appropriate waterpoint drainage at household and communal washing, bathing and cooking areas and handwashing facilities.
   - Look for opportunities to reuse water, such as for vegetable gardens, brick-making or irrigation.

Maximum number of people using water-based facility

- 250 people per tap (based on a flow rate of 7.5 litres/minute)
- 500 people per hand pump (based on a flow rate of 17 litres/minute)
- 400 people per open hand well (based on a flow rate of 12.5 litres/minute)
- 100 people per laundry facility
- 50 people per bathing facility

Guidance notes

Water source selection should consider:

- availability, safety, proximity and sustainability of a sufficient quantity of water;
- need for and feasibility of water treatment, whether bulk or at household level; and
- social, political or legal factors affecting the source control of water sources might be controversial, especially during conflicts.

A combination of approaches and sources is often required in the initial phase of a crisis to meet survival needs. Surface water sources, despite requiring more treatment, may be the quickest solution. Groundwater sources and/or gravity-flow supplies from springs are preferable. They require less treatment, and gravity-flow does not require pumping. Monitor all sources regularly to avoid over-extraction

Table 23: Relevant excerpts from MoE Minimum Standards on WASH in Schools Infrastructure

MEHA COMPLIANCE *(Minimum Standards on Water, Sanitation and Hygiene (WASH) in schools infrastructure – 2012)*			
WATER QUALITY			
1. Is the water from a safe source (free of faecal contamination)? 2. Is the water protected from contamination in the school? 3. If necessary, can water be treated at the school? 4. Does the water supply meet FNDWS standards regarding chemical or bacteriological parameters? 5. Is thE water acceptable (smell, taste, appearance)? 6. Is the school water supply designated and built so that low-quality water cannot be drunk?	Standards 2 & 4	*14, 15 & 16*	***Standard 2: Potable Water Quality*** Safe drinking water should be odor less ,color less, tasteless and free from bacteria. See annex 1 for specific quality requirements. Water quality checking is mandatory for any suspected case of contamination. Schools situated in areas with risks of contamination should perform a water quality test at least once a year. These include schools in mining areas, intensive agriculture areas, floods areas, etc… **3.1.2 Non potable water** A school must offer adequate access to water for non drinking purposes; these include hand washing, body washing, cleaning of schools, compounds, etc…. ***Standard 4: Non Potable Water Quality*** Although non potable water is not for drinking purposes, its quality should be of acceptable level: it has to be colorless, odorless, exempt from debris (stones, sand, leaves, algae, etc…) exempt from suspended solids particles, free from arsenic and other hard metals; See Annex 1 for more specific water quality requirements. It must have a sign which is fixed to the specific tank/point of distribution which clearly inform the users of its non portability. Students should be educated on the purpose of the non potable water (washing hands and body, cleaning, etc…) and sensitized on not drinking it because of the water related diseases which may arise from it. Water quality checking is mandatory for any suspected case of contamination; Schools located in areas with risk of contamination, i.e. schools located in area with intensive agriculture, mining areas, floods areas, should perform water quality test at least once a year.

MEHA COMPLIANCE

(Minimum Standards on Water, Sanitation and Hygiene (WASH) in schools infrastructure – 2012)

TOILETS

1. Are there sufficient toilets at the school?
2. Separated blocks?
   Are the toilets situated in the right place?
3. Do the toilets provide privacy and security?
4. Are the toilets appropriate to local culture and social conditions?
5. Are the toilets hygienic to use and easy to clean?
6. Is there hand washing facilities close by?
7. Does the school have accessible toilet for children in wheelchairs?
8. Are there shower rooms for both girls and boys?
9. Are there sanitary bins in girls' toilets?

Standards 6, 7 & 8

17, 18 & 19

Standard 6: Toilets

Appropriate quantity of sanitation facilities/or toilets must be provided according to the ratios in the table below:

Sanitary facility ratio
Girls
One closet for every 20 girls or part of 20 up to 200 girls, and an additional closet for every 25 girls or part of 25 girls over that number up to 300 girls, and one additional closet for every 33 girls or part of 33 girls over 300 girls.
1 hand wash point with tap and soap per 50 girls.
Boys
One closet for every 33 boys or part of 33 boys up to 200 boys, and an additional closet for every 50 boys or part of 50 boys over the number of 200 boys.
1 urinal per 50 boys.
1 hand wash point with tap and soap per 50 boys.
Staffs
Separate closets for each sex. One closet for every 20 persons or part of 20 persons of either sex.
1 hand wash point with tap and soap per 20 staffs
Minimum 2 cubicles 1 for Women and 1 for Men
Children with special needs (in Wheelchairs)
For newly constructed toilet facilities, 1 closet for children with special needs (in wheelchairs)

Following are minimum requirement to be met in addition of sanitation facilities:

a. Girls and boys must have equal access to adequate sanitation facilities in schools, which ensure privacy for all.

b. Girls and Boys sanitation facilities must be separate with their own wash basins and taps. The separation must have adequate visual, noise and odor separation.

c. Specifically for Class 1, Class 2 and Class 3, the height of flushing toilet should be maximum 295mm all inclusive (WC and toilet seats) and the height for wash basin be maximum 610 mm all inclusive (wash basin, support and accessories)[5]

d. Staff toilets must have separate women and men cubicle with adequate privacy.

e. Cubicle doors are open inwards or outwards; this is to facilitate easy opening either inside or outside.

f. Each toilet door should have a hangar for children to hang their stuffs easily.

g. The above guidelines are also applicable for boarding schools.

N.B:

1. When intended for use by Muslims the compartment should not face in the direction of Mecca, and a low level cold water tap should be provided in addition to any flushing water. In addition, the school must also provide space for ablution, for their usual prayers. Urinals should not be installed for them.

2. Schools where children with special needs (in wheelchairs) are enrolled, must provide at least one accessible toilet and hygiene facilities for them. See annex 3

3. Toilets types:

- In geographical areas where there is no water source, Ventilated Improved Pit (VIP) Latrine can be used; See Annex 4
- In geographical areas where water is not enough and/or not available the whole year, water seal toilet can be used; See Annex 5
- In geographical areas where water is available throughout the year, flush toilet should be used. See annex 6
- Each cubicle should at least have minimum of dimension as 1.5m x1.2m of surface area and have a door of 1.9m to 0.45m of dimensions preferably. See annex 2

4. Special schools for children with disabilities should have:

- One cubicle for every 15 children and provision of one toilet for wheelchair for each block of toilet and per sex.

Standard 7:

A personal hygiene compartment where girls are able to wash during menstruations must be offered.

Thus each toilet block should have at least one room for girls to take a shower and one room for boys to take a shower with all necessities.

Standard 8:

The provision of sanitary towels, hygienic pads and disposal facilities should be made available at schools for girls in menstruation. Hygienic and safe disposal practice must be practiced.

One sanitary bin per girl's toilet is a requirement and in addition, one sanitary bin per block of toilets.

MEHA COMPLIANCE

(Minimum Standards on Water, Sanitation and Hygiene (WASH) in schools infrastructure – 2012)

WASH FACILITIES	Page Number

2. **Water facilities and access to water**: Sufficient water-collection points and water-use facilities are available in the school, allowing convenient access to, and use of, water for drinking and personal hygiene, and for food preparation, cleaning and laundry.

   Indicators

   a. A reliable water point, with soap or a suitable alternative, is available at all the critical points within the school, particularly toilets and kitchens.

   b. A reliable drinking water point is accessible for staff and schoolchildren at all times.

4. **Hygiene promotion**: Correct use and maintenance of water and sanitation facilities is ensured through sustained hygiene promotion. Water and sanitation facilities are used as resources for hygiene education.

   Indicators

   a. Hygiene education is included in the school curriculum.

   b. Positive hygiene behaviours, including correct use and maintenance of facilities, are systematically promoted among staff and schoolchildren.

   c. Facilities and resources enable staff and schoolchildren to practice behaviours that control disease transmission in an easy and timely way.

5. **Toilets**: Sufficient, accessible, private, secure, clean and culturally-appropriate toilets are provided for schoolchildren and staff.

   Indicators

   a. There are sufficient toilets available – 1 per 25 girls or female staff, and 1 toilet plus 1 urinal (or 50 centimetres of urinal wall) per 50 boys or male staff.

   b. Toilets are easily accessible – no more than 30 metres from all users.

   c. Toilets provide privacy and security.

   d. Toilets are child-friendly and appropriate to local cultural, social and environmental conditions.

   e. Toilets are hygienic to use and easy to clean.

   f. Toilets have convenient hand-washing facilities close by.

   g. There is a cleaning and maintenance routine in operation that ensures clean and functioning toilets are available at all times.

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STANDARDS FOR WASH IN SCHOOLS[14]

1. **Water quality**: Water for drinking, cooking, personal hygiene, cleaning and laundry is safe for the purpose intended.

   Indicators

   a. **Microbiological quality of drinking water**: Escherichia coli or thermotolerant coliform bacteria are not detectable in any 100-ml sample.

   b. **Treatment of drinking water**: Drinking water from unprotected sources is treated to ensure microbiological safety.

   c. **Chemical and radiological quality of drinking water**. Water meets WHO *Guidelines for Drinking-water Quality* or national standards and acceptance levels concerning chemical and radiological parameters.

   d. **Acceptability of drinking water**: There are no tastes, odours or colours that would discourage consumption of the water.

   e. **Water for other purposes**: Water that is not of drinking water quality is used only for cleaning, laundry and sanitation.

2. **Water Quantity**: Sufficient water is available at all times for drinking and personal hygiene, and for food preparation, cleaning and laundry when applicable.

   Indicators

   a. **Basic quantities required**

Day schools	5 litres per person per day for all schoolchildren and staff
Boarding schools[15]	20 litres per person per day for all residential schoolchildren and staff

   b. **Additional quantities required** (The following should be added to the basic quantities as necessary. Figures given are for day schools. They should be doubled for boarding schools.)

Flushing toilets	10–20 litres per person per day for conventional flushing toilets/1.5–3 litres per person per day for pour-flush toilets
Anal washing/cleansing[16]	1–2 litres per person per day

MEHA COMPLIANCE

(Minimum Standards on Water, Sanitation and Hygiene (WASH) in schools infrastructure – 2012)

SANITATION FACILITIES QUALITY (FNBC)

1. Is the building made with the highest materials and compliant to the National Building Code? 2. Is there adequate natural or artificial light? 3. Is there adequate ventilation? 4. Is the building designed and built to avoid damp and moulds? 5. Is the wastewater drainage system correctly designed and built?	Standards 9,12 & 14	19,22 & 23	***Standard 9:*** Sanitation facilities must be of appropriate quality: a. All structures must be made with highest materials to avoid environmental risks such as unstable floors or full pits; and provision of cyclones protection measures; and must be compliant to the National Building Code. b. All structures and surfaces must be kept neat, tidy and hygienic. c. All sanitation facilities must have adequate(natural or artificial) light. d. All sanitation facilities must have adequate ventilation. ***Standard 12*** School environment should be free from stagnant water and schools must have proper drainage system.

Are the school facilities designed to be easy to use and maintained hygienically?

TABLE NF2.3
SANITARY AND OTHER FACILITIES

Class of Building	User	Max Number Served by-								
		Closet Fixture (s)			Urinals (s)			Washbasin (s)		
		1 Up to	2 Up to	Each Extra	1 Up to	2 Up to	Each Extra	1 Up to	2 Up to	Each Extra
3,5,6 and 9 other than *schools*	**Employees**									
	Males	20	40	20	25	50	50	60	120	60
	Females	15	30	15	-	-	-	60	120	60
7 and 8	**Employees**									
	Males	20	40	20	25	50	50	30	60	30
	Females	15	30	15	-	-	-	30	60	30
6 - Department stores, shopping centres and, individual shops in excess of 900 m² total *floor area*	**Patrons-**									
	Males	500	2400	1200	600	1200	1200	1000	4000	2000
	Females	300	600	1200	-	-	-	1000	4000	2000
6- Restaurants cafes, bars, public halls, function rooms and 9a - out patients	**Patrons-**									
	Males	50	200	250	60	200	100	50	200	250
	Females	30	70	80	-	-	-	50	200	250
9a-*Health-care buildings* (Other than for out patients)	**Resident Patients-**									
	Males	-	16	8	-	-	-	16	32	16
	Females	-	16	8	-	-	-	16	32	16
	- Other facilities - One shower for each 8, or part, patients or inmates.									
9b - *Schools* not being *early child-hood centres*	**Staff and employees-**									
	Males	20	40	20	25	50	50	30	60	30
	Females	15	30	15	-	-	-	30	60	30
	Students-									
	Males	30	70	70	30	70	40	60	140	140
	Females	20	40	30	-	-	-	60	140	140
	- Other facilities - A minimum of one shower each for male and female students									

Standard 14:

School should monitor hygiene behaviour of teachers and students as well as maintenance of school's classrooms, toilets and compounds.

Activities for hygiene promotion can include:

Cleaning toilets and collecting solid waste. These activities should be organised fairly and transparently (e.g. with a publicly-displayed rota that does not discriminate between boys and girls or children from particular social or ethnic groups), within the limits of children's age and ability. These activities should not be used as a punishment.

Children are heavily influenced by the example set by school staff, their teachers in particular, who should provide positive role models by consistently demonstrating appropriate hygiene behaviours.

Staff and children should not be expected to adopt behaviours that are inconvenient, uncomfortable or impractical. For example, staff not washing their hands after using toilets because there is no water;

Appropriate facilities should be provided for menstrual hygiene for female teachers and older girls. A shower should available in each girl's toilet block and a sanitary pad per cubicle and per block should also provided.

Table F2.1 Minimum Number of Sanitary Fixtures per Building Type

Building Class	User Group	Closet Pans		Urinals		Washbasins	
		1 per	+ 1 every	1 per	+ 1 every	1 per	+ 1 every
Class 3, 5, 6 9 - other than schools	**Employees**						
	Males	20	20	25	50	30	30
	Females	15	15	-	-	30	30
Class 7 and 8 (except electricity network substation)	**Employees**						
	Males	20	20	25	50	20	20
	Females	15	15	-	-	20	20
Class 6 - department stores, shopping centres and, individual shops in excess of 900m² total floor area	**Patrons**						
	Males	1200	1200	600	1200	600	1200
	Females	300	300	-	-	600	1200
	None required if total number of persons is not more than 600						
Class 6 - restaurants, cafes, bars, public halls, function rooms and 9aout patients	**Patrons**						
	Males	100	100	50	50	50	200
	Females	25	50	-	-	50	150
	None required if total number of persons is less than 21						
Class 9a - health care buildings (other than for out-patients)	**Resident Patients**						
	Males	8	8	-	-	8	8
	Females	8	8	-	-	8	8
Class 9b - schools (not being early childhood centres)	**Staff + employees**						
	Males	20	20	20	30	30	30
	Females	5	15	-	-	30	30
	Students						
	Males	25	75	50	75	10	50
	Females	10	25	-	-	10	50
Class 9b - early childhood centres	**Children**	15	15	-	-	15	15
	Must be junior pans, washbasin with rim height not more than 600 mm						
Class 9b – theaters with multiple auditoria, art galleries and the like	**Participants**						
	Male	20	20	10	10	10	10
	Female	10	10	-	-	10	10
	Spectators						
	Male	250	400	100	100	150	150
	Female	10	60	-	-	80	175

Annex 7 – FDPF Access Audit Tool

Please refer to separate attachment.

Annex 8 – NRW Cyclone Checklist

Please refer to separate attachment.

Annex 9 – Individual School Reports

Please refer to separate attachment.


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