



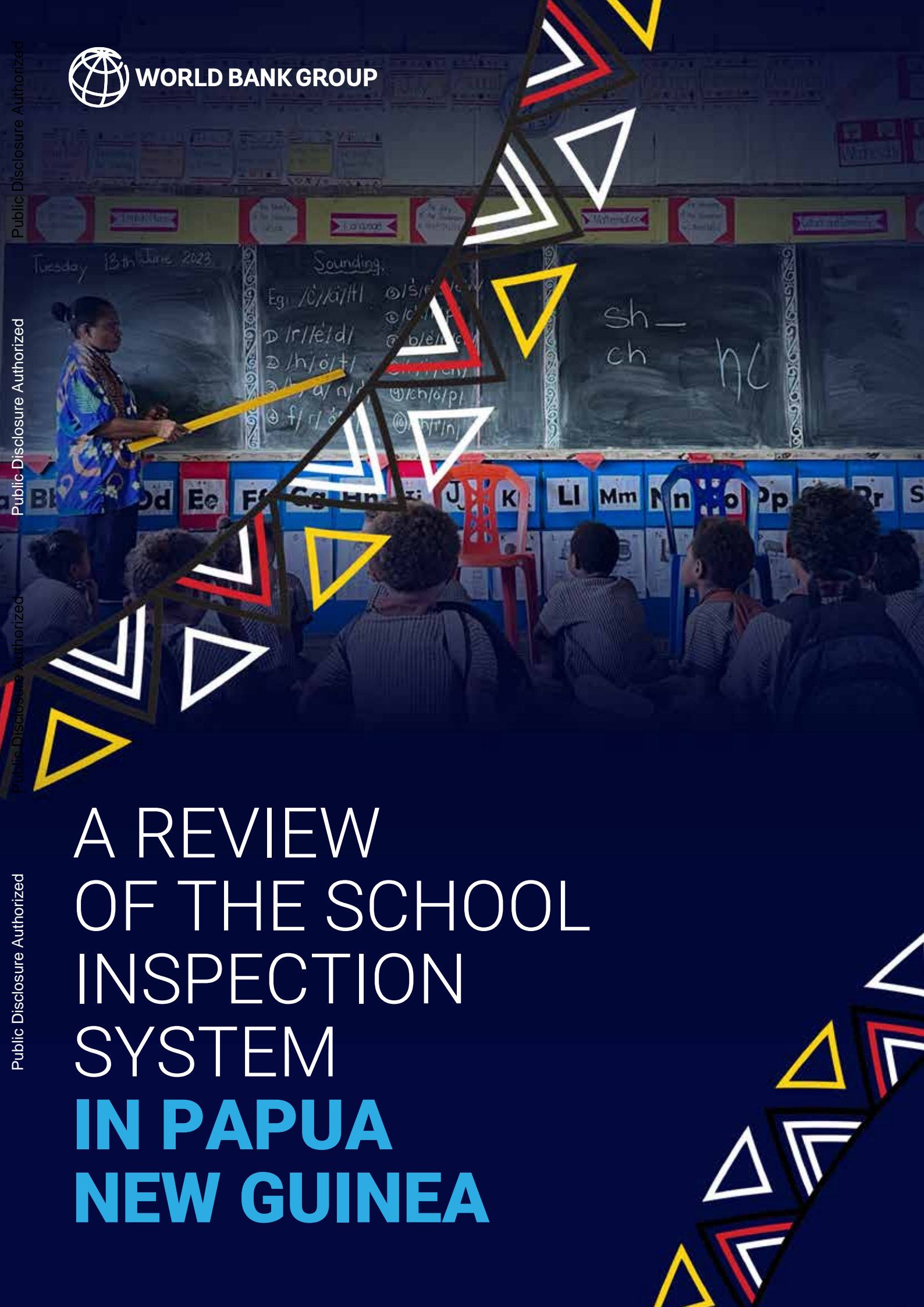
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A REVIEW OF THE SCHOOL INSPECTION SYSTEM **IN PAPUA NEW GUINEA**

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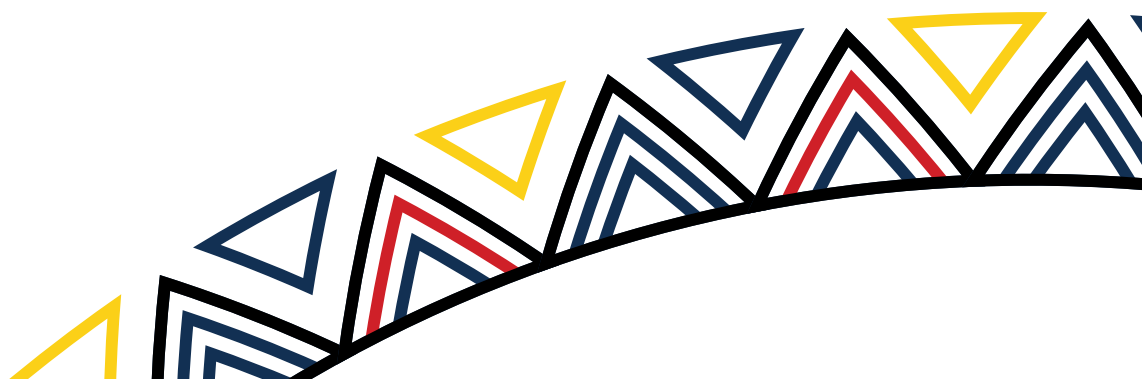
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Abbreviations

AROB	Autonomous Region of Bougainville
AS	Assistant Secretary
BOM	Board of Management
DDA	District Development Authority
DEO	District Education Officer
DFAT	Department of Foreign Affairs and Trade (Australian Government)
DHERST	Department of Higher Education Research Science and Technology
DS	Deputy Secretary
DSIP	District Services Improvement Programme
ECBP	Education Capacity Building Programme
EHP	Eastern Highlands Province
EMIS	Education Management Information System
ENB	East New Britain Province
ERO	Education Review Office (New Zealand)
ESP	East Sepik Province
FAS	First Assistant Secretary
FRC	Full Registration Certificate
GTFS	Government Tuition Fees Subsidy
HT	Head Teacher
KRA	Key Result Area
MFAT	New Zealand Ministry of Foreign Affairs and Trade
MP	Member of Parliament
MPR	Master Position Register
NASSA	National Approach to Schools Standards Assessment
NCD	National Capital District
NDoE	National Department of Education
NEFC	National Economic and Fiscal Commission
NIP	New Ireland Province
NQSSF	National Quality Schools Standards Framework
NRC	National Ratings Conference
NSMS	National Schools Minimum Standards
OECD	Organisation for Economic Cooperation and Development
PARI	Papua New Guinea Accessibility/Remoteness Index (PARI)
PASA	Programmatic Advisory Services and Analytics

PBDS	Performance based Duty Statements
PDoE	Provincial Department of Education
PEA	Provincial Education Advisor
PEB	Provincial Education Board
PFM	Public Financial Management
PIE	Partnerships for Improving Education
PMV	Private Motor Vehicle
PNG	Papua New Guinea
PRC	Provincial Ratings Conference
SBC	Standards Based Curriculum
SBM	School Based Management
SBMSR	School based Management and Supervision Reform
SBTA	School Based Teacher Assessment
SEOC	Senior Education Officers Conference
SHP	Southern Highlands Province
SIBE	School Inspector Basic Education
SID	School Inspections Division
SISS	Senior Secondary Inspector
SLIP	School Learning Improvement Plan
SMR	Supervision and Management Reform
SOSY	Start of School Year
SPA	Senior Professional Assistant
SSIBE	Senior Schools Inspector Basic Education
TED	Teacher Education Division
TPD	Teacher Professional Development
TSC	Teacher's Service Commission
VET	Vocational Education and Training
WHP	Western Highlands Province
WNB	West New Britain Province
WSP	West Sepik Province
1 6 6	One-Six-Six (new structure of school education)
3 6 4	Three-Six-Four (previous structure of school education)

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Executive Summary



Executive Summary

Dating back to the introduction of mass public schooling, school inspection systems have become ubiquitous in recent decades, with a growing global focus on improving educational outcomes.¹ Though different countries use varying names and models for inspections, these systems all seek to improve the quality of education. They typically undertake three main functions, with differing degrees of emphasis: (i) enforcing compliance with legislation and minimum quality standards, and so serve as a mechanism of accountability; (ii) supporting school improvement and innovation; and (iii) evaluate the educational system and the professionals (teachers and school principals) working in it. When done well, these three core functions can contribute significantly to improving learning outcomes in a national schooling system.

In Papua New Guinea (PNG), school inspectors should ideally play a pivotal role in monitoring, providing feedback, and strengthening the quality of teaching and learning. PNG's school inspection system currently faces a crisis. Originally designed several decades ago, the system now struggles with capacity issues, failing to evolve with the changing needs of education. While school inspectors are integral for governance, accountability, and teacher quality, they are hampered by outdated protocols, inadequate training, and insufficient resources. PNG's education system struggles to produce good outcomes for students as measured international comparative process, a problem made worse by the reality that the inspector system is not sufficiently focused on improving these outcomes. With education in PNG now under the guidance of an ambitious National Education Plan (NEP), it is of paramount importance to understand these challenges comprehensively.

In theory, inspections are seen as serving a key purpose of promoting education quality. Various documents outline inspectors' roles, reflecting a highly ambitious job description for inspectors, worsened by a lack of restriction around inspectors' mandated functions and the fact that multiple actors from different agencies at different levels in the system are defining the scope of inspectors' activities in different ways. Hence, there is a lack of an integrated, stable policy environment that clearly defines and delineates the roles of inspectors. A further challenge is that the inspection system's human capacity has not kept pace with the growth of the schooling system. This has created massive bottlenecks in achieving the current mandate of the school inspection system.

Teacher appraisal, inspections, and inspection reports are critical for teachers, their registration status, tenure, and promotions. Currently though, the core role of teacher inspections is beset with cumbersome rules and procedural challenges, most clearly illustrated by the way in which the national ratings process currently functions. Teachers are not being inspected because the inspectors are stretched beyond capacity; reports are not being generated; and affected teachers cannot secure full registration, tenure, salaries commensurate with tenured positions, or opportunities for promotion. Inspectors' assessments of teacher performance are not linked to national teacher professional standards or student learning outcomes.

Over the years, various policy reforms and procedures were introduced to decentralize and tackle quality issues in the schooling system, including the concepts of school-based management, supervision and management reform, school-based teacher appraisal, and school reviews, which have never been systematically implemented in PNG. Implementing these effectively and systematically is seen by all key role players as central to streamlining inspectors' roles and shifting their focus to developmental school review and quality assurance.

¹ McNamara, B, M; O'Hara, G and O'Brien, J (2016). Exploring the changing face of School Inspections. *Eurasian Journal of Educational Research*, 66 1-26. <http://dx.doi.org/10.14689/ejer.2016.66.1>

Ehren, M.C.M; Janssens, F.J.G; Brown, M; McNamara, G; O'Hara, J & Shevlin, P (2017). Evaluation and decentralised governance: Examples of inspections in polycentric education systems.

Thus, the evidence demonstrates that centralized control endures. This has produced untenable expectations of inspectors across a range of functions, leading to significant variability in provincial implementation of national policies, and several layers of crisis. In turn, these factors have created worsening bottlenecks in teacher registration, appraisal, and teachers' ability to secure tenure in their roles. Ultimately, the ad hoc reforms have had limited impact on education quality, while the mandates and roles of the various actors at central and subnational level are still unclear and disputed.

The school inspections system is severely under-resourced in terms of the number of officers, salary levels, equipment, funds for operational expenses, and access to induction and ongoing capacity-building. These resource constraints influence their ability to carry out their mandate effectively. The limited number of inspectors, their overloaded job description, and constrained resourcing ultimately mean that inspectors have significant discretion in deciding where to focus their energy, while they also have very limited accountability for their work.

Inspectors are influential officials, within a political system that seeks to extend patronage into schools and other local, district and provincial structures. In some provinces, inspectors themselves are political appointees and use their appointment to get other political supporters into key positions. Current arrangements, where inspectors depend on schools for basic logistics, create an environment conducive to corruption. This is not to say that inspectors are corrupt: rather, that the integrity of the system currently depends not on good structures of incentives but on the integrity of the individual inspector working in a challenging and often severely resource-constrained context.

Tackling the challenges in PNG's school inspections system requires a comprehensive, systematic, and sustained strategy to be designed, implemented, and resourced adequately. The report's recommendations focus on:

- 1) Approving a clear and stable set of roles for inspectors and the broader school inspection system. This process should include detailed budgeting exercises to ensure that the roles defined are realistic and can be funded sustainably once approved.
- 2) Mobilizing the resources required, ensuring that there is predictability in annual inspection budgets and availability of resources when they are needed.
- 3) Documenting, approving, and operationalizing clear and transparent policies, regulations, and school, school leadership, and teacher professional standards to govern the implementation of those roles.

Preliminary estimation conducted as part of this Review suggests that an allocation of resources between two to four times higher than current spending would likely be needed to strengthen inspection services in line with the recommendations in this report.

01. Introduction



1. Introduction

1.1 Why this review?

In their contribution to institutional capabilities, inspectors' potential lies in monitoring, providing feedback, and supporting the quality of teaching and learning, thereby enabling the education sector in Papua New Guinea (PNG) to meet and raise expectations. This is a common role for school review and oversight internationally. Through the feedback and accountability they provide to schools, education authorities, and communities, inspections contribute a common set of long-standing expectations driving the education system.

In this process, inspections should set expectations for the performance of the education system and communicate these clearly. Inspectors' evaluation and accountability measures should produce evidence as to whether expectations have been met by the practical operation of the system units. This 'evidence', around met and unmet expectations, can then stimulate and orientate system development. While its impact has proven difficult to quantify consistently (compared to, for example, the direct effect of school leadership and management quality, and the quality of teaching²), inspection is well placed to inform and shape educational practice in schools.

The school inspection system in PNG is, unfortunately, in a state of a crisis, lacking the capacity to fulfil its mandate and implementing functions that remain largely unchanged since they were defined several decades ago. School inspectors are crucial to governance, accountability, and teacher professional standards, but struggle to fulfil their roles. Within an education system that has decentralized extensively, the inspections system seeks frontline quality control through highly centralized, sometimes authoritarian systems, but which are increasingly dependent on local actors and authorities for human and other resource. Induction of inspectors is done without significant upskilling, and in a context where inspectors are relatively poorly remunerated and under-resourced. Significant reforms have been prepared but not trialled or implemented for a range of reasons, including budget and feasibility.

Identifying how to fix these challenges and how to modernize the role of school inspections so that it can play an active role in improving and assuring the quality of schooling in PNG first requires a clear understanding of the problems and their underlying causes. It is especially important currently as the education sector is being guided by a comprehensive and ambitious National Education Plan (NEP). The reforms proposed in the current NEP represent a major opportunity to increase access for and improve the quality of education, but will depend on well-functioning, reformed school inspections to assure the quality and effectiveness of these reforms.

PNG, however, does not yet have a system wherein expectations about schools are – reliably and accountably over time – translated into assessments and followed up with systemic improvement. Consequently, the National Department of Education (NDoE) requested World Bank, through its Programmatic Advisory Services and Analytics (PASA) team to conduct a thorough review of the current inspections system in the country, especially important currently as PNG's education system is at a juncture where it can make some important strategic choices about what roles it wants its inspectors to play. This review was guided by four key questions:

- 1) How well are inspectors able to implement their mandated Roles and how well supported are they by the current framework of *Rules and Procedures*?
- 2) How have (human and financial) Resources enabled or constrained inspectors' ability to implement their roles effectively?

² Ehren, et al (2013)

- 3) How effective and relevant are the current roles, rules, and resourcing, given challenges identified and in the context of ongoing education reforms in PNG and globally?
- 4) What actions can be taken to improve school inspections, aligning with other existing and planned reforms?

The review uses various data sources, including teacher position data 2022 retrieved from the Master Position Register (MPR) database and outcomes of annual teacher inspection processes completed through national ratings processes over several years. It draws on the World Bank’s analysis of governance and institutional arrangements in several sectors in Port Moresby and across a range of provinces over the last decade (See Appendix 2 for the analytic approach), including a study of inspections and accountability in Simbu conducted as they prepared inspection reports in schools in several districts. In addition, an extensive series of interviews was undertaken, as well as workshops involving inspectors, Provincial Education Advisors (PEAs), head teachers (HTs), and NDoE officials, in Central, Simbu, National Capital District (NCD), East Sepik, and Western Highlands provinces. It was further informed by a telephonic survey of 151 inspectors across all 22 provinces, attendance at the 2021 National Ratings Conference, and workshop participation in the recent re-writing of PNG inspectors’ handbook. Extensive variability and diversity in local contexts in PNG mean that triangulation is necessary in research. Provincial workshops and those that included people from across PNG provided a powerful way to gather facts and reflect on analyses.

1.2 Structure of the report

As a core component in PNG’s institutional framework for education, school inspection can be analysed for its institutional capabilities,³ their abilities to help people work together, creating and enforcing shared expectations or ‘standards’ across the education system and to extend those expectations down into and with provinces, schools, and classrooms. Like all institutions,⁴ these capabilities emerge from strengths in roles, rules, and resources and the ways these core elements combine and adapt over time to perform the institutions’ overall functions. This report is structured around a systematic analysis of the roles, rules, and resources of the PNG school inspection system:

- **Section 2 considers the roles of inspectors.** It explores briefly what is typically expected of school inspections globally, before summarizing the roles of school inspectors in PNG. This analysis highlights that there is not an integrated, stable policy environment that defines and limits the roles of inspectors. It also demonstrates that growth in these roles creates an unrealistically overburdened job description for the country’s cohort of inspectors. It concludes by presenting data that demonstrates practically how inspectors are simply unable to fulfil their mandate in the current environment.
- **Section 3 focuses on the rules and procedures that inspectors are expected to implement**, by exploring the most critical functions of teacher inspections and school reviews. Through a rich and detailed review of how these functions operate, it illustrates both that many of the rules and procedures governing them are no longer fit for purpose given the expanded size and changing needs of the school system and the reality that many rules and procedures governing school inspections are not yet properly defined.

³ See Nussbaum (2011), Horscroft and Craig (2011)

⁴ See North (2011), March and Olsen (2008)

- **Section 4 explores the *resourcing* of inspectors**, building on the prior observation from Section 1 that there are simply not enough inspectors employed. It highlights that: inspectors' salaries are too low for the functions they are expected to perform; resources for travel, accommodation, communication, consumables, and other expenses are inadequate, unreliably allocated, and typically distributed too late; they do not receive adequate induction into and training for their roles; and under-resourcing of inspectors creates spaces for undue influence in fulfilment of their roles.
- **Section 5 presents a coherent set of recommendations on how to solve the problems identified in the report.** This starts by responding to the need to reduce the number of roles that inspectors are expected to undertake. Recommendations then explore the need to define roles better so that they are underpinned by well-defined simple standards that focus on improving quality of teachers and schools and supported by digitized processes that streamline the roles effectively. Finally, they consider the need to resource and capacitate the inspections system much better and much more predictably, professionalizing and training inspectors and removing spaces for undue influence. Taken together, these recommendations present a clear and achievable roadmap to shift the PNG school inspections system from one of haphazard and superficial oversight to a modern one focused squarely on systematically strengthening the quality of PNG's schools and its teachers.

02. The role of inspectors in Papua New Guinea



2. The role of inspectors in Papua New Guinea

2.1 Global trends in school inspections

Dating back to the introduction of mass public schooling, school inspection systems have become ubiquitous in recent decades, with a growing global focus on improving educational outcomes.⁵ Though different countries use varying names and models for inspections, these systems all seek to improve the quality of education.⁶ Choi (2019, pg.2) defines inspection systems as

Instrument[s] to control and promote the quality of education that is external to the schools and aims to improve the level of knowledge of their students, in addition to other objectives.⁷

Similarly, Eddy-Spicer et al (2016, pg. 91) note that:

School inspections are understood as external evaluations of schools, undertaken by officials outside of the school with a mandate from a national or local authority. Regular visits to schools are an essential part of schools inspections to collect information about the quality the school, check compliance to legislation and/or evaluate the quality of students' work (e.g. through observations, interviews and document analysis).

In improving the quality of education, inspection systems around the world typically undertake three main functions, with differing degrees of emphasis:

- 1) Enforce compliance with legislation and minimum quality standards, and so serve as a mechanism of accountability.
- 2) Support school improvement and innovation.
- 3) Evaluate the educational system and the professionals (teachers and school principals) working in it.⁸

While the first function (supervision and compliance) was emphasized historically, inspections systems globally now emphasize more supportive approaches to school improvement that recognize the importance of school autonomy in the process.⁹ In some cases, school self-reflection is embedded in inspection systems:¹⁰

Historically inspection was largely about compliance with rules and to an extent to judge the work of individual teachers. Now, at least, in theory, it is as much concerned with creating a regulatory framework within which schools as organisations can enjoy greater autonomy while simultaneously being held responsible for student performance outcomes.¹¹

⁵ McNamara, B, M; O'Hara, G and O'Brien, J (2016). Exploring the changing face of School Inspections. Eurasian Journal of Educational Research, 66 1-26. <http://dx.doi.org/10.14689/ejer.2016.66.1>

Ehren, M.C.M; Janssens, F.J.G; Brown, M; McNamara, G; O'Hara, J & Shevlin, P (2017). Evaluation and decentralised governance: Examples of inspections in polycentric education systems.

⁶ UNESCO IIEP (2023). Systems for accountability, supervision and control. Issues Briefs, 22 March 2023. <https://learningportal.iiep.unesco.org/en/issue-briefs/improve-learning/systems-for-accountability-supervision-and-control>

⁷ Choi, AC (2019). Education inspection: Which models work best? What Works in Education? Using Evidence to Improve Education, 13 January.

⁸ Choi, AC (2019). Education inspection: Which models work best? What Works in Education? Using Evidence to Improve Education, 13 January.

See also, Ehren, M.C.M (2016). Chapter 1. Introducing School Inspections. In Ehren, M.C.M (eds). Methods and Modalities of Effective School Inspections. Switzerland, Springer.

⁹ Brown, M; Gardezi, S; del Castillo Blanco, L; Simeonova, R; Parvanonva, Y; McNamara, G; O'Hara J & Kechri Z (2021). School self-evaluation. An international or country specific imperative for school improvement? International Journal of Educational Research Open, 2, 100063. <https://www.sciencedirect.com/science/article/pii/S2666374021000339>

¹⁰ UNESCO IIEP (2023). Systems for accountability, supervision and control. Issues Briefs, 22 March 2023. <https://learningportal.iiep.unesco.org/en/issue-briefs/improve-learning/systems-for-accountability-supervision-and-control>

¹¹ McNamara, B, M; O'Hara, G and O'Brien, J (2016). Exploring the changing face of School Inspections, pg. 2. Eurasian Journal of Educational Research, 66 1-26. <http://dx.doi.org/10.14689/ejer.2016.66.1>

In addition to the three core inspection functions listed above, some countries include additional functions. These include, for example: ‘educational leadership’, with inspectors providing advice, assistance, and support (capacity building) to head teachers, taking on managerial tasks such as teacher deployment and promotion assessment, and supporting liaison across education sector stakeholder.¹²

There are important choices to be made when designing an inspection system:¹³

- How will the system move from a primarily supervisory and compliance stance towards a more supportive approach?
- What will the relative emphasis of assessing results/performance versus educational processes be?
- Will the consequences of inspection be high or low stakes? High-stakes systems typically involve punitive consequences of some form, while low-stakes approaches focus on information sharing and recommendations for improvement.
- What frequency and intensity of inspection visits will work best for the specific context?
- Should inspection reports be published for public scrutiny or be treated confidentially?

Global experience indicates that inspections can have a positive impact on overall school quality, as well as learning and teacher career outcomes. These changes come through encouragement of school self-evaluation against standards and raised expectations. It can also happen through monitoring of progress against goals, behavioural change of teachers and school leaders in the classroom and in school management, improved teaching conditions, better informed focus on teacher practices, promoting teacher content knowledge, and children’s learning outcomes as the primary goal.¹⁴ This makes school inspections a critical component of a well-functioning education system, if implemented in parallel with other reforms proven to improve learning outcomes.

Further, inspection models are only likely to contribute to improving quality of schooling when the approach is aligned with the socio-political, educational, and cultural context of the country in question.¹⁵ Coordination between the inspectorate and other national stakeholders is critical, as is ensuring that inspections are aligned with policy and legislation. The credibility of the inspectors is also crucial. Mechanisms for building capacity of teachers and principals to respond to issues raised during inspections is needed. Further, the quality of inspection feedback is key. Feedback should be respectful and make recommendations that are within the school’s control to address.¹⁶

In exploring how well PNG’s inspections system aligns with these good practices, it makes sense to commence by exploring the roles defined for inspectors.

¹² Eddy-Spicer, D; Ehren, M; Bangpan, M; Khatwa, M & Perrone, F (2016). Under what conditions do inspection, monitoring and assessment improve system efficiency, service delivery and learning outcomes for the poorest and most marginalised? A realist synthesis of school accountability in low- and middle-income countries. London: EPPI-Centre, Social Science Research Unit, UCL Institute of Education, University College London. <https://eppi.ioe.ac.uk/CMS/Portals/0/PDF%20reviews%20and%20summaries/Q4%20System%20efficiency.pdf>

See also, McNamara, B, M; O’Hara, G and O’Brien, J (2016). Exploring the changing face of School Inspections, pg. 2. Eurasian Journal of Educational Research, 66 1-26. <http://dx.doi.org/10.14689/ejer.2016.66.1>

¹³ Choi, AC (2019). Education inspection: Which models work best? What Works in Education? Using Evidence to Improve Education, 13 January.

¹⁴ Ehren, M.C.M (2016). Chapter 4. School Inspections and School Improvement; the Current Evidence Base. In Ehren, M.C.M (eds). *Methods and Modalities of Effective School Inspections*. Switzerland, Springer.

¹⁵ Rafaeli, T (2018). The Art of School Inspections. UKFIET, 24 September, 2018. <https://www.ukfiet.org/2018/the-art-of-school-inspections/>

Choi, AC (2019). Education inspection: Which models work best? What Works in Education? Using Evidence to Improve Education, 13 January.

Levy, B. (2022). *How Political Contexts Influence Education Systems: Patterns, Constraints, Entry Points*. RISE Working Paper Series. 22/122.

Migdal, J. (1988). *Strong Societies and Weak States: State Society Relations and State Capabilities in the Third World*. Princeton University Press

Andrews, M., L. Pritchett, and M. Woolcock (2017). *Building State Capability: Evidence, Analysis, Action*. Oxford University Press

Harris, B. (2007). *Papua New Guinea: A Nation in Waiting. The Dance of Traditional and Introduced Structures in a Putative State*. Mimeo.

¹⁶ Eddy-Spicer, D; Ehren, M; Bangpan, M; Khatwa, M & Perrone, F (2016). Under what conditions do inspection, monitoring and assessment improve system efficiency, service delivery and learning outcomes for the poorest and most marginalised? A realist synthesis of school accountability in low- and middle-income countries. London: EPPI-Centre, Social Science Research Unit, UCL Institute of Education, University College London.

2.2 What are the documented roles of inspectors in Papua New Guinea?

Within the NDoE administrative structure, school inspectors are officers of the School Inspections Division (SID) which falls under the operational responsibility of the Deputy Secretary, Curriculum and Standards.¹⁷ The National Education Act¹⁸ Section 28, (d) and (e), states that the National Department of Education Departmental Head is, amongst various other responsibilities,

- (d) responsible for the inspection of all schools, and for the certification and assessment of teachers; and*
- (e) without limiting his powers under this Act or any other law, is responsible for the inspection of teachers for the purposes of –*
 - (i) registration; and*
 - (ii) investigation where it is deemed necessary under Section 89 or 90 of the Teaching Service Act 1988*

Section 88 of the Act establishes the statutory mandate for inspectors to enter and inspect any school within the National Education System.

The Teaching Service Commission Act of 1983, Subdivision H, covers specific responsibilities for inspectors. This includes inspecting the work of teachers and preparing ‘professional reports’ as well as dealing with both minor and serious offences.¹⁹

According to the National Education Plan 2020-2029:

The role of inspectors is critical for effective monitoring of what is happening in schools. This is of added significance at the moment as the schools are beginning to implement the Standards Based Curriculum (SBC).²⁰

The 2020-2029 National Education Plan explicitly recognizes the critical role that inspections play in the education system and includes several outcomes specific to the improvement of inspections.

Inspections are seen as serving a key purpose of promoting education quality, at least in theory. For example, a recent Secretary’s circular²¹ states that:

Quality Teachers are groomed for improved education standards through the inspection processes. It is through the inspection processes that quality control and quality assurance advocated and promoted for the improvement and maintenance of acceptable levels of qualities in relation to the National School Minimum Standards pursued by the Department.²²

¹⁷ Papua New Guinea, Department of Education. National Education Plan 2015-2019. Quality Learning for All.

¹⁸ Independent State of Papua New Guinea, Chapter 163, Education Act, 1983.

¹⁹ School Inspections Division, Department of Education, Papua New Guinea (2023). Inspector’s Manual. Issue 1 2023.

²⁰ Papua New Guinea, Department of Education. National Education Plan 2020-2029. Achieving Quality Education for All.

²¹ Secretary’s circular Instruction #13 of 2021: Personal Reports, section 11.

²² Secretary’s circular Instruction #13 of 2021: Personal Reports, section 22

The 2023 Inspector's Manual²³ provides the most current statement of how this should be operationalized.²⁴ In promoting the National Quality Schools Standards, the main functions of inspectors are defined as: 1) effective school management; 2) teacher professional development; 3) teacher performance management; and 4) monitoring and audit. In addition, they are responsible for managing operational funds related to their duties and play a coordination and communication role in their provinces and districts. The functions of inspectors as presented in this manual are described in Table 1.

Table 1.

Overview of PNG Inspectors' functions, accountabilities, and key purposes defined for inspection visits²⁵

Functions	Description
Effective school management	<ul style="list-style-type: none"> Assess if school has developed and implemented a School Learning Improvement Plan (SLIP), with operational budget. Assess school management and governance against National Approach to School Standards Assessment (NASSA). Provide advice and coaching to head teachers and school boards on improving access, equity, and learning.
Teacher professional development	<ul style="list-style-type: none"> Inspect quality of teaching, learning, assessment, and materials at schools to evaluate whether curriculum goals are being met. Assess whether schools are organizing regular professional development. Assess whether teachers have individual Professional Development Plans. On occasion, attend or facilitate in-service training.
Teacher performance management	<ul style="list-style-type: none"> Support schools to deliver effective school-based teacher appraisals (SBTA). Inspect, supervise, and appraise teachers for registration and promotion. Prepare reports for Provincial Ratings Conferences (PRCs) and National Ratings Conference (NRC). Work closely with local Teacher Service Commission (TSC) representative and PDoE on teacher discipline cases.
Monitoring and Audit	<ul style="list-style-type: none"> Monitor the quality of data from the Annual School Census (ASC) and Government Tuition Fee Subsidy (GTFS) acquittals. Investigate student safeguarding issues under the Behaviour Management Policy (BMP). Support research activities as authorized by the NDoE Research Committee.
Additional roles	<ul style="list-style-type: none"> Manage operational funds related to their duties. Coordination and communication between stakeholders implementing the Provincial Education Implementation Plan (PEIP). Share recent policies and data.

²³ School Inspections Division, Department of Education, Papua New Guinea (2023). Inspector's Manual. Issue 1 2023.

²⁴ Note that there are several earlier documents that also discuss inspector roles. These appear to be consolidated in the 2023 Manual. Additional policy documents include: HR Policy Information and Operations Manual; Universal Basic Education Plan 2010-2019; National Education Plan 2015-2019; Secretary's Circular No. 01/2010 – External Review of School Learning Improvement Plans; Secretary's Circular No. 01/2007 – School Learning Improvement Plans (SLIPS); Department of Education Inspections Work Standards;

²⁵ Source: School Inspections Division, Department of Education, Papua New Guinea (2023). Inspector's Manual. Issue 1 2023, pg. 21-22.

The timing of core inspector functions is set out in a detailed, month-by-month Annual Inspection Calendar, which is presented in Appendix 4.

This is a highly ambitious job description for inspectors, worsened by the fact that inspector activities have never been restricted to mandated functions. Tracking of national programmes, feedback from the online inspector survey, and interactions with inspectors shows that they are involved in many other activities. Successive national policies have included new roles for inspectors in both implementation and monitoring. Various authorities and actors at different levels seek to involve inspectors in their operations, especially PDOEs, with whom inspectors in some provinces cooperate closely. Politicians too seek to engage and direct some inspectors' activities. This situation, where growth and change happen across the system without strong direction, focus, and prioritization, is common across the globe. It is helpfully understood as 'institutional drift'.²⁶

A partial driver of institutional drift has been that multiple actors from different agencies at different levels in the system are defining the scope of inspectors' activities in different ways. This happens through national policy, secretary's circulars, PDoE activities, schools' demands, and the everyday work choices inspectors themselves make about who and what to inspect. Predominantly, duties have been added but not removed. This situation is not sustainable. As NDoE Deputy Secretary, Paul Ainui observed in an interview:

We have been so overloaded: anything and everything the ministry comes up with, we are the ones they think will do it. For so long we have been performing the same roles. The change is very necessary. We need to streamline so many competing demands. We have got to free up Inspectors to do whole-of-school assessment.

The full extent of inspector's role expansion can be seen in the table and diagram in Appendix 3, which maps 33 different roles currently mandated by different agencies and actors. There is thus no single location where the role of inspectors is set.²⁷

2.3 Stretched beyond capacity

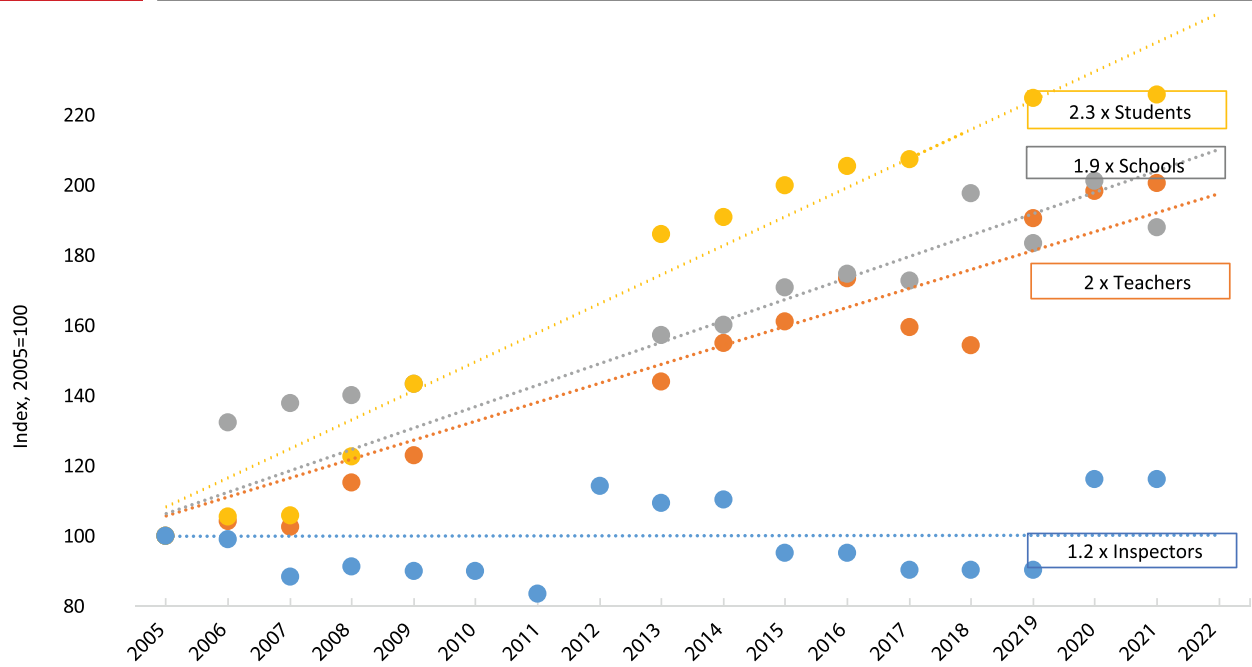
This ambitious and continuously evolving role definition for inspectors is further burdened by the fact that the inspection system's human capacity has not kept pace with the growth of the schooling system. At independence, the school system was much smaller. It has grown extensively, but the number of inspectors has not. Between 2005 and 2022 the number of inspectors serving teachers and schools inspectors has increased by only 20 percent, while the numbers of teachers and students has more than doubled and the number of schools has nearly doubled.

²⁶ Thelen (2003)

²⁷ In this, PNG inspections resemble other countries' situations, where authority is distributed unevenly across the system, from top to bottom, and between different locations. See Levy (2022)

Figure 1.

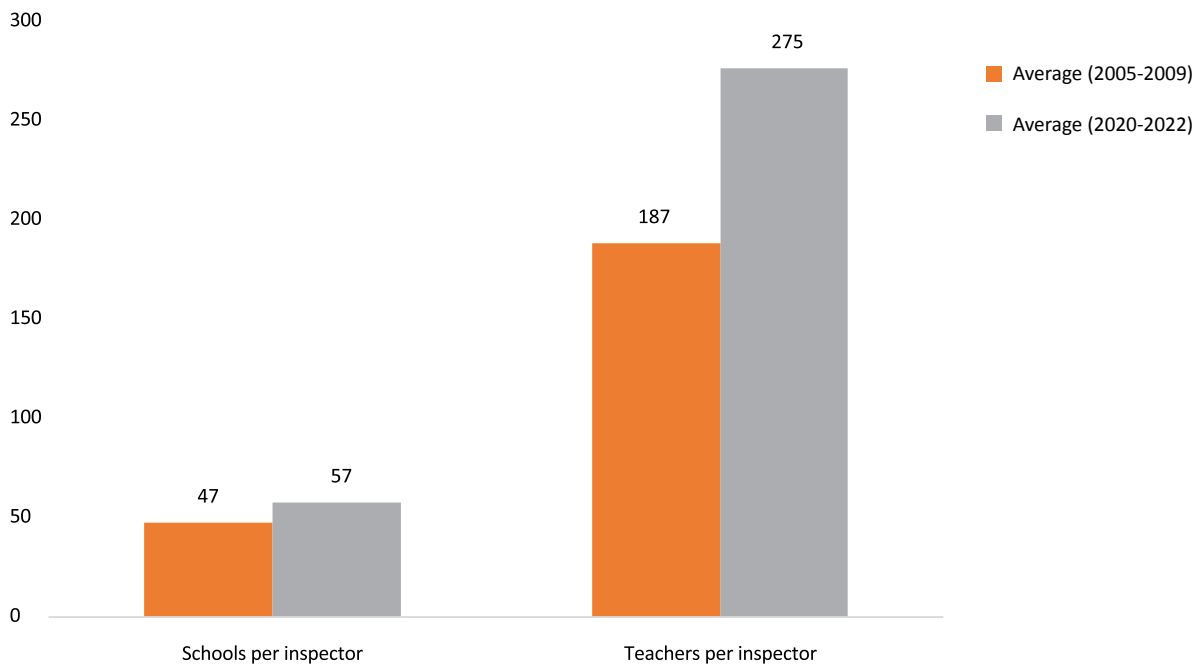
Teacher and school numbers have increased dramatically, without concomitant increases in inspectors to service them²⁸



Likewise, the average number of schools and teachers per inspector is increasing, so the workload of inspectors is rising drastically, and they are simply not able to fulfil their core inspection roles.

Figure 2.

The average number of teachers and schools per inspector (2005-2022) has increased dramatically²⁹



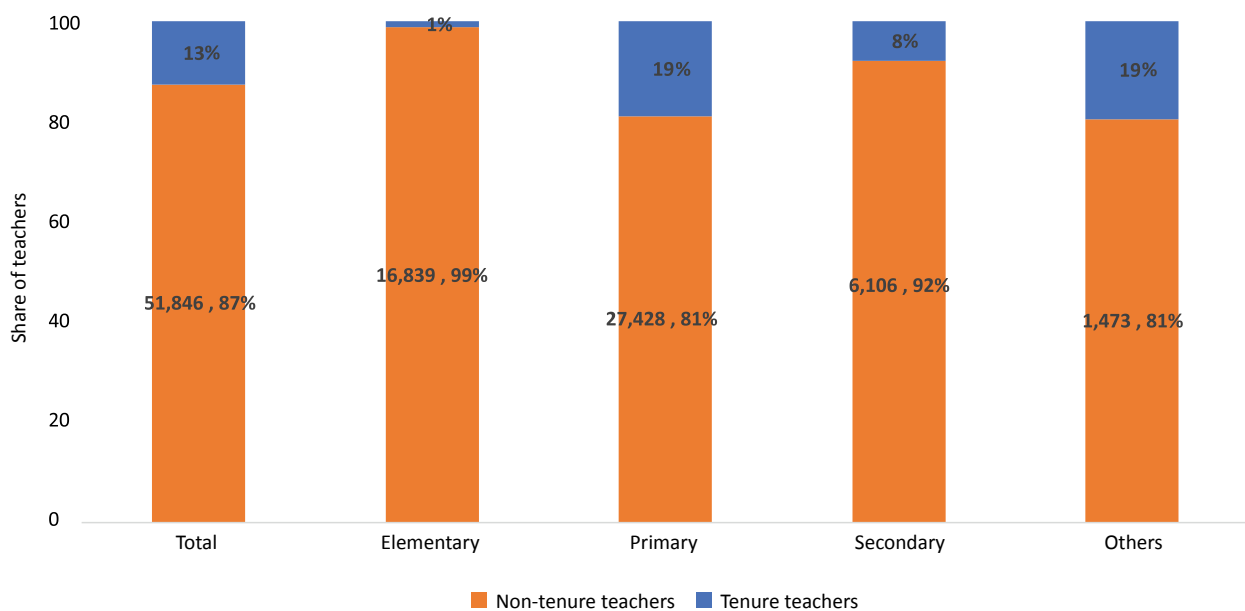
²⁸ Data source: Teacher and school: Education statistics of PNG (2005-2009, 2013, 2019, 2021), EMIS database (2014-2017), Master position register (MPR database) (2018, 2020, 2022)
 Student: Education statistics of PNG (2005-2009, 2013, 2019, 2021), EMIS database (2014-2017)
 Inspector: National Ratings Conference data
²⁹ Source: Teacher position data 2022, retrieved from the master position register (MPR database)
 Data source: Teacher and school: Education statistics of PNG (2005-2009, 2013, 2019, 2021), EMIS database (2014-2017), Master position register (MPR database) (2018, 2020, 2022)
 Inspector: National Ratings Conference data

In 2023, 235 inspectors of a potential total of 252 (17 positions are currently vacant) service up to 70,000 teachers and 14,000 schools. There is no prospect that they will be able to fulfil all their roles, even at a very superficial level.

The most visible sign of a bottleneck is that nearly 90 percent of teachers are waiting to receive an inspection, while an average of 87 percent of all PNG teachers are in non-tenured positions.³⁰ Annually, only around 10 percent of teachers receive an inspector’s report, down from 15 percent in 2007³¹ and well below what could be reasonably expected from a well-functioning performance management review system.

Figure 3.

Unacceptably high numbers of teachers were not tenured in 2022 and thus need inspections reviews urgently³²



2.4 Conclusion

In summary, the inspectors in PNG have an impossibly large and complex mandate to fulfil, while there are also not enough inspectors employed to implement even the most critical of their roles. There are two complementary strategies to adopt in solving this problem; increasing the number of inspectors servicing the system and reducing the extent of their roles. Reducing their roles might involve a combination of removing some functions completely and simplifying or streamlining other functions to reduce the overall workload. Calculating the optimal number of inspectors required to run an effective national school quality improvement system thus first requires an understanding of how they are expected to fulfil their current core functions and the effort this requires. Consequently, the next section focuses on the two functions that should occupy the bulk of inspectors’ time, teacher inspections and school reviews.

³⁰ Data source: 2022 Master position register (MPR database)

³¹ Data source: National rating reports: National rating conference data

Teachers: Education statistics of PNG (2005-2013, 2019, 2021), EMIS database (2016-2017), Master position register (MPR database) (2018, 2020, 2022)

³² Data source: 2022 Master position register (MPR database)

03. The rules and procedures of teacher inspections and school reviews



3. The rules and procedures of teacher inspections and school reviews

In PNG, inspectors' main work is commonly seen as supervisory, focusing on teacher quality, performance, and standards by producing ratings related to teachers' registration and promotion. As has been illustrated in the previous section, even implementing this set of core roles has proven highly challenging for inspectors, given static human resourcing accompanied by significant expansion of school and teacher numbers in recent years. Simultaneously, PNG does not yet have a system to translate expectations for teacher professional standards, student learning, and school performance reliably and accountably into assessments that can support systemic improvement, a vital role that might ideally be facilitated by a well-functioning school inspections system. Consequently, review of the effectiveness of the school inspections system in PNG requires more detailed analysis of teacher inspections and the country's current efforts to introduce school reviews into the system.

3.1 Current teacher inspection processes

Teacher appraisal, inspections, and inspection reports are critical for teachers, their registration status, tenure, and promotions, but these procedures need reform to function effectively. A teacher needs Full Registration status to become a full member of the Teaching Service (and receive the benefits and entitlements it provides, including salary, tenure, and promotion). A teacher may be provisionally registered to teach for a period of 12 months if they meet a set of strict requirements that must be verified in a vetting process. They can only be fully registered if they have been inspected and if an inspection report has been generated and confirmed by a school inspector. The report must be approved at a Joint National Ratings Conference (NRC), held annually. There are, however, several bottlenecks and problems in the current system, leading to significant delays in completing and approving these reports. As the previous section illustrated, some bottlenecks are linked to inadequate numbers of inspectors, but others are a function of the inspection procedures themselves. As the data showed, this has negative consequences for the employment status of teachers. However, it also means that the inspections process is playing a very limited, if any role, in assuring and improving the quality of teaching in PNG.

3.1.1.1 Filtering processes for entry to the teaching profession

There is variability in the application of filtering rules and processes applied to people who want to enter the teaching profession in PNG. One example of a filtering system meant to operate early in the process is the minimum entry requirements for pre-service teacher training: a 2.8 Grade Point Average as of July 4, 2023, a requirement which inspectors are expected to verify as part of the inspection process to secure full registration as a teacher. Another is the stringent attention paid to requiring that original versions of all certificates and diplomas be presented during registration, a requirement repeated later in the teacher's career during the promotion procedure. Moreover, some provinces require an evaluation before a graduate takes up their first job, whereas others do not. In schools with induction programmes, the HT is the key decision-maker who decides whether the new teacher passes the induction. This works well in some provinces (such as Simbu) and is an example of a potentially reformed decentralization process of employment vetting, but there is no set of rules applied consistently across PNG for how aspiring teachers enter the profession.

3.1.1.2 Teacher registration

The registration process for teachers starting their careers sets standards for new teachers. All new teachers must get a provisional registration certificate from the NDoE, based on appointment to a position by the PDoE or Provincial Education Board (PEB), and have this ratified by the TSC before a teacher can go on payroll. A teachers' college usually initiates the provisional registration process for its graduates. The provisional certificate is supposed to be for a maximum of two years, with teachers receiving a compulsory inspection report within the first (or, at worst, the second) year of teaching.

This registration process is not functioning effectively, as has been comprehensively documented in a recent review of the Teachers Registration System undertaken by Partnerships for Improving Education (PIE).³³ A Full Registration Certificate (FRC) is currently awarded to around 2,000 teachers each year, while 3,000 to 4,000 provisional registration certificates are being issued to graduates each year.³⁴ Full registration can only be awarded once the provisionally registered teacher's inspection report has been vetted in the provincial and national ratings processes (discussed below). The number of FRCs issued is comparatively low, with bottlenecks. The Teachers Registration System Review notes that:

Whilst this [low rate of FRC completion] could be largely due to the limited inspections undertaken each year, inefficient undocumented processing systems within TRC are also a contributing factor.³⁵

Without full registration, a teacher's salary and conditions are heavily compromised. The backlog is deepening, and an increasing number of teachers work without full registration. There is also no focused analysis of which Provincial Ratings Conference (PRC) teachers are most likely to get a report and an award of a Full Registration Certificate yet, but results appear to be highly uneven between places, levels of school, and levels of teachers.

Teacher registration is a key area where the national ratings processes demonstrate significant challenges with capability and reach, even while major reforms are trying to change the rules for teacher registration (for example, the move to a one-six-six schooling structure, known as 1-6-6). Inspectors prioritize compulsory registration inspections, but thousands of elementary school teachers are never inspected, never registered, and thus at risk of auto-suspension from payroll at the start of each school year). If there is a crisis in inspections, then it is visible in the number of unregistered elementary teachers, who, despite efforts led by the Secretary,³⁶ are not being inspected or are not securely on payroll.

The inability of the system to complete inspections for new teachers is the main direct cause of this unacceptable situation. In 2021 9,262 elementary teachers had provisional registration certificates but their full registration, mandated for compulsory inspection in the two years after provisional registration, had not yet been completed. Fifteen provinces had more than 300 and five had more than 700. Estimates of elementary teachers not on payroll (around 10,000) appear consistent with this situation. Here, inspectors' inability to meet basic requirements for elementary reporting is evident.

Once teachers get into the system, the national ratings process is used to vet and confirm if they should become registered teachers. Until this happens, they are excluded from full pay and access to further promotions. Part of PNG's reliance on registration is due to lack of faith in pre-service programmes and filtering that takes place before teachers are hired. PNG's bottleneck around registration relates to entry into the profession as, even when teachers have been hired, many are kept provisionally registered.

'Vetting' is the process of ensuring the quality of a teacher's appraisal report, confirming that a teacher is assessed fairly and professionally, following the rules of inspection. Vetting seeks to affirm that all aspects of policy expectations about teacher performance and standards are met by the teacher inspected, as well as by the inspector in conducting the inspection. Vetting ensures that the inspecting officer has followed the rules of inspection, the report meets quality expectations, the teacher inspected meets qualification and competency requirements set by the NDoE, and the report is processed and stamped correctly while rating. There are four levels of vetting before the NRC: (i) the inspector, including SBTA reports; (ii) the Senior Inspector Basic Education, who must personally quality assure all reports at the Provincial Ratings Conference (PRC) and NRC level; (iii) the PRC, which vets before sending to the NRC; and (iv) the Regional Director of Inspections, of whom there are four.

³³ Selmes, G. (2023) Partnerships for Improving Education Teacher Registration Study. NDoE and the Australian Government, Port Moresby.

³⁴ Date source: Selmes (2023:21)

³⁵ Selmes (2023)

³⁶ Secretary's Circular Instruction #20 of 2021. Inspections of the recently certified elementary teachers and those with provisional registration certificates

The process of vetting is very compliance-oriented and bureaucratic in nature. It begins with review of the teacher's Grade 10 certificate, which must be viewed in its original form, and checked for number, year, province, and school match. Similar scrutiny is given to the Grade 12 certificate and its Grade Point Average, as well as to the matriculation certificate, the teacher qualification. Where an original certificate is lost, Measurement Services Division of the NDoE must produce a statement of result. In the next stage, known as clerical vetting, all are checked for name consistency (official name, no initials, and nicknames: check pay slip for official name) and 14 further criteria (see Appendix 5 for the full list of clerical vetting requirements).

The reports set out to achieve a standard procedure based on criteria for whether the teacher is to be awarded 'eligibility', 'satisfactory' or 'unsatisfactory', presented in a recommended scripted vocabulary. They match the criteria to the vocabulary, describing the teacher as meeting 'a very high standard', being 'thoughtful', 'creative', or 'lazy' in their implementation of standards-based curriculum or maintaining a professional, harmonious, and friendly relationship with 360 degrees of children, teachers, Board of Management (BOM) members, and the Provincial Education Advisor (PEA). The effect of the scripting is that there is a high level of sameness about the reports as read out in the NRC. The inspectors must master this scripting to give predictable and consistent results. Issues have been raised about inspectors' ability to agree on the rules and write acceptable reports for elementary school teachers.

There is very little in the above process to suggest it plays a meaningful role in quality assurance of teachers in the first year of teaching. As the Teachers Registration System Review indicates, parts of the national ratings process (including registration inspections) have been reviewed, but not successfully reformed. The system is cumbersome,³⁷ rule-bound, and partially duplicated across different levels of the system (NDoE, PDoE, and TSC). Inspections remain integral to the process, and delays in teacher inspections affect the registration of teachers.

3.1.1.3 Inspection reports and provincial variability

The teacher inspection process generates two main types of reports: inspection/compulsory reports and personal reports. Inspection reports include those that can lead to teacher registration, as described above, but they also cover routine reporting every five years (though this is seldom, if ever, achieved), as well as 'forced' reporting when there are grounds for questioning teachers' basic competency and compliance. Personal reports are optional for teachers, but required if eligibility for promotion is being sought or if a teacher has been appointed by the PEB to a position above their 'substantive' grade. Problems in reporting affect provisional appointments, acting and (three-year) tenured positions.

Fully registered teachers also encounter challenges in securing inspection reports. If they are appointed by the PEB to a position above their current grading, they need a stamped personal report to be confirmed in that position or they will remain in an acting position without any inspection provided they are reappointed again each year. The only way currently to achieve three-year tenure is to secure an inspector's report. Given the challenges in the inspections system, many long-term acting teachers choose not to apply for promotion or tenure, opting instead to re-apply each year for their job on the same pay scale. This is a severe bottleneck arises in the inspection process.³⁸

³⁷ Describing the process occupies several pages of the PIE review (see Selmes 2023).

³⁸ Partnerships for Improving Education (PIE). April 2023. Teacher Registration Study Papua New Guinea

Teachers are not being inspected because the inspectors are stretched beyond capacity; reports are not being generated; and affected teachers cannot secure full registration, tenure, salaries commensurate with tenured positions, or opportunities for promotion. Many work in a state of unemployment insecurity for years, especially lower down in the system. Figure 4, based on NRC reporting from 2016–2022, shows populations of elementary and primary schools, and compares the numbers of reports (and percentage of teachers receiving reports) for total, primary and elementary teachers. It also shows success rates for different kinds of teachers, with success being defined as registration (or deferred registration), eligibility, or confirmation/efficiency at acting or substantive positions. In 2019, merely 0.1 percent of elementary teachers received successful NRC reports, rising only slightly to 2.2 percent in 2022.

Figure 4. Far fewer elementary teachers receive successful reports compared to primary teachers³⁹

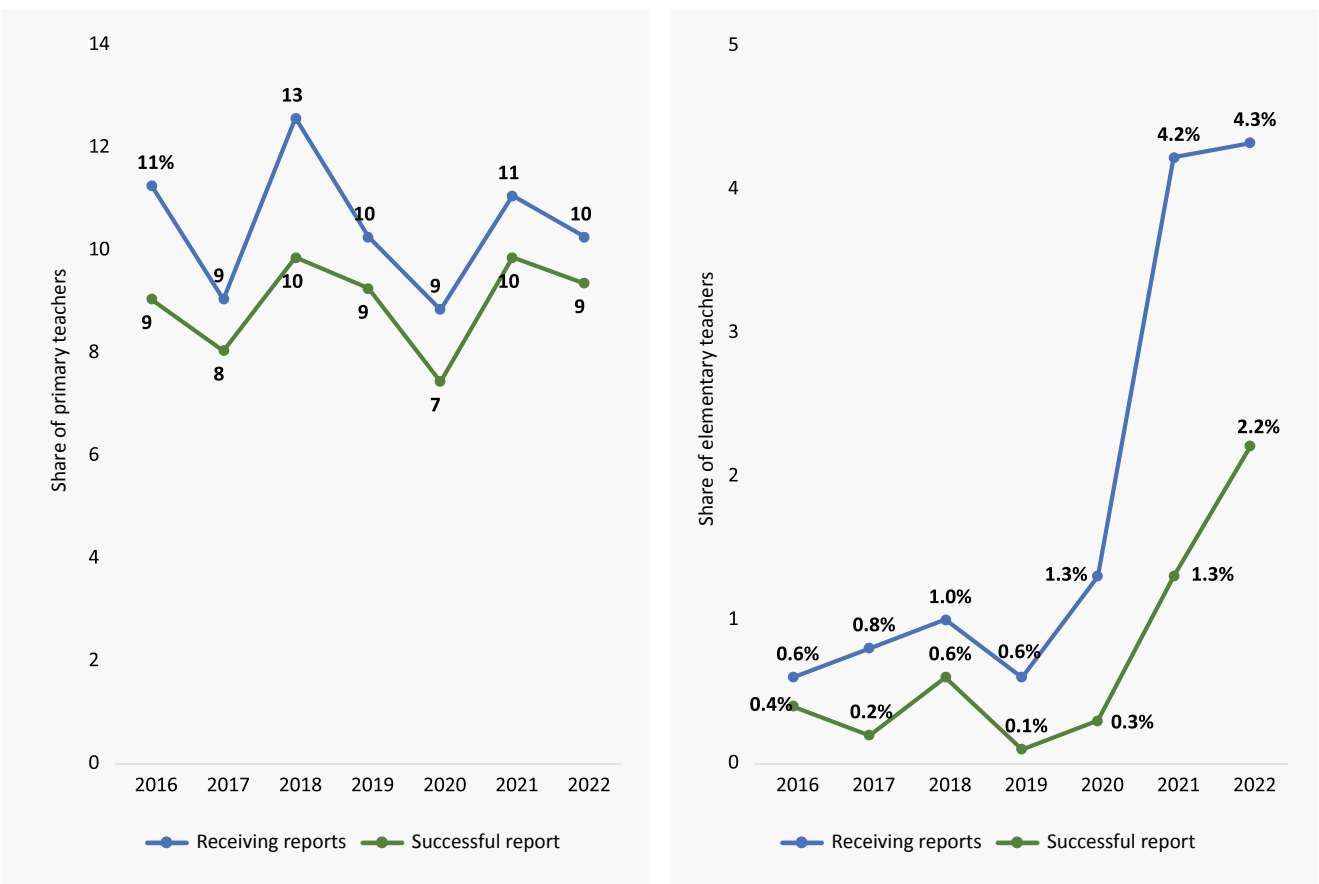
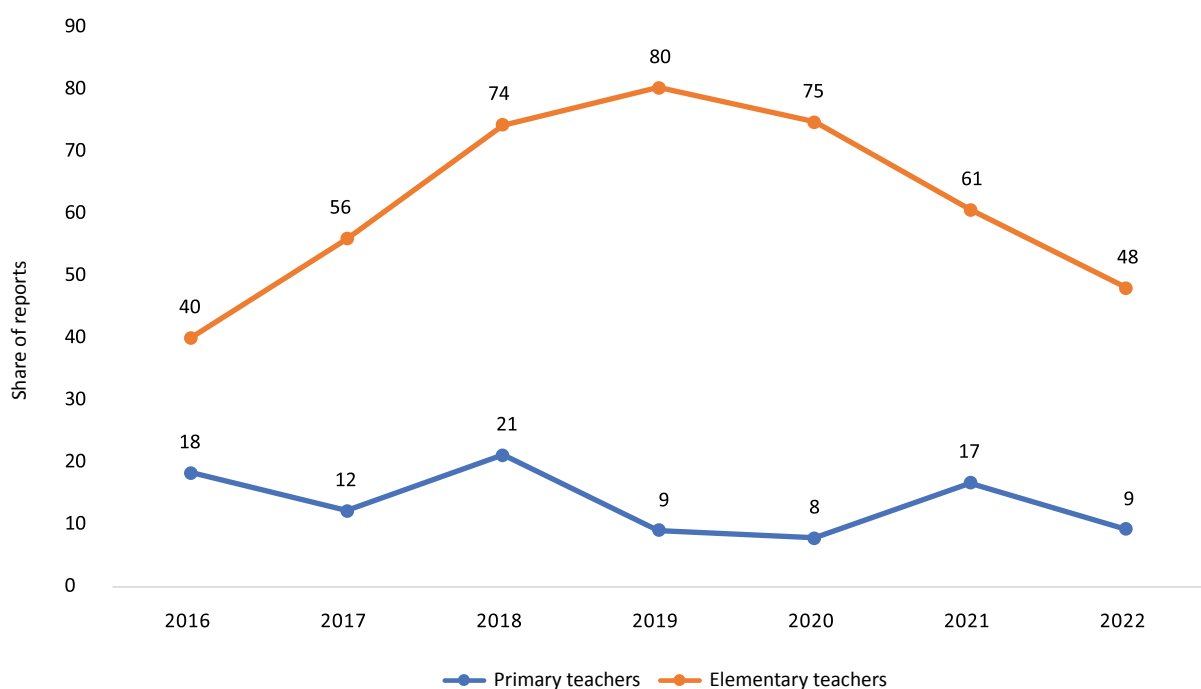


Figure 5 confirms the crisis regarding reports generated for elementary school teachers. It shows the high rates of negative outcomes for elementary teachers compared to those for primary teachers.

³⁹ Data source: National ratings conference data

Figure 5.

NRC negative outcome rates are higher for elementary teachers than for primary teachers⁴⁰



According to the Secretary’s Circular of 2021, 9,262 elementary teachers’ registration reports were to have been brought to NRC in 2022. Instead, only 652 were, with more than half withdrawn. Most of these were produced by just a few provinces; several provinces produced almost none.

Table 2.

Elementary schools’ teacher inspections reports (registration, not personal reports)⁴¹

Elementary schools	2016	2017	2018	2019	2020	2021	2022
Numbers of teachers	24,242	19,045	16,177	21,857	19,546	21,709	16,990
All inspection reports	110	102	112	64	141	799	652
Registration granted	54	44	74	13	37	171	307
Report withdrawn	44	49	28	51	102	549	321
Provinces with 3 or fewer registration reports		Central, Milne Bay, Eastern Highlands Province (EHP), Simbu, Western Highlands Province (WHP), West Sepik Province, Madang, Morobe, West New Britain Province (WNB), East New Britain Province (ENB), New Ireland Province, Autonomous Region of Bougainville (AROB), Jiwaka, Hela				Morobe, Manus, Jiwaka, EHP WHP	Central EHP Simbu, WHP, AROB, Manus, Enga, Jiwaka

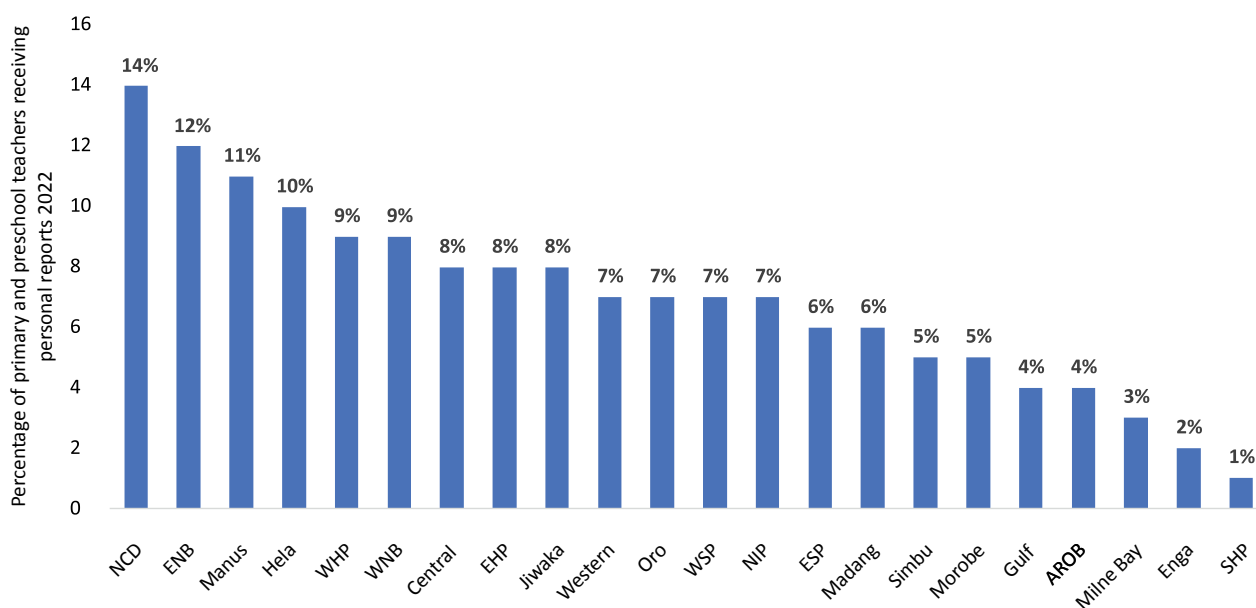
⁴⁰ Data source: NRC data

⁴¹ Data source: NRC data

The number of teacher inspections conducted varies considerably across the provinces, with some provinces reporting on a much larger proportion of teachers than others. In 2017, 14 provinces produced three or fewer inspection reports (including for registration) of elementary teachers. In 2021/22, some provinces made exceptional efforts in elementary reporting, seeing a rise from around 100 to 800. Yet several provinces produced no elementary reports. In 18 out of PNG's 22 provinces, fewer than 10 percent of basic education teachers receive the reports needed to move out of probation or to be eligible for promotion or confirmation in their positions. In 10 out of 22 provinces, including some of the largest, 6 percent or fewer receive these reports. Figure 6 illustrates this provincial variance, using data from 2022.

Figure 6.

Receipt of personal inspection reports by primary and elementary teachers were highly variable across provinces in 2022⁴²



Box 1 contains a few anecdotal examples of the effect that not receiving inspections reports has on teachers.

BOX 1.

Elementary teachers express dismay at lack of compulsory registration inspection¹

I don't know why I have not had my inspection for full registration after nearly 10 years. I am still waiting. It is one of the requirements. I don't know why it is taking so long. I don't think the system is functioning.

Enga teacher.

I think our system is slow. How long must I wait? We asked at the District Office, and they asked the Provincial Office who said it's still being processed. Maybe next year. We were patient. We got no help from the Provincial Education Board either. We keep asking for an inspection, but no one comes. I have been here for 13 years, 13 years of teaching. I have experience in everything, but I am still only provisional.

Central province teacher.

⁴² Data source: 2022 National Ratings Conference data

I was finally inspected in 2021 for full registration but I never got my report back. They rang me to sign it, but they never turned up. I am not happy about this. I was disappointed; it was a long time since I started teaching.

Bougainville teacher.

I have been teaching for 13 years and have not had my inspection for full registration. I don't know why because our school is not remote.

Enga teacher.

I started teaching in 2001 and was only inspected for full registration in 2016. I want them to improve the system by coming and inspecting us teachers because for so many years many of us have not been inspected. Even when we fill out inspection forms, they don't come.

Bougainville teacher.

3.1.1.4 Provincial Ratings Conferences and the National Ratings Conference

The ratings conferences are the final parts of the national ratings process, intended to vet teacher inspection reports. The NRC is a national-level peer process in which inspectors participate, intended to confirm eligibility for registration or promotion. Provincial and mini ratings conferences precede NRC vetting.⁴³ The ratings process is a focus of professional pride among inspectors and is seen as crucial to national quality education standards. The energy and commitment shown by inspectors at the NRC is intense, with committees meeting late into the evening and inspectors attending closely to details of individual reports and wider procedures for long consecutive days. Protocol is strictly followed; reports are read aloud to ratings committees by an inspector from another province, but with all reference to the person, their school, and their province being omitted. The Secretary's 2021 Circular instruction 13 stresses that the:

*National Ratings Conference continues to be an important annual event. It is through this event that teachers' performances are rated to note their level of performances, uplift, improve and maintain acceptable levels of quality in relation to set standards. The National Ratings also unveils weaker areas of the school system where everyone collectively works together to address them.*⁴⁴

Reports accepted at the PRCs are supposed to be taken to the NRC for final vetting, but many reports are rejected ('withdrawn') at provincial level, given the small number that reaches the NRC. Reports can be (and are) withdrawn because of technical non-compliance. Senior Inspectors Basic Education (SIBEs) gave feedback that some inspectors working with elementary schools were poorly trained and coordinated with the rest of the inspectors. They also noted that reporting formats (forms and templates) for elementary schools were either judged incorrectly (using the wrong form) or did not have the same level of scripting as primary school reporting forms. Reports not following formal and informal conventions about what constitutes an acceptable or 'rate-able' form were highly likely to be rejected in the NRC. The PIE Teacher Registration Review documents the experiences of elementary teachers waiting for full registration in compelling terms. Thousands of individual reports are never reviewed by an NRC committee. The committee does not even know how many reports need to be vetted. SID AS Circular 1 of 2020 recounts:

It has always been a problem that we have never been able to establish accurate data; even at the time of the NRC we fumble and remain confused in establishing the actual number of reports to be rated.

⁴³ [after the provincial ratings conference] 'At the NRC reports will be vetted for stamp verification only'. Secretary's circular Instruction #13 of 2021: Personal Reports, Attachment 1 Section 5.0

⁴⁴ Secretary's circular Instruction #13 of 2021: Personal Reports, section 11

The national ratings process cannot cope with current expectations, thus is not contributing meaningfully to national quality education and teacher professional standards. Even in areas where inspection works better, such as school registration inspection reports, and where some inspectors are getting some support from HTs, SBTA, and Supervision and Management Reform (SMR) processes, they are not keeping pace. This bottleneck crisis at the NRC compounds the impact on teachers and their registration and tenure. Without reports being vetted, teachers' registration status cannot be confirmed. Nearly 90 percent of teachers are waiting to receive an inspection.⁴⁷

This is not a recent problem; it has persisted for some years without a solution. For example, 2005 review of PNG inspections, carried out by the Education Capacity Building Programme (ECBP) with over 870 stakeholders across 17 provinces, revealed ambivalence among participants about centralized and local appraisal of teachers. The report states that:

*There was an overwhelming consensus from respondents in all sectors that quality assurance functions should remain a central function. However, there was also wide recognition that teacher appraisal processes should be school-based, with school improvement and accountability the function of the work of inspectors.*⁴⁸

Little progress has been made to date in achieving this shift.

3.1.1.5 Teacher tenure

A teacher cannot be eligible for or confirmed in a promotion, or have (three-year) tenure extended, without a report approved at the NRC. With access to regular inspections and positive 'eligibility' or performance reports, some teachers enjoy a smooth transition up through a career path that takes them from one secure job to another. Most (87 percent in total and 99 percent of elementary teachers) are hired as non-tenured staff, overwhelmingly in 'acting' positions for which they must re-apply each year. Teachers on a more ambitious career path can apply for a personal national rating granting eligibility to apply for higher positions. Teachers viewed by the appointing authorities (the PEB) as able to perform at higher levels can also be appointed by the PEB to acting positions, after which they must apply for an inspection to be confirmed in that position, usually after two years. These ratings and their personal reports are, however, entirely dependent on the ability and willingness of inspectors to visit the school. If there are 60,000 teachers, just 10 percent are getting NRC registration, promotion, or tenure extension in a year.

Without inspections and national ratings making them eligible or substantive in their current position, a growing number of teachers remain in repeat cycles of annual acting basic level positions (often within the same school, with effectively a proforma application). When they apply for positions there and elsewhere, they compete with the smaller group who have an inspector rating. This is better, however, than the deeper insecurity of having to apply for acting jobs from what is known as 'the pool', the group of teachers who were not successful in their initial applications. To be in the pool without any prospect of an inspection is to endure to an indefinite period of insecurity and unemployment. Coping with this can mean enforced moving of house and family to other locations or provinces, vulnerability to harsh treatment by school leaders, and reluctance to apply for remote schools where teachers are unlikely to be inspected. Without stability and security, teachers' access to credit or loans and their ability to own assets is also impacted.

⁴⁵ Selmes (2023, 35-36)

⁴⁶ SMR and SBTA have developed over 20 years. The two are integral to each other, though SBTA is often described as a 'component' of SMR. SMR describes the 'in-school' supervision of teachers, by their immediate supervisors, specialist subject and other senior teachers, and HTs. Since 2002, with no overall quality control or consistency, schools have assessed teachers and set expectations for them using a combination of several classroom visits and checklist assessments conducted throughout the year. The process now uses an expanding range of checklists, most based on the categories of SID inspections reports, but with many more focused on teacher duties than on crucial student learning approaches. SBTA refers to the generation of reports for national ratings processes, such as teacher registration and eligibility or confirmation in promotion, by SMR supervisors and the HT. Insofar as SBTA can build on SMR processes, it is promoted by SID and others as able to efficiently relieve both inspectors and HTs of reporting overload. SMR and SBTA are thus crucial to both the streamlining of inspections, and to the roles of inspectors in supporting in-school supervision.

⁴⁷ Data source: National rating reports: National rating conference data

Teachers: Education statistics of PNG (2005-2013, 2019, 2021), EMIS database (2016-2017), Master position register (MPR database) (2018, 2020, 2022)

⁴⁸ Kants, P. (2009) From colonial dependence to independent school based accountability for education in Papua New Guinea, pg.3. Port Moresby: NDoE. https://docplayer.net/33358235-From-colonial-dependence-to-independent-school-based-accountability-for-education-in-papua-new-guinea.html#google_vignette

In principle, there are three reasons why a teacher could be in a non-tenured position: (a) they might not have secured registration; (2) they may have been appointed for a position above their current national rating (for example, a teacher of level 4 is appointed to level 6); and (3) their three-year tenure of a position could have lapsed, which results in them being relegated to an acting position, needing to re-apply each year and facing competition from other teachers who could apply with an inspection report establishing eligibility to apply for a position at that level. Bottlenecks in the registration process are a direct result of the untenable expectations placed on inspectors. Challenges in the system of teacher inspections are intertwined with the history of school inspections and seemingly ad hoc attempts to transform the roles of inspectors in PNG.

3.2 Supervision and Management Reform and School-Based Teacher Assessment as a Strategy to Shift the Role of Inspectors

School governance has been a core aspect of decentralized policy in PNG. The national government has decentralized several functions in education and other key areas to the provincial level and beyond. The 1977 Organic Law on Provincial Government and 1995 Organic Law on Provincial Government and Local Level Government established administrative divisions of labour for education. The national government became responsible for implementing national education policy, while provinces became responsible for service delivery and planning.⁴⁹

Simultaneously, the country began a move towards school-based management (SBM), with the HT intended to play a pivotal role.⁵⁰ As Kants observes,

By 2005, the inspectorate had become increasingly focused on teacher appraisal at the expense of whole school improvement and system planning. The inspectorate lacked capacity and resources to provide effective quality assurance for the rapidly expanding school system. There had also been a decline in community confidence in the quality of student learning outcomes because of weak school leadership, poor supervision, ineffective resource management, and lack of coordinated professional development support for teachers. The inspectorate nationwide was overworked, under-resourced, and lacked focus so there was a need to find strategies to address the issues identified.

This context enabled the emergence of SMR and School Based Teacher Assessment (SBTA) as the two most significant elements in school-based management in PNG. The two are integral to each other, though SBTA is often described as a ‘component’ of SMR.

SMR describes the ‘in-school’ supervision of teachers, by their immediate supervisors, specialist subject and other senior teachers, and HTs. Since 2002, and with no overall quality control or consistency, schools have assessed teachers and set expectations for them using a combination of classroom visits and checklist assessments, often totaling several per year. The process now uses an expanding range of checklists, most based on the actual categories of SID inspections reports, but with many more focused on teacher duties than on crucial student learning approaches.

⁴⁹ Howes et al (2012) p.8

⁵⁰ Schools in PNG have developed SBM governance structures. The Head Teacher plays a pivotal role in schools: managing teachers, students, infrastructure, and finances. According to section 62 of the PNG Education Act (as amended in 1995), the school’s Board of Management (BoM) is responsible for school planning and management, ensuring availability of school buildings and teachers houses, student enrolment, determining school aims/goals, disciplining and suspending students, and other duties as identified by the BoM itself. The nature of activities depends on funding available. According to section 61 of the Act, the BoM must consist of at least five members of the community, a teacher, and the Head Teacher. Also, according to the Act, Parents and Citizens (P&C) Committees are to augment the BoM by representing the views of parents and the broader community. Under the government’s Tuition-Fee Free policy the Head Teacher and BoM are jointly responsible for managing school subsidies; the P&C Committee provides oversight and approves funding decisions.

SBTA refers to the actual generation by SMR supervisors and the HT of reports for national ratings processes, such as teacher registration and eligibility or confirmation in promotion. Here, both SBTA and SMR are intended to form part of a wider quality assurance process and approach. Insofar as SBTA can build on SMR processes, it is promoted by SID and others as a strategy to relieve both inspectors and HTs of reporting overload. SMR and SBTA are thus supposedly crucial to both the streamlining of inspections, with a view to enabling inspectors to play a stronger role in supporting school whole school review.

SMR and SBTA have a long history in PNG. In 1995, the Tololo report had already urged that ‘the head teacher and senior staff of a school take greater responsibility for the school supervisory/advisory processes’. It had called ‘for the supervision process to be institutionalized so that it could be implemented primarily by the school hierarchy’.⁵¹ The 1997 Grant report,⁵² while underlining provinces’ desire for national level quality control, likewise recommended ‘updating the duty statements of Inspectors and Head Teachers/Principal giving greater involvement to Head Teachers/principals in the writing of teacher appraisal reports and school performance reports’.⁵³ NDOE issued a directive in Education Gazette Vol 32, no 27, Oct 2002 to implement School Based Management and Supervision Reform (SBMSR) in all schools.

SMR and SBTA received unprecedented policy attention and resources for implementation for a period and thus corresponding cycles of growth: According to Kants,

The number of school-based reports exceeded the number written by Standards Officers in 2006. There was an increase of 16 percent in Inspection reports and an increase of 25 percent in the number of personal reports. In 2005, the four regions rated 4,767 reports, 2006 rated 4,026 reports and in 2007 rated 5,043 reports. It was evident at 2007 Provincial Ratings Conference that this proving to be successful. The quality of reports written by head teacher was adequate and will improve as time progresses. (Kants, 2009)

Subsequent moves to shift PNG’s inspection system to SBTA have, however, proven challenging: Moves to expand the roles of HTs in teacher appraisal through SBTA grew, to the point where they performed more than 50% of Teacher ratings. However, since 2005, the reform has proved only partially effective, and today, only 25% of teacher ratings appraisals nationally are performed by HTs — with much lower percentages in many provinces. Inspectors have, therefore, never shifted their focus away from individual teacher performance and quality control, while the question of who conducts school reviews remains unanswered, partly because of poorly defined rules and processes and partly because of lack of capacity to implement all the roles expected of inspectors.

Nevertheless, implementing SMR and SBTA is today seen by all senior officials consulted for this review as central to streamlining inspectors’ roles, enabling them to focus on school reviews and other critical quality assurance tasks. A new policy is currently being written to drive the reform. There is an opportunity for complementary reform gains, combining a streamlined national ratings process and strengthened capabilities for HTs and senior teachers in supervision in PNG schools. Insofar as it can create genuine consensus and a close fit with stakeholder interests, this policy process can direct the streamlining of supervision and assessment, supported by digitization and automatization of supervision processes. SMR and SBTA need to provide a coherent and effective model for national quality assurance, teacher appraisal, accountability, and professional standards. Significant policy work remains to be done. SMR and SBTA reforms will require agreement and well-defined delegation on specific functions and roles, as well as alignment with PNG’s emerging Teacher Professional Standards approach.⁵⁴

⁵¹ Rema (2005)

⁵² Grant (1997)

⁵³ Kants (2009)

⁵⁴ Pacific Regional Community (2023) Pacific Regional Standards for Teachers https://teachertaskforce.org/sites/default/files/2023-04/2023_Pacific-community_Pacific-regional-standards-for-teachers_EN.pdf

If this can be done successfully, it can make a major contribution to streamlining the role of inspections and enabling a shift towards whole school review. It will also help enact a wider shift from primarily supervisory roles for inspectors towards supporting schools to build capabilities in teacher assessment and professional development linked to national standards.

3.3 The stop-start history of school inspection reforms: the case of national quality school standards reforms

Historically, inspectors have been concerned with individual teacher appraisal, while school leadership, governance, whole school reviews have been neglected. Recently, school review processes using a National Quality Schools Standards Framework (NQSSF) have been initiated to tackle this issue. NQSSF implementation holds potential to promote national standards in an institutional context where diversity and decentralization tend to produce variability. Recently, school review processes using a National Quality Schools Standards Framework (NQSSF) have been initiated to tackle this issue. NQSSF implementation holds potential to promote national standards in an institutional context where diversity and decentralization tend to produce variability. How these reforms are supposed to fit together and be actioned by inspectors is, however, not clearly defined.

Like other SBM-oriented reforms, the NQSSF reflects the international Quality Schools framework, which emerged into international practice in the mid-1980s, supported by the Organization for Economic Cooperation and Development (OECD). David Hopkins at the University of Cambridge developed the Improving the Quality of Education for All (IQEA) approach.⁵⁵ In this approach, schools are measured against widely shared standards, including school hygiene and sanitation, gender equity in appointments, inclusive education, freedom from violence, and child-centred pedagogy.

In PNG, a quality schools reform underpinned by the NQSSF attempted to fulfil a long-term ambition of NDoE leadership to shift inspections towards a whole-school review model, similar to those deployed by other countries.⁵⁶ It attempted to expand the central control/supervisory approach beyond its narrow focus to include the whole school and develop the inspectors' role as reviewers and supporters of school quality. PNG developed its NQSSF⁵⁷ between 2010 and 2018. It is designed to function as an assessment tool, implemented as a core function of inspectors.

The NQSSF is intended as a national standards-based, school-focused screening tool for inspectors, intended to provide rapid feedback around several standards. As depicted in Figure 7, it was envisaged as a sub-framework of the foundational National Quality Education Standards Framework, which underpins all the other standards frameworks making up the standards-based approach to education policy, curriculum, and accountability. The intention was that NQSSF and an accompanying National Approach to School Standards Assessment (NASSA) App would be used by HTs to self-evaluate their schools, identifying areas of needing improvement, and ensuring these are embedded into SLIPs.

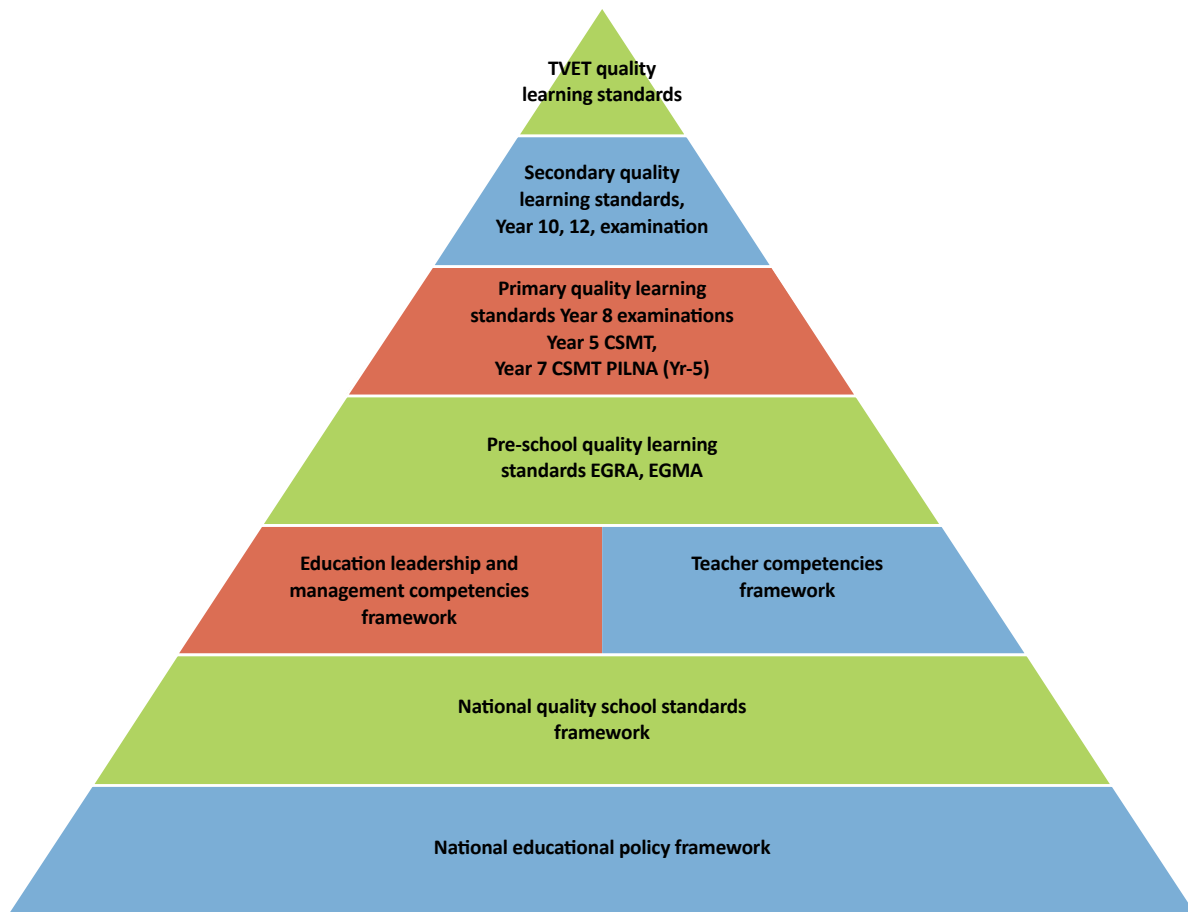
⁵⁵ Hopkins (1987)

⁵⁶ For example, the Office for Standards in Education, Children's Services and Skill in the United Kingdom and the Education Review Office in New Zealand.

⁵⁷ See NDoE (2018a)

Figure 7.

The NQSSF is designed to be an assessment tool underpinning broader quality improvement



The NQSSF and the NASSA app generated an assessment framework based around four quality standards, each with 16 indicators. The four quality standards are: (1) quality education leadership, (2) positive school environment, (3) effective school management, and (4) quality learning outcomes. The framework aimed to achieve compliance and accountability through a scoring system which ranked each indicator as Not Evident (Red), Emerging (Yellow), Established (Green), and Advanced (Blue). Extensive guidelines were generated for inspectors and schools in preparation for visits and collection of ‘accountability documents’. Unfortunately, there were deep operational problems, including with the software developed to achieve the aims of the NQSSF.

The NQSSF was intended to be supported on the ground by the NASSA app, which aimed to digitize the requirements for multiple sources of evidence to measure performance against each indicator. NQSSF assessments could be entered into the app, generating immediate feedback results and reports. In 2018, the NDoE was:

Urged to ensure that all inspectors make the most out of NQSSF/NASSA with results to improve the schools they visit and the overall quality of education by utilizing the NASSA software, as it comes with substantial investment.⁵⁸

⁵⁸ NDoE (2018), p. iv

However, implementation of the NQSSF and the NASSA app encountered challenges. Development of the app cost nearly a million Kina, with ongoing monthly licence costs and payments to keep it operational. Inspectors were required to use a proprietary tablet, which some resented. Inspectors also cited connectivity issues in the provinces as a barrier to its use. Consequently, use of the NASSA app was limited and it was subsequently disabled at national level. Using NQSSF reporting and feedback to promote change in schools was hindered by inability to access reports and data after submission. Inspectors felt that data ‘disappeared into the air’. Accessing reports for inspectors themselves was also a challenge. HTs would not allow them access, therefore dialogue on improving performance was often not possible – evidence of further procedural and resourcing failures.

Other policy developments were introduced alongside the NQSSF and the NASSA app, most notably in the form of the NSMS policy. The move to standards was intended as an urgent response to reverse declining standards in education resulting from the adoption of an Outcomes-Based Education approach. A new Standards Based Curriculum would be implemented nationally, along with the establishment of ‘National School Minimum Standards...consistent with the shift from Outcomes-Based Education to a Standards Based Education System’. The NSMS generated 125 standards for schools, teachers, and students, with HTs intended to lead implementation and supervision. Acting as ‘standards officers’, school inspectors were to ‘monitor strict compliance to all the minimum standards to support the overall assessment of schools through the NQSSF’.⁶⁰

School Inspectors and Guidance Officers will ensure that Governing Boards, school administrations, and other stakeholders collectively assist schools to meet these minimum standards to achieve quality education outcomes.

Inspectors were to implement the NQSSF/NASSA frameworks as an extension of their existing functions. NQSSF activities would take place between March and August, after Start of School Year (SOSY) and before NRC reporting, when inspectors would otherwise be involved in ‘advisory visits’ to schools. It was envisaged that inspectors would perform this work with existing human resourcing, although increased resources were provided in 2020 for expenses such as logistics. These resources were procured through the budget system, and distributed straight into inspectors’ personal bank accounts, with instructions for use encapsulated in Assistant Secretary’s circular 3 of 2020. However, the process stalled due to late arrival of funds, while the Covid-19 pandemic also disrupted work.

Consequently, whole school reviews, implemented as a developmental strategy to improve quality of schooling in PNG using the NQSSF/NASSA assessment tool to provide immediate feedback to schools on areas for improvement have never been systematically implemented in PNG. None of these reforms and policy developments changed the basic centralized control, supervisory approach of PNG inspections, which were still to be completed by SID central staff. Lack of clarity around processes and inadequate resourcing hindered implementation of the reforms.

⁵⁹ NDoE (2018a) National Quality School Standard Framework. Port Moresby, p. vi

⁶⁰ NDoE (2018a) National Quality School Standard Framework. Port Moresby, p. 2

3.4 The impact of ‘layering reforms’

The history of school inspections in PNG illustrates the impact of ‘layering reforms’.⁶¹ The initial reform is conceptualized but cannot be universally implemented. Reformers attempt to establish a foothold (or a ‘layer’) of new practice within the system, which works along different lines from existing practice. This layer needs to function, making itself strong by creating cycles of positive growth and reform. These cycles can improve investment into more people (taking up more roles in the system), more money and skills (resourcing enabling and embedding the new practices), and strong rules: policy and legislative embedding and procedures (policies, circulars, support from procedures, underpinned by digitized workflows in an integrated education management information system or EMIS). If these can be established, the reform can expand into and occupy the entire institutional field, permanently changing the way things are done. The prior practices will have been driven out as the new layer has expanded, either by mandate, or resourcing, or leadership.

When a reform fails to attract resources and engagement, it will most likely fail. The NQSSF and the NASSA App attempted to create a new layer of whole school reviews. In doing so, reformers did not think they were competing with existing arrangements; they were simply implementing something new. Donor and other resourcing used to design the NQSSF and the NASSA App were quickly used, with few further funds made available for implementation. Successful cycles of increasing returns were not achieved. Ongoing costs, especially related to the NASSA App, limited ability to resource further trials. Inspectors still had existing roles/duties and lacked resources and/or incentives to do more in the NQSSF and the NASSA App. They exercised discretion and did not enable annual cycles of reporting that built up the knowledge or other resource base of schools. This is the history of whole school reviews in PNG.

In the case of SMR and SBTA, successes and failures have been variable. SBTAs are today carried out in significant numbers in some provinces, but not all. Legislation meant that SBTA of certain levels of teachers became mandatory, a mandate acted on in several provinces, including AROB, Manus, NCD, Simbu, and Madang. Even in some of these provinces, such as AROB, past successes came under threat. In more successful provinces, HTs’ roles have expanded into SMR and SBTA management (see Box 2 on the Central Province approach), while school resources have been invested in training and developing supervisory capabilities in senior staff, as well as in getting inspectors to come to oversee processes (including elementary school registration and personal reporting). This happened in elementary schools in NCD, and to an extent in AROB, Manus, Madang, and Simbu, but almost nowhere else. At the national level, SID was unable to sustain the massive training efforts of 2006. Furthermore, as trained teachers and inspectors moved on, their replacements were not trained in SMR or SBTA and reverted to reliance on (unreliable) inspections.

⁶¹ Horscroft and Craig (2021)

School based teacher appraisals (SBTA) (Leadership)

A very important component of supervision & management reform (SMR)

Key issues and expectations

- 1) Supervision of teachers in school should be regular and evidence based. Unfortunately, many supervisors fail to provide required evidence of supervision in schools.
- 2) SBTA should be monitored on termly basis by H/T or TICs.
- 3) SBTA expectations include:
 - a) Completion of self-evaluation form by teachers (Week 1 Day 5 Termly).
 - b) 3 x advisory visit reports (Weeks 3, 5 & 7 termly).
 - c) Completion of self-evaluation form by teachers again (Week 9 day 5 termly).
 - d) Completion of self-evaluation form by supervisors (Week 10 day 5 termly).
 - e) Supervisors compile term appraisals for subordinates using above evidence to report (Use inspection template for this appraisal).
 - f) Teachers, supervisor & HT sign reports and submit copies to school inspector responsible at the end of each term.

The mandates and functions/roles of the various actors at central and subnational level (NDoE, TSC, and PDoE) are still unclear and disputed. The resources (and the competencies) to do the various inspections, including HTs' time, as well as the rules demanding they perform certain actions, have not been clearly identified, legislated, or resourced. In such contexts, where there are no coherent rules and roles, local practice becomes entirely dependent on the inspectors and HTs themselves. The outcomes are simply thin and variable.

3.5 Conclusion

The current crisis in the PNG inspections system is evident in cumbersome rules and unclear and inconsistently applied procedures across the system. Despite various policy reforms and procedures introduced to decentralize and address flailing quality in the schooling system, the evidence reveals that centralized control persists, with untenable expectations of inspectors across a range of functions, leading to vast variability in provincial implementation of national policies, and many layers of crisis. These factors have led to bottlenecks in teacher registration, appraisal, and teachers' ability to secure tenure in their roles. The ad hoc reforms have had limited impact on education quality. In the next section the resourcing and political challenges that compound the failures in the system are explored.

04. Resourcing and political challenges



4. Resourcing and political challenges

As the previous section has illustrated, the core inspection role of teacher inspections is beset by cumbersome rules and procedural challenges, while a well-designed, developmental school review system is yet to be operationalized in any meaningful way. These problems are compounded by the sheer inadequacy of numbers of inspectors available to implement these roles. However, beyond this, additional resourcing and political challenges undermine the effectiveness of the school inspections system.

4.1 Salary differentials

Inadequate resourcing starts with salaries, as inspectors are at a considerable salary differential disadvantage compared to other senior teachers and officials. The remuneration package for inspectors is much lower than the teachers whom they inspect, which seems intuitively problematic and undermines their authority. For example, an inspector at Grade 13 receives K44,377 per annum while a teacher at the same level (TS8) receives K48,308 per annum. Teachers have other attractive fixed allowances like Boarding Duty and Responsibility Allowances that increases the salary margin of a teacher, while inspectors get occasional incidentals and travel allowances. Review of payroll data in 2023 indicates that, above the two most junior teacher levels (TS7 and TS8), an overall teacher's package might be anything from 8.9 percent to 54.2 percent higher than an inspector at an equivalent level (see Appendix 1 for a detailed breakdown).

A senior manager clearly summed up the implications of this:

The department cannot attract experienced and competent head teachers, principals, and managers to become inspectors because TSC offers better and competitive conditions compared to PSC conditions for inspectors. It is a demotion for head teachers to become inspectors and they refuse to be demoted by becoming inspectors. This is a serious problem undermining the department's ability to assemble a team of able school inspectors for the country because head teachers, principals, and managers provide the choice for selecting inspectors. The NDoE is therefore settling to appoint junior officers to become inspectors and this is affecting the calibre of inspectors to undertake the work of school inspection.⁶²

As well as making it hard to attract competent, experienced people to the role of inspection, this also undermines the credibility of inspectors, especially given that it is widely known that their salaries are lower than the teachers and head teachers whom they are supposed to inspect. The only solution to these problems is to restructure the salaries of inspectors so that remuneration accurately reflects the seniority of the position relative to teachers and head teachers. A review of the qualifications requirements in Appendix 1 suggests that any such salary review would need to be accompanied by a review of the qualifications requirements for inspectors to ensure that these align with the seniority of the position.

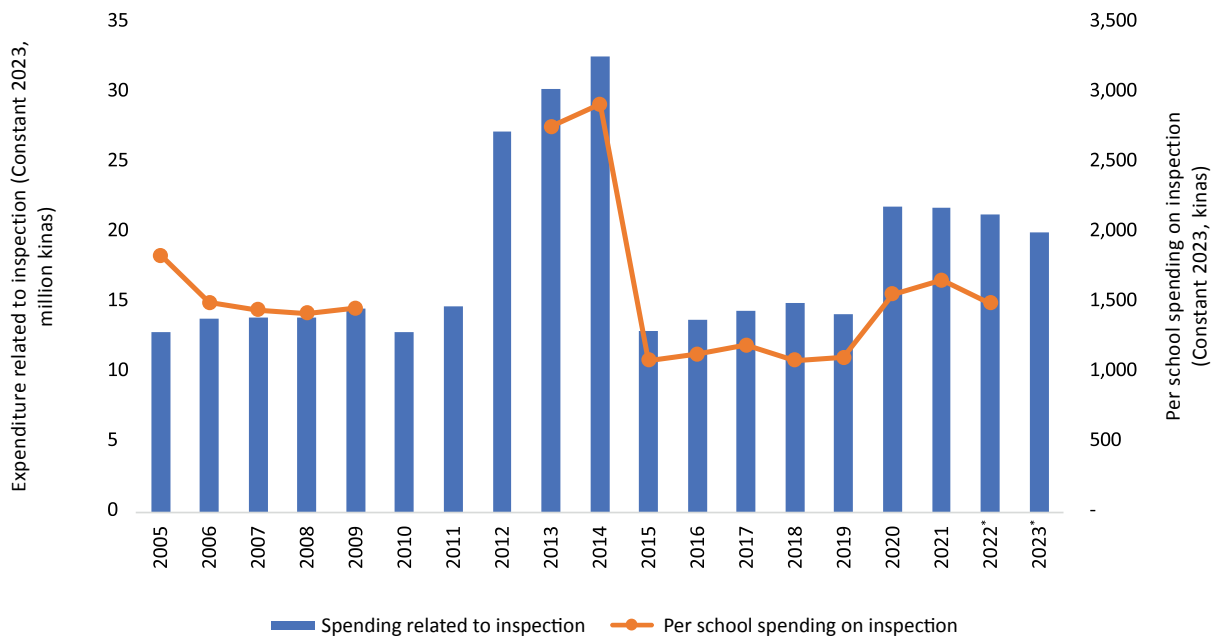
⁶² NDoE SID Management (2022)

4.2 Financing and resourcing constraints

In addition to inadequacy of posts and salaries paid, there has been little growth in other spending relating to inspections from 2005 to 2023, as is illustrated in Figure 8.

Figure 8.

Little growth in spending related to inspections, national budgets.⁶³



Basic resourcing of inspectors is inadequate on all levels. Capital investment received a boost from a three-year Public Investment Plan project starting in 2012, which invested in inspector housing and vehicles, but this ceased in 2014, and no further capital investments have been made since then. The vehicles purchased were never adequate and are now aging. Housing provision, as described in the survey data below, is increasingly sporadic, dependent on schools or even spouses.

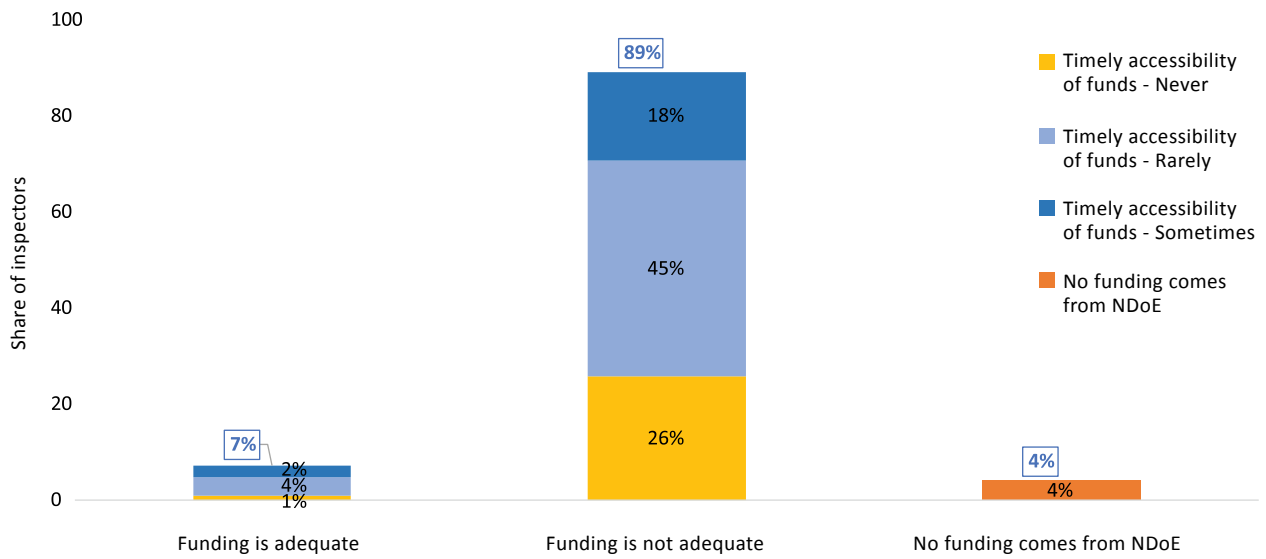
Funds for recurrent expenses arrive late in the year (in recent years in August), so can support inspections visits for the national ratings process, but not other activities, such as whole-of-school reporting and advisory visits to schools and teachers. Inspectors reported in workshops that, in some years, funds have arrived as late as November and then they must be spent and fully acquitted by March of the following year.

Challenges with acquittal can also exacerbate the problem. For example, no funds flowed to inspectors in the first five months of 2023 because of lack of acquittal for 2022 funds. The result is that, at crucial periods in the year, when advisory and whole-of-school visits should be happening, inspectors lack the resources to conduct these activities. Another outcome has been the neglect of certain schools (elementary and remote schools, but also selected schools close to town) due to lack of funds.

⁶³ Data source: School: Education statistics of PNG (2005-2009, 2013, 2019, 2021), EMIS database (2014-2017), Master position register (MPR database) (2018, 2020, 2022) Spending data: PNG national budget (2005 – 2023), Note: * indicates budget data No data on number of schools was available for 2010, 2011 and 2012

Figure 9.

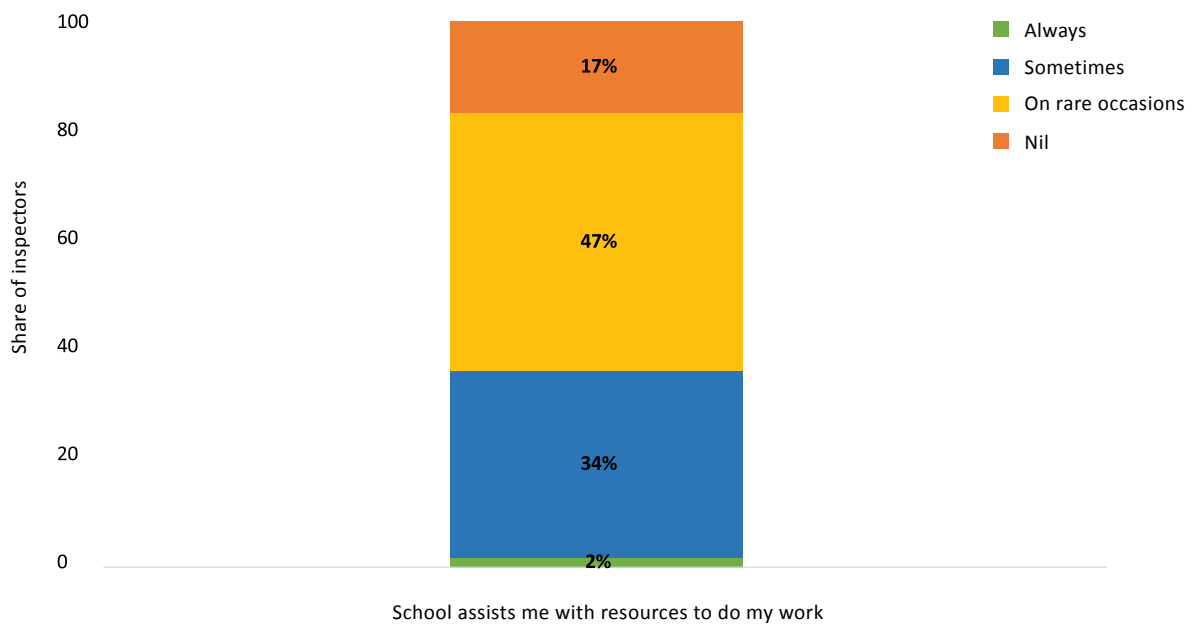
Inspectors report that funding is not adequate and is never or rarely accessible on time.⁶⁴



Due to limited national funding, inspectors have had to find other sources of support. These have included PDoEs (housing, vehicles, office space and facilities, and funds to conduct SOSY/GTFS visits), district administrations and District Development Authorities (logistics, office space and facilities), schools (stationery, bus fares, phone data, and resources to convene district forums and conduct TPD), and inspectors’ own resourcing (all the above).

Figure 10.

Inspectors’ view: reliance on schools and own funds to complete inspector duties⁶⁵



⁶⁴ Data source: 2023 Telephonic survey of 151 inspectors

⁶⁵ Data source: 2023 Telephonic survey of 151 inspectors

Increasingly, though unevenly, therefore provinces and some districts contribute to inspector resourcing, with 64 percent of inspectors surveyed in 2023 receiving at least some provincial support and 13 percent some district support. Provincial spending on inspectors comes primarily from Education Function Grants from national government.⁶⁶ Support comes in the form of housing, the capital cost of some vehicles, and fuel and maintenance for vehicles. However, 86 percent of inspectors reported that they received no support from districts, while such support depends on the political and personal connection of inspectors and Members of Parliament (MPs).

In certain circumstances, schools provide support to inspectors, particularly around providing logistics and accommodation (on school sites). Survey responses suggest that such support is provided ‘on rare occasions’ (47 percent) and ‘sometimes’ (34 percent). In some cases, this is not provided (17 percent), but it was a reality for 83 percent of respondents. In national workshops and provincial interviews conducted for this review, inspectors and PDoE officials observed that accepting support from schools is a conflict of interest for inspectors. It also creates a sense of obligation, as well as subordination and dependence on schools. This undermines the respect and independence that inspectors have in their supervisory roles.

Thus, even though national rules make the NDoE fully responsible for resourcing, each province, district, and school seems to make its own arrangements for resourcing inspectors’ activities. They all contribute uneven amounts to support inspectors in this work, so this is not a reliable source of funding for building a sustainable school inspections system.

Many inspectors contribute considerable personal resources to their work. Much of this covers recurrent expenses including logistics, which can be reimbursed and acquitted when central funds arrive each year. However, 38 percent of inspectors participating in the telephonic survey indicated they are never reimbursed, 16 percent seldom reimbursed, 42 percent only sometimes reimbursed. As a Simbu Inspector observed in an interview:

Inspectors need better resources and logistics support. Currently a lot of us use our family resources to do this work and it is not fair on our families. Personally, my family have spent money on servicing the vehicle and putting in fuel. This is just an indication of the extent to which we commit.

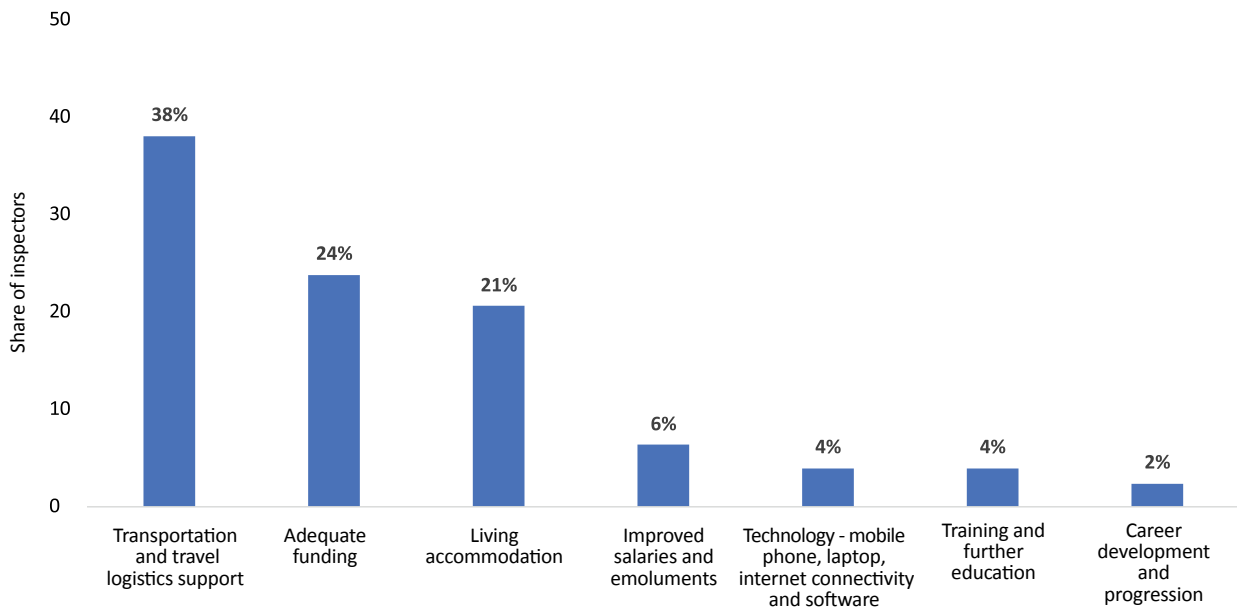
Simbu inspector

Lack of basic office and communications support is debilitating. Since 2020, inspectors have had access to additional resourcing to cover connectivity, but many still feel under-resourced, with 58 percent of inspectors surveyed using their own resources to access the internet. Of the 151 inspectors who completed the telephonic survey, only 8 percent have access to the internet provided by the office, 12 percent are provided with office equipment and stationery and 28 percent have an office computer or laptop. Almost half (48 percent) indicated that they provided their own computer or laptop. Resources for transport were most needed. Currently, only 37 percent of inspectors surveyed are provided transport for their work. For the remaining 63 percent, most use public transport. Lack of adequate funding and lack of accommodation were also regularly noted in interviews as key challenges. Figure 11 outlines which issues surveyed inspectors considered to be most problematic.

⁶⁶ Annually, provinces receive an education function grant (from the national government) based on a formula that the National Economic and Fiscal Commission (NEFC) has developed. As part of this formula, the NEFC has identified and costed ‘Minimum Priority Activities’ that provinces are meant to undertake and use their education grant to fund. For education. One of these activities is ‘Supervision by district and provincial officers’. Costs may include travel allowance and accommodation (for overnight visits), fuel (for both vehicles and boats), and in some instances vehicle/boat hire costs. For more details, see NEFC (2018): ‘Between the Lines’.

Figure 11.

Transportation, adequacy of funding, and accommodation are the most important resourcing challenges affecting inspectors.⁶⁷



Box 3 presents some quotations from interviews illustrating the effects of this resourcing gap.

BOX 3.

Effects of the inspections resourcing gaps: interviews from Simbu

The two struggling inspectors are not funded well and bigger schools in the district are assisting with a few items like ink cartridges and paper reams to make sure all their reports are done and properly presented in the inspectors' rating conference'.

Confused and worried, Nawaeb [district, Morobe province] Saputun, The National Letters page October 28, 2022

There are three issues: 1. Overwork. I have over 600 secondary school teachers across 18 Secondary/High schools to cover in the province. While HTs help inspect the base level teachers, it is still a lot of work to cover all teachers and schools with the level of attention I should be giving. I need one or two more inspectors to help me. 2. Time. In line with the above I always do not have enough time to cover all school and inspect all teachers. 3. Logistics. We are under-resourced in terms of logistics. When there is funding available, I am able to secure a vehicle and drive to schools. Many times, I have had to rely on schools to pick me up and drop off.

Bopi, G. et al (2023, 20) 'Accountability and institutional capital in Simbu Education: The contributions of Inspectors'. p20

The inspector comes around at least once a year due to the overwhelming logistics challenges. It is 4 hours walk from Kilau where the Private Motor Vehicle (PMV) stops but that is when the roads are passible. Otherwise on a 4-wheel drive it can be a 6 hour drive all the way from Kundiawa on a good day.

Remote school HT

Inspector comes here once a year when he has access to transport. His inspection visits are important to us. I also inspect base level teachers, so I do most of his work and send the reports to him.

Primary HT

School inspectors are the only people that seem to care if things are functioning at the school level. We need more inspectors so that they can come to the school frequently and often.

Primary Board member

⁶⁷ Data source: 2023 Telephonic survey of 151 inspectors

With support from HTs in aspects of their work, inspectors are mandated to perform inspections, but may lack the skills to do so. There is inadequate training for inspectors and those functions that HTs are supposed to undertake in support of the inspections process. There is also a high turnover of inspectors and HTs, which makes it difficult to maintain a consistent level of awareness and training. In addition, functions are at times delegated to people who lack the personal skills, training, and resources to execute them. Resources to implement such training, combined with human resource management mechanisms to reduce turnover, are critical to long-term success of inspections. As an inspector observed during an interview:

From my personal experience, the school inspectors need to be better qualified and trained, resourced, and supported to do their job, including improving accountability for not only governance and management but for educational outcomes in the province. It will also be good if inspectors are themselves individuals with successful records of performance in school management and governance, so that their advice is appreciated and valued.

Inspector accountability⁶⁸ is a further challenge in the school inspection system. Currently, inspectors have very limited accountability in their work.⁶⁹ No central or provincial records are kept, nor reports made of how many requests for inspections have been fulfilled or how many schools have and have not been visited. Provinces do not know how much support inspectors get from NDoE, what they use it for, and how they prioritize their activities. The only significant record of inspections is the numbers of reports which arrive at the NRC, but these are not reviewed by provinces. There is some accountability for withdrawn reports at the NRC, as inspectors are supposed to receive a letter detailing why they had reports withdrawn. However, unless the expectations about inspectors' roles become more realistic and achievable, few improvements to their accountability will be possible.

Working more closely with PDoEs also offers good prospects for inspectors, who are becoming increasingly reliant on them for resourcing. As foreshadowed in the NEP, this ongoing decentralization should ideally be approached with a view to formalizing shared resourcing arrangements with provinces, as the following quotations from participants in a workshop held in September 2023 in Port Moresby illustrate:

Closer to where the action is the way to go. What can the provinces do to take up inspections? Every province should take up the ownership. If the province is thinking about quality of education they need to bring the inspectors in. Because they are there in the province, we need to take ownership and resource them: with operational grants, their fuel, vehicle maintenance, housing. Inspectors work well in that ecosystem, mentoring, coaching. If the HT does it on their own, it all becomes fragmented. They need to work as a team. If everyone owns it, new policies and interventions will be grounded. In Simbu, we all have to be team players.

As Brian Levy⁷⁰ emphasizes, in countries like PNG, where there are different qualities of government operating at subnational level, performance of schools, leaders and inspectors will also vary widely. This makes consistent implementation of policies like national school leadership standards and teacher professional standards more challenging. In these situations of variable performance, many important reforms can only be implemented closer to the ground, in the provincial district level, or even school levels.

Appendix 6 presents a more detailed example of what is possible when inspectors' relationships with PDoEs are developed as a real working form of collaboration.

⁶⁸ 'It is fundamental that School Inspectors are closely monitored, supervised, and appraised so that the best is expected from them. The performance of the School Inspector is to be measured according to Education Standards'. Patrick Silata, Draft of Inspectors' work standards 2023

⁶⁹ Selmes (2023)

⁷⁰ Research for this review found that inspectors' performance varies widely in PNG, with provinces producing very different numbers of overall inspections per school, teacher, and inspector. There is also significant variance in whether compulsory inspection reports are the most important part of inspectors' activities or whether they focus more on personal reports for teacher promotion. They vary too regarding the extent to which they have implemented SMR/ SBTA school- based assessments, and NQSSF. This suggests that central agencies' influence will be uneven in changing these situations, but that change is possible at local levels. See Levy (2022).

4.3 Creating space for undue influence

The argument for maintaining an autonomous, national inspectorate in PNG is most often framed in terms of concerns about what would happen to school governance and leadership (and provincial education governance) if inspectors were not there or were captured and assigned to some political purpose. At the same time, education leaders regularly raise concerns about the need to maintain, at all costs, an appointment process based on merit⁷¹ rather than on a kinship, political, or other non-merit basis. These concerns are often raised both in the context of avoiding political, patronage, and tribal/clan/*wantok*⁷² capture, but also in the context of inspectors' important roles supporting and informing appointment processes at school, district, and province level.⁷³

Inspectors are increasingly drawn from within provinces and have come up through the school system. Provincial resourcing and politics have a greater role in inspectors' work. As Dr Kombra, Secretary of Education has noted,

When there is scarce resource funding, inspections does not sit on the high priority list. Hence, we have engaged provinces as partners to support inspectors. That is where we may have allowed for the opportunity for political influence and other forces to intervene in their independence as NDoE agents in the provinces⁷⁴

Another senior provincial official noted that 'politics, if we are not careful, will eventually kill the service delivery system. Politically influenced support to schools and in other services, is never fully accountable to the provincial administration'.⁷⁵

Inspectors are influential officials, within a political system that seeks to extend patronage into schools and other local, district and provincial structures. The risk is that if inspectors themselves are political appointees and use their appointment to get other political supporters into key positions, the overall performance of the system suffers. It matters when inspectors are not appointed on merit. Where this is the case, they will support appointment of others based on patronage, and not capability or expertise.

If the appointee is not appointed on merit, core institutional capabilities are undermined across the system. The person appointed commonly lacks knowledge of the rules. Having been appointed by breaking the rules, no-one is expecting this person to start following them once in office. They will have debts and obligations which are outside the system: to appoint others, to award contracts, to distribute large and small bundles of cash. They will have no incentive to perform: their occupation of the position is protected by their patron, regardless of their actual performance in the role. Appendix 7 contains evidence from Simbu about the positive effects of merit-based appointments, and the threats emerging where nepotism and political patronage set the rules, appoint people to the roles, and commandeer the resources.

Likewise, appointments in schools, especially around leadership, are crucial areas where wantokism and political patronage can have dramatic and unfortunate impact. Inspectors are seen as having a potentially significant role in appointments, especially around quality control and application of rules and standards. They have also been asked by leaders of all styles to influence the appointments process in one direction or another. Those on the side of rules and merit-based appointments know that inspectors add weight where no-one else can, as do those advancing political and personal/*wantok* interests.

⁷¹ See Craig, Naur, and Horscroft (2023).

⁷² Denotatively, *wantok* defines a relationship between people of the same basic language ('one talk'), one of the estimated 840 languages which reflect PNG's diversity and dispersion between otherwise disconnected groups or people and places. In its most local and clan-family oriented versions, 'wantokism' can be seen as a form of kin preference distinguishable from the kinds of reciprocal altruism modern bureaucratic rules and roles seek to establish. The *wantok* system is notorious in PNG for its powerful role in shaping formal institutional arrangements, and especially nepotism, enabling people to be appointed to positions within the formal system for which they are not the best candidate.

⁷³ See Hukula (2017).

See assistant secretary's circular 1 of 2020. 'The purpose of this circular is to... re-enforce our role to quality- assure teaching and learning processes and outcomes through vigilant, fair and transparent teacher appraisal... Maintain vigilance in screening and vetting background information on each teacher that is to be inspected. There are fraudsters in the teaching force and we must continue to screen each teacher's background fully in the process of inspection.'

⁷⁴ Bopi et al (2022a), p18.

⁷⁵ Bopi et al (2022a), p18.

In terms of support for merit-based appointments, while inspectors may not be on the appointments committee, a well-motivated PEA will seek the advice of inspectors across the appointment process, aware that inspectors have the advantages of understanding the work and having personal and professional knowledge of both the people involved and their capability and performance in previous roles. They will also have close knowledge of the procedures everyone will need to follow in the appointment process. So, while the PEB and the school board will make the appointment, the inspector can add genuinely valuable knowledge well beyond what is available otherwise.

Maintaining the authority of inspectors and ensuring merit-based appointments in the face of these kinds of challenges will not happen automatically. Inspectors who lack training or qualifications will not be so easily respected going into appointment processes. Inspectors' induction should include significant training related to appointment processes, and their potential role in maintaining merit-based appointments and the overall integrity of the system.

Beyond this, the limited number of inspectors, their overloaded job description, and constrained resourcing ultimately mean that inspectors have significant discretion in deciding which exceptional individuals will get a personal report, which will make them eligible for promotion or enable their tenure to be extended. If inspectors cannot do everything, and multiple authorities and clients are requesting services, they will do just enough and then exercise personal discretion, according to resourcing, location/convenience, and personal connection.⁷⁶ In many (though not all) provinces, virtually no-one with local authority is able to question inspectors' decisions in this regard.

The current situation, where inspectors tap into schools' resources for basic logistics, creates an environment that many of those consulted regard as unsatisfactory and conducive to the wrong kind of influence. It creates an incentive to move attention from compulsory inspections to personal inspections, as well as from schools that cannot afford to bring inspectors long distances to those prepared to pay inspectors' expenses. Increasingly, the integrity of the system currently depends not on good structures of incentives but on the integrity of the individual inspector working in a challenging and often severely resource-constrained context.

4.4 Conclusion

In all ways (number of officers, salary levels, equipment, funds for operational expenses, and access to capacity-building), school inspectors are severely under-resourced, a problem that both erodes their capacity to discharge their mandate effectively and opens space for undue influence in the execution of their roles. Having documented the challenges regarding the roles, rules, and resourcing of the PNG school inspections system, as well as evidence presented that these problems are longstanding and pervasive, it is possible to turn to documenting possible actions that can be taken to tackle these challenges.

05. Solving the problems: recommendations for action



5. Solving the problems: recommendations for action

5.1 Key Recommendations

The challenges facing PNG's school inspections system are deep-seated and longstanding, so will not be solved through once-off, *ad hoc* interventions; indeed, such efforts in PNG historically have tended to exacerbate problems rather than solving them. The situation requires a comprehensive, systematic, and sustained strategy to be designed, implemented, and resourced adequately. Such a strategy should be guided by an overall objective of transforming PNG school inspections into a modern system of quality assurance for schooling, which both ensures adherence to minimum standards and provides clear developmental direction to departmental officials, schools, HTs, and teachers alike on concrete actions to improve the learning experience and outcomes for PNG students.

The recommendations presented below will need to be implemented in a clear sequence. This will start by approving a clear and stable set of roles for inspectors and the broader school inspection system. This process should include detailed budgeting exercises to ensure that the roles defined are realistic and can be funded sustainably once approved. From there, it will be important to mobilize the resources required, ensuring that there is predictability in annual inspection budgets and availability of resources when they are needed. Finally, it will then be possible to document, approve, and operationalize clear and transparent policies and regulations to govern the implementation of those roles. With this in mind, we present proposed recommendations for action.

Recommendation 1 (Roles): Review the roles being undertaken by inspectors, with a view to reducing the number of roles and simplifying/streamlining how they are implemented so that they focus squarely on supporting quality assurance and improvement.

This review process should focus on defining how teacher registration and promotion, regular teacher/HT performance management review, and regular whole school review processes will function and what roles school inspectors should play in these processes. Fortunately, there are several activities already underway that have been exploring how to reform those processes in which inspectors play a key role and that are at the heart of their mandate. An initiative underway to establish a national EMIS has already documented in detail how processes of teacher management and administration (including those linked to registration, performance review, and promotion) should be revised and how they will be streamlined through the digitization of many of these processes through an integrated, online teacher management information system. In parallel, the PIE Teacher Registration Review presented clear recommendations on improvements to teacher registration, which will affect the roles of inspectors if adopted. Finally, both the Education Act and the Teaching Services Act are currently under review, which provides an excellent opportunity to update legislation so that it aligns with current aspirations for the school inspection system.

Implementing this recommendation should consider the following key sub-recommendations:

- 1.1. *Streamline processes for teacher registration*, building on recommendations in the PIE Teacher Registration Review and integrating the business process changes documented in the EMIS Reform Initiative. Changes to the teacher registration system and rules enabled by teacher information system digitization across the TSC, NDoE, and PDoEs can streamline verification of qualifications and obtaining full registration. The goal should be for new teachers to receive full registration after one year's service, so that there will not be many teachers whose registrations are awaiting verification from some level, including inspectors. It will also ensure that HTs be tasked with responsibility for review of the performance of provisionally registered teachers, conducting

and submitting reports online. Inspectors' streamlined role would then be to approve the (digitized) HT's report, and to convene an independent review including PDoE, SID, and TRPD if an HT's report is disputed by the teacher concerned.

- 1.2. *Define a clear, limited role for inspectors in supporting a revised process around resumption of duties.* Proposed changes to Resumption of Duties rules and procedures enabled by teacher information system digitization will mean that resumption of duties will be assumed, unless there are report-based grounds for individual teachers' exclusion. It is recommended that inspectors' roles be production of timely and independent reports where HTs do not want a particular teacher to resume duties and this is disputed by the affected teacher. The dispute and report would form a basis for a decision made by a group including TSC, SID senior inspectors, and PDoE. A similar role might apply for all areas in which there is contestation regarding poor teacher performance and an objective report is required to resolve those disputes.
- 1.3. *Implement regular performance management reviews of teachers and head teachers by inspectors at least once every five years.* Building on SMR/SBTA reforms and the current strengthening of teacher professional standards, these reviews could replace the current voluntary inspections process to assess eligibility for promotion and should ideally be mandatory so that all teachers and head teachers receive regular performance management reviews, rather than only being inspected when they wish to secure eligibility for promotion. HT performance management reviews could be implemented at the same time as whole school reviews are being conducted to reduce travel and logistical expenses. Linked to this process, supervision, evaluation, and support of teachers would become more clearly the role of school leadership. HTs using SMR and SBTA approaches could generate performance and ratings reports, with inspectors providing professional standards support and risk management to those processes. Digitized SBTA assessments endorsed by inspectors would become integral to registration, and possibly eligibility, processes.
- 1.4. *Design simplified forms and processes for preparing reports related to the above processes, focused on teacher performance and subject knowledge and children's learning outcomes, underpinned by approved School Leadership Standards and Teacher Professional Standards.* These forms and processes should harness the affordances of digitized business processes that will be enabled by the EMIS Reform Initiative. Special care should be taken to ensure that the School Leadership Standards and Teacher Professional Standards are kept simple and attainable so that reports and feedback mechanisms focus on improving performance and not superficial compliance with long checklists of requirements. There should also be clear alignment between these reporting processes and implementation of teacher professional development programmes, so that these programmes rigorously and systematically target key professional development needs identified during performance management reviews.
- 1.5. *Introduce regular whole school reviews, underpinned by a revised NQSSF and accompanying NASSA.* These reviews, once implemented sustainably across the country, will become a primary focus for school inspectors, enabled by streamlining of other key functions as documented above. They should focus primarily on helping schools identify areas of strength and resolve weaknesses, as part of an ongoing relationship rather than a once-off assessment. A whole-school focus using the NQSSF can enable identification of inequalities between schools and locations, while identifying issues for schools and PDOEs to tackle together. Accountability for report outcomes should be enhanced by strong feedback loops within longer timeframes and repeat engagements for the data, enabling review issues to be clearly identified and approached strategically. Implementation might include an action learning approach to see how the process can work best, perhaps by focusing on a single crucial standard and trialling an approach to identify challenges, bottlenecks, and opportunities.

- 1.6. *Adopt a supportive, ‘closer to schools’⁷⁷ approach in doing whole school reviews, prioritizing school visits based on need and vulnerability, using clear triggers (sending inspectors to, for example, schools with the lowest examination scores, or highest turnover of teachers), and/or selection of schools on a random basis, covering 20 percent of schools in a year. This would mean all schools have incentives to maintain standards even if no visit happens for a period. The NRC could also be moved online to provide final digitalized stamping of ratings, or re-focused on validating reports on HTs only. Whole school review and supporting school leadership might become the focus of a new annual inspectors and school leaders’ conference.*

- 1.7. *In completing the design of these revised roles and processes, ensure that costing exercises are undertaken to assess the level of resourcing needed to implement the processes sustainably. A key problem with aspirational policy reforms is that they often define new processes that are simply not affordable in the long term. Consequently, development of a simple costing model would provide a good mechanism to verify the resourcing implications of introducing new processes. This will be important both to determine how many inspectors are required for the system to achieve its goals sustainably and what additional resourcing is needed to do their work. This model should consider the requirements outlined in Recommendation 2 below. It should, however, also consider savings that can be generated from, for example, digitization of key business processes and streamlining of the national ratings process (which might make expensive face-to-face meetings redundant). Identification of the optimal number of inspectors required should include definition of clear norms to ensure that the number is not static but can grow as and when more schools are established and the number of teachers employed increases*

Recommendation 2 (Resources): Secure regular, sustained funding to resource the school inspection system at a high enough level to enable it to play its critical, aspirational function of improving the quality of schooling in PNG.

As this report has outlined, the school inspection system can only function effectively if it is properly resourced. As was noted in Recommendation 1.7, it will be important to do thorough costing exercises as part of the overhaul of the roles and functions of school inspectors. Once this has been done and the revised roles have been finalized and approved, it will be important to argue the case for the funding required to sustain these roles. This process should consider the following key issues:

- 2.1. *Adjust inspector salary levels to reflect the relative seniority of this function.* Inspectors are senior to HTs in terms of the function they fulfil, so their salaries should reflect this reality. This is critical both to provide credibility to their role and to ensure that recruitment processes can identify and appoint people of integrity who are qualified, experienced, and of good character. Any such salary review would need to be accompanied by a review of the qualifications requirements for inspectors to ensure that these align with the seniority of the position.

- 2.2. *Define clearly what resources inspectors need to do their jobs effectively and argue the case for this allocation to be made annually.* Resourcing requirements include accommodation, travel, communication, consumables, and other relevant costs.

- 2.3. *Provide for regular induction of new inspectors and HTs, as well as ongoing professional development and performance management reviews for those already appointed.* HTs are included here because rationalizing the roles of inspectors as proposed in recommendation 1 will require HTs to perform new functions reliably. This might take place as part of a broader process of updating conditions of inspectors’ employment, including new management arrangements that draw on and foster inspectors’ own aspirations for performing well in their work. This should include regular performance management reviews of the inspectors themselves.

⁷⁷ See UNESCO (2011).

- 2.4. *Investigate what roles PDoEs play in the inspections process and what contributions they should make to co-funding inspections.* Provincial co-funding of inspections is foreseen in the NEP, but needs to be reliable and should come with clear expectations of how provinces benefit from this co-funding. Once consensus is reached, binding written agreements will be needed to ensure availability of funds and resources as and when required.
- 2.5. *Build a clear defence for the proposed inspections budget that can be presented as part of the NDoE annual budget.* This defence should focus on defining clearly how implementation of the recommendations in this report play a critical role in attaining targets defined in the NEP. It should also include identification of the risks created when this critical function becomes susceptible to undue influence through under-resourcing.

Recommendation 3 (Rules and Procedures): Develop and approve a new School Quality Assurance Policy and accompanying regulations, through a suitable process of national and subnational consultation, that documents a revised, rationalized set of roles and responsibilities for inspectors and other key players (especially head teachers). The goals of this policy should be clearly directed at shifting inspectors’ roles from direct supervision of individual teachers to supporting schools and subnational authorities in quality improvement, as well as achieving against Teacher Professional Standards and School Leadership Standards, including teacher’s classroom practices, content knowledge, and student learning outcomes.

Successful implementation of Recommendations 1 and 2 above will provide all the information required to develop a new School Quality Assurance Policy, which codifies and organizes into one policy instrument the agreements reached through the processes outlined above and School Leadership Standards and Teacher Professional Standards and instruments that will underpin the work of inspectors. It should document clear roles and responsibilities of all key stakeholders, as well as the agreed governance and financing mechanisms that enable operationalization of the school inspections functions.

5.2 Estimating costs of implementation

Though more extensive work will be needed to determine the cost of implementing the above recommendations (including deciding which ones ought to be implemented and over what period), it is worth exploring notionally what finances might be required to strengthen school inspection services in PNG. To do this, it is necessary to make various assumptions about inspection services, including the time needed for the whole-of-school assessment, the time spent on inspection functions by an inspector, the inspector’s salary scale, and the costs of transportation, accommodation, and allowances.

In this notional budgeting exercise, three scenarios have been constructed, based on the following assumptions.

- For scenario 1:
 - Whole-school assessments last between 4 to 15 days, depending on education level.
 - Travel time to schools ranges from 1 day to 4 days, based on PNG Accessibility/Remoteness Index (PARI) categories.
 - Transportation costs range from 200 kinas to 20,000 kinas, depending on the type of transportation and school PARI categories.
 - The per diem rate is 200 kinas per day.
 - The cost of accommodation ranges from 200 kinas to 500 kinas, depending on the accessibility of the school.
 - The salary of the inspector remains the same as the current pay scale for inspectors.
- For scenario 2:
 - All assumptions are the same as scenario 1, but the salary of an inspector is assumed to be equivalent to that of a primary head teacher.

- For scenario 3:
 - The salary of an inspector is assumed to be equivalent to that of a secondary head teacher.
 - Whole-school assessment last between 5 to 20 days, depending on the education level.
 - Travel time to schools range from 2 to 5 days, based on PARI categories.
 - Transportation costs range from 300 kinas to 25,000 kinas, depending on the type of transportation and school PARI categories.
 - The per diem rate is 300 kinas per day.
 - The cost of accommodation ranges from 300 kinas to 600 kinas, depending on the accessibility of the school.

More details on how costs for each scenario were calculated, including data input details, assumptions, and methods used to estimate each cost component are presented in Annex 8.

Table 3. Cost estimates of inspection services per scenario

	2022 spending ⁷⁸	Costing estimate (in kinas)			% Increase		
		Scenario 1	Scenario 2	Scenario 3	Scenario 1	Scenario 2	Scenario 3
Salary	13,671,575	17,524,737	22,648,409	40,150,534	28%	66%	194%
Other costs ⁷⁹	16,232,574	46,268,023	46,268,023	74,712,117	211%	211%	360%
Total	29,904,149	68,000,593	73,124,266	114,862,651	127%	145%	284%
Number of inspectors	222	281	281	450	27%	27%	103%

This estimation suggests that an allocation of resources between two to four times higher than current spending would likely be needed to strengthen inspection services in line with the recommendations in this report. It also indicates that additional inspectors will be required to complete whole school assessment for every school at least once every three years (59 more in scenarios 1 and 2 and 228 more in scenario 3). The personnel cost for inspection services could increase from 28 percent to 194 percent compared to spending in 2022. Likewise, additional resources will be required to support inspectors in visiting schools, to cover costs of transportation, accommodation, and allowances.

⁷⁸ 022 spending includes expenditure on inspection services by the NDoE and budget allocated to inspection services through education function grants by the provinces. Provincial allocations of inspection services have been obtained from provincial reports and IFMS data. For provinces with missing data, it is assumed that provinces spent five percent of their education function grants on inspection. According to provincial reports, the allocation of funds by provinces could vary from less than 1 percent to as high as 20 percent. It is likely that approximately 28 percent of the total inspection cost (about half of the non-personnel cost) may have been covered by the provinces. However, these estimates could vary depending on the level of commitment from each province to assist inspectors during school visits. Thus, these estimates outline additional resources required based on current spending patterns. For instance, if half of the additional non-personnel resources are assumed to be funded by the provinces, they would be required to allocate 20 percent (with assumptions in scenario 1 and 2) to 30 percent (with assumptions in the scenario 3) of their education function grants for inspection services.

⁷⁹ Other costs include the costs of transportation, accommodation, and per diems.

Bibliography

Andrews, M., L. Pritchett, and M. Woolcock (2017). *Building State Capability: Evidence, Analysis, Action*. Oxford University Press

Asiure, J. (2002). *Supervision and Management Reform in Secondary Schools*. https://devpolicy.org/2022-PNG-Update/Supervision-and-management-reform-in-secondary-schools_JAsiure.pdf

Bopi, G., D. Craig and V. Horscroft. (2022a). *Accountability and institutional capital in Simbu Education: The contributions of Inspectors*. Mimeo: World Bank. Contact authors.

Bopi, G., D. Craig and V. Horscroft. (2022b). *Accountability and institutional capital in Simbu Education: the role of School Learning Improvement Plans (SLIPs) and other routine reporting* Mimeo: World Bank. Contact authors.

Brown, M., McNamara, G., O'Hara, J. and O'Brien, S. (2016). Exploring the changing face of School Inspections. *Eurasian Journal of Educational Research*, 66 1-26

Craig, D., Naur, J.K., and V. Horscroft. (2023). *Governance and Education in Simbu Case Studies*. Series of six case studies Under review: contact authors.

Ehren, M., Altrichter, H., McNamara, G. & O'Hara, J. (2013). 'Impact of school inspections on improvement of schools – describing assumptions on causal mechanisms in six European countries.' *Educational Assessment Evaluation and Accountability*. 25(1): pp 3-43.

Fukuyama, F. (2008). 'Governance Reform in Papua New Guinea.' Mimeo.

Fukuyama, F. (2006). 'Observations on state-building in the Western Pacific.' Mimeo.

Grant, W. (1997). *Reform Implementation Adviser Consultancy report - The Inspectorate*. PNG Department of Education: Port Moresby

Harris, B. (2007). *Papua New Guinea: A Nation in Waiting. The Dance of Traditional and Introduced Structures in a Putative State*. Mimeo.

Hopkins, D. (1987). *Improving the quality of schooling*. Lewes: Falmer Press.

Horscroft, V. and D. Craig. (2021). Institutional Capital for Public Service Delivery. In World Bank (2021) Dealing with a Triple Crisis: PNG Economic Update Jan 2021. <https://www.worldbank.org/en/country/png/publication/papua-new-guinea-dealing-with-a-triple-crisis>

Howes, S., Mako, AA., Swan, A., Walton, G., Webster, T and Wiltshire, C. (2014), *A lost decade? Service delivery and reforms in Papua New Guinea 2002 – 2012*, PNG National Research Institute and Development Policy Centre, Canberra.

Hukula, F. (2017) 'Kinship and relatedness in urban Papua New Guinea', *Journal de la Société des Océanistes*, 144-145.

Kants, P. (2009) *From colonial dependence to independent school based accountability for education in Papua New Guinea*. Port Moresby: NDoE. https://docplayer.net/33358235-From-colonial-dependence-to-independent-school-based-accountability-for-education-in-papua-new-guinea.html#google_vignette

Levy, B. (2022). *How Political Contexts Influence Education Systems: Patterns, Constraints, Entry Points*. RISE Working Paper Series. 22/122.

Lipsky, M. (1969). *Toward a Theory of Street- Level Bureaucracy*. University of Wisconsin-Madison

Malen, B., R. T. Ogawa, and J. Kranz. (1990). 'What Do We Know about Site-based Management: A Case Study of the Literature— A Call for Research.' *In Choice and Control in American Education*, Vol. 2, 289–342, ed. W. H. Clune and J. F. Witte. London: Falmer Press.

March, J.G. and J. P. Olsen. (2008). 'Elaborating the 'New Institutionalism.'" in S. A. Binder, R. A. W. Rhodes, and B. Rockman (eds.) *The Oxford Handbook of Political Institutions*. Oxford: OUP.

Migdal, J. (1988). *Strong Societies and Weak States: State Society Relations and State Capabilities in the Third World*. Princeton University Press.

National Department of Education. (1995). *Inspections Review Committee Report - Review Committee chaired by the late Sir Alkan Tololo KBE*. Department of Education: Port Moresby.

National Department of Education. (2005). *The Review of the Elementary, Primary and Secondary Inspectorate*. Department of Education: Port Moresby

National Department of Education. (2002). *Secretary's Circular 32 / 2002 – Trial of School Based Supervision and Management Reform*. Department of Education: Port Moresby.

National Department of Education (2018) *National Quality School Standard Framework*. Port Moresby.

National Department of Education SID (2022) *Capability and Accountability of an Inspector*. Mimeo. Port Moresby.

National Economic and Fiscal Commission (2018): *Between the Lines. The 2015 Provincial Expenditure Review report. With trend analysis from 2011 to 2015*.

North, D. (1991). 'Institutions.' *The Journal of Economic Perspectives* 5 (1): 97–112.

Nussbaum, Martha. (2011). *Creating Capabilities: The Human Development Approach*. Harvard University Press.

NRI (2022). *Report on the National Conference on Decentralisation in PNG*. NRI: Port Moresby

OECD (2022). *OECD Review on Evaluation and Assessment Frameworks for Improving School Outcomes – Country Reviews*. <https://www.oecd.org/education/school/oecdreviewonevaluationandassessmentframeworksforimprovingchooloutcomescountryreviews.htm>

Ozga, J. and M. Lawn (2014). *Inspectorates and Politics: the trajectories of school inspection in England and Scotland*, *Revue Francais de Pedagogie*, p. 11-21

Pacific Community (2023) *Pacific Regional Standards for Teachers*. Suva: Pacific Community

Pierson, P. (2004) *Politics in Time: History, Institutions, and Social Analysis*. Princeton: Princeton University Press

Rema, A. (2005) *Supervision and Management Reform*. Paper circulated by NDOE SID, Port Moresby

Selmes, G. (2023) Partnerships for Improving Education Teacher Registration Study. NDoE and the Australian Government, Port Moresby.

Thelen, K. (2003) 'How Institutions Evolve: Insights from Comparative-Historical Analysis' in J. Mahoney and D. Rueschemeyer (eds), *Comparative Historical Analysis in the Social Sciences*. New York: Cambridge University Press, 208-40.

UNESCO (2011) *Reforming School Supervision for Quality Improvement*, vol 7: Alternative Models in Reforming School Supervision <https://unesdoc.unesco.org/ark:/48223/pf0000215935>

Wang, A. H.; Coleman, A.B. Coley, R.J. Phelps, R.P. (2003). *Preparing teachers around the world: A policy information report*. Princeton: Policy Information Centre.

World Bank (2007) *What is School Based Management?* Washington: World Bank



Appendix 1:

Inspections salaries and benefits, with comparisons to other senior education sector officials

Inspector (PSC) (Amount - in thousand Kina)					Teacher (TSC) (Amount - in thousand Kina)										Variance (Amount - in thousand Kina)			
Designation	Grade	Salary (PA)	Allowance (PA)	Total	Designation	Grade	Salary (PA)	(1)	(2)	(3)	(4)	(5)	(6)	Sub-total	Total	Amount	%	SI is Pd more or less than teacher
First assistant secretary	PS18	79.5	2.5	82.0												82.0		
Assistant secretary	PS16	60.9	2.5	63.4												63.4		
Senior school inspector - NSoE	PS15	55.3	2.5	57.8	Teacher - National high school	TS12	82.6	12.4			2.0		15.0	29.4	112.0	-54.2	-93.8	Less
	PS15	55.3	2.5	57.8		TS11	73.4	11.0			2.0		15.0	28.0	101.4	-43.6	-75.4	Less
	PS15	55.3	2.5	57.8		TS10	65.4	9.8		6.5	2.0			18.4	83.8	-26.0	-44.9	Less
	PS15	55.3	2.5	57.8		TS9	58.8			5.9	2.0			7.9	66.7	-8.9	-15.4	Less
	PS15	55.3	2.5	57.8		TS8	53.1			5.3	2.0			7.3	60.4	-2.6	-4.5	Less
	PS15	55.3	2.5	57.8		TS7	48.7			4.9	2.0			6.9	55.6	2.2	3.9	More
Senior school inspector - FoDE	PS15	55.3	2.5	57.8	Teacher - FoDE Centre	TS10	65.4	9.8			2.0		10.0	21.8	87.2	29.4	-50.9	Less
	PS15	55.3	2.5	57.8		TS9	58.8	8.8		5.9	2.0		7.5	24.2	83.0	-25.2	-43.6	Less
	PS15	55.3	2.5	57.8		TS8	53.1			5.3	2.0			7.3	60.4	-2.6	-4.5	Less
	PS15	55.3	2.5	57.8		TS7	48.7			4.9	2.0			6.9	55.6	2.2	3.9	More
Senior school inspector - Secondary	PS15	55.3	2.5	57.8	Teacher - High and secondary school	TS10	65.4	9.8			2.0		10.0	21.8	87.2	-29.4	-50.9	Less
	PS15	55.3	2.5	57.8		TS9	58.8	8.8		5.9	2.0		7.5	24.2	83.0	-25.2	-43.6	Less
	PS15	55.3	2.5	57.8		TS8	53.1			5.3	2.0			7.3	60.4	-2.6	-4.5	Less
	PS15	55.3	2.5	57.8		TS7	48.7			4.9	2.0		6.9	55.6	-2.2	3.9	More	
Senior school inspector - Basic education	PS15	55.3	2.5	57.8	Teacher - Primary school	TS8	53.1	8.0	5.3		2.0	4.0	5.0	24.3	77.4	-19.6	-33.9	Less
	PS15	55.3	2.5	57.8		TS7	48.7	7.3	4.9	4.9	2.0	4.0	4.0	27.0	75.7	-17.9	-31.0	Less
	PS15	55.3	2.5	57.8		TS6	43.6		4.4	4.4	2.0	4.0		14.7	58.3	-0.5	-0.9	Less
School inspector - Basic education	PS14	50.6	2.0	52.6	Teacher - Primary school	TS8	53.1	8.0	5.3		2.0	4.0	5.0	24.3	77.4	-24.8	-47.1	Less
	PS14	50.6	2.0	52.6		TS7	48.7	7.3	4.9	4.9	2.0	4.0	4.0	27.0	75.7	-23.1	-44.0	Less
	PS14	50.6	2.0	52.6		TS6	43.6		4.4	4.4	2.0	4.0		14.7	58.3	-5.7	-10.9	Less

Note: * based on MOA between TSC and PNGTA (2017-2019)

(1) HT responsibility allowance: 15 percent of base salary, (2) One teacher/ HT allowance: 10 percent of base salary, (3) Multi-grade teacher allowance: 10 percent of base salary, (4) Boarding school duties allowance: K2.0/PA, (5) Rural remote disadvantage school allowance: K4.0/PA, (6) DMA Different levels/rates

Appendix 2:

Institutional analysis in this report

The historical institutional analysis used in this review views institutions as embodying bundles of rules/ procedures, roles, and resources durably over time (March and Olsen 2008, North 1991, Pierson 2004). It examines the ways institutions like school inspection change over time, as they do or do not successfully adapt to changing circumstances including resourcing, technologies, new actors entering the field. Here, it looks for data, historical and other evidence of patterns: failure to adapt and capture within ‘path dependency’ and ‘institutional drift’ commonly leads to rule boundedness, fragmentation, and inability to perform core duties (such as, in PNG, the National Ratings Process, which is meant to extend central supervision to all teachers wherever they are but fails many of the most vulnerable). It observes how stresses in resourcing affect ability to fulfil roles and complete the procedures the rules require.

Historical institutional analysis also attends closely to patterns emerging when crises in resourcing, role fulfilment and rule/ procedure implementation reach high levels of dysfunctionality, or even crisis. Crisis (or what Historical Institutional analysis calls ‘critical juncture’) often contains the seeds of new opportunity and possibility for change: the term for this is ‘critical juncture’ (Pierson 2004). PNG school inspections’ current juncture involves many common elements: new actors with new resources including new technologies, able to influence, impinge and create new demands on the core activities of the inspectors.

Historical institutional analyses can also track particular reforms, and analyse and why they get resisted, or reversed with adverse consequences. Reforms (especially rule- or policy- procedure based reforms) must overcome vested interests and create new roles and sustainable resourcing for the new system. Here a classic pattern is that the new reform rules/ procedures must compete to try to displace the old, and they often lose that competition, and collapse, or continue as a marginal detail of the resurgent previous system. This is the story of endless reforms across multiple sectors in PNG, especially where the reform has been initially driven and funded by donors. This ‘layering’ analysis (Thelen 2003) is highly relevant to the trajectory of significant inspection- related reforms: NQSSF/ NASSA, SMR/ SBTA in particular; and it will be relevant to this review’s proposed EMIS- related streamlining going forward.

Appendix 3:

'Mission creep' and institutional drift in the roles of Inspectors

Table 3 below comprises roles duties defined in and copied from many sources, from the National Education Act to Secretary's circulars, the recently updated inspectors' handbook, and other related guides, the media, and workshops and interviews with inspectors and education officials both centrally and in provinces. The actual words used are in most cases drawn from the documents and sources themselves, enabling the reader to assess the mindset at work in these descriptions of inspectors' roles and responsibilities.

Even trying to limit overlap, and removing similar roles described slightly differently in different documents, the table identifies 33 different roles, delegated by multiple different actors. This full list comprises a mix of overarching, big picture perspective asking for leadership (quality control, teacher appraisal – national ratings and SMR/SBTA – supporting school leadership and management), coordinating (section 28 Education Act principal of partnership; district forums, WhatsApp groups, RODSS, school census); operational (the ratings processes, specific project or training implementation, implementing curriculum) and apparently trivial (but actually crucial that someone does it: such as getting teachers on my payslip app). Many roles overlap or are shared with (for example) DEOs or PDoE responsibilities, with inspectors being the 'glue' linking up the system.

Table 4. *Current roles of inspectors*

Current Roles	Description / core elements	Rationale and challenges
1. 'Re-enforce our role to quality assure teaching and learning processes and outcomes through vigilant, fair and transparent teacher appraisal'. ⁸⁰	Individual appraisal of teacher quality and performance; vetting and screening of teachers prior to registration, promotion, confirmation in extended tenure. Identification of underperformers through compulsory inspections	Quality control from the centre; screens and filters teachers at every point.
2. National ratings process, aggregating and stamping national reports in standard format; Provincial ratings.	Compulsory/ inspection reports, including Registration, 'personal' reports (eligibility, efficient ratings for promotion). National ratings conference purposively samples bundles of provincial inspector reports and stamps	National standardization/ sampling of reports depend on provincial vetting. Quality control from centre; filters teachers at every point.
3. School Advisory Visits	Support the wider process of inspections, including admin matters around registration and school functions	Inspectors visit to make sure school, teachers are ready for inspection visit.
4. NQSSF/NASSA assessments	Monitoring/training standards 1. Educational Leadership, 2. Positive Environment, 3. Effective management, 4. Quality Outcomes'.	Closer to schools, focus on school leadership and comparative analysis
5. Supervise School leadership and management	Ensure essential school leadership traits like Educational Leadership, People Leadership, Strategic Leadership and Democratic Decision Making are in schools.	Overall leadership role based on Inspectors' senior status and experience: but also managerial checking.

⁸⁰ AS circular 1 of 2020.

Current Roles	Description / core elements	Rationale and challenges
6. Institutionalize SMR/SBTA in schools	Enable the decentralization of inspections to schools	Inspectors devolve supervision / assessment to school leaders.
7. Monitor teacher qualification requirements on behalf of GES and TSC	Vetting/screening of teachers, including name, correct spelling, file number, qualifications, certificate numbers	Happens during personal and inspection visits.
8. Uphold teaching, learning and other National Schools Minimum Standards in schools	Assess and monitor the National School Minimum Standards; ensure schools adequately apply and meet the National Schools Minimum Standards (NSMS).	Inspectors not well trained in NSMS. Few incentives for schools to implement.
9. Professional development of individual teachers by encouragement, guidance and advice.	Inspectors take a supportive instructional leadership role Assist planning, administration of agreed provincial programmes of professional development	This is very unevenly practiced. Simbu TPD forums are facilitated by district-based inspectors, with WhatsApp group
10. Supervise Implementation of Standards-based curriculum	Introduce schools to standards- based approach and ensure its replacement of outcomes-based approaches	Inspectors can be instructional leaders promoting change. Lack materials, training.
11. Supervise implementation of Quality Learning Outcomes	Ensure Quality Learning Outcomes in curriculum implementation, Teaching and Learning, Assessment Evaluation Reporting, Teacher Professionalism.	A high- level international policy area focused on assessment. Prof development for inspections.
12. National and Provincial education plan implementation	Encourage and advise on the attainment of National, Provincial Education goals and policies as laid down by national and provincial government.	Inspections convey information and feedback between national and provincial/ district/ school level.
13. Development and implementation of manuals, training modules for National and Provincial skilling	Inspection manuals, induction materials for senior and Head teachers, new inspectors.	Central level SID policy role, but routinely involves senior and other inspectors at sub national level?
14. National examinations	Training on new national procedures of all kinds.	'Eyes and ears of secretary' for a national quality control function
15. Participation in Start of School Year (SOSY) processes with schools.	Monitor the national examination implementation and report issues to Regional Office	Inspectors are valued for their ability to liaise between NDoE, PDoE and schools
16. Supervision of GTFSS processes	Accompany PDoE on visits to schools, checking procedures. Orientation on new plans, targets, policies, materials, circulars, and data. Monitor student enrolment and commencement of classes and report issues to Regional Office.	Inspectors can facilitate census and acquittals; investigate malpractice
17. Supervision of SLIPs	Expenditure and acquittal, SLIPs. Ensure fees are not being collected. Ensure school heads are accountable through the School Learning Improvement Plan (SLIP) planning and evaluation	Inspectors can monitor SLIP use, transparency, participation.
18. Supervision of RODSS processes	Participation in provincial aspects of RODSS in support of PDoE	Inspectors facilitate communication/ expedition of processes,
19. MyPayslip app registration officers	Take teachers' photos, upload to app, phone number, file number.	Inspectors have familiarity with App.
20. Appointments advice and recommendations: schools and PDoE	Recommendations for appointments to provincial Appointments Committee. Technical advice to PEB on school and board appointment. Monitor PDoE teacher induction and report issues.	Inspectors have detailed knowledges of schools, positions, often teachers themselves, and rules for appointments.

Current Roles	Description / core elements	Rationale and challenges
21. Registering new 'mushroom' schools: closing schools.	Schools popping up at local level (often sponsored by MP or church) made official.	Inspectors are officials able to bridge provincial and school levels, and often deal with political actors building schools.
22. Charging schools/ teachers in breach of rules	Represent TSC as authorized persons to investigate, charge or suspend teachers on disciplinary grounds; Charging officer for GTFS fee collection.	Eyes and ears of the secretary, representing TSC (though this role is changing with TSC officers in province)
23. Dealing with political interference and other conflict in schools, PDoE.	Supporting the Board when there are elements of political interference in school, budget, appointment difficulties and disputes.	Inspectors are able to influence whether rules and processes are followed or pushed aside by political actors.
24. Address various committee issues: BOM and BOG, PEB, Church educational agencies	Inspectors are called on where there are procedural issues, disputes, and governance/ management issues in schools	Inspectors are seen as senior officials able to inform, arbitrate, and facilitate collective action.
25. Promote institutional- community relationships	Encourage the development of in school programs related to community projects	Community dimension to being 'the glue'.
26. National and donor partner projects Implementation, supervision/ training	International agency projects landing in province/ district are supported (e.g., WASH, COVID, DFAT PFM training, Child Fund programs SLIP and psycho-social, disaster management)	Inspectors are able to bridge national and local levels: 'only province-based official who visits schools'
27. School Infrastructure and inventory management	Assess school establishment and infrastructure standards on behalf of the secretary through the school registration and compliance committee (SRCC).	Inspectors (at least in theory) can be mobilized episodically to do NDoE tasks like this
28. Ensure positive school environment	Positive school community relationship, people's physical wellbeing, people's psychological wellbeing, positive school culture	General oversight role Limited impact: Depends on actual procedures and resourcing
29. Ensure that teachers are aware of the Code of Ethics and adhere.	Create conducive environments that promote transparency, honesty, and accountability	General oversight role
30. 'The Glue' animation/participation in activities linking PDOE, districts, schools. Liaising, communicating, coordinating between all different actors in the subnational education sector.	Section 28 of Education act: responsible for ensuring that the principle of partnership of all education agencies is upheld in practice in accordance with this Act or any other law relating to education matters. Monthly coordination meetings with PDoE, church agencies, Guidance Officer and TSC representative Support PDoE to animate TPD, hold client days, screen new teachers. Convening district forums for schools, TPD. Help schools with quarterly reporting.	Inspectors have resources to bring teachers, school leaders together to discuss issues, developments including curriculum, TPD, other school welfare issues. Highly variable across provinces; greatly enabled by provinces.
31. Research officer, Reporting, and data management	Facilitate Research activities related to School Inspections in the Region, Inspectorate, and schools by NDoE Research Committee. Kobo-based survey for COVID response.	Not clear how much of this activity happens
32. Special duties: Inclusive Education, VET Inspectors;	Focus area- specific activities, school level issues and support. Liaising with regional A/S and NDoE SID.	Emerging roles for inspectors working in these areas.
33. Effectively manage staff (SID management)	Manage inspectors modelling best practice in monitoring, supervision, and performance management.	Challenging role given limited central/ regional staff

Appendix 4:

The annual inspection calendar

January

Inspection planning 1. Provincial inspectors' planning meeting. 2. Update your files with schools, head teachers, provisional teachers, and teacher contact information and data. 3. Submit School Visit Itinerary and Budget Estimate (IBE) to line manager.

Start of School Year (SOSY)

1. Briefing with PDoE officers and DEAs.
 2. Communicate with your head teachers to: a. share the Education Calendar and dates for NIST and PIST. b. remind teachers appealing against ratings to do so before the end of February. c. send you a list of all teachers who are eligible for provisional and personal inspection. d. work with the school board and teachers to review and update the SLIP and annual operational budget. e. work with the teachers to prepare the annual in-service plan. f. collect accurate enrolment data. g. inform parents of the GTFS fee instructions.
 3. Monitor teacher resumption of duty, submission of *Resumption of Duty Summary Sheet and Teacher Record of Appointment* forms and report issues to Regional Office.
 4. Monitor the annual PDoE teacher induction programme and report issues to Regional Office.
-

Inspector induction and professional development 1. First Staff Performance Appraisal (SPA). Meet with supervisor to discuss priorities and tasks. 2. Complete SPA form.

February

SOSY 1. Monitor student enrolment and commencement of classes and report issues to Regional Office. 2. End of February is the deadline for appeals against ratings.

Inspector induction and professional development 1. National, regional, and provincial induction or professional development workshops. 2. Orientation on new plans, targets, policies, materials, circulars, and data. 3. Deadline for application for NDoE or donor sponsored courses. 4. If applicable, deadline for leave application.

Inspection planning 1. IBE approved. 2. Inform schools of visit timetable. 3. Identify teachers in need of inspection: a. Probationary teachers b. Teachers who had received unsatisfactory reports c. Requests for investigation from PDoE d. Personal inspections for promotion/ratings.

Remind head teachers to: a. Advise teachers who want a Registration or Personal Inspection Report to apply by the end of April. b. Begin SBTA and provide necessary forms to teachers. c. Update the SLIP and operational budget. d. Start submitting Monthly Returns to the PDoE. 5. Submit your Monthly Report. BEGIN INSPECTION VISITS. BEGIN MONTHLY COORDINATION MEETINGS WITH PDoE, church agencies, Guidance Officer and TSC representative.

March

Annual School Census 1. Remind your head teachers to submit the ASC data. 2. Monitor the ASC submissions and transfer to HQ and follow up missing schools immediately. 3. Keep a copy of the ASC for your school.

Inspection visits 1. Implement your visit plan. 2. Submit whole-school NASSA reports. 3. Conduct advisory visits. 4. Update your school and teacher files. 5. Submit acquittals. SUBMIT Q1 QUARTERLY REPORT TO REGIONAL OFFICE. BRIEF PDoE AND CHURCH AGENCIES. DEADLINE FOR REGISTRATION OF NEW SCHOOLS.

April

Inspection visits 1. Implement your visit plan. 2. Submit whole-school NASSA reports. 3. Conduct advisory visits. 4. Update your school and teacher files. 5. Applications for Personal Inspection Reports close on 30 April. 6. Submit acquittals.

May

Inspection visits 1. Implement your visit plan. 2. Submit whole-school NASSA reports. 3. Update your school and teacher files. 4. Submit acquittals.

Personal reports 1. Provincial Personal Inspection Steering Committee meets to screen applications for personal reports. 2. Conduct advisory visits. 3. Communicate with teachers who have applied. VACANCY GAZETTE CIRCULATED TO SCHOOLS.

June

Inspection visits 1. Implement your visit plan. 2. Submit whole-school NASSA reports. 3. Conduct advisory visits. 4. Submit Registration and Personal Inspection Reports. 5. Update your school and teacher files. 6. Submit acquittals.

National examinations 7. Monitor national examination implementation and report any issues to the Regional Office.

Inspection planning 8. Update IBE for Q3 and Q4. 9. IBE approved.

Inspector induction and professional development 10. Submission of first part of SPA. 11. Discussion with supervisor and update your SPA for Q3-Q4. SUBMIT Q2 QUARTERLY REPORT TO REGIONAL OFFICE. BRIEF PDOE AND CHURCH AGENCIES.

July

Inspection visits 1. Implement your visit plan. 2. Submit whole-school NASSA reports. 3. Conduct advisory visits. 4. Submit Registration and Personal Inspection Reports. 5. Update your school and teacher files. 6. Submit acquittals.

August

Inspection visits 1. Implement your visit plan. 2. Submit whole-school NASSA reports. 3. Submit Registration and Personal Inspection Reports. 4. Update your school and teacher files. 5. Submit acquittals.

National examinations 6. Monitor national examination implementation and report any issues to the Regional Office. NATIONAL BOOK WEEK.

September

Inspection visits 1. Implement your visit plan. 2. Submit whole-school NASSA reports. 3. Submit Registration and Personal Inspection Reports. 4. Update your school and teacher files. 5. Submit acquittals.

DEADLINE FOR HEAD TEACHERS TO SUBMIT APPRAISAL REPORTS FOR INSPECTEES. NATIONAL LITERACY WEEK SUBMIT Q3 QUARTERLY REPORT TO REGIONAL OFFICE. BRIEF PDOE AND CHURCH AGENCIES.

October

Inspection visits 1. Implement your visit plan. 2. Submit whole-school NASSA reports. 3. Submit Registration and Personal Inspection Reports. 4. Update your school and teacher files. 5. Submit acquittals. 6. Remind head teachers of the End of School Year (EOSY) dates and activities.

Inspection visits 1. Implement your visit plan. 2. Submit whole-school NASSA reports. 3. Submit Registration and Personal Inspection Reports. 4. Update your school and teacher files. 5. Submit acquittals. 6. Remind head teachers of the End of School Year (EOSY) dates and activities.

Provincial Ratings Conference 7. Screen and approve ratings. 8. Communicate with PDoE, church agencies, TSC and teachers.

National examinations 9. Monitor the national examination implementation and report any issues to the Regional Office.
NATIONAL EDUCATION WEEK.

November

Inspection visits 1. Implement your visit plan. 2. Submit whole-school NASSA reports. 3. Conduct or revise Registration and Personal Inspection Reports, if necessary. 4. Update your school and teacher files. 5. Submit acquittals. 6. Remind head teachers of the End of School Year (EOSY) dates and activities.

National Ratings Conference 7. Screen and approve ratings. 8. Communicate with PDoE, church agencies, TSC and teachers.

Student selection 9. Monitor student selection meetings and report any issues to Regional Office.

December

End of School Year 1. Monitor school closures to ensure schools complete the academic year. Report any issues and, if necessary, charge head teachers and teachers who abandon their posts. SUBMIT FINAL PART OF SPA. SUBMIT ANNUAL REPORT BEFORE 20TH DECEMBER.



Appendix 5:

Vetting criteria

Clerical Vetting

This vetting is done to quality assure a report in terms of format and write up. This vetting should be done before NRC. This vetting is largely the responsibility of the Senior Inspector and the PRC.

1. Report correctly identified - Personal/Inspection
2. Personal details - all filled, no blanks
3. Report format and headings - according to level of report
4. Word limit - length of report
5. Font type and colour
6. Paper quality and colour
7. Use of English and grammar
8. Copying and pasting - reports reading the same
9. Re-presenting report - previous personal, withdrawn, and deferred registration. Each report must be done afresh in the current year. Inspector commits misconduct.
10. Content of report consistent with headings
11. Date - current year and date of report
12. Official name - no initials and nick names, check pay-slip for official name
13. Names and signatories to report - name of author of report, inspected, inspector and PEA - they must all sign next to their names; name must matches signature - no third party signatures.
14. Introduction: Grade 10 & 12 - school and year, teaching training - institution, qualification and year, statement on verification of original qualification documents, and purpose of report
15. Summary - recommendation for registration reports only

Technical Vetting

This vetting ensures that technical and policies expectations are complied with. It is better done before NRC, but if this is not possible, it can be done after the NRC. This vetting is vital to ensure that national inspection policies requirements are not breached. Background data on teacher records is useful for this vetting. This vetting is largely the responsibility of the Senior Inspector and the Regional Director.

1. Correct file number, no file number, no inspection
2. Correct substantive level - confirm
3. School location - no teacher can be inspected in unregistered schools
4. Designation - report content consistent with designation and level of report
5. Date of inspection - done and completed within time allowed; not before or after
6. Period of assessment - whole-year performance and for current year only; no break in service or duty statement
7. Compliance - done by authorized officer (HT/Principal or inspector), and at levels permitted.
8. Registration - prerequisite, unregistered teacher cannot receive personal inspection
9. Repeat registration - a teacher is registered once, not twice or thrice
10. Accelerated promotion - allow three years before next personal report;
11. Accelerated promotion - allow three years before next personal report;
12. Readmission inspection - prerequisite for readmitted teachers, before personal inspection.
13. Subject specialization - secondary registration report, not allowed in primary sector
14. Official name - match with name used on the report;
15. Report done by family member - not allowed
16. Non-teaching head teachers - head teachers and principals are expected to teach

Appendix 6:

An example of inspectors working more closely with provinces from Simbu

The relationship between inspectors and PDoEs varies widely. Simbu is a province where this works successfully. Each year, NDoE conducts a school census to enumerate the number of students, teachers, and schools for the purposes of allocating the GTFS. The PDoE supports the census, but the main activities of passing on hard and soft copy forms, collecting and collating the forms, and approving MY PNG SCHOOL App online census returns are often done by inspectors in Simbu.

Simbu inspectors work through district-level forums they created and administer, which meet monthly, involving teachers and HTs. The forums develop teacher professional development at district level. They enable rapid communication between people who have come to know each other. Anyone can post messages on the WhatsApp group (convened by the district inspector). Forms to be completed or positions vacant are instantly distributed from the inspector or PDoE.

The PDoE actively requires acquittal of GTFS funds, and inspectors support this. The PDoE does not allow schools to access GTFS funds at the start of the year until they have clearance from the PEA, who requires a covering letter from the inspectors regarding GTFS acquittal and SLIP completion. The SLIP is a checklist that is monitored and signed off by the inspector and the PEA. Beyond this, as part of Simbu's school supervision, schools regularly report a range of statistics, including GTFS expenditure. Schools are prohibited from charging parents excessive 'project fees' and inspectors enforce these project fee restrictions where needed.

Teacher and HT turnover is high, with more than 50 percent of teachers transferring in some contexts. The recording of teacher appointments is captured and linked to payroll through RODSSs. There are weaknesses in this system, as up to 20 percent of PNG's teachers get removed from payroll each March, but the processes of re-appointment start in July of the previous year. When the RODSS forms arrive at provincial appointments level, they are sent to HTs via the district WhatsApp groups. Typically, Simbu's RODSS removal rate is around 10 percent, mostly comprising new teachers appointed only in the new year, and after a vetting process at provincial level. As part of this complex arrangement nationally, there is often a significant mismatch between teaching vacancies and actual teachers on the ground and on payroll. National data show Simbu's vacancy rates to be among the lowest, at 9.7 percent in 2021 (compared to 47 percent in Morobe and 52 percent in Madang). Part of Simbu's success in processing RODSSs to get teachers on payroll at the start of the year is through Start-of-School-Year (SOSY) visits by DEOs and school inspectors.

Simbu inspectors also support the PDoE to maintain teacher quality (and avoiding difficulties of qualifications affecting registration and promotions) through a shared screening process for new graduates. Every new graduate is interviewed by a committee comprising senior PDoE personnel, TSC officials, and inspectors. This process reduces the recruitment of candidates whose interests are more in getting a formal sector job, as well as incidences of bribery or manipulation of nepotistic ties by candidates seeking to join the workforce. When these new teachers come to apply for jobs and promotions, all their credentials have already been verified.

New graduate teachers also need to complete a probationary year, including an inspector visit or an SBTA report approved by an inspector, before they can be fully registered and receive full salary for their grade. Many graduate teachers do not get inspected or have their SBTA approved, especially in remote locations and provinces where inspectors lack logistical support. Thus, their full teacher registration and full pay is delayed. In Simbu, inspectors use their district WhatsApp groups to complete SBTAs with oversight.

There are monthly 'clients' days' at provincial and now also district level. Teachers, parents, Board members, and other stakeholders can meet to seek resolutions to issues they raise. District-level clients' days are run by district inspectors, offering stakeholders an accessible feedback/resolution mechanism, linked to the WhatsApp group.

Inspectors participate in many senior teacher and Head Teacher appointment processes, providing technical advice and appraisal of candidates.

Appendix 7:

The Simbu experience of merit-based, non-patronage appointments in inspections

Protecting institutions – maintaining a set of management rules, roles controlling and directing resources towards wider public good ends – is hard work. In PNG education, it requires constant vigilance, and consistently pressing back against adventurous politicians, nepotistic school leaders, and others. It requires merit-based appointments (roles), merit-based processes (rules), and rule-based resource allocation. It needs more than just a Provincial Administrator committed to following the rules: it means scrutinizing every appointment for its potential political aspects. It means getting as many good people into positions as possible, hoping that the dominance of a new political leader will not undermine what is in place, and leave the sector or school with an inept and un-respected manager, unable to move on because he lacks any qualifications beyond a personal loyalty to some departed MP.

Inspectors are crucial to these processes. If their own appointment is not merit based, they will lack authority, and be required to advance political and patronage issues and allies, rather than the people in schools and the PDoE best able to do the job. PNG inspectors have a crucial role in other people's appointments, due to their status as high level, well qualified, and well-informed education official. It is crucial that they can do this job fairly and on a merit basis; and this circles back to the requirement that they themselves are merit based. The discussion below illuminates the issues from Simbu education officials' (PDoE and Inspectors') experience.

Simbu education officials confirmed the importance of inspection and other appointments being merit based. They note the following key benefits:

- Being merit-based gives you strength. When quality appointments are made on merit, both the person appointed and their appointing officers feel good and happy about the outcome: there is no guilt or shame on any side, and nothing to hide. The reasons for appointment are clear to all, and the appointment and person are seen as valid. This means both the appointee and those appointing them can draw confidence and even a sense of strength from the appointment, which in turn provides a basis for everyone to step up and develop things further. 'Being from a fair and firm appointment process gives you strength to make decisions, without bias. I can be very tough when I request NDoE/PEB/PDoE to appoint someone, because I know they have the skills and can do the job'. 'If you were appointed on merit, no-one is going to push you around. I think they listen to me'.
- Merit-based appointments give you and the appointee autonomy and independence, rather than obligation. 'If I was appointed in the right way, I have no obligation to anyone. I don't need to appoint others below me based on my obligation to some higher patron. I have no debt to repay to anyone, so I can in turn do what is right.' 'I know the rules; so I can follow the rules'. 'I have taken extreme positions on certain appointments, because I knew that person was competent'.
- Inspectors whose appointments are merit-based have higher qualifications and this helps earn more respect. 'Teachers often trust and respect inspectors appointed on merit because of the level of education required; and they are disparaging of those appointed without a degree qualification. Non-merit-based appointments are more likely to involve persons with lower education and skill.'

- You avoid compromise and can base decisions on truth and facts. ‘When you lie, or bend the rules, it comes back: you have to provide some explanation that isn’t true, and is more likely to be seen as false. And that means no-one will trust. If you tell the truth, you don’t need to remember the lies’. ‘If it’s not based on merit, then it’s based on assumptions and opinions, not knowledge’.
- The appointments are based on (technical) knowledge, and that enables more information to be collected and used. ‘The appointees are there because they have learnt, and have the basic competencies to know what matters, and what to base decisions on. They in turn will gather and pass on information. They have no reason to hide knowledge. They got there by openly displaying knowledge. Knowledge becomes the basis for decisions, not personal preference. This is where inspectors are important to the appointment process. They too have technical knowledge, often more than PEB members and others.’ ‘We rely on [merit-based appointments] for the information they provide’. ‘They make the basis of the appointment, not something else. The PEB members have to trust the inspectors, because they don’t have other information. So, the inspectors are crucial: they must have information and use it in a technical way. They need evidence and data, and this is where the SMR appointment forms will benefit’.

Appendix 8:

Methodology for estimating costs of strengthening inspection services in PNG

Data input and assumptions for costing of whole-of-school inspection services

Estimating the cost of strengthening inspection services requires consideration of several components necessary to conduct the whole school assessment for every school once every three years. This includes the time needed for the assessment, time spent on inspection by an inspector, the inspector's pay scale, and the cost of transportation, accommodation, and allowances. The assumptions made in this costing exercise are based on the criteria necessary to complete the in-depth evaluation of whole-of-school assessment. Table 5 outlines the assumptions made for each component involved in the calculation.

Table 5.

Components of cost analysis and assumptions for data input

No.	Components	Scenario 1	Scenario 2	Scenario 3	Assumptions
1	Duration of school assessment	ELEM – 4 days PRIM – 4 days SEC – 15 days VOCA – 15 days	ELEM – 4 days PRIM – 4 days SEC – 15 days VOCA – 15 days	ELEM – 5 days PRIM – 5 days SEC – 20 days VOCA – 20 days	Scenario 1 and 2: minimum days to complete the assessment answered by inspectors in 2023 Kobo survey. Scenario 3: authors assumptions based on the scenario 1 and 2.
2	Number of working days in a year	240 days	240 days	240 days	Authors' assumption based on the official calendar and new year holidays
3	Share of time spent for inspection	50%	50%	40%	Based on the proposed whole-of-school assessment framework
4	Travelling time for inspector to each school (round trips, in days)	Highly accessible – 1 day Moderately accessible – 1 day Accessible – 1 days Remote – 2 days Very remote – 3 days Extremely remote – 4 days	Highly accessible – 1 day Moderately accessible – 1 day Accessible – 1 days Remote – 2 days Very remote – 3 days Extremely remote – 4 days	Highly accessible – 2 days Moderately accessible – 2 days Accessible – 2 days Remote – 3 days Very remote – 4 days Extremely remote – 5 days	Authors' assumptions based on the team members who experienced in travelling to schools in different provinces
5	Pay scale of the inspector	Current average salary – 59,141 kinas	Primary HT average salary – 77,375 kinas	Secondary HT average salary – 87,210 kinas	Current salary is adjusted to match with the personal emoluments spending in 2022. Primary and secondary HT salary is used as a reference in scenario 2 and scenarios 3.

No.	Components	Scenario 1	Scenario 2	Scenario 3	Assumptions
6	Cost of transportation: Road transport (Own car) per day	Highly accessible – 200 kinas Moderately accessible – 200 kinas Accessible – 200 kinas Remote – 200 kinas Very remote – 200 kinas Extremely remote – 200 kinas	Highly accessible – 200 kinas Moderately accessible – 200 kinas Accessible – 200 kinas Remote – 200 kinas Very remote – 200 kinas Extremely remote – 200 kinas	Highly accessible – 300 kinas Moderately accessible – 300 kinas Accessible – 300 kinas Remote – 300 kinas Very remote – 300 kinas Extremely remote – 300 kinas	Authors' assumption based on the team members who experienced in travelling to schools in different provinces
7	Cost of transportation: Road transport (rented car) per day	Highly accessible – 1000 kinas Moderately accessible – 1000 kinas Accessible – 1000 kinas Remote – 2000 kinas Very remote – 2000 kinas Extremely remote – 2000 kinas	Highly accessible – 1000 kinas Moderately accessible – 1000 kinas Accessible – 1000 kinas Remote – 2000 kinas Very remote – 2000 kinas Extremely remote – 2000 kinas	Highly accessible – 1500 kinas Moderately accessible – 1500 kinas Accessible – 1500 kinas Remote – 3000 kinas Very remote – 3000 kinas Extremely remote – 3000 kinas	Authors' assumption based on the team members who experienced in travelling to schools in different provinces
8	Cost of transportation: Water transport	Highly accessible – 1500 kinas Moderately accessible – 1500 kinas Accessible – 1500 kinas Remote – 3000 kinas Very remote – 3000 kinas Extremely remote – 3000 kinas	Highly accessible – 1500 kinas Moderately accessible – 1500 kinas Accessible – 1500 kinas Remote – 3000 kinas Very remote – 3000 kinas Extremely remote – 3000 kinas	Highly accessible – 2000 kinas Moderately accessible – 2000 kinas Accessible – 2000 kinas Remote – 4000 kinas Very remote – 4000 kinas Extremely remote – 4000 kinas	Authors' assumption based on the team members who experienced in travelling to schools in different provinces
9	Cost of transportation: Air transport	Highly accessible – 2000 kinas Moderately accessible – 2000 kinas Accessible – 2000 kinas Remote – 20000 kinas Very remote – 20000 kinas Extremely remote – 20000 kinas	Highly accessible – 2000 kinas Moderately accessible – 2000 kinas Accessible – 2000 kinas Remote – 20000 kinas Very remote – 20000 kinas Extremely remote – 20000 kinas	Highly accessible – 3000 kinas Moderately accessible – 3000 kinas Accessible – 3000 kinas Remote – 25000 kinas Very remote – 25000 kinas Extremely remote – 25000 kinas	Authors' assumption based on the team members who experienced in travelling to schools in different provinces
10	Share of use of own car	50%	50%	70%	Authors' assumption
11	Per diem rate	200 kinas	200 kinas	300 kinas	Authors' assumption
12	Accommodation cost per day	Accessible area – 500 kinas Remote area – 200 kinas	Accessible area – 500 kinas Remote area – 200 kinas	Accessible area – 600 kinas Remote area – 300 kinas	Authors' assumption
13	Years to complete inspection for all schools	Three years	Three years	Three years	Authors' assumption

Estimating the cost of inspection

There are two primary components to consider:

- 1) Personnel costs for inspectors are estimated based on the number of inspectors needed to visit each school once every three years.
- 2) Resources required for visiting schools include transportation costs, accommodation expenses, and per diems.

Personnel costs

Estimating personnel costs for inspection services must consider multiple factors, including the number of days needed to conduct whole school assessments, travel time required for each school, and the amount of time inspectors will spend on the assessment. In addition, the salary of an inspector is an important factor in estimating personnel costs. Three different scenarios of inspector salaries have been considered in this exercise: (i) the current average inspector salary (scenario 1); (ii) making the average inspector salary equivalent to that of a primary head teacher (scenario 2); and (iii) making the average inspector salary equivalent to that of a secondary head teacher (scenario 3). Table 6 presents the personnel costs required for inspection services, which range between 17 million kinas and 25 million kinas under different scenarios, including the current salaries of executives and assistants. This section provides the detailed description of the method for estimating personnel costs for inspection.

Table 6.

Personnel cost for inspection service by province (in kinas)

Province	Scenario 1	Scenario 2	Scenario 3
Autonomous Bougainville	1,123,685	1,470,125	1,656,990
Central	768,837	1,005,875	1,133,730
East New Britain	650,554	851,125	959,310
East Sepik	946,261	1,238,000	1,395,360
Eastern Highlands	827,978	1,083,250	1,220,940
Enga	709,695	928,500	1,046,520
Gulf	473,130	619,000	697,680
Hela	532,272	696,375	784,890
Jiwaka	473,130	619,000	697,680
Madang	1,182,826	1,547,500	1,744,200
Manus	354,848	464,250	523,260
Milne Bay	887,119	1,160,625	1,308,150
Morobe	1,478,532	1,934,375	2,180,250
National Capital District	236,565	309,500	348,840
New Ireland	650,554	851,125	959,310
Northern	532,272	696,375	784,890
Sandaun	1,005,402	1,315,375	1,482,570
Simbu	650,554	851,125	959,310
Southern Highlands	887,119	1,160,625	1,308,150
West New Britain	709,695	928,500	1,046,520
Western Highlands	650,554	851,125	959,310
Western	887,119	1,160,625	1,308,150
Total of inspectors' salary	16,618,703	21,742,375	24,506,010
Executive and assistant salaries	906,034	906,034	906,034
Total of personnel cost	17,524,737	22,648,409	25,412,044

In this table, scenario 1 retains the current pay scale of inspectors, scenario 2 aligns with the pay scale of primary head teachers, and scenario 3 aligns with the pay scale of secondary head teachers.

Differentiating the number of schools by province and by PARI

Visiting schools is a key aspect of conducting inspection services. Due to the unique geographic features of Papua PNG, visiting schools in provinces with varying levels of accessibility presents challenges in terms of the resources and logistics required. Thus, it is important to be able to differentiate the resources required for school inspections in different geographical locations. The model includes features to accommodate expenses required for schools in different PNG Accessibility/Remoteness Index (PARI) categories. The number of schools by level of education and by province was obtained from the Master Position Register Database (MPR 2022) (See Table 7). The number of schools for different PARI categories is estimated based on the distribution of schools by PARI for different levels of education using the 2019 census (See Tables 8 to 11)).

Table 7. Number of schools by level of education in 2022

Province	Number of schools			
	Elementary	Primary	Secondary	Vocational
Autonomous Bougainville	446	249	12	7
Central	414	226	15	5
East New Britain	386	190	15	8
East Sepik	520	326	39	10
Eastern Highlands	465	251	30	8
Enga	438	165	13	11
Gulf	193	111	6	5
Hela	269	91	20	6
Jiwaka	228	115	21	5
Madang	769	315	27	8
Manus	123	95	6	1
Milne Bay	528	230	11	10
Morobe	1016	389	26	10
National Capital District	49	42	14	5
New Ireland	383	161	10	5
Northern	327	123	7	6
Sandaun	564	237	12	9
Simbu	380	180	22	12
Southern Highlands	611	215	26	9
West New Britain	354	209	18	2
Western Highlands	380	137	25	7
Western	495	198	10	5

Data source: Master position register database 2022

Table 8.

Share of elementary schools by PARI

Province	Share of elementary schools						
	Highly accessible	Moderately accessible	Accessible	Remote	Very Remote	Extremely remote	Unknown
Autonomous Bougainville	0%	32%	54%	6%	0%	0%	8%
Central	17%	7%	46%	9%	0%	0%	21%
East New Britain	9%	10%	52%	17%	8%	0%	4%
East Sepik	2%	35%	29%	9%	8%	0%	17%
Eastern Highlands	15%	0%	81%	3%	0%	0%	1%
Enga	21%	24%	54%	0%	0%	0%	2%
Gulf	0%	15%	11%	20%	26%	0%	27%
Hela	0%	4%	2%	0%	0%	0%	93%
Jiwaka	10%	0%	3%	0%	0%	0%	87%
Madang	19%	27%	21%	14%	3%	0%	16%
Manus	0%	35%	0%	55%	0%	8%	2%
Milne Bay	0%	10%	11%	50%	23%	6%	0%
Morobe	16%	26%	19%	12%	7%	0%	21%
National Capital District	89%	0%	0%	0%	0%	0%	11%
New Ireland	0%	53%	4%	26%	13%	0%	4%
Northern	17%	12%	32%	23%	2%	0%	14%
Sandaun	0%	19%	8%	26%	19%	12%	16%
Simbu	55%	12%	30%	3%	0%	0%	0%
Southern Highlands	10%	10%	71%	0%	0%	0%	9%
West New Britain	0%	0%	33%	33%	21%	9%	3%
Western Highlands	35%	21%	32%	0%	0%	0%	12%
Western	0%	10%	1%	24%	46%	3%	16%

Data source: 2019 census

Table 9.

Share of primary schools by PARI

Province	Share of primary schools						
	Highly accessible	Moderately accessible	Accessible	Remote	Very Remote	Extremely remote	Unknown
Autonomous Bougainville	0%	26%	65%	7%	2%	0%	0%
Central	17%	10%	48%	15%	0%	0%	11%
East New Britain	10%	13%	50%	18%	10%	0%	1%
East Sepik	2%	38%	37%	12%	10%	0%	1%
Eastern Highlands	11%	0%	85%	3%	0%	0%	1%
Enga	19%	21%	58%	0%	0%	0%	2%
Gulf	0%	22%	13%	24%	39%	0%	3%
Hela	0%	1%	0%	0%	0%	0%	99%
Jiwaka	7%	0%	5%	0%	0%	0%	87%
Madang	24%	33%	26%	14%	2%	0%	2%
Manus	0%	32%	0%	55%	0%	8%	5%
Milne Bay	0%	8%	13%	49%	24%	6%	0%
Morobe	19%	34%	22%	14%	8%	0%	3%
National Capital District	84%	0%	0%	0%	0%	0%	16%

Province	Share of primary schools						
	Highly accessible	Moderately accessible	Accessible	Remote	Very Remote	Extremely remote	Unknown
New Ireland	0%	55%	4%	26%	13%	0%	2%
Northern	20%	8%	39%	31%	2%	0%	1%
Sandaun	0%	25%	10%	33%	21%	11%	1%
Simbu	51%	12%	32%	3%	0%	0%	2%
Southern Highlands	9%	17%	74%	0%	0%	0%	1%
West New Britain	0%	0%	27%	30%	27%	7%	9%
Western Highlands	34%	32%	32%	0%	0%	0%	2%
Western	0%	11%	2%	28%	46%	3%	10%

Data source: 2019 census

Table 10.

Share of secondary schools by PARI

Province	Share of secondary schools						
	Highly accessible	Moderately accessible	Accessible	Remote	Very Remote	Extremely remote	Unknown
Autonomous Bougainville	0%	33%	58%	8%	0%	0%	0%
Central	25%	17%	50%	8%	0%	0%	0%
East New Britain	14%	7%	71%	7%	0%	0%	0%
East Sepik	10%	30%	50%	10%	0%	0%	0%
Eastern Highlands	39%	0%	61%	0%	0%	0%	0%
Enga	23%	15%	62%	0%	0%	0%	0%
Gulf	0%	17%	33%	17%	33%	0%	0%
Hela	0%	25%	0%	0%	0%	0%	75%
Jiwaka	23%	0%	23%	0%	0%	0%	54%
Madang	20%	33%	27%	20%	0%	0%	0%
Manus	0%	60%	0%	20%	0%	0%	20%
Milne Bay	0%	10%	20%	50%	10%	10%	0%
Morobe	30%	25%	25%	10%	5%	0%	5%
National Capital District	100%	0%	0%	0%	0%	0%	0%
New Ireland	0%	70%	10%	10%	10%	0%	0%
Northern	43%	14%	43%	0%	0%	0%	0%
Sandaun	0%	18%	18%	27%	27%	9%	0%
Simbu	62%	10%	29%	0%	0%	0%	0%
Southern Highlands	17%	11%	67%	0%	0%	0%	6%
West New Britain	0%	0%	40%	30%	20%	10%	0%
Western Highlands	26%	39%	35%	0%	0%	0%	0%
Western	0%	0%	11%	22%	67%	0%	0%

Data source: 2019 census

Table 11.

Share of vocational schools by PARI

Province	Share of secondary schools						
	Highly accessible	Moderately accessible	Accessible	Remote	Very Remote	Extremely remote	Unknown
Autonomous Bougainville	0%	0%	100%	0%	0%	0%	0%
Central	20%	0%	60%	0%	0%	0%	20%
East New Britain	38%	13%	25%	0%	25%	0%	0%
East Sepik	38%	25%	25%	13%	0%	0%	0%
Eastern Highlands	67%	0%	33%	0%	0%	0%	0%
Enga	36%	18%	36%	0%	0%	0%	9%
Gulf	0%	20%	0%	20%	20%	0%	40%
Hela	0%	0%	0%	0%	0%	0%	100%
Jiwaka	0%	0%	0%	0%	0%	0%	100%
Madang	50%	13%	25%	13%	0%	0%	0%
Manus	0%	100%	0%	0%	0%	0%	0%
Milne Bay	0%	13%	13%	50%	13%	13%	0%
Morobe	30%	10%	30%	0%	0%	0%	30%
National Capital District	100%	0%	0%	0%	0%	0%	0%
New Ireland	0%	100%	0%	0%	0%	0%	0%
Northern	33%	0%	33%	17%	0%	0%	17%
Sandaun	0%	33%	0%	44%	22%	0%	0%
Simbu	57%	14%	29%	0%	0%	0%	0%
Southern Highlands	33%	0%	67%	0%	0%	0%	0%
West New Britain	0%	0%	67%	0%	33%	0%	0%
Western Highlands	43%	14%	14%	0%	0%	0%	29%
Western	0%	25%	0%	0%	75%	0%	0%

Data source: 2019 census

Number of days needed for inspection (including travel time)

The proposed whole school assessment framework suggests a comprehensive evaluation of schools using a standardized report template. It is estimated that this process would take a minimum of three full days to one week for a primary school in accessible areas. Larger schools, such as secondary and vocational schools, will take longer, ranging from four to five times the duration of the primary school assessment. The duration of assessments could vary according to the size of the school and the availability of data. The time required for inspection is determined by the level of education.

$$\text{Whole - of - school assessment}_i = x_i * d_i$$

Where: i refers to different levels of education, such as elementary, primary, secondary, and vocational schools; x_i refers to the number of schools in each i level of education; and d_i refers to the number of days required to complete the assessment for each school in the i level of education.

Similarly, the number of days required to travel to each school is also determined by different PARI categories, ranging from one day for highly accessible areas to four days for extremely remote areas (in scenario 1 and 2) and two days to five days (in scenario 3) for a round trip.

$$\text{Number of days required to travel}_i = x_{ij} * t_j$$

Where: i refers to the different levels of education; j refers to the different levels of PARI; x_{ij} refers to the number of schools at each i level of education and each j PARI; and t_j refers to the number of days required to travel to each school in each j PARI.

Table 12.

Number of days needed for whole school assessment by level of education (scenarios 1 and 2)

Province	Number of days needed for whole-of-school assessment				
	Elementary	Primary	Secondary	Vocational	Total
Autonomous Bougainville	1,784	996	180	105	3,065
Central	1,656	904	225	75	2,860
East New Britain	1,544	760	225	120	2,649
East Sepik	2,080	1,304	585	150	4,119
Eastern Highlands	1,860	1,004	450	120	3,434
Enga	1,752	660	195	165	2,772
Gulf	772	444	90	75	1,381
Hela	1,076	364	300	90	1,830
Jiwaka	912	460	315	75	1,762
Madang	3,076	1,260	405	120	4,861
Manus	492	380	90	15	977
Milne Bay	2,112	920	165	150	3,347
Morobe	4,064	1,556	390	150	6,160
National Capital District	196	168	210	75	649
New Ireland	1,532	644	150	75	2,401
Northern	1,308	492	105	90	1,995
Sandaun	2,256	948	180	135	3,519
Simbu	1,520	720	330	180	2,750
Southern Highlands	2,444	860	390	135	3,829
West New Britain	1,416	836	270	30	2,552
Western Highlands	1,520	548	375	105	2,548
Western	1,980	792	150	75	2,997
Total	37,352	17,020	5,775	2,310	62,457

Table 13.*Number of days required for whole-of-school assessment by level of education (scenario 3)*

Province	Number of days needed for whole-of-school assessment				
	Elementary	Primary	Secondary	Vocational	Total
Autonomous Bougainville	2,230	1,245	240	140	3,855
Central	2,070	1,130	300	100	3,600
East New Britain	1,930	950	300	160	3,340
East Sepik	2,600	1,630	780	200	5,210
Eastern Highlands	2,325	1,255	600	160	4,340
Enga	2,190	825	260	220	3,495
Gulf	965	555	120	100	1,740
Hela	1,345	455	400	120	2,320
Jiwaka	1,140	575	420	100	2,235
Madang	3,845	1,575	540	160	6,120
Manus	615	475	120	20	1,230
Milne Bay	2,640	1,150	220	200	4,210
Morobe	5,080	1,945	520	200	7,745
National Capital District	245	210	280	100	835
New Ireland	1,915	805	200	100	3,020
Northern	1,635	615	140	120	2,510
Sandaun	2,820	1,185	240	180	4,425
Simbu	1,900	900	440	240	3,480
Southern Highlands	3,055	1,075	520	180	4,830
West New Britain	1,770	1,045	360	40	3,215
Western Highlands	1,900	685	500	140	3,225
Western	2,475	990	200	100	3,765
Total	46,690	21,275	7,700	3,080	78,745

Table 14.*Number of days needed for travel by level of education (scenario 1 and 2)*

Province	Number of days needed for whole-of-school assessment				
	Elementary	Primary	Secondary	Vocational	Total
Autonomous Bougainville	512	278	13	7	810
Central	537	285	16	6	844
East New Britain	532	261	16	12	821
East Sepik	738	432	43	11	1,225
Eastern Highlands	482	261	30	8	781
Enga	445	168	13	12	638
Gulf	387	227	11	10	635
Hela	520	181	35	12	748
Jiwaka	427	215	32	10	685
Madang	1,039	379	32	9	1,460
Manus	221	175	8	1	405
Milne Bay	1,128	493	22	21	1,664
Morobe	1,486	519	33	13	2,050
National Capital District	54	49	14	5	122

Province	Number of days needed for whole-of-school assessment				
	Elementary	Primary	Secondary	Vocational	Total
New Ireland	596	247	13	5	861
Northern	463	166	7	8	644
Sandaun	1,211	493	25	17	1,746
Simbu	392	189	22	12	615
Southern Highlands	668	217	27	9	922
West New Britain	730	444	36	3	1,213
Western Highlands	426	140	25	9	600
Western	1,198	472	26	13	1,708
Total	14,193	6,291	500	213	21,197

Table 15.

Number of days needed for travel by level of education (scenario 3)

Province	Number of days needed for whole-of-school assessment				
	Elementary	Primary	Secondary	Vocational	Total
Autonomous Bougainville	958	527	25	14	1,524
Central	951	511	31	11	1,504
East New Britain	918	451	31	20	1,420
East Sepik	1,258	758	82	21	2,120
Eastern Highlands	947	512	60	16	1,535
Enga	883	333	26	23	1,265
Gulf	580	338	17	15	950
Hela	789	272	55	18	1,134
Jiwaka	655	330	53	15	1,054
Madang	1,808	694	59	17	2,579
Manus	344	270	14	2	630
Milne Bay	1,656	723	33	31	2,443
Morobe	2,502	908	59	23	3,491
National Capital District	103	91	28	10	232
New Ireland	979	408	23	10	1,420
Northern	790	289	14	14	1,107
Sandaun	1,775	730	37	26	2,568
Simbu	772	369	44	24	1,209
Southern Highlands	1,279	432	53	18	1,783
West New Britain	1,084	653	54	5	1,796
Western Highlands	806	277	50	16	1,149
Western	1,693	670	36	18	2,416
Total	23,531	10,546	885	367	35,329

Number of inspectors needed

The proposed framework assumes that 40 percent of inspectors' time will be required to conduct the whole school assessment, with an additional 10 percent for individual teacher assessment. Assuming that school assessment will be undertaken every three years, the number of required inspectors varies from 281 to 450, depending on the allocation of inspectors' time spent on inspection (see Table 16).

Table 16. Number of inspectors needed in different scenarios

Province	Number of inspectors	
	Scenario 1 and 2	Scenario 3
Autonomous Bougainville	19	31
Central	13	20
East New Britain	11	18
East Sepik	16	27
Eastern Highlands	14	23
Enga	12	18
Gulf	8	12
Hela	9	14
Jiwaka	8	14
Madang	20	32
Manus	6	9
Milne Bay	15	24
Morobe	25	41
National Capital District	4	7
New Ireland	11	18
Northern	9	15
Sandaun	17	25
Simbu	11	18
Southern Highlands	15	25
West New Britain	12	19
Western Highlands	11	17
Western	15	23
Total	281	450

Resources required to visit schools

The costs for school visits include transportation, accommodation, and per diem expenses. Based on the assumption that each school undergoes inspection once every three years, the total operational cost could vary from 50 million kinas (in scenario 1 and 2) to 74 million kinas (in scenario 3) (See, Table 17). The primary factor contributing to higher operational costs is the increased number of days required to complete the whole school assessments compared to current practices. This section provides a detailed, step-by-step method for estimating operational costs.

Table 17. Operational cost of inspection service (in kinas)

Operational cost	Scenario 1 and 2	Scenario 3
Transportation cost	33,215,538	43,348,743
Accommodation cost	11,534,381	19,657,968
Per diem	5,725,937	11,705,406
Total of operational cost	50,475,857	74,712,117

Cost of transportation

The model considers transportation costs in two parts: the cost of traveling to the provincial capital and the cost of travel within the province. To avoid overestimating travel costs, the cost of traveling to the maritime provinces is estimated separately, while it is assumed that the same car will be used for travel within the highland provinces. Within the maritime provinces, it is estimated that 50 percent of schools will need water transport, while the remaining 50 percent will require air transport. In the model, it is assumed that inspectors will use a car to visit schools once they arrive in the provincial capital. Despite the model quantifying the number of days required to travel to school, the cost of traveling within the province is based on the number of days required to conduct whole-of-school assessment. It could be argued that inspectors may or may not keep the car with them during their entire visit. Since the decision to keep the car or not is arbitrary, the model only used the number of days required for the whole school assessment to estimate the cost of traveling within the province, without accounting for the additional days required for traveling to schools. The total cost of traveling is then divided by three, assuming that visiting all schools requires three years, to estimate the annual cost of traveling. Table 18 presents the annual travel costs associated with school inspections for each scenario.

Table 18. Annual cost of transportation (in kinas)

Province	Annual cost of transportation	
	Scenario 1 and 2	Scenario 3
Autonomous Bougainville	1,263,673	1,715,090
Central	1,414,618	1,884,346
East New Britain	1,463,746	1,928,330
East Sepik	2,065,782	2,734,138
Eastern Highlands	619,090	847,276
Enga	505,277	693,837
Gulf	1,195,583	1,530,500
Hela	429,481	560,367
Jiwaka	400,507	524,370
Madang	2,520,667	3,343,078

Province	Annual cost of transportation	
	Scenario 1 and 2	Scenario 3
Manus	868,390	1,110,681
Milne Bay	3,475,573	4,414,227
Morobe	3,529,113	4,648,414
National Capital District	175,682	241,185
New Ireland	1,640,945	2,133,004
Northern	1,216,705	1,593,956
Sandaun	3,219,923	4,115,177
Simbu	488,015	667,817
Southern Highlands	708,992	969,816
West New Britain	2,309,930	2,950,462
Western Highlands	456,231	623,059
Western	3,247,614	4,119,613
Total	33,215,538	43,348,743

Cost of accommodation and per diem

Estimating the cost of accommodation and per diem is relatively straightforward. The accommodation rate is determined based on the accessibility of the schools – 600 kina per day for schools located in accessible areas and 300 kina per day for schools located in remote areas. Then, the rate is multiplied by the number of days required to visit the schools, including the travel day. Similarly, a per diem of 300 kina is calculated, including travel days to schools. Table 19 shows the yearly expenses for accommodation and daily allowance in all scenarios.

Table 19. Annual cost of accommodation and per diem (in kinas)

Provinces	Scenario 1 and 2	Scenario 3
Autonomous Bougainville	1,017,786	1,863,401
Central	821,461	1,475,420
East New Britain	705,696	1,289,004
East Sepik	1,132,229	2,046,998
Eastern Highlands	973,408	1,750,374
Enga	792,674	1,422,010
Gulf	362,200	669,800
Hela	600,544	1,034,213
Jiwaka	571,948	988,676
Madang	1,351,152	2,443,447
Manus	241,877	456,303
Milne Bay	748,839	1,437,950
Morobe	1,736,280	3,134,826
National Capital District	184,902	330,102
New Ireland	624,641	1,152,310
Northern	538,601	981,849
Sandaun	884,083	1,647,784
Simbu	771,607	1,386,622
Southern Highlands	1,111,468	1,989,773

Provinces	Scenario 1 and 2	Scenario 3
West New Britain	628,858	1,182,426
Western Highlands	729,555	1,302,227
Western	730,509	1,377,858
Total	17,260,318	31,363,374

Comparison of costing of whole school assessment with estimate of inspection service in 2020

The National Economic and Fiscal Commission (NEFC) estimated that the operational cost for inspection services was about 8 million kinas in 2020 (see Table 20), which is approximately 30% of what is currently spent in 2022. The NEFC estimate only covers the operational cost of inspection by the province without the personnel cost. Even in terms of operational costs, the NEFC report assumes that the province meets the resources required for two out of the three required visits each year. The significant difference with between the cost estimates in this report and NEFC estimates is that NEFC estimates are based on the current practice of one inspector visiting each school for one day, while these costing scenarios are based on the proposed whole-of-school assessment framework.

Table 20.

Operational cost of inspection service covered by province in 2020 (in kinas)

Provinces	Operational cost of inspection
Central	366,940
East New Britain	334,926
East Sepik	527,666
Eastern Highlands	424,058
Enga	373,112
Gulf	247,323
Hela	233,238
Jiwaka	210,124
Madang	557,708
Manus	137,276
Milne Bay	442,900
Morobe	712,814
New Ireland	306,803
Northern	263,399
Sandaun	719,355
Simbu	372,744
Southern Highlands	391,373
West New Britain	585,738
Western Highlands	211,581
Western	699,145
Total	8,118,226

Data source: National Economic and Fiscal Commission, 2020, *The Thin Blue Line in 2020*.



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