

1 INTRODUCTION

1.1 Introduction

The state of Papua New Guinea, supported by a host of non-state actors, has long sought to ensure that its citizens are healthy and well educated. While there has been some success, there is still much to do: many Papua New Guineans are illiterate and suffer from poor health. Turning this around requires a variety of resources and reforms. Teachers and health workers need to be trained, paid and, in many cases, housed. Health clinics and schools need to be built and maintained; they need to be stocked with medicine and equipment or teaching materials. Funding must be available. Both spending and staff need to be regularly monitored. Improving health and education outcomes in PNG – ensuring that students learn and patients are treated – requires responding to these complex and sometimes competing challenges with limited resources and within a difficult environment.

PNG's National Departments of Education and Health play a central role in policy development. Provincial and local level governments are mainly responsible for implementing these policies under decentralised service delivery arrangements. Their efforts have been augmented by support from churches, NGOs, international donors, and increasingly MPs, who use their constituency funds to build classrooms or new health facilities.

Both education and health funding have been greatly increased over the last decade. And a number of reforms have been implemented to improve service delivery. What has been the result? Little monitoring has taken place. There is a paucity of information about the success or otherwise of policy reforms, and about how the education and health systems have fared over the past decade. Have health clinics and schools improved over the past ten years or, as many suspect, have they deteriorated? Are more resources available for Head Teachers and Officers in Charge of health clinics, or less?

This report tries to answer these questions. It presents the results of a survey of health clinics and schools across eight provinces, from the nation's capital to its most far-flung and inaccessible regions. Many of the same schools and health facilities were surveyed at the start of the decade, in 2002. The report compares funding, financial management, governance arrangements and quality indicators for schools and health clinics between 2002 and 2012. It also analyses the impacts of key policy reforms.

The report provides the basic information that is needed by not only national departments and provincial governments, but indeed the people of PNG, to assess progress and suggest changes.

This chapter provides the objectives of the project, an overview of the current policy context in PNG, an introduction to the health and education sectors, and an outline of the report.

1.2 Purpose of the study

The Promoting Effective Public Expenditure (PEPE) project is a joint research initiative between PNG's National Research Institute (NRI) and the Development Policy Centre at The Australian National University. The overall purpose of the research is to analyse how PNG allocates its public money through the national budget, and to better understand the effectiveness of this expenditure in key service delivery sectors. The project arose out of a concern that the country faces major challenges in converting resource revenues from the recent boom in mineral wealth into effective development outcomes. To support more effective allocations and better expenditure practices, the project conducted a public expenditure and facility survey focusing on schools and health facilities across PNG in 2012. This report presents the main findings of this research.

The PEPE survey had two major objectives. The first was to replicate key aspects of the Public Expenditure and Service Delivery (PESD) survey undertaken by NRI and the World Bank in 2002. In 2012 we visited most of the schools and health clinics that NRI and the World Bank did in 2002. PESD survey instruments were used as a basis for designing the PEPE surveys. This enabled us to study progress and regress between 2002 and 2012. While many facility surveys have been undertaken around the world, it is rare to have two comparable surveys. The combination of the two enables us to provide not just a snapshot but a dynamic assessment.

The second objective was to understand the financing arrangements of the health and education sectors, and to analyse the impact of recent financing reforms. This report focuses on three areas in particular:

- **Education financing and the Tuition Fee-Free policy.** In 2012, school tuition fees (up to Grade 10) were abolished and, in compensation, subsidies were paid directly as a grant to schools (via individual school bank accounts) by the national government. While there has been much conjecture about the effectiveness of this reform, there is little empirical evidence to support claims of success or otherwise.
- **Health financing and the free health policy.** Health function grants paid to provinces to support primary health care functions were introduced in 2004 and have been increased significantly since. But little is known about how much of this funding is actually received at the health facility level. In 2013, the government abolished health user charges as part of its free health policy. This happened after our survey, but the survey

provides useful information on how important user fees were, and how hard or easy it will be to replace them.

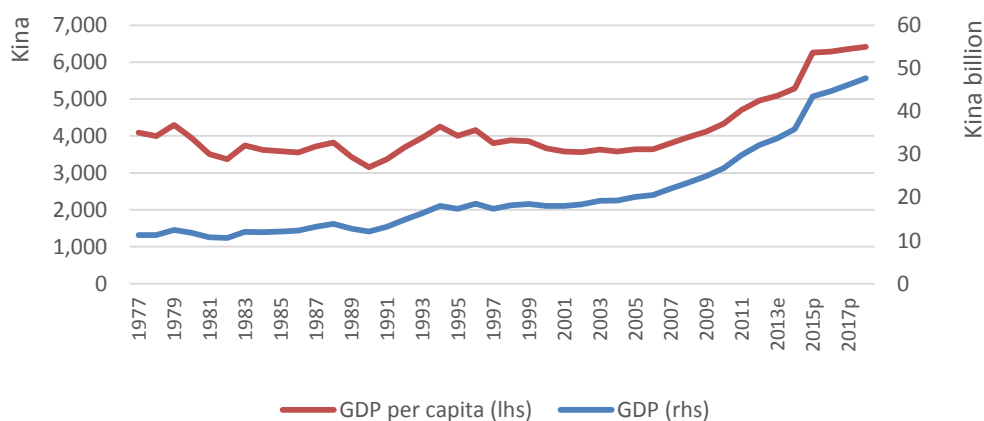
- **MP funding.** Constituency funding, through the District Service Improvement Program (DSIP), has become an important source of revenue for the health and education sectors. Given the recent massive increases in DSIP funding, it is timely to examine its importance and effectiveness for health clinics and schools in our sample.

In sum, this report provides a stocktake of progress over the last decade, and an analysis of financing reforms.

1.3 Economic and funding context

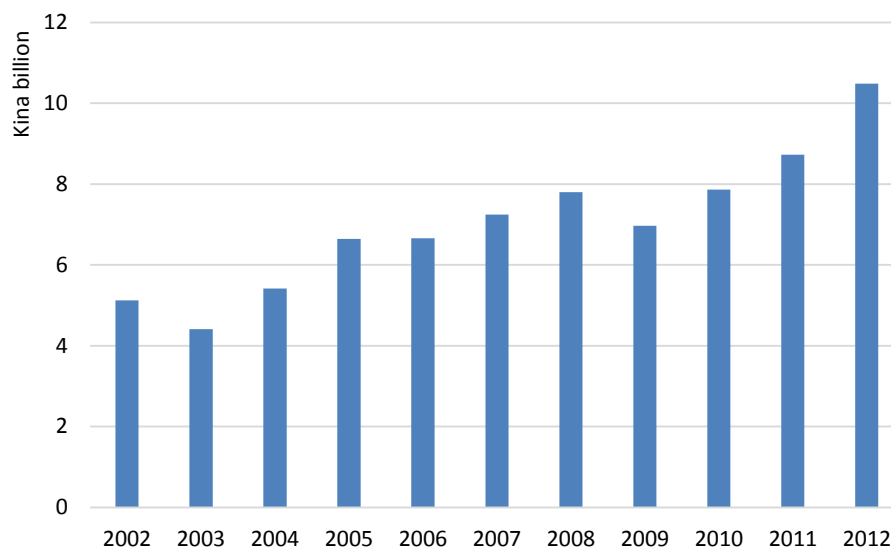
Success in the health and education sectors is tied to the broader economy and to the government's revenue position. PNG has experienced uninterrupted and rapid economic growth for more than a decade. As Figure 1-1 shows, this reversed the declining trend in income per capita apparent since the early 1990s, and income per capita is today at record levels. Economic growth is forecast to continue to remain reasonably strong in coming years, with a big boost in 2015 from the PNG LNG project.

Figure 1-1: GDP and GDP per capita, 2012 prices



Notes and sources: Bank of PNG and national budgets. GDP deflator provided in budget documents used from 1994 onwards; CPI deflator before that. 'e' is an estimate, and 'p' are projections.

With rapid economic growth has come an expansion of government revenue and spending. As Figure 1-2 shows, over the ten-year period that is the focus of this report (2002 to 2012), government spending approximately doubled after inflation, from K5.1 billion to K10.5 billion. (This is in 2012 prices, and excluding interest, since interest payments are not available for service delivery.)

Figure 1-2: Central government expenditure (2012 prices, excluding interest)

Notes and sources: National budget documents. The GDP deflator given in the budget is used to deflate the series.

It is difficult to work out how much expenditure has gone to primary schools and health clinics over this period, but there has certainly been a large increase. For example, operational funding to all schools has increased from K56 million in 2004 to K735 million in 2013 (in 2012 prices). Operational funding to health facilities is estimated to have increased from K18 to K93 million over the same period, also adjusting for inflation (see Figure 9-1). Has PNG been successful in translating this increased funding into improved services? Or has it been a lost decade? These are critical questions for this report.

1.4 Education and health in PNG: a brief introduction

There is a lack of recent reliable data on social indicators in PNG. The 2011 census should help fill some of the gaps, but its results have not yet been released, and there are questions about its reliability. Available estimates suggest slow improvements off a low base. Average life expectancy in PNG is estimated to have increased from 60 in 2002 to 62 in 2012 (World Bank 2014). In the 2009-10 Household Income and Expenditure Survey (HIES), 30 per cent of respondents reported themselves to be unwell, and 18 per cent said that they had been suffering from malaria in the month before the survey (NSO 2013). Adult literacy is estimated to have increased from 57 per cent of the population in 2000 to 63 per cent in 2012 (World Bank 2014). In 2009-10, 51 per cent of women and 40 per cent of men reported primary as their highest attained educational level (NSO 2013).

There is an urgent need to improve PNG's social indicators. Papua New Guineans are estimated to live six years less than people in Solomon Islands, and 20 years less than Australians (World Bank 2014). While the official literacy rate is estimated to be 63 per cent, tests of literacy carried out independently estimate literacy rates to be much lower; in

some provinces they may be as low as 15 per cent (ASPBAE, 2011). The country is unlikely to achieve any of its Millennium Development Goals by 2015.

Given the poor outcomes to date, there is concern that economic growth will do little to significantly improve the lives of Papua New Guineans. Increasing government allocations to health and education is important, but clearly not enough. We need to check if funds are being translated into services, and services into outcomes.

The 2009-10 HIES has some useful information on usage of the health and education systems (NSO 2013). The gross primary enrolment rate is 74 per cent at the primary school level, but there are many over-age children at school and there are many children not at school at all. 48 per cent of children (girls and boys) aged 6 to 11 years and 19 per cent of children aged 12 to 14 years (21 per cent girls) have never been to school. The HIES also tells us that the population is heavily reliant on the health system. 15 per cent (16 per cent in rural areas) reported visiting a health clinic in the last month.

There is a scarcity of independent data on the state of PNG's health and education system. Of course, the Departments of Health and Education collect administrative data but this is not independent and is often not public nor comprehensive. There have been studies of funds flowing to the provinces and districts for service delivery (NEFC 2012 and World Bank et al. 2013), but not down to the facility level. The PESD survey of 2002 resulted in two useful reports on PNG's schools, the main focus of that survey (World Bank & National Research Institute 2004 and Guy et al. 2003). This study aims to update these reports and extend their coverage to health clinics, and thereby help fill the knowledge gap.

Since independence, PNG has witnessed significant changes to the management and financial arrangements of its health and education systems. Both have been affected by the devolution of powers from the national to subnational governments after independence. In 1977 the Somare government passed the Organic Law on Provincial Government (OLPG) that empowered subnational governments to provide and administer services. Further decentralisation came in 1995 with the enactment of the Organic Law on Provincial Governments and Local Level Governments (OLPGLLG), often referred to as the most significant political and administrative change since independence. The 2013 District Authority Act is an amendment to the OLPGLLG. It promises to further decentralise administrative functions to the district level. The way these and other policies have shaped PNG's education and health systems to the present day is explored below.

PNG's education system

The colonial government and the churches ran PNG's schools until the early 1970s, when a national education system was established. At

independence the new nation inherited a centralised colonial bureaucracy. The government was quick to decentralise political power. The two decentralization acts, the 1977 OLPG and the 1995 OLPGLLG, established an administrative division of labour: the national government became responsible for the implementation of national education policy; the provinces became responsible for service delivery and planning.

The National Department of Education (NDoE) is today primarily responsible for developing, implementing and coordinating national plans and policies. It also supports the provinces with planning, professional services, developing and monitoring standards, distributing school subsidies, managing pre-service training for teachers, and managing teacher payrolls. Provincial and local level governments are responsible for developing and operating schools. The Teaching Service Commission (TSC) employs teachers, sets salaries and conditions of employment, approves teacher appointments, and handles industrial relations (World Bank et al. 2007). Salaries are paid directly by the central government to teachers. Most infrastructure development is carried out at the provincial level by a sub-committee of the Provincial Education Board (PEB), which is comprised of the Provincial Education Manager, who chairs the PEB, and other stakeholders, including churches and technical officials (NDoE 2009).

The education sector is funded by a variety of sources. The biggest funder is the central government, which pays teacher salaries and sends national subsidy payments direct to schools. These payments are in lieu of tuition fees, which have been reduced over time, and largely abolished in 2012 (see Chapter 5). The central government also funds teacher training and Standards Officers (district-level school inspectors). As well, it provides education function grants to provinces to distribute basic learning materials to schools and fund district education office operations and supervision. Some provinces also contribute from their own revenue. Though tuition fees have been largely abolished, schools still raise project fees (and some may continue to charge tuition fees). Funding and in-kind support is also provided by non-governmental organisations, donors, churches and others. Funds are also available through constituency funds controlled by MPs.

Churches play a crucial role in providing education across PNG. They run a significant proportion of the education sector, from elementary schools through to universities. Just over half of primary schools in the country are run by churches. The NDoE works closely with the Churches Education Council, with the latter engaging with the government on education policy and implementation. Administratively, the majority of church-administered schools are fully integrated into the government system. The government provides teachers to church-run schools, and pays their salaries. Church schools also receive

subsidy payments. Church bodies provide supervision of their schools, and some provide additional funding.

Schools in PNG have developed 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.² The PESD survey found that in 2002 almost all of the 214 schools they visited had both a BoM and a P&C Committee (World Bank & NRI 2004). Under the government's Tuition Fee-Free policy (see Chapter 5) the Head Teacher and BoM are jointly responsible for managing school subsidies; the P&C Committee provides oversight and approves funding decisions.

The structure of the education system was significantly altered by the education reforms of 1993. They redefined schooling to consist of three years of elementary and six years of primary (this was defined as 'basic education') and four years of secondary education. Community schools were whittled down to comprise of grades Preparatory to 2, rather than 1 to 6 as under the previous system. Primary schools – the focus of this report – were introduced to incorporate grades 3 to 8. Secondary schools were introduced for grades 9 to 12, replacing high schools (grades 7 to 10) and national high schools (grades 11 and 12). The reforms were designed to increase access, equity and retention at all levels of education. They are widely perceived to have helped increase enrolments (World Bank et al. 2007, p. 133), but some think that quality suffered as a result.

A second part of these reforms focused on curriculum reform to emphasise local language and vocational skills. Introduced in 2003, this system is known as Outcomes Based Education (OBE). It gives a greater role to teachers in determining what students learn, and requires that children in elementary (Prep to Grade 2) are taught in the local language rather than English. As a result, many children struggled to make the transition from elementary school to primary school as the latter is taught in English. After criticism about the effectiveness of OBE (see Agigo 2010 for a critical evaluation), Prime Minister O'Neill announced in 2011 that the system would be scrapped. However, a government taskforce asked to evaluate the OBE

2. The Act refers to P&C Associations, but they are more commonly called P&C Committees.

argued that the system should be retained, although it recommended an extensive overhaul of the education system, including increasing English and Mathematics teaching at elementary and primary schools. The taskforce's 48 recommendations were approved by Cabinet in August 2013, with the NDoE tasked with implementation (Islands Business 2013). Despite this, recent comments from Minister for Education Nick Kuman suggest that OBE will be completely phased out by 2015 (Kiala 2014).

According to official statistics, more than 915,000 primary school students were enrolled across the country in 2012 (Table 1-1). There were more than 24,000 teachers, giving a student-teacher ratio of 37. The number of primary schools has increased over the past decade, from 3,300 primary schools in 2003 to 3,595 in 2012 (NDoE 2012b).

Table 1-1: Primary schools, students and teachers

| | 2012 |
|----------------------------|-------------|
| Number of schools | 3,595 |
| % government schools | 47 |
| % church and other schools | 53 |
| Students enrolled | 915,970 |
| Teachers | 24,706 |
| Students per teacher | 37.1 |

Source: NDoE communication.

PNG's health system³

In the early 1970s the soon-to-be independent nation of PNG developed its first National Health Plan (1974-78). The 1977 OLPG attempted to decentralise responsibilities for health services, but failed to specify responsibilities between the levels of government, leading to haphazard implementation (Regan 1991). The 1995 OLPGLLG attempted to clarify the responsibilities of provincial and local level governments to provide primary health services, but national funding allocations were grossly insufficient to fund these functional responsibilities (NEFC 2005). In addition, not enough was done to oversee and monitor health spending to the facility level (Thomason & Kase 2007).

Today, the PNG National Department of Health (NDoH) is responsible for the planning and coordination of the health system. NDoH is also responsible for funding hospitals around the country, including the national referral hospital, a specialist psychiatric hospital, four regional hospitals and provincial public hospitals. Most health clinics are the responsibility of provincial and local-level governments, working closely with various church agencies. Provincial administrations run government health clinics and manage health workers who are paid centrally. Church-run clinics are integral to the health system and provide almost half the ambulatory services. Churches are more autonomous than government-run institutions,

3. This section draws on WHO and NDoH (2012) and World Bank (2012).

but they are also highly subsidised, with more than 80 per cent of their service costs financed by the government. Church-run health clinics are governed by church health service providers (Catholic and Lutheran for example) that manage the clinics and employ the staff. There are also a small number of other health operators, including for-profit organisations but also NGOs, community groups and traditional healers.

In 2009 there were 21 provincial hospitals augmented by 14 district and rural hospitals that provide basic health services, including medical, surgical, obstetric, paediatric, trauma and 24-hour emergency care. There were also 192 health centres, 73 urban clinics and 447 sub-health centres. This group of facilities manages chronic and acute conditions, can provide basic surgical and paediatric care, and performs deliveries.

The bulk of patient care is handled by aid posts. In 2009, it was estimated that almost 2,000 aid posts were open, but this figure is not known with accuracy, and an increasing number of aid posts are believed to be closed. Aid posts are staffed by community health workers (often a single worker) and deliver basic health care, including mother and child care and community-based health promotion. With aid posts playing a critical role in determining the accessibility of the health system, the increasing proportion of closed facilities is concerning.

Over 12,000 people worked in the public health sector in 2009, most as community health workers. The World Bank (2012) reports that while the numbers of administrative staff doubled between 2004 and 2009, the number of health extension officers, nurses, allied health professionals and community health workers declined.

PNG's health system is in the midst of changes to governance and financial arrangements. Provincial Health Authorities (PHAs) have been established in some provinces. PHAs are being formed to manage primary and secondary care under a single model in each province. Under this system, the PHAs report directly to the Governor of the province and Minister for Health, rather than the Provincial Assembly, as the rest of the provincial administration does for other sectors. It is uncertain whether PHAs will survive the proposed establishment of District Development Authorities.

The health sector receives funding from a variety of sources. The central government is by far the biggest financier. It pays the salaries of government health workers, and provides grants to both provinces and church health service providers. Church health service providers pay the salaries of health workers, and also provide church-run clinics with operational funds or support. To help overcome underfunding of basic health requirements, health function grants to provinces were introduced in 2004 and subsequently expanded to fund operational costs at the facility level. Provinces with less internal revenue receive

more grant funding than wealthier provinces, which are expected to contribute their own funding to the health budget. In principle, all health facilities can access these funds, but in practice getting funds to the facility level can be a challenge.

Apart from the central government, MPs provide project funding through their DISP allocations. Various donors, NGOs, churches and others make in-kind and cash contributions. Until recently, user fees have been charged, but in 2014 the government officially abolished them (except for hospitals where fees have been subsidised) under its free primary health care and subsidised specialist services policy.

As Cairns (2014) highlights, the relationship between various levels of government are fluid and often dependent upon personal relationships. There are also some areas of health delivery where the roles and responsibilities of those meant to deliver services are less than clear. For example, there have been questions over who is responsible for water supply and emergency patient transfers (Cairns 2014).

At the health facility level, the Officer in Charge (OIC) plays a key management role, but the role varies depending on facility type. At aid posts, the OIC is often the only health worker available and is therefore responsible for all aspects of service delivery. OICs at aid posts report to larger health centres, which are responsible for overseeing aid posts. OICs at these health centres normally manage all aspects of operations, including staff and patients.

Community involvement in managing health clinics is, by and large, limited. Some clinics have Village Health Committees (VHCs), made up of local representatives to promote community engagement.

1.5 Report outline

This report is divided into three parts. The first comprises the introduction (this chapter), and the methodology for both the PESD (2002) and PEPE (2012) studies (Chapter 2).

The second part compares findings between 2002 and 2012 to consider whether the health and education sectors have experienced a 'lost decade'. Chapter 3 looks at the changes in education while Chapter 4 does the same for health.

The third part of the report focuses on sector financing and financing reforms. In Chapter 5, education financing is reviewed in light of the Government's Tuition-Fee Free education policy. Chapter 6 examines health financing and the free health policy. Chapter 7 examines funding from Members of Parliament through constituency funds.

The fourth and final part of the report tries to explain the results. Chapter 8 takes the analysis down to the facility level. A number of regressions are run to understand why some facilities perform better than others. Chapter 9 brings this analysis together with our sectoral and provincial comparisons to conclude.