

5 EDUCATION FINANCING AND THE TUITION FEE-FREE POLICY

5.1 Introduction

In 2012 the PNG Government introduced the Tuition Fee-Free (TFF) policy, which effectively eliminated tuition fees for students in elementary school up to Grade 10. The policy put into action the PNG Government's Universal Basic Education (UBE) plan (2010–2019), which aims to ensure that "all school-aged children have equal access to quality basic education in order to contribute to the development of the country" (National Department of Education [NDoE] 2009, p. i). To achieve this aim the government has allocated significantly more resources for the education sector to improve school attendance. In its first year of operation, the government allocated a total of 602 million kina – around one-third of the education budget appropriation (of 1,631 million kina) – to be distributed to schools in lieu of revenue from parents. In 2013 the total government subsidy was budgeted at 677 million kina – this included the full subsidisation of upper secondary. The subsidy is expected to increase at around 3.5 per cent per annum to 782 million kina in 2017 (NEFC & NDoE 2013).

The government has not only eliminated fees for students up to Grade 10. Under its Tuition Subsidy policy, which was also introduced in 2012, it also subsidised 75 per cent of tuition fees at the secondary and vocational school levels. Flexible, open and distance education providers are given a one-off payment of 75 kina per student. Table 5-1 outlines how the new policies allocate subsidies on a per student basis. It is important to note that the policy only covers *tuition* fees; parents are still responsible for paying project fees to schools and other school-related costs such as lunches, school uniforms and transport.

Given that PEPE and PESD surveyed primary schools, this chapter focuses on the TFF policy only, and not the Tuition Subsidy policy.

Table 5-1: Tuition fees under the TFF and Tuition Subsidy policy (kina per child)

School level	Maximum fee limits (per child)	Government contribution	Parental contribution
Elementary P1, E1, E2	100	100	0
Primary grades 3 to 8	270	270	0
Lower secondary (day)	900	900	0
Lower secondary (boarding)	1,500	1,500	0
Vocational (day)	900	675	225
Vocational (boarding)	1,300	975	325
Upper secondary (day)	990	743	247
Upper secondary (boarding)	1,500	1,125	375
Flexible/Open/Distance (one-off payment)	100	75	25

Adapted from: NDoE (2012a).

The TFF reform changes the way that subsidies are paid to schools. Previously, subsidies had been made available through the provinces. But in 2012 funds were electronically transferred directly to individual school bank accounts. This meant that many schools had to open bank accounts and register these with the department in order to receive the subsidy. The new policy required that school management – the Head Teacher and the Board of Management – consult with parents to determine the best use of the funds; the subsidy is also subject to formal monitoring by national, provincial and district level education officials.

There has been a great deal of debate about the impact of the TFF policy. The media in PNG is awash with stories about its implementation and effectiveness, but there has been little independent evaluation. This chapter draws on the results of the PESD and PEPE surveys and compares them to some of the TFF's key policy objectives. In doing so, it highlights some of the key challenges facing the TFF, and makes some suggestions on how they might be overcome.

We examine the effectiveness of the TFF policy at two levels. First, we ask how, and how well, the expanded system of payments to schools is being implemented. Are schools receiving the money in a timely manner? How much does it cost them to access it? How is it being managed? What are they using it for? Who is making the decisions?

Second, we look at whether the new policy is achieving its objectives. The Fee-Free Tuition Policy Management Manual (NDoE 2012a) states that the TFF policy supports the achievement of five key result areas of the UBE plan:

1. Access is improved for all children, especially for girls;
2. Retention is enhanced where more children complete nine years of primary education;
3. Quality of education is improved for all grades of elementary and primary levels;
4. Education management is strengthened across all administrative levels; and
5. Equity is enhanced to ensure quality education is available for all children in all communities across the country.

This chapter analyses the success of the TFF policy with respect to the result areas we are able to comment on based on the PESD and PEPE surveys (with additional data provided by the NDoE). In particular, we examine the policy's impact on access, quality of education and equity (the first, third and fifth points above).

Unless otherwise indicated, the data presented in this chapter is based on the PEPE Head Teacher survey which has a sample size of 216.

The next section provides a brief background on attempts to implement free education policies in PNG over the past decade. Section 5.3 presents the findings of our study in relation to the implementation of the TFF policy. Section 5.4 asks whether the policy is achieving its aims as set out in the 2012 TFF policy, and the final section concludes by discussing what these results might mean for further education reform in PNG.

In summary, the chapter finds that most schools are receiving the subsidy in full, and that it has been associated with a significant increase in school enrolments, similar to that achieved by the country's last attempt at free education in 2002. The increase is testament to the extent to which the policy is reducing the cost constraint on parents sending their children to primary school. However, the increase in student numbers has put strain on school resources. The chapter suggests that the subsidies could be better targeted and that more could be done to improve quality indicators and school oversight.

5.2 2002 to 2012: From free-to-fee-to-free

The decade from 2002 to 2012 has been marked by significant shifts in tuition fee policy. Late in 2001, the Morauta government announced that it would more than double school subsidies, which increased to around 150 million kina in 2002. In 2002 there was some confusion about which fees this subsidy would eliminate, but most provinces eliminated tuition fees while keeping project fees (World Bank & National Research Institute 2004). With the Somare coalition winning the 2002 election on a platform opposed to "free education" (as it was described at the time), the subsidy was significantly scaled back. Somare's government reverted the school subsidy to 2001 levels; the 150 million kina subsidy was reduced to 60 million kina (World Bank & NRI 2004, p. 46). The subsidy was also redirected away from reducing or eliminating school fees; instead the government decreed that it was only to be spent on school infrastructure and maintenance.

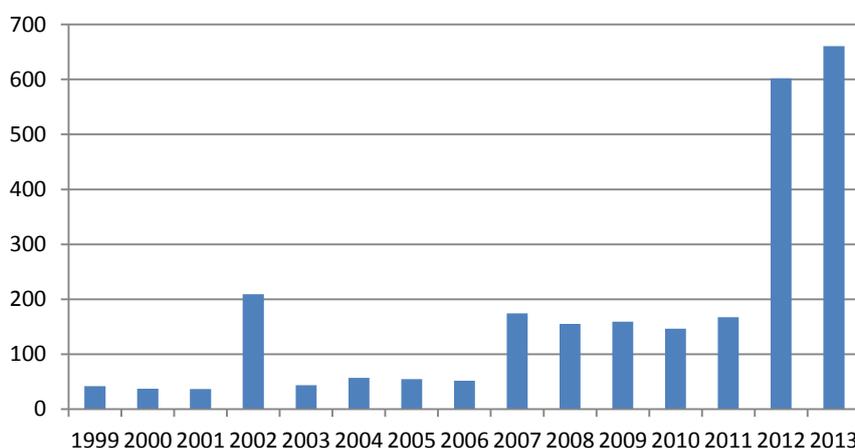
For most of the past decade, politicians and bureaucrats have been cautious about tuition fee-free and related enrolment policies. This caution was reflected in the 2004 National Education Plan, which had the rather modest aim of ensuring every 6-year-old be admitted to elementary school by 2012 and complete three years of basic education (NDoE 2004, p. 24). Universal primary education (the first nine years of schooling) was still a stated goal, but the report acknowledged that

ensuring children have access to free and compulsory education by 2015, a key goal of the 1990 Jomtien (Thailand) Declaration to which PNG is a signatory, was unlikely in the “current economic climate” (NDoE 2004, p. 6). It suggested there would be “space available” for children up to Grade 8, while the growth of enrolments in secondary college would be reduced.

With PNG’s economy performing well through the 2008 global financial crisis and growing optimism around the country’s future growth potential related to the LNG project, the UBE plan 2010–2019 (NDoE 2009) was more sanguine in its outlook. It aimed to have all children of school age complete nine years of education. To achieve this goal, the plan aimed for the gradual elimination of primary school fees (up to Grade 8) by 2019. By employing a gradualist approach, the NDoE hoped to monitor demand, so that resource requirements could be adjusted accordingly.

In 2007 education subsidies were increased from just over 40 million kina to about 150 million kina. They stabilised between 140 to 145 million kina until 2012. Figure 5-1 shows the rise in subsidy payments in real terms (adjusted for inflation). The graph highlights the huge rise in subsidies in 2002, and subsequent fall until they were raised again in 2007. From 2007 to 2011 funding in real terms remained constant until the subsidy allocation skyrocketed in 2012 and further increased in 2013.

Figure 5-1: Subsidy payments from the central government (2012 prices, million kina)



Source: PNG national budget documents. CPI used to deflate series.

The large jump in revenue in 2012 was unexpected. The NDoE expected a steady rise in subsidy payments, but projected far lower subsidies than exist under the TFF. In 2012, for example, it was expected that primary students would be subsidised by 177.70 kina per student (NDoE 2009), but in fact the 2012 TFF subsidy was 270 kina per student. The NDoE’s UBE plan estimated that a total of 182 million kina would be spent on subsidies in 2012 (NDoE 2009). This is

less than a third of the 602 million kina budgeted for 2012 TFF subsidies.

This mismatch between planned and actual expenditure in 2012 is an outcome of the “big bang” approach to the TFF policy. The gradual introduction of tuition fee-free education was derailed in late 2011 when Peter O’Neill took over from Michael Somare as prime minister. In his first address to parliament in his new role, O’Neill stated that the government would introduce tuition free education up to Grade 10 and provide subsidised education from Grade 11 to tertiary level (Post Courier 2011). In January 2012, the NDoE circulated ministerial policy statements outlining how the subsidies would be administered and structured (NDoE 2012a). The Department, subnational governments, schools and their communities had little time to plan for the changes that were to come.

There are pros and cons of a big bang approach. On the positive side, such an approach means that all children who have yet to benefit from primary education have an opportunity to enrol. But the big bang approach has many downsides, as highlighted by the World Bank’s (2009) review of experiences of abolishing school fees in Ethiopia, Ghana, Kenya, Malawi and Mozambique. This review suggests that fee-free policies that are phased in give:

more time to mobilize required teachers, classrooms, and training materials, test different procedures for channelling the fee-replacement funds to schools, put in place transparent mechanisms for managing these funds, and mobilize the financing (pp. 24-25).

In short, the review suggests that a big bang approach can cause “access shock”, whereby a sudden rise in student numbers puts pressure on educational quality.

The TFF policy’s big bang approach enabled thousands of children who were previously unable to attend school the means to access an education. The rise in enrolments, however, has likely put a strain on the quality of schooling. While many speculate about these quality impacts, little is known about them and how they affect the goals of the TFF policy and other key education policies. By presenting key findings from surveys undertaken in 2002 and 2012, the following two sections highlights some of the impacts of the TFF policy, and shows where key challenges might lie.

5.3 How well is the TFF policy being implemented?

This section looks at how well the TFF is being implemented in terms of delivery and management of the subsidy. It examines whether schools are benefitting from the subsidy, how and when they receive payments and how well payments are managed.

Are schools benefitting from the TFF payments?

In Chapter 3 we showed that revenues per student increased significantly over the decade. Table 5-2 provides estimates for 2011 and 2012. Between these two years, the TFF saw national government subsidies increase from 177 to 249 kina per student, 21 kina short of the K270 per enrolled student that these schools are meant to get. (The shortfall is likely due to the fact that about 16 per cent of the schools we surveyed had not received their second payment, and 10 per cent had not received a payment at all.) Also in 2012, there was a reduction of support from provincial governments (perhaps because of the increase from the central government) and from parents (due to the TFF policy). As a result the *total revenue* per student was 336 kina per student in 2012, almost identical to the 340 reported for 2011.

In practice, it is likely that the better-organized schools that were able to produce financial statements for 2011 were also among the better off. This would mean that the figures in Table 5-2 would underestimate the increase in school revenues between 2011 and 2012. In any case, our estimate for the increase in funding from 2001 to 2012 is from K159 to K336 per student (Table 3-21). So there is no doubt that school funding has increased greatly in recent times. The key point to take away from Table 5-2 is the small size of the loss in fee revenue, only K40 per student. From this perspective, the school subsidy payment of K270 per student is generous.

Table 5-2: Revenues per student 2011 and 2012 in 2012 prices

Source of revenue	2011 (K)	2012 (K)	Growth
Parents	52 (5)	12 (1)	-76%
National government	177 (15)	249 (9)	41%
Provincial governments	32 (11)	7 (2)	-79%
Other (donors, church, other government, etc.)	79 (2)	68 (19)	-14%
Total	340 (33)	336 (21)	-1%

Notes: The data are measured in 2012 kina. Standard errors are in parentheses, as they are throughout this chapter. Revenue per student is calculated as the ratio of revenue to enrolled students within each school.

How are schools receiving the TFF payments?

The TFF policy reform resulted in more schools having their subsidy paid into a bank account. In 2011 under half of the schools we visited received the subsidy by bank transfer; almost 80 per cent received funding in this way by 2012 (Table 5-3). Given that receiving funding by cheque is more costly for schools than bank transfer (Table 5-4), this is a welcome development.

The NDoE aimed for all schools to be paid directly into a bank account in 2012. Our findings suggest there is still some way to go before this goal is achieved: in the first quarter of 2012 there were still 23 per cent

of schools that reported receiving their subsidy payment by cheque.¹³ (Table 5-3). A similar percentage of schools received payment via cheque for their second payment. Enga was most reliant on cheques for both payments. We have been assured by the Department that far fewer schools now receive their subsidy payments by cheque than when our survey was conducted in 2012. So we expect that these figures have improved over the last two years.

Table 5-3: Type of payment for subsidy, 2011 and 2012 (%)

	2011				2012			
	First payment		Second payment		First payment		Second payment	
	Bank transfer	Cheque	Bank transfer	Cheque	Bank transfer	Cheque	Bank transfer	Cheque
Overall	44 (3.4)	56 (3.4)	45 (3.8)	55 (3.8)	77 (2.8)	23 (2.8)	79 (3.2)	21 (3.2)
East New Britain	45	55	42	58	95	5	100	0
West New Britain	40	60	51	49	89	11	90	10
Morobe	49	51	52	48	82	18	87	13
Sandaun	53	47	49	51	80	20	81	19
Eastern Highlands	53	47	52	48	63	37	60	40
Enga	24	76	19	81	40	60	29	71
Gulf	33	67	33	67	83	17	100	0
NCD	35	65	57	43	79	21	78	22
Government	43	57	44	56	79	21	81	19
Church	49	51	52	48	75	25	79	21
Readily accessible	41	59	48	52	80	20	80	20
Accessible	37	63	32	68	69	31	64	36
Remote	61	39	63	37	91	9	96	4
Very remote	53	47	54	46	84	16	94	6

While more schools had more direct access to their subsidy payments, schools still faced substantial costs to access funds. Table 5-4 shows that, on average, it cost more than 1,000 kina to access a subsidy payment and took around 32 hours of travel. This represented almost 4 per cent of one subsidy payment (calculated as an average of both payments). In 2012, costs and travel time were particularly onerous in Gulf, Sandaun and Morobe, in part due to their remoteness. Gulf lost 32 per cent of its subsidy payments in travelling to access them. Government schools and those in remote locations also paid more to access funds.

Table 5-4 also highlights the time and cost savings involved in accessing funds through a bank. On average, schools receiving their subsidy by bank transfer travelled 41 fewer hours and saved 763 kina when accessing their funds. This suggests that banks are more accessible than subnational government offices, which usually distribute cheques.

13. These findings were backed up by BoM members who participated in our survey: 25 per cent said that the school was paid by cheque in the first quarter.

Table 5-4: Cost and time of accessing subsidy payments in 2012

	Time in 2012 (hours)	Cost (kina)	Average subsidy received (kina)	Cost as % of subsidy
Overall	32	1,132	31,251	3.6
East New Britain	30	270	30,722	0.9
West New Britain	12	1,215	29,754	4.1
Morobe	48	955	22,102	4.3
Sandaun	56	2,917	22,290	13.1
Eastern Highlands	2	45	32,504	0.1
Enga	10	822	56,547	1.5
Gulf	83	2,865	8,903	32.2
NCD	2	31	121,354	0.0
Government	37	1,164	32,436	3.6
Church	28	849	29,345	2.9
Readily accessible	11	195	60,454	0.3
Accessible	22	877	34,564	2.5
Remote	20	913	20,822	4.4
Very remote	62	2,034	16,022	12.7
Bank transfer	19	1,041	30,909	3.4
Cheque	60	1,804	39,747	4.5

Note: Hours calculated at 8 hours per day, so 24 hours in the table equals three days travel. Average subsidy received is the average of the two national TFF subsidy payments.

Are schools receiving the TFF payments in a timely manner?

The changes in the way schools received their funding have not adversely affected the timing of subsidy payments. In 2012 schools received their first payment, on average, a month earlier than 2011; their second payment arrived in August, the same month it did in 2011 (Table 5-5). Still, the timing of the first payment was later than it should have been. In 2012 the first payment (due in January) was on average two months late; it was even later in Morobe province, and very remote schools. This is concerning because if schools do not receive payments in a timely and consistent manner it makes planning and resource allocation difficult. The second payment arrived, on average, within the July/August timeframe set in the NDoE's Fee-Free Tuition Policy Management Manual.¹⁴

Table 5-5 also shows that 84 per cent of schools received both payments in 2012, a good outcome considering the short timeframe given to implement changes associated with the TFF. In East New Britain and Eastern Highlands all of the schools we visited received both payments. However, only 55 per cent in West New Britain and 65 per cent in Gulf received both payments. The more remote the school, the less likely it was to receive both payments. This suggests that

14. The NDoE's Fee Free Tuition Policy Manual (2012a) indicates that the second subsidy would be paid in July/August 2012, while the Ministerial Policy Statement suggests June/July. Given that the policy manual was designed as a guide for schools, and that they would therefore expect July/August as the date of arrival, we have used this timeframe for our report.

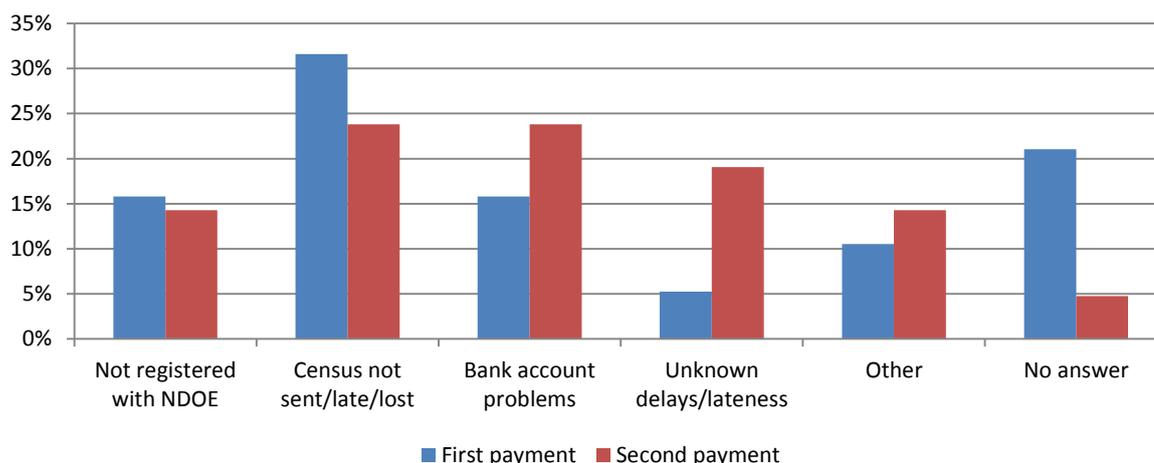
ensuring subsidy payments reach hard-to-get-to locations is a key policy challenge.

Table 5-5: Receiving subsidy payments in 2011 and 2012

	2011		2012		Received both subsidies (%)
	First subsidy received	Second subsidy received	First subsidy received	Second subsidy received	
Overall	April	August	March	August	84
East New Britain	April	September	March	September	82
West New Britain	May	September	March	September	55
Morobe	April	August	April	August	90
Sandaun	April	August	February	August	79
Eastern Highlands	April	September	March	August	100
Enga	April	August	March	September	100
Gulf	April	September	May	September	65
NCD	April	September	March	September	96
Government	April	August	March	August	85
Church	April	August	March	August	83
Readily accessible	April	August	March	September	94
Accessible	April	August	March	August	92
Remote	April	September	March	September	79
Very remote	April	August	April	August	71

The few schools that did not receive a payment (about 10 per cent for each of the two payments) said this was mostly due to issues related to getting the school census to the NDoE on time (Figure 5-2). Problems with bank accounts – which included bank accounts not being accessible or opened – also contributed to schools not receiving the second payment.

Figure 5-2: Reasons for not receiving a payment (2012)



Note: Data unweighted due to the small sample size: n=19 responses to reasons for first payment not delivered; n=21 for responses about second payment.

How effectively are subsidy payments being managed?

To work effectively, the TFF policy requires oversight from both the government and the school community. The NDoE acknowledges this, with improving education management the fourth goal of the TFF policy. To this end, the government funds Standards Officers and other district officers to monitor school expenditure and quality. School communities also play a role through their involvement in the Parents and Citizens (P&C) Committee and the Board of Management (BoM). This section looks at how these groups and others oversee and manage school subsidies.

Standards Officers and district officials

The TFF Policy Management Manual (NDoE 2012a) instructs BoM Chairs and Head Teachers to meet with district authorities twice a year to ensure they are using the TFF funding correctly. We asked Head Teachers how many visits they received from officials to verify subsidy spending or acquittals. Results from the survey suggest that the NDoE's target is not close to being met. 29 per cent of schools said they received a visit to check the subsidy payment in 2011, and 33 per cent said they received a visit in 2012 (Table 5-6). Only 39 per cent received a visit in 2011 *or* 2012. This suggests that in both years inspections mostly occurred in the same schools. These visits were least likely to take place in Gulf, Eastern Highlands and West New Britain. Schools that received a visit were inspected 1.4 times in a year in 2011 and 2012. Only Gulf (in 2011) and Enga (2011 and 2012) received two or more visits.

In over 90 per cent of cases, Head Teachers said that schools acquitted subsidies before the next allocation was received; 60 per cent of schools sent their acquittals to the province, while just under 40 per cent sent them to the district administration (data not shown in table). In order to improve accountability it is important that schools receive regular feedback on these acquittals. Table 5-6 shows that only a third of all schools received feedback; the number was lowest in Gulf (10 per cent), and highest in Eastern Highlands (51 per cent). With such poor feedback it is likely that fewer and fewer schools will acquit their subsidies over time.

Table 5-6: Supervision of subsidy payments

	% schools that received visit to check subsidy payment			If visited, number of visits		% schools received feedback
	2011	2012	2011 or 2012	2011	2012	2012
Overall	29 (3.0)	33 (3.1)	39 (3.3)	1.4 (0.1)	1.4 (0.1)	34 (3.1)
East New Britain	38	37	44	1.4	1.2	33
West New Britain	8	21	21	1.7	1.5	39
Morobe	40	38	43	1.6	1.4	29
Sandaun	21	36	52	1.5	1.3	25
Eastern Highlands	22	28	24	1.5	1.2	51
Enga	30	37	40	2.4	2.0	40
Gulf	15	30	32	2.0	1.4	10
NCD	70	41	77	1.4	1.5	43
Government	26	30	35	1.2	1.2	32
Church	31	36	43	1.7	1.6	36
Readily accessible	39	26	43	1.1	1.1	37
Accessible	32	37	45	1.4	1.3	29
Remote	26	30	32	2.5	1.6	58
Very remote	21	34	33	1.9	1.7	26

Note: Research teams visited schools between October and November 2012, so the 2012 figures may be underestimates for the full year.

School management

The TFF Policy Management Manual also stresses that Head Teachers, BoM and P&C members all have a crucial role to play in monitoring and managing subsidy payments. People representing all three of these institutions are encouraged to reach consensus on what the TFF funding will be spent on. Chapter 3 showed that the BoM manages school assets, but that its role can be hampered by diminished access to school financial records, particularly when Head Teachers leave the school. It also highlighted the lack of input the P&C has around budgetary consultation, with only one quarter of P&C members saying that they had been consulted about the budget.

According to Head Teachers and Grade 5 teachers, decisions about spending school subsidies in particular are becoming increasingly determined by the BoM rather than the Head Teacher (Table 5-7). In 2012, the BoM was considered the key decision maker of how funds are spent. P&C Committees clearly do not play a leading role in deciding on how subsidies are spent – no Head Teacher said their P&C Committee had most say over school subsidy spending, which was essentially the same response from Grade 5 teachers.

Table 5-7: Most say over spending school subsidies (%)

	Head Teachers		Grade 5 teachers	
	2002	2012	2002	2012
BoM	48(3.2)	67(3.0)	35(3.3)	71(3.0)
Head Teacher	46(3.0)	31(2.9)	50(3.3)	24(2.8)
National Government	0	0	0	0
Provincial Government	4	0	3	1
District/Standards Officer	1	0	1	1
P&C/parents	0	0	0	1
Other	0	1	9	2
Total	100	100	100	100

It is encouraging to see the increased role the BoM is playing in managing school resources: all the more reason to give them full access to financial records. Table 5-7 shows that the P&C do not have the most say over funding decisions, but what is more worrying is that, as shown in Chapter 3, this body is infrequently consulted about the budget or other school decisions. The low level of engagement that the P&C committee has in decision making is concerning, particularly as previous studies (World Bank & NRI 2004; World Bank 2009) highlight the importance of the community in helping schools improve the quality of education.

5.4 Is the TFF policy achieving its objectives?

This section looks at whether the TFF is achieving its objectives. It focuses on the impact of the policy on access, quality and equity.

What impact has the TFF had on access to education?

Chapter 3 showed that enrolments have increased by more than 50 per cent over the decade. To get a sense of how the TFF has contributed to this increase, here we examine changes between 2011 and 2012 (the year the TFF was introduced). Given that a tuition free policy was also introduced in 2002, we also compare figures from 2001 and 2002. This means we can assess the impacts of the 2012 reform in relation to the previous attempt to introduce a tuition fee-free policy.

Table 5-8 shows that the introduction of free education policies increased enrolments by 17 per cent between 2001 and 2002, and by the same amount between 2011 and 2012. In 2012, Gulf saw the highest rate of growth, with enrolments increasing by 52 per cent over the previous year. There are two important conclusions to draw from the large changes over the two time periods. First, the magnitude of these increases in enrolments in a single year is large, given an average annual increase in the PNG population of around 3 per cent and an average annual increase in enrolments between 2002 and 2011 of 4.6 per cent. Second, the increase in enrolments in 2012 is particularly impressive since it is from a higher base.

Table 5-8: Average enrolments per school

	2001	2002	Change 2001-2002	2011	2012	Change 2011-2012
Overall	159 (19.4)	186 (13.4)	17%	253 (16.4)	294 (18.5)	17%
East New Britain	172	192	12%	233	240	3%
West New Britain	136	165	21%	224	246	10%
Morobe	95	104	9%	156	174	11%
Sandaun	89	130	46%	169	191	13%
Eastern Highlands	161	247	54%	315	409	30%
Enga	283	282	0%	453	530	17%
Gulf	85	109	28%	134	202	52%
NCD	759	637	-16%	957	1,059	11%
Government	185	211	15%	268	317	18%
Church	148	154	4%	228	265	16%
Readily accessible	340	377	11%	507	547	8%
Accessible	154	173	12%	278	337	21%
Remote	102	111	8%	178	223	25%
Very remote	91	95	4%	126	143	13%

Note: Based on the Head Teacher survey and, where there are missing values, statistics from the NDoE.

Table 5-9 shows the change in enrolment for each grade in 2012 relative to 2011. The largest increase in enrolments occurred in Grade 6, while only small increases occurred in Grade 7 and 8. There were solid increases in enrolments at every grade in the Highlands provinces (Eastern Highlands and Enga). Schools in accessible areas recorded strong growth in all grades, an average increase of 15 per cent.

Table 5-9: Growth in enrolments by grade (%): 2011-2012

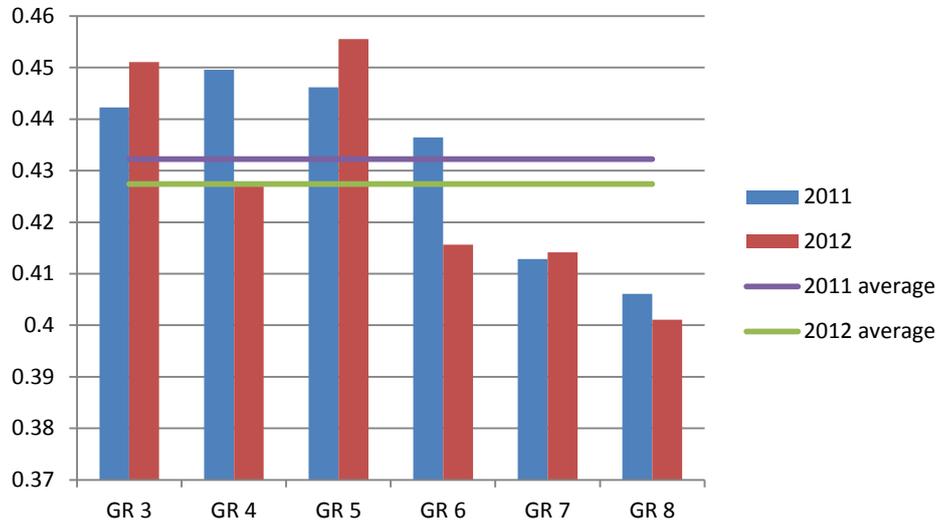
	GR 3	GR 4	GR 5	GR 6	GR 7	GR 8
Overall	8.4 (3.0)	13.0 (3.2)	10.4 (4.6)	19.7 (4.5)	3.3 (3.6)	2.1 (3.5)
East New Britain	10.9	-1.7	3.3	14.2	8.9	-6.8
Eastern Highlands	21.6	34.1	28.3	17.5	12.8	22.0
Enga	17.1	32.9	28.5	37.2	26.3	27.4
Gulf	8.1	23.4	60.4	-24.8	-1.9	-51.0
Morobe	0.8	8.5	3.8	25.5	1.1	5.6
National Capital District	12.9	10.4	8.2	12.1	13.3	11.1
Sandaun	-8.2	-0.5	-10.9	20.3	2.0	-8.4
West New Britain	16.7	5.9	-4.3	26.2	-25.3	-4.5
Government	8.2	13.2	18.5	6.8	6.8	6.2
Church	9.3	11.3	13.0	30.6	1.2	-5.0
Readily accessible	15.6	20.5	6.0	15.0	13.0	8.0
Accessible	12.2	15.1	14.0	27.7	11.4	18.2
Remote	8.5	2.1	2.2	17.5	-21.3	19.5
Very remote	-0.1	11.4	19.9	13.4	-2.5	-32.7

Notes: Data sourced from NDoE (PEPE sample of schools only).

According to the policy, the TFF was especially intended to increase access for girls. Because the policy led to higher rates of enrolment, it did increase overall access for girls. However, it did not improve girls' enrolment relative to boys. There was some slight variation from grade to grade (Figure 5-3), but overall the share of girls in the total number

of students was steady at around 43 per cent for 2011 and 2012. Still, Chapter 3 shows that the ratio of girls enrolled has increased dramatically over the decade.

Figure 5-3: Girls' share of enrolment by grade



Source: As per Table 5-8.

Chapter 3 showed that absenteeism has increased over the decade and is a problem for many schools. So the effects of these enrolment figures would have been softened somewhat by absenteeism – which is worth keeping in mind when reading the following section about how this growth has affected school quality. Still, the increase in enrolments between 2011 and 2012 is a clear indication that the policy has substantially increased access to schooling for children across the country.

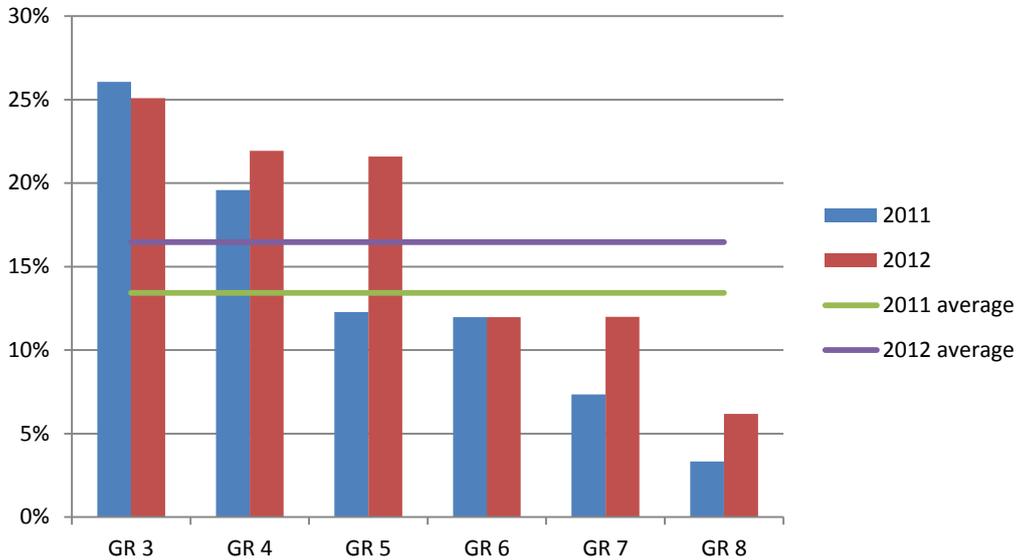
How has the TFF affected quality?

The third goal of the TFF policy is to improve the quality of schooling. Chapter 3 showed that the quality of education facilities over the last decade has, by and large, improved in terms of the condition of buildings, availability of water, and other key resources. Yet, it also showed that schools face challenges associated with overcrowding. The TFF has contributed to this overcrowding, which makes the official goal to reduce classes with more than 45 students to zero by 2019 (NDoE 2009) even more difficult.

Figure 5-4 shows that the share of classes with more than 45 students has increased in 2012 relative to 2011, and that growth has been particularly high in grades 5, 7 and 8. In 2012, the level of crowding was, in both years, worse for lower primary grades. Overcrowding would have likely been worse if it wasn't for teachers being reallocated to the lower grades where overcrowding was more of an issue. According to data from the NDoE, between 2011 and 2012 the number of teachers in Grades 3 and 4 grew by 5 per cent, in Grade 5 it grew by 2 and in Grade 6 by 3 per cent. This suggests teachers were

reallocated from the higher grades to overcrowded lower ones: Grade 7 teachers reduced by 3 per cent and Grade 8 by 4 per cent between 2011 and 2012.

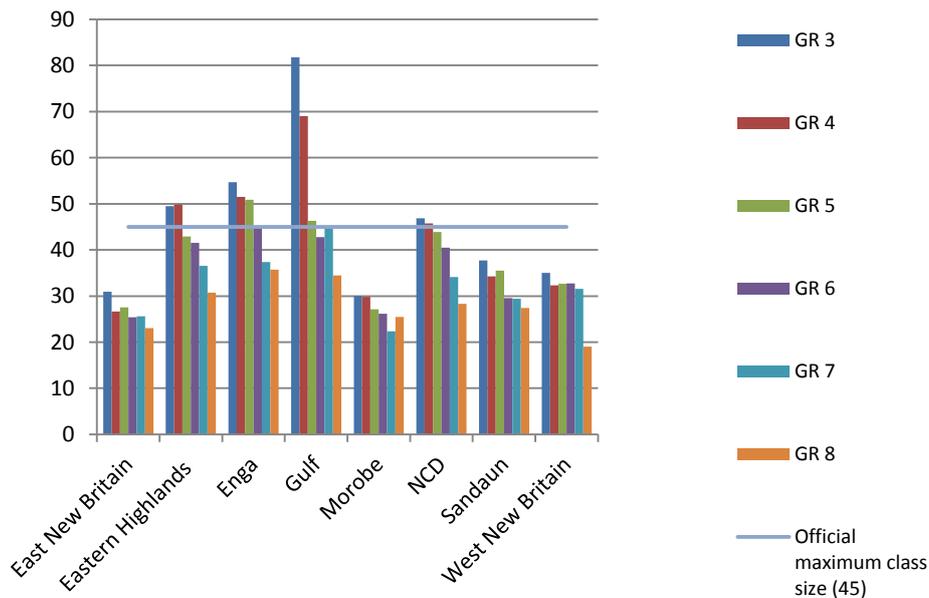
Figure 5-4: Share of classes with more than 45 students



Source: As per Table 5-8.

Figure 5-5 shows that, as we saw in previous analysis (Figure 5-4), the impact of overcrowding appears most apparent in early grades. Gulf is a standout for being particularly crowded in early grades. In 2012 it had over 80 students per teacher in Grade 3 and almost 70 per teacher in Grade 4.

Figure 5-5: Average enrolled students per teacher in 2012



Source: As per Table 5-8.

How has the TFF affected equity of education?

Our survey asked Head Teachers how much tuition and project fees (fees charged per student to cover school projects) were in 2011 and 2012, and to estimate additional costs associated with schooling (such as for books and uniforms). Based on the answers to these questions, between 2011 and 2012 the total cost of schooling – including school fees, project fees and associated costs (books, uniforms, etc.) – fell by 92 kina per student per year on average (Table 5-10). The TFF policy has clearly driven this change, with school fees reducing from just under 100 kina in 2011 to 9 kina in 2012. Project fees have, overall, not increased to make up for the reduction of school fees. Prior to the abolition of tuition fees, the central government only imposed maximum limits, so there was variation from province to province. NCD was the most expensive province in which to send a child to school. In 2012 it cost parents almost 94 kina per child per year, but this was 224 kina less than the cost in 2011.

Table 5-10: Official school costs (in Kina per child, constant 2012 prices)

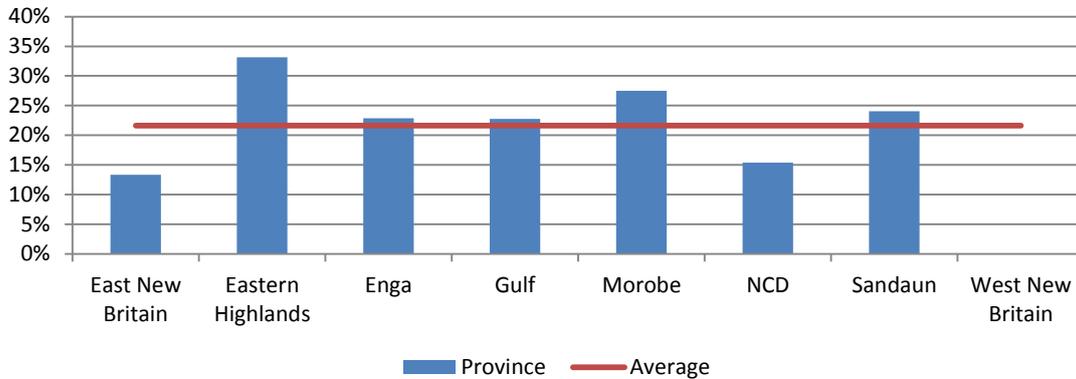
	Tuition fees		Project fees		Additional costs		Total costs	
	2011	2012	2011	2012	2011	2012	2011	2012
Overall	97 (4.5)	9 (1.5)	28 (2.7)	26 (2.3)	5 (1.6)	4 (1.3)	131	39
East New Britain	87	2	37	56	0	0	124	58
West New Britain	98	17	41	32	5	3	143	52
Morobe	74	17	32	27	0	0	106	43
Sandaun	88	3	25	25	8	4	120	32
Eastern Highlands	136	1	14	0	5	2	155	4
Enga	96	2	21	17	2	3	119	22
Gulf	77	14	28	31	10	11	114	57
NCD	225	13	23	30	71	50	318	94
Government	110	7	30	26	6	4	146	37
Church	77	10	23	24	2	5	103	39
Readily accessible	118	6	20	26	3	4	141	36
Accessible	87	8	22	16	5	6	114	30
Remote	91	7	30	34	9	2	129	43
Very remote	80	11	57	30	7	3	143	44

Note: Calculated by averaging costs for upper and lower primary.

While costs have fallen, many parents nevertheless said they could not afford the fees set by the school in 2012. Figure 5-6 shows that, on average, one-fifth of P&C members reported that they could not afford project and tuition fees. Over 30 per cent of respondents in Eastern Highlands said they could not afford fees, which contrasts markedly with West New Britain, where no P&C Committee member said that fees were unaffordable, even though this province charged substantial school and project fees. On a visit to West New Britain, provincial administrators told us that this was likely because of the income that many families received from oil palm. The high proportion of respondents in Eastern Highlands stating that they cannot afford fees is counterintuitive given that this province had the lowest level of fees. The difference between these responses may reflect the high levels of

fees charged in the past – this province had one of the highest costs associated with schooling in 2011.

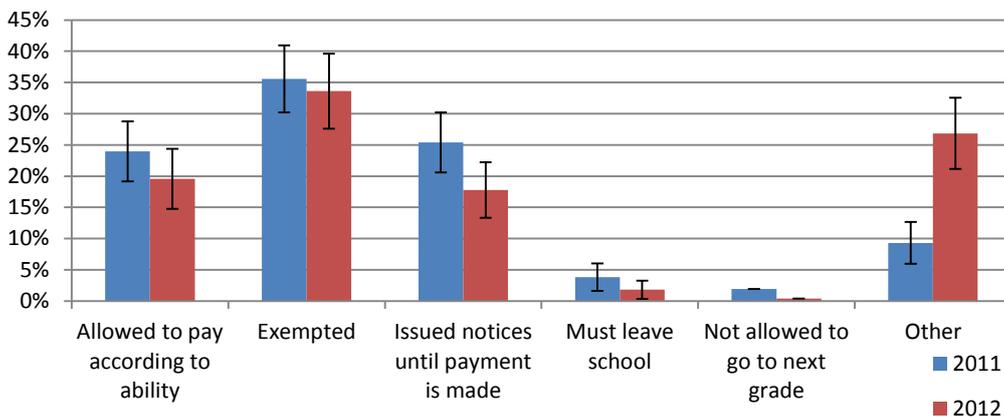
Figure 5-6: Percentage of P&C respondents who could not afford fees (2012)



Source: P&C Committee survey.

Not being able to pay does not exclude students from school. Around one-third of Head Teachers said that such students were exempted from fees in 2012, the same proportion exempted from all fees (project and tuition) in 2011 (Figure 5-7). In 2012 one-fifth said parents could pay according to ability, just over 15 per cent said parents were issued with a notice or warning. Less than 5 per cent said students were expelled in 2011 and 2012. In other words, when parents lacked the ability to pay fees their children were still being accepted into school even before the TFF was introduced.

Figure 5-7: What happens to students unable to pay fees?



There is no doubt that the TFF policy has made education substantially more affordable, and therefore equitable. According to the 2009-10 Household Income and Expenditure Survey, 33 per cent of parents said their children were not going to school because of fees, by far the most common reason. The figure was 35 per cent for parents who had girls and 50 per cent for those in the poorest wealth quintile of families (NSO 2013). At the same time, it should be noted that because fee policies were implemented with some flexibility (that is, some parents were

exempted from paying fees), the official costs shown in Table 5-10 overestimate the impact on families of fee abolition. As Table 5-2 shows, actual fees paid by families were on average K52 per student in 2011 and K12 in 2012, well below the official fee levels (tuition and project fees) of K125 and K35 shown in Table 5-10.

5.5 Conclusion

Overall, the survey suggests that, while it is early days, the TFF policy shows a number of indicators of success. The great majority of schools are receiving the payment they should, and through their bank accounts as they should. Increasingly, the BoM is seen as playing a crucial role in the spending of subsidy payments, as it should, though it needs to be better equipped with financial information. Schools also expect to acquit funds before the next payment is received (although they are rarely provided with feedback on acquittals).

The TFF policy has increased children's access to education across PNG – a crucial (but not the only) step in achieving UBE. 17 per cent more students are enrolled in schools in 2012 compared to 2011, though declining attendance ratios soften this increase somewhat. The policy's longevity is also a step forward for PNG – this effort has lasted longer than any previous attempt at fee-free education in PNG.

In real terms, the school subsidy has more than made up for fees no longer paid by parents, and compensated for a reduction in payments from provinces. This in itself is an achievement. The World Bank's (2009) review of free education policies in Africa found that in some cases replacement revenues did not sufficiently make up for revenues lost. By and large this has not been the case in PNG; indeed viewed over the entire decade, school revenues have risen sharply, both in total and per student (see Chapter 3).

However, there are many areas in which the TFF could be better implemented. The findings raise serious concerns about the monitoring of the TFF subsidy. Checks on how the subsidies are being spent are rare, far fewer than twice a year, as should be the case. More needs to be done to ensure that education officials are monitoring subsidy payments; and at the very least, that they visit different schools every year, rather than the same schools as at present. Increased monitoring should also focus on enrolment and absence rates, to ensure enrolments are not inflated to get extra funding for schools.

The TFF policy stipulates that school spending decisions be jointly undertaken by the Head Teacher, BoM and P&C Committee. But, as Chapter 3 highlighted, the latter are rarely consulted about financial issues. The importance of involving communities in funding decisions has been shown to be crucial to improving school performance in PNG and in other countries. In Mozambique, for example, empowerment of the local community to monitor subsidy payments helped to improve administrative efficiency and created a stronger constituency that

supported education (World Bank 2009). Improving the P&C committee's role in monitoring subsidies, and school finances more generally, should be made a priority in the future, particularly given the low levels of school visits made by education officials to check school subsidies.

While enrolments have increased, Chapter 3 showed that attendance has decreased. One likely reason for this is that Head Teachers have an incentive to inflate enrolment rates to maximize their subsidy payments. To this extent, the school subsidy bill is inflated by the link to enrolments. It may not be practical to link subsidy payments to actual attendance rates (although this could be a longer-term goal). But if inspections reveal a high level of absenteeism, school enrolment figures should be challenged. For this to work, however, Standards Officers and others will need to regularly monitor attendance at schools.

This chapter (as well as Chapter 3) highlight the difficulties that schools in remote areas have in accessing funding – remote schools have to pay substantially more to access their subsidies. The difficulties faced by schools in remote locations have been recognised in the report *Go Long Ples* (NEFC and NDoE 2013). It recommends that the TFF should be continued as a minimum guarantee to all schools – that is, that no schools should see their TFF subsidy cut. In addition, it argues that schools in remote locations should receive between 10 and 58 per cent extra depending how remote they are. It estimates that the scheme would cost between 10 to 15 percent of the annual TFF payments, which would equate to 70 to 105 million kina.

Our findings around the cost for schools in accessing tuition fees and the poorer quality of remote schools support moves to increase the subsidy for schools that are particularly remote. However, the grounds for increasing the total aggregate provided in subsidies are weak given how much better off schools are now financially than ten years ago (as shown in Chapter 3) and given the need to reduce class sizes. Rather, much more funding needs to be directed towards increasing the stock and quality of teachers. The school subsidy itself could be better targeted, with increases to more remote schools paid for by decreases to less remote ones.

The survey results strongly show that increases in school enrolments have put great pressure on existing resources – PNG is certainly experiencing “access shock”. In 2012, the year the TFF was introduced, the share of classes with more than the maximum target of 45 students increased to 16 per cent from 13 per cent in 2011. These quality concerns are manifest in both urban locations (like NCD) and remote provinces (such as Gulf). While this is to be expected given the big bang nature of the TFF policy, there is now a need to direct resources to hire more teachers to provide for a much larger cohort of students. This is discussed further in Chapter 9.