



Sub-National Governance
Programme

Pakistan Sub-National Governance (SNG) Programme

Pilot Education Needs Assessment:
Nowshera District Summary Report

22 November 2013

Sub-National Governance Programme

ISLAMABAD: House 4, Street 14 A, F-7/2, Islamabad, Pakistan

Tel: +92 (51 8314625) Fax: +92(51) 8314625

LAHORE: 112 Tipu Block, New Garden Town, Lahore, Pakistan

Tel: +92 (42) 35881223, +92(42) 35881223 Fax: +92 (42) 35847738

www.pk-sng.org

PESHAWAR: 39 D, Sahibzada Abdul Qayum Road, University Town, Peshawar, Pakistan

Tel: +92 (91) 5702794 Fax: +92 (91) 5702796

Table of Contents

Table of Contents	1
1 Summary	2
2 Introduction	3
3 Pilot education needs assessment findings	4
3.1 Provision of education services in Nowshera	4
3.1.1 Budget allocations for education	4
3.1.2 Coverage and provision of education infrastructure	4
3.1.3 Provision of education staff	9
3.2 Access to and utilisation of education services	11
3.2.1 Enrolment and attendance rates	11
3.2.2 Constraints and barriers to access	12
3.3 Educational outcomes	14
3.4 Conclusion and next steps	15
3.4.1 Addressing needs through current systems	15
3.4.2 Possible implications for the SNG Programme	17
3.4.3 Next steps	17
4 Brief assessment of pilot needs assessment methodology	18
4.1 What information did the pilot needs assessment approach provide?	18
4.2 What were the limitations of the pilot needs assessment approach?	18
4.3 Recommendations for future needs assessments	19

1 Summary

The educational outcomes briefly described in this report indicate that the system is failing to meet the needs of many children, particularly girls and those in rural areas. Supply-side factors are significant in this but they are compounded by – or themselves compound – demand-side constraints on education generally but particularly for girls. Broad issues identified in the report include:

- The need to widen the coverage of school facilities in line with population numbers and spread, so as to reduce the distance to the nearest school. This should include an assessment of the demand for single-sex schools (given that many schools are currently mixed) and the provision of schools appropriate to this demand.
- The need to improve the monitoring and reporting of school infrastructure and its functionality (e.g. functioning electricity, usable toilets, complete boundary walls, potable water, etc.). Equity issues in the provision of school facilities and infrastructure need to be addressed, in particular the current under-provision of functioning infrastructure in girls' and rural schools.
- Despite an adequate number of teachers overall, there is a need to distribute teachers more effectively to reduce the wide disparity in Pupil Teacher Ratios. PTRs are too high for efficient teaching in some schools, particularly in girls' and rural schools. There is also widespread dissatisfaction with the quality of teaching, particularly amongst women. The quality of teaching should be monitored and there should be appropriate incentives to both attend work and work in less desirable areas, in order to reduce disparities in PTRs and outcomes.
- The need to allocate the district budget more equitably between boys and girls, based on the above needs, increase the non-salary budget (operating expenditure) for primary education to meet basic needs in each school, and improve school plans. In many cases, plans to improve school facilities do not match needs. Weak community engagement with service delivery is linked with poor service provision and outcomes. Improving the effectiveness of PTCs could help to address this issue.

The findings on the barriers and constraints to access to education (measured through enrolment and attendance) suggest that a focus on getting the supply side of service provision right is key. However, other informal factors (e.g. social and cultural norms) can still have a significant influence on access and uptake, particularly for girls.

The recent UNICEF Situational Analysis of Women and Children in Pakistan (2012) indicates that, at a national level, enrolment and attendance are affected by factors such as insufficient or inappropriate infrastructure, quality, distance and cost, and that these factors reduce girls' access and uptake more than boys' due to attitudes and norms in regard to women and girls. This is supported by the SNG needs assessment. While a supply-side focus is therefore essential, demand-side constraints and needs should also be addressed appropriately if gender disparities in the provision of primary education are to be reduced by the maximum extent possible. This suggests that GoKP also needs to:

- Understand potential demand-side constraints to education access and uptake, through the use of qualitative survey methods (such as focus group discussions, and better functioning PTCs) in order to ensure supply-side measures take these into account
- Address specific demand-side constraints to education access and uptake, for instance through targeted provision of additional capacity and infrastructure and specific incentives to encourage parents to send girls to school. This could include, for example, financial support to poorer households or information provision on the benefits of education for girls.

2 Introduction

The purpose of the pilot education needs assessment was to test a combination of approaches and data sources for understanding current levels of education service provision, access and outcomes, and to identify relevant needs. These approaches and data sources included:

- An analysis of secondary data, including budget data, policy documents, reports and assessments from other programmes and government, Education Management Information Systems (EMIS) data, etc.;
- The rapid collection of primary data through a school facilities survey (for comparison against EMIS data), also including GIS data; and
- The collection of primary data through discussions with citizens.

The collection of primary data was conducted with the authorisation and consent of the Elementary and Secondary Education (E&SE) Department. Six field teams visited 67 primary schools (27 girls' schools and 40 boys' schools; 61 rural and six urban schools) in six union councils (UCs) of Pabbi Tehsil of Nowshera District during the first week of September 2013.

Each field team consisted of two Khyber Pakhtunkhwa (KP) SNG team members (one male and one female) and a staff member from the E&SE Department, so as to encourage government participation and ownership of the process, as well as to facilitate interaction with teachers and parent-teacher councils (PTCs). District education officers (DEOs) and relevant administrative staff were consulted beforehand by the SNG team, and all schools were notified in advance by the circle ADO (Education), with a letter from the E&SE Department explaining the field work.

Data from all these primary and secondary sources are combined in the analysis of needs in this summary report (Section 3).

The pilot also aimed to assess if and how these particular approaches and data sources provided sufficient evidence for the assessment of needs, alone and in combination, and how they might be adapted and used for future needs assessments (Section 4).

3 Pilot education needs assessment findings

3.1 Provision of education services in Nowshera

In this section we summarise the key findings on the supply of education services in Nowshera, including budget allocations and provision of infrastructure, materials and personnel.

3.1.1 Budget allocations for education

Analysis of public financial management data showed the following key findings:

Increasing provincial expenditure on education has been a priority of the Government of Khyber Pakhtunkhwa (GoKP) in recent years. The rate of increase in the overall budget for education (province-wide) has been greater than the rate of increase in the overall budget of GoKP over the last four years. The GoKP's current budget increased by 65% between 2010–11 and 2013–14, whereas the GoKP's current budget for education increased by 74% over the same period. Moreover, in this period the overall GoKP development budget increased by 68%, whereas the GoKP development budget for education increased by 300%.

Nowshera District's expenditure on education has increased in absolute terms but decreased slightly as a proportion of the total district budget. In 2013–14, the total current budget of the district is PKR 3,256 million, of which 68% (PKR 2,209 million) is allocated to elementary and secondary education. While the percentage allocation to elementary and secondary education at the provincial level has increased over the last 4 years, from 27% to 29%, there is a slight decrease at the district level, from 75% to 68% over the same period. This is because the total current budget in Nowshera has been increasing at a faster rate than for the province overall.

A significant gender disparity exists between funding for girls' schools and funding for boys' schools. Budgets are not linked to enrolments. There are 330 girls' schools and 424 boys' schools in Nowshera, which is a ratio of 44:56. The ratio of girls' net enrolment ratio (NER) to boys' NER is 70:80, which suggests there are a similar number of girls in school as there are boys. However, current expenditure (70% of total education expenditure) on girls' schools compared to boys' schools is in the ratio 30:70.¹

The non-salary budget (operating expenditure) for schools is insufficient to meet basic needs, let alone educational needs. The total non-salary budget for Nowshera in 2013–14 is PKR 34 million, which is approximately PKR 45,000 per school or approximately PKR 180 per student per year. This is supported by the Alif Ailaan District Rankings,² which show lower school facility scores for electricity and water (funded from the non-salary budget) compared to the facility scores for classrooms and boundary walls (funded from the development budget). Note that Nowshera achieves a high rank provincially and nationally with respect to school facilities.

3.1.2 Coverage and provision of education infrastructure

The availability of schools does not clearly match population needs, particularly in rural areas and for girls. 2010 estimates suggest the percentage of the population who were boys aged 5–9 and 10–14 are 8.3% and 7.1% respectively. This compares to the percentage of girls for

¹ Information to be found in the KP Provincial and Nowshera District budgets.

² The Alif Ailaan District Rankings are based on publically available data sources: the PSLMS (2010–11), the Annual Status of Education Report (2011, 2012), and the NEMIS (2008–09, 2010).

the same age groupings at 7.7% and 6.6% respectively (USAID, 2012). Overall, the percentage of boys aged 5–14 was 15.4% compared to 14.3% for girls. These relatively equal school-age populations are not reflected in the number of primary schools provided for girls and boys, which show 425 for boys compared to 330 for girls.

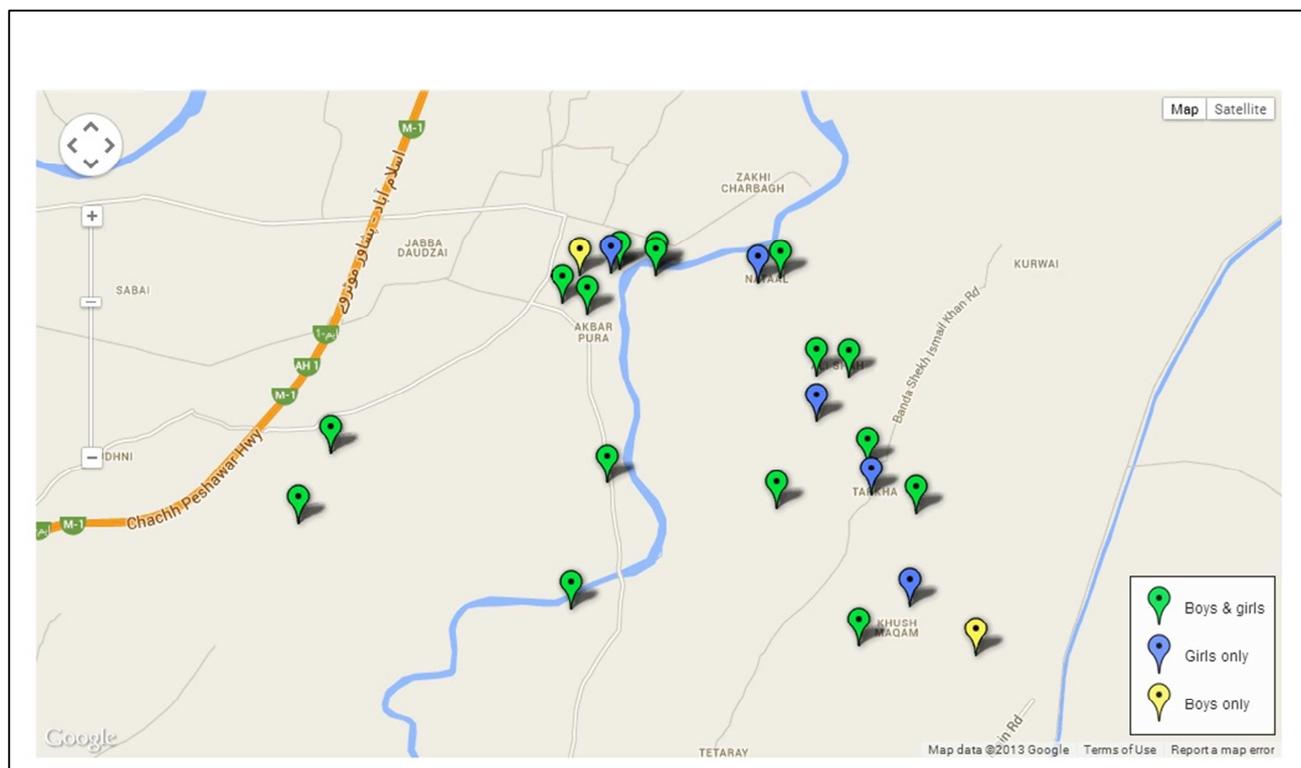
The lack of sufficient single-sex schools leads in practice to mixed schools. While the lack of sufficient girls’ schools could simply suggest that more girls’ schools are needed, both the EMIS data and the SNG facilities survey indicated that, in reality, girls attend boys’ schools in many cases and, in a few cases, boys attend girls’ schools (see Table 1 and Figure 1). In reality, around 20% of girls are actually enrolled at a boys’ school.

Table 1 Enrolment of pupils in girls’ and boys’ schools by gender

	SNG facilities survey		EMIS data	
	Girls’ schools	Boys’ schools	Girls’ schools	Boys’ schools
Total enrolment	4,951	8,828	5,016	8,668
Total boys	106	7,598	76	7,455
Total girls	4,845	1,230	4,940	1,213
% boys of total enrolment	2.1	86.1	1.5	86
% girls of total enrolment	97.9	13.9	98.5	14

Figure 1 below shows the schools in Akbar Pura UC, with different coloured markers for schools: a) boys and girls enrolled (green); b) only girls’ enrolled (blue); and c) only boys enrolled (yellow). In this UC, the majority of schools are thus mixed in reality, with most being boys’ schools that girls also attend.

Figure 1 School enrolment in Akbar Pura UC by gender³



³ See SNG Pilot Needs Assessment Map at <http://techtabelle.com/wb/sng/>

This finding could have significant implications for the provision of education services in Nowshera in that the focus on provision of single-sex schools could potentially be adjusted (e.g. to a combination of single-sex and mixed schools, or even only mixed schools). However, this would be a significant shift and run contrary to much other analysis on gender norms in Pakistan, so before policy and budget decisions could be made on this a much deeper understanding of the dynamics that are underpinning these findings would need to be established.

Alif Ailaan’s District Rankings provide a **school index of the quality of school facilities** based on scorecards by district for all provinces in Pakistan. The overall school index score is a simple average of five scores for electricity, water, toilets, boundary walls and overall condition of buildings. KP is ranked third out of seven provinces in terms of the availability of school facilities, with an overall school index score of 66 (in comparison to Punjab with the highest score of 83 and Azad Jammu and Kashmir with the lowest score of 24).

Nowshera District received a school index score of 77, indicating that it performs better than the province overall in these areas (and giving it a district ranking of 20th out of 145 districts nationally and sixth out of 25 provincially). The individual scores for each of the assessed criteria in Nowshera District and KP are shown in Table 2 for comparison. Across each of the individual criteria apart from water, Nowshera District performed better than the KP provincial average.

Table 2 Alif Ailaan school index scores: Nowshera District and KP comparison

	Electricity	Water	Toilet	Boundary wall	Building condition	Overall school score
KP	51.91	77.73	78.18	77.54	45.52	66.18
Nowshera	69.89	77.59	92.57	95.89	50.80	77.35

Below we examine these areas in more detail using data from other sources, particularly the EMIS data and the SNG facilities survey data.

3.1.2.1 Buildings and classrooms

There is a significant difference in the provision of sufficient classrooms for girls and boys, resulting in unequal pupil–classroom ratios (PCRs). In Nowshera there are a total of 3,017 classrooms (the vast majority being *pakka*, or finished), with around 1,812 for boys and 1,205 for girls. With current enrolment rates, this gives a PCR for Nowshera of 36 for boys’ and 44 for girls’ schools. While this corresponds with the 2013–16 Budget Output-Based Budgeting (OBB) document, which indicates class size is around 42 pupils for most schools, the OBB document also states that over 176 schools have only one classroom and between 64 and 70 pupils, resulting in much higher PCRs for these schools. This suggests that even if the average PCR is relatively good, there are significant differences and disparities across schools. Girls’ schools had roughly half the number of classrooms as boys’ schools (according to both EMIS and SNG facilities survey data).

PCRs are worse in both girls’ schools and in urban areas. The SNG facility survey data and EMIS data indicated roughly similar average PCRs overall (SNG – 45.9; EMIS – 44.4). The SNG data showed average PCR values ranging from 31.5 to 60.3 for the six UCs in the sample, while EMIS data indicate lower (and hence better) average values from 30.7 to 52.6 for the same six UCs. Both the SNG and EMIS data showed average PCRs of around 48–49 for girls’ schools and around 42–45 for boys’ schools. This finding supports the gendered disparity for Nowshera overall that we referred to above, but it also indicates much higher PCRs in the facilities survey sample

than the Nowshera District averages. Individual schools sometimes had even higher PCRs than these averages; for instance, the SNG facilities survey showed that the only girls' primary school in Kuderzai has five classrooms and 399 students, giving a PCR of 80. EMIS and SNG survey data also showed that schools in urban areas had significantly higher PCRs (around 51–55) than those in rural areas (43–45).

A significant number of school buildings need repair (minor or major) or complete rehabilitation. When classrooms exist, EMIS data show that approximately 1,781 or 59% of government primary school classrooms in Nowshera need either minor (32%) or major repairs (16%) or complete rehabilitation (11%). The SNG facilities survey supports this, with 22 out of the 67 schools (around 33%) visited needing minor repairs, although it did not collect data on more serious repairs or complete rehabilitation needed. While girls' schools appear to need fewer repairs in absolute terms, the figures may reflect the fewer girls' classrooms and buildings provided rather than the better condition of girls' schools.

3.1.2.2 Boundary walls

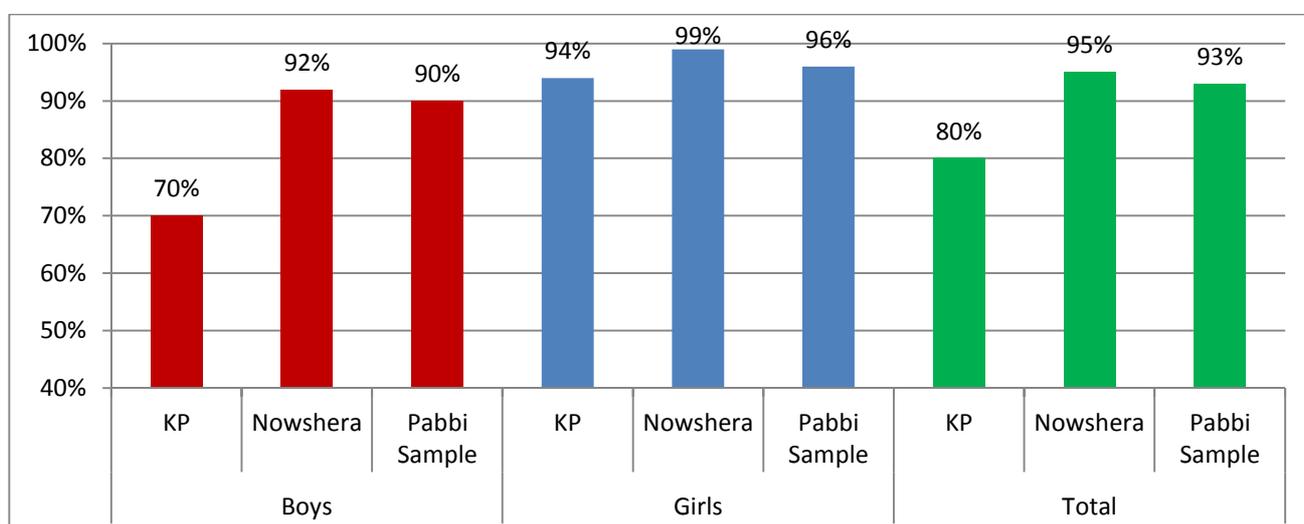
Most Nowshera schools have boundary walls, with girls' schools proportionally better served in this respect than boys' schools. Nowshera also has a better rate of boundary wall provision than KP as a whole (see Table 23 and Figure 2). Both the EMIS data and the SNG facilities survey showed similar findings, with the main difference being in the number of rural schools with boundary walls on four sides. EMIS data indicate that around 4% of schools have no boundary walls, while the SNG facilities survey indicates that around 7% do not.

Table 3 School boundary wall provision in Nowshera (EMIS data)

	Boys' schools	Girls' schools	Total
With boundary wall	371	340	711
Without boundary wall	32	4	36

Although the provision of boundary walls is relatively high, this does not always mean they are fully functional or complete. Of the 67 schools visited for the SNG facilities survey, 10 schools had partially damaged walls (while five had no boundary walls), indicating that around 15% of boundary walls were damaged to some extent.

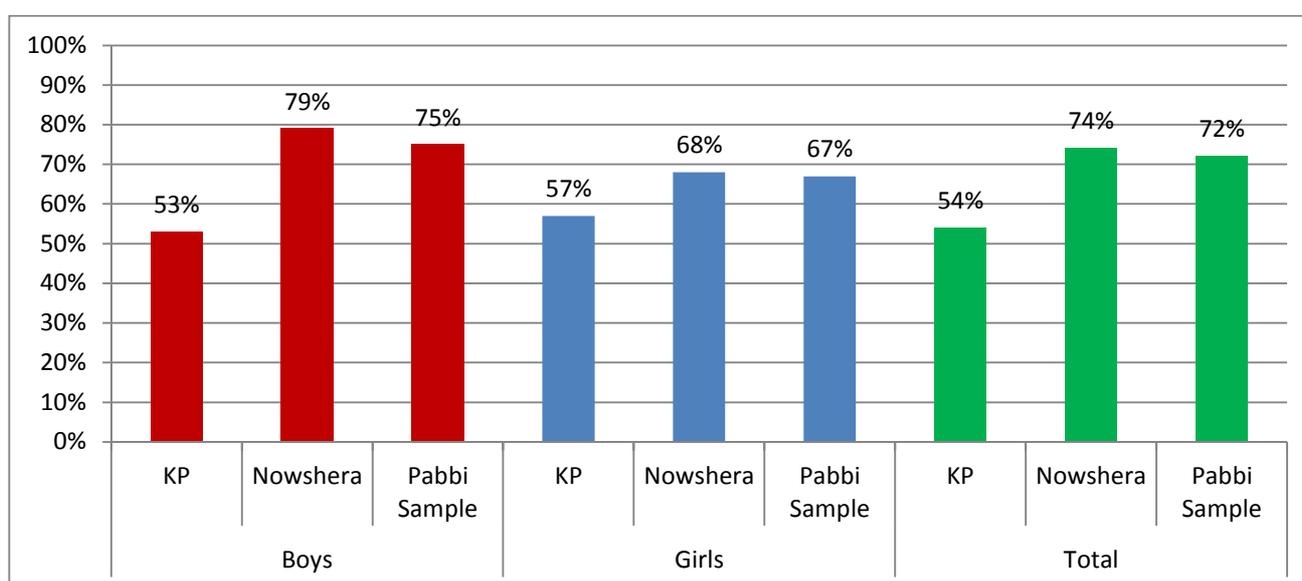
Figure 2 Complete boundary walls by gender: KP, Nowshera District and SNG survey sample (Pabbi Tehsil) comparison



3.1.2.3 Electricity

Nowshera has a higher proportion of schools connected to electricity than the province overall, although rural and girls' schools do not fare so well. Both the EMIS data and the SNG facilities survey indicate that around 25–28% of schools in Nowshera District do not have electricity. This is despite Nowshera, as in KP generally, having an extremely high percentage of households connected to the electricity supply (99.8% in rural areas and 98% in urban areas) (Pakistan Bureau of Statistics (PBS), 2010), which would suggest that the opportunity to physically connect to the supply is not a constraint. Although more girls' schools have electricity than boys' schools in KP overall, this is not the case for Nowshera and the SNG facilities survey sample (Pabbi Tehsil), which both show higher rates for boys' schools. Boys' schools are much more likely to have electricity than girls' schools, as are urban schools.

Figure 3 Electricity provision by gender: KP, Nowshera District and SNG survey sample (Pabbi Tehsil) comparison



Even when connected to the electricity supply, a high proportion of schools do not have functional electricity. Being connected to the electricity grid does not mean that electricity is available within a school. The SNG facilities survey looked not just at connection but at functionality: of the 67 schools in the sample, 18% were connected to an electricity supply but still did not have power, and two-thirds of these were girls' schools (this is in addition to the 28% without any connection). This in effect means that just 37% of girls' schools have a functioning electricity supply compared to 65% of boys' schools. The poor functionality of the electricity provision is hindered further by the lack of electrical appliances and equipment (e.g. lack of fans, light bulb holders, etc.).

3.1.2.4 Drinking water

A quarter of schools in Nowshera have no drinking water available, with disparities between boys' and girls' schools. Both EMIS and SNG facilities survey data show that around 24% of schools have no drinking water. The biggest difference is between girls' schools and boys' schools, with 30% of girls' schools having no water compared to 20–22% of boys' schools.

3.1.2.5 Toilets

Not all schools have toilets physically available, particularly boys' schools and rural schools. EMIS data indicate around 8% of primary schools in Nowshera have no toilets at all. In the SNG pilot facilities survey sample, 11% of schools were without any toilet facility. EMIS data showed that boys' schools were more likely to have no toilets at all compared to girls' schools (approximately 12.5% without toilets compared to 3.5% respectively). The SNG facilities survey supported this disparity, in fact suggesting that the disparity was much larger (17.5% of boys' schools in the SNG sample had no toilets). The SNG sample also showed that no urban schools were without toilets, while around 13% of rural schools were without.

Furthermore, many of the school toilets that do exist are unusable. Although EMIS data show the availability of toilets, they do not show how many are functional and usable. However, the SNG facilities survey provides data on this; in the SNG sample, around 28% of the toilets in boys' schools are unusable and, although provision overall is better for girls' schools, usability is equally poor with 26% not being usable. The disparity between urban and rural areas is large: 9% of school toilets provided in urban areas are unusable while in rural areas this increases to 29%. In some schools, this means that despite physically having toilets, none are actually functional and usable (see Table 4).

Table 4 Schools with no usable toilets

School name	Urban/rural	Boys'/girls' school	UC	# of toilets	# of usable toilets
GGPS Awal Khan Koroona	Rural	Girls'	Dag Besud	2	0
GGPS Dawa Koroona	Rural	Girls'	Akbar Pura	2	0
GGPS Kandar No.1	Rural	Girls'	Akbar Pura	1	0
GGPS Kandi Tazadin No.2	Rural	Girls'	Choki Mumraiz	2	0
GGPS Spin Khak No.4	Rural	Girls'	Spin Khak	2	0
GGCMS Wazir Ghari No.2	Rural	Girls'	Dag Besud	6	0
GPS Jaroba No.3	Rural	Boys'	Spin Khak	2	0
GPS No.5 Dag Besud	Rural	Boys'	Dag Besud	2	0

Six out of the eight schools surveyed in Table 4 that had toilets that were unusable were girls' schools. All eight schools were in rural areas. In all cases, EMIS data indicated that toilets existed but they did not give any information on usability.⁴

3.1.2.6 Other materials, supplies and equipment

Adequate school furniture is generally missing from almost all schools. The SNG facility survey data indicate that about 90% of schools are without basic furniture for students. Given this almost complete lack of furniture across all schools, there is little disparity by gender or locations. The majority of all the schools surveyed had their students sitting on mats.

3.1.3 Provision of education staff

The salary budget for Nowshera schools has increased substantially since 2010–11, but not as fast as the provincial-level salary budget for schools. While the salary budget for all schools in Nowshera shows a cumulative increase of about 46% since 2010–11 to PKR 2,176 million in

⁴ While the EMIS questionnaire asks for the number of toilets as well as their usability, this is not however reflected in the data/report.

2013–14, this is less than the cumulative increase of about 71% since 2010–11 for the total provincial figure (PKR 53,093 million). Both at KP provincial and Nowshera District level the allocation of salary budget for girls' schools is just 32% and 30% for 2013–14 respectively, and this proportion has not changed significantly over the last three years.

Despite there being an adequate number of teachers overall, distribution of teachers is not based on needs. Some schools have more than enough teachers while others have too few.

Table 5 shows the total number of filled teaching posts (comparing EMIS and SNG data) against the sanctioned positions in the SNG pilot facilities survey sample. It also indicates the resulting pupil–teacher ratios (PTR) for each school. There are significant differences between EMIS and SNG data, particularly for posts filled overall and disaggregated numbers for girls'/boys' schools and urban/rural schools. EMIS and SNG data show roughly similar overall PTRs, although data for individual schools differs significantly in some cases.

Table 5 Teacher posts filled and PTRs

	Sanctioned posts	Posts filled (and difference to sanctioned posts)		PTR	
		EMIS data	SNG data	EMIS data	SNG data
Akbar Pura	105	135 (+30)	134 (+29)	28.9	29.6
Aman Kot	35	36 (+1)	35 (0)	40.9	36.1
Choki Mumraiz	56	53 (-3)	48 (-8)	43.5	50.3
Dag Besud	73	65 (-8)	61 (-12)	51.5	46.1
Khuderzai	52	47 (-5)	47 (-5)	40.4	42.3
Spin Khak	26	31 (+5)	23 (-3)	42.6	57.6
Girls'	127	129 (+2)	115 (-12)	38.9	43.1
Boys'	220	238 (+18)	233 (+13)	36.4	37.9
Urban	50	32 (-18)	47 (-3)	40.3	37.7
Rural	297	335 (+38)	301 (+4)	38.3	49.9
Total	347	367 (+20)	348 (+1)	38.4	39.6

PTRs are too high for efficient teaching in some schools, particularly for girls' schools and in rural areas. UC-level PTRs from the SNG Pabbi/Nowshera pilot needs assessment are in the range of 29.6:1 to 57.6:1. The World Bank indicates that efficient teaching occurs when the PTR is in the range 20:1 to 40:1. In the SNG pilot assessment, four UCs (out of a total of six) had a PTR above 40:1.

Rural areas and girls' schools have the highest PTRs. The SNG pilot facilities survey shows that rural UCs in the sample had an average PTR of 50:1, whereas urban UCs average PTRs of 38:1. At all levels, from provincial to district to the tehsil of Pabbi (selected for the SNG pilot assessment), girls' schools had higher PTRs; in girls' schools the ratio averaged 43:1, whereas in boys' schools it averaged 38:1.

PTRs seem to be higher for schools that do not have transparent or well-functioning PTCs. The SNG pilot assessment looked at the functioning of PTCs and compared against a range of criteria, including PTR. In schools with less transparent PTCs (measured by a lack of open election, recent election (within last three years), meeting minutes and PTC training), PTRs stood at 48.9 compared to an average of 39.6 across the whole sample.⁵

⁵ This comparison was made only for the SNG sample.

It should be noted that **PTRs indicated through filled posts may not be accurate; in reality teacher absenteeism may increase actual PTRs, particularly in rural areas.** The SNG pilot assessment provides a snapshot indication that while teacher absenteeism (i.e. non-attendance of teachers from filled posts) is relatively low (just under 4%), it is predominantly a rural problem, with no teachers in urban areas absent from filled posts on the day of assessment. It should be remembered, however, that the SNG survey team announced their arrival to these schools in advance, meaning that results for certain indicators – such as teacher attendance – might have been affected due to the anticipation of such a survey. These results therefore need further verification.

There is wide dissatisfaction with the quality of teaching, particularly among women.

Related to PTRs, but also going further than just numbers of teachers, focus group discussions (FGDs) with male and female citizens in the SNG primary data collection indicated that 77% of the participants overall are dissatisfied with the quality of teaching in government schools and see a need for improvement in this area. When broken down by gender, 100% of the women⁶ who analysed this situation were dissatisfied with the quality of teaching compared to 69% of men.

3.2 Access to and utilisation of education services

Improving education outcomes requires not only an assessment of current service provision and identification of gaps or needs from the supply side but also an understanding of demand-side issues or constraints. The latter may also highlight particular needs that can be addressed by government at various levels and, in some cases, these demand-side needs have to be addressed or at least considered in order for supply-side initiatives to be fully effective in improving outcomes.

3.2.1 Enrolment and attendance rates

Girls' enrolment rates are lower than boys' enrolment rates, but Nowshera has better female enrolment than KP overall. The gross enrolment rate (GER) for government primary schools, excluding *katchi* schools, for 5–9-year-olds in KP is 68%, but it is much higher for boys (79%) than for girls (59%). At district level, Nowshera has an overall GER of 73% (higher than KP) but a much higher female GER (70%) and less disparity between girls and boys (GER of 76%).

Urban areas have higher GERs than rural areas in KP; however, in Nowshera urban areas in fact have a slightly lower GER than rural areas. In KP overall, urban GER (100%) is higher than in rural areas (87%). In Nowshera, the disparity is reversed with a lower urban GER at 102% and a higher rural GER at 106%.⁷

Net enrolment rates (NERs) also show gender and location disparities. For Nowshera District, the NER⁸ at government schools is 43% for boys and 36% for girls. A similar disparity exists at the provincial level with KP NERs at government primary schools of 50% for boys and 43% for girls. However, a significant proportion of children aged 5–9 in Nowshera attend private schools and when these private schools and *deeni madaris* are taken into consideration, NERs increase to 72% and 54% respectively, indicating the high numbers of children taking up alternatives to government-provided education services. The KP provincial NER overall is 51% with rural areas having a rate of 50% and urban areas 61%. Nowshera again performs better than KP overall and

⁶ Note that this is a very small sample and therefore not statistically representative.

⁷ Pakistan Social and Living Standards Measurement Survey, 2010–2011.

⁸ KP EMIS Annual Statistical Report, 2012–2013.

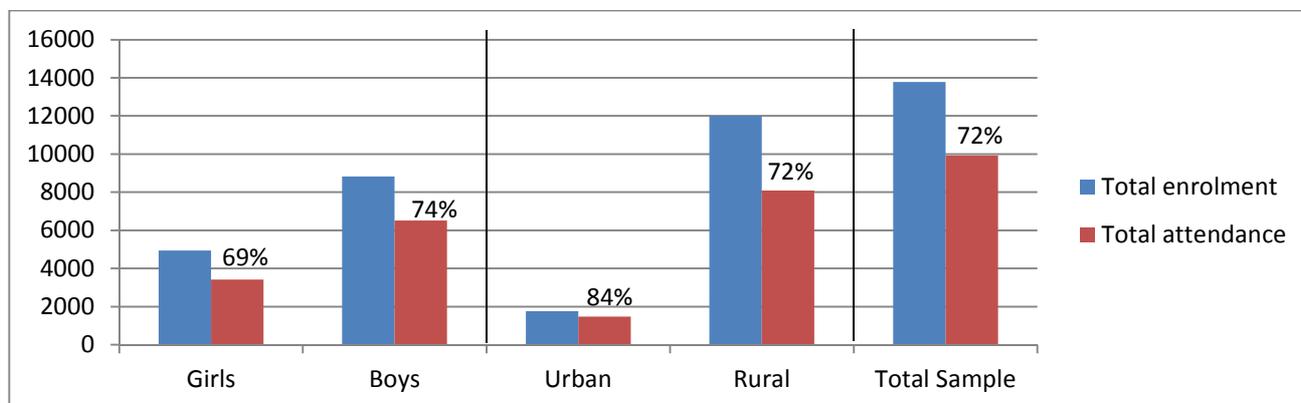
for rural areas (NERs of 63% and 64% respectively) with an equal standing for urban areas at 61%.⁹

Gender parity calculations highlight the disparity between girls and boys in Nowshera and KP. The Gender Parity Index (GPI) is calculated by dividing the number of girls enrolled by the number of boys enrolled (i.e. the closer to 1, the greater the parity). SNG data indicate a slightly better gender parity than the EMIS data, particularly in rural schools.¹⁰ Overall, the difference in GPI between province, Nowshera and the SNG sample is small (0.8, 0.82 and 0.79 respectively). However, the Alif Ailaan Education District Rankings suggest a KP provincial GPI of around 0.8 and a slightly lower district GPI of 0.78 for Nowshera (see Table 6). Either way, these figures indicate a significant gender disparity – for every 100 boys enrolled, just 80 girls are enrolled.

As mentioned earlier, **a large number of girls are actually enrolled in boys’ schools.** EMIS data indicate that about 20% of the girls enrolled in government primary school attend boys’ schools, while about 4% of the boys enrolled in government primary school attend girls’ schools (see Section 3.1.2 for more details).

Enrolment does not ensure attendance, particularly for girls (compared to boys) and rural areas (compared to urban areas). The SNG pilot assessment gathered data on pupil attendance on the day versus enrolment numbers. While these numbers are not representative for the district overall, there are two key disparities highlighted in terms of gender and location. Of all the girls enrolled in the surveyed UCs, 69% were attending class on that day compared to 74% of boys. Conversely, 84% of urban school children were attending class, in contrast to 72% in rural areas (see Figure 4 for a snapshot comparison from the SNG pilot data collection).

Figure 4 School enrolment and attendance on SNG assessment day



If these figures reflect the general situation, then the percentage of boys and girls actually attending school is much lower than enrolment figures suggest, a difference that is particularly pronounced for girls. While enrolment can give an indication of demand, actual attendance can reflect access and factors that constrain access.

3.2.2 Constraints and barriers to access

Cultural and religious norms against education for girls are not necessarily the most important barrier to female education. The SNG pilot assessment FGDs indicated that only 15%

⁹ Pakistan Social and Living Standards Measurement Survey, 2010–2011.

¹⁰ Some caution should be exercised in the interpretation of gender parity calculations. For example, although these figures might show a lower gender disparity than in other areas (e.g. compared to Sindh or FATA) this might not indicate high enrolment rates for girls overall but rather low enrolment rates for both boys and girls, i.e. actual enrolment of girls is still low, but so is the rate for boys and thus the disparity is low.

of all respondents (men and women) believed that education for girls is unnecessary, but this 15% were in fact all men – i.e. no female respondent perceived this to be the case.¹¹ While cultural and religious norms are often stated as being key barriers to the education of girls, this suggests that girls' attendance at schools is not necessarily simply prevented by perceptions that they should not receive an education at all but by a number of other factors (e.g. availability within reasonable distance, etc.). This is supported by the number of boys' schools that girls actually attend because no girls' school is available, but there is a need to explore this issue in much more depth before making policy and budget decisions.

Overall, FGDs with male and female parents identified the following as key factors constraining the attendance of children at school, even if enrolled:

Greater distance between homes and schools negatively affects levels of enrolment and attendance, especially for girls. This factor links directly with the provision and coverage of schools not being in line with population densities and needs. Of the participants in the FGDs, 73% (79% of men and 60% of women) cited the lack of girls' and boys' schools close to their homes as their most pressing concern in terms of access to government schools. This concern translated into 47% of FGD participants being unable to send their children to school because of the distance from their homes, with the issue being more troubling for women than for men.

When the distances between home and school are longer, transportation costs become a further constraint on access to education, particularly for poorer households. In the SNG FGDs, 33% of participants for whom commuting the distance from home to school is problematic also informed the team that transportation costs are too high.

Lack of coverage has knock-on effects on other education system indicators. When there are not enough schools, households send their children to the nearest available (whether it is a boys' school or a girls' school). This means pupil numbers can be well above the capacity of the school, resulting in high PCRs and PTRs: for instance, the only girls' primary school in Kuderzai has five classrooms and 399 female students, with a PCR of 80. In addition, there is only one toilet available at the school. The SNG needs assessment map¹² shows that the nearest girls' schools are too far away and overcrowded, with a high PTR, a high PCR and inadequate facilities (i.e. school 20453 has a PTR and PCR of 98, with only four usable toilets for about 600 children; school 20452 has a PCR of 52 and a PTR of 65 and non-functional electricity).

Poorer households are less likely to send children to school due to costs. Income levels play an important role in decisions about children's enrolment and attendance at school. Almost all the male participants of the FGDs (93%) indicated income poverty as the main reason for low enrolment and/or attendance of children in schools. However, no women in the FGDs indicated income poverty, or child labour, as a reason for low attendance or enrolment – the reasons for this difference in perception require more research. However, women participants did feel much more strongly than male participants that the cost of school supplies and uniforms are too high: 83% compared to 23% from women and men respectively.

Other factors discussed in the FGDs included the shortage of teachers (which also leads to high PTRs) as a reason why participants hesitate to send their children to government schools.

While the findings above suggest that a focus on getting the supply side of service provision right is key – and that the main constraining factors are related to availability, cost and quality – other informal institutional factors (e.g. social and cultural norms) can still have a significant influence,

¹¹ Note that the number of women respondents was also small compared to the number of male respondents.

¹² See SNG Map – School code: 20403, Location: (71.785, 34.0124) and School code: 20452, Location: (71.813, 34.0246): <http://techtabelle.com/wb/sng/>

and are often compounded or justified by issues of availability, cost and quality. For instance, in the SNG assessment FGDs, over 20% of male participants¹³ expressed a belief that education for girls is unnecessary (compared to no female participants expressing the same view). The overall effects of these factors in combination can be seen in the PBS figures showing that just 53% of the population aged 10 years and older have ever attended school, with significant disparities between males (71%) and females (35%). In Nowshera, the PBS figures are broadly similar, with 56% of the population over 10 years having ever attended school, with 75% for boys and 37% for girls.

3.3 Educational outcomes

The education system and context outlined in preceding sections produces the following outcomes for children and parents in Nowshera.

Alif Ailaan’s District Rankings provide an education index based on scorecards by district for all provinces in Pakistan. The education score is a composite score of access, attainment (retention until the 5th grade), achievement (Urdu and English literacy at the 2nd grade level for 5th graders, and numeracy at the 3rd grade level for 5th graders) and gender parity. Access has been discussed above; here we focus on attainment and achievement.

Table 6 Alif Ailaan education index scores: Nowshera District and KP comparison

	Enrolment score	Achievement score	Survival score	Gender parity score	Overall education score
KP	74.17	44.45	56.40	80.14	63.79
Nowshera	85.83	39.23	56.80	78.33	65.05

Overall, KP is ranked fourth of the six provinces in Pakistan with an education score of 64, (Balochistan is the lowest with 46 and Azad Jammu and Kashmir the highest with a score of 78). Nowshera District’s education score (65) is slightly above the KP provincial score of 64. Despite above-average enrolment rates in Nowshera (86 in Nowshera compared to 74 in KP), the achievement score (39) is lower than the provincial average (44). Despite having higher enrolment than the rest of the province, the average survival score is 56 and the achievement score is a low 39. Nowshera District’s GPI Score is 78, which is close to the national average of 79.

Many children do not complete primary school, and this is particularly the case for girls.

With enrolment rates not reaching near 100% and attendance rates even lower, the number of children not completing primary school is unsurprisingly high. While Alif Ailaan’s District Education Rankings show that just 62% of girls completed primary school compared to 80% for boys,¹⁴ the PBS data show primary completion rates in Nowshera of just 42% overall, with 59% for males and 26% for females (broadly similar to the KP provincial figures). Rural areas also show lower completion rates than urban areas (38% and 55% respectively in KP and 40% and 49% respectively in Nowshera).

Gender disparities in literacy rates are extremely wide. Low completion rates are reflected in low levels of literacy and numeracy, particularly for girls and women in Nowshera. PBS data show that the overall literacy rate for KP is 38%. Although there is a 50% literacy rate for men, for women this is just 25%. The literacy rate in urban areas also averages 50%, while in rural areas it is just 35%. In Nowshera, the disparity between men and women is even greater. Although overall

¹³ This is 20% of male respondents only; when looking at overall respondents (men and women) the figure is 15% overall although no women respondents expressed this opinion.

¹⁴ See Annex IV – Performance and Facilities Issues.

literacy rates for Nowshera (at 42%) are slightly better than the KP provincial average, this is due to better literacy rates for men and does not reflect an improved situation for women; male literacy is at 60.5% while for women it is just 22.5%. These gender disparities are reflected to a similar extent across every population age grouping.

Education outcome disparities exist between rural and urban areas. At both the KP provincial and Nowshera District levels, literacy rates are higher in urban areas compared to rural areas. These disparities are not as wide as those seen between men and women, but they still represent significant differences in outcomes. PBS data show that in KP, for instance, urban literacy rates stand at 63% compared to 48% in rural areas; in Nowshera the figures are 57% and 49% respectively.

Children still at school are falling behind basic standards. For children still at school, Alif Ailaan figures show that only 42% of 5th grade students can read grade 2 Urdu and 41% English, while just 33% of 5th grade students can do 3rd grade-level mathematics. Of children aged 5 and above, only 44% are literate.¹⁵ This reflects both quality of teaching but also the quality of infrastructure and materials provided. It also suggests that longer-term measurements of outcomes (e.g. literacy rates for those over 10 years old) are unlikely to change significantly unless basic issues and needs are addressed. The wide disparities between males and females, as well as urban/rural disparities, need to be a priority if overall achievement and educational outcome rates are to improve at the district and provincial levels.

3.4 Conclusion and next steps

3.4.1 Addressing needs through current systems

These issues are well known to GoKP. The 2013–16 Budget OBB document states that the “Elementary & Secondary Education department is facing enormous challenges to improve the enrolment and completion rates, reduce the dropout rates, enhance the literacy levels and narrow the gender gap in educational outcomes. Although the number of schools has increased over the years, many schools are still inadequately equipped. Besides, in a number of rural areas, children have to travel for more than 1 hour to reach the closest government school. These problems are particularly severe for girls, because of the lesser number of girls' schools. Of the total schools, 35% are for girls while of the total school-going children 34% are girls and 66% are boys. The department is struggling to reduce the gender gap in enrolment and provision of adequate number of schools for girl children. Class size is around 42 pupils for most schools but there are over 176 schools with only 1 classroom that have average class sizes of 64 to 70 pupils.”

The GoKP has identified policy priorities to address these needs. In the short term, it aims to improve the quality of district-level sector plans, improve monitoring through a school report card system using DEOs and PTCs, improve community monitoring of teacher attendance, appoint mostly female teachers, and look at alternative ways of addressing the classroom deficits (renting, co-education, etc.).¹⁶

The GoKP has also recognised the need for specific gender-related initiatives to address disparities. These include 30% of construction funds to be used for boys' schools and 70% for girls' schools, introducing a girls stipend scheme at secondary level and conditional grants being executed in six districts (including Nowshera¹⁷), with funds are being utilised for the provision of

¹⁵ Alif Ailaan Education District Rankings 2013.

¹⁶ See the 2013–16 OBB document.

¹⁷ The other five districts are Buner, D.I. Khan, Lakki, Karak and Haripur.

missing facilities in girls' primary schools. The results of these targeted investments will inform future planning and implementation in the rest of the province.¹⁸

These represent positive actions toward both addressing general education needs and addressing gender and other disparities. However, a number of challenges also need to be recognised and addressed:

Plans to improve schools facilities do not match needs. GoKP has selected 998 schools to receive PKR 590 million in conditional grants for facility improvements. In a recent audit of six district school improvement plans, Deloitte reported that 80% of these plans did not match school needs. The auditor has recommended that GoKP revisit the appropriateness of the selection of schools and budgeted activity through actual site visits, with any necessary adjustments then being made to the district plan. If this finding is true of all schools in SNG districts, between 650 and 800 school facility improvement plans will need to be revised. The effectiveness of the use of conditional grant funds will be lower as a result.

Communities do not engage effectively in educational planning and decision-making. The Deloitte study, the UNESCO report and the SNG needs assessment pilot all indicate low levels of community engagement in educational decision-making through PTCs. Issues include lack of a transparent election process, lack of parental involvement in the PTC, lack of community participation in planning and monitoring, inactive or disbanded PTCs, and lack of training of PTCs. This is supported by the finding that plans to improve schools facilities do not match needs (see above and Section 3.1.1).

Weak PTCs are linked with poor education service provision and outcomes. SNG and EMIS data indicate that 98% of schools have established PTCs, with a comparatively higher number of functional PTCs in boys' schools than girls' schools. SNG data indicate that schools that do not have well-functioning PTCs have higher PTRs, lower levels of functioning electricity, fewer usable toilets, and less availability of water. While EMIS data show a 93% satisfaction rate with annual PTC performance, SNG FGDs indicate that the majority of participants – and all female participants – were unaware of PTCs' roles, responsibilities and activities. Of the few participants who were aware, the majority of them expressed disappointment with PTC performance. This has implications for the effectiveness and efficiency of disbursing conditional grants through PTCs

This analysis thus indicates that there are also needs to be addressed *within* current systems. These include:

- Reviewing and revising plans to ensure they are based on an accurate assessment of the current situation and appropriately address needs.
- Increasing the involvement of communities in education planning and decision-making in order to base plans on stated needs, preferences and priorities as opposed to assumed perceptions. This should be done in ways that recognise and include those groups within communities that are often excluded and not just through traditional mechanisms that maintain the status quo.
- Increasing the capacities of PTCs to undertake their responsibilities more effectively and transparently.

¹⁸ See the 2013–16 OBB document.

3.4.2 Possible implications for the SNG Programme

The needs outlined above raise the following opportunities and challenges for the SNG Programme in relation to primary education in KP

- **Addressing location and gender disparities**, through interventions that focus on currently under-served and/or under-performing locations, and that target the gender gap.
- **Increasing access**, through specific measures designed to address barriers to access. Demand-side barriers to access include both direct cost for pupils and their families, such as uniforms, transportation, stationary, etc.) as well as social norms that may limit mobility and opportunity for particular groups, particularly girls and the poor.
- **Enhancing the quality of monitoring data**, not only through improvements to existing instruments (e.g. EMIS) but also through instruments which provide local narratives about education quality – e.g. focus group discussions, community scorecards, citizen report cards, etc).
- **Improving and increasing participatory planning and decision-making**, through strengthening of PTCs (e.g. through training but also by ensuring transparency and inclusiveness) and other mechanisms for broader involvement in school-based and district-level planning.

3.4.3 Next steps

Findings from the Nowshera needs assessment indicate a significant gap between community needs in primary education and services currently provided. There is a need for more comprehensive data on schools and improved use of existing data to improve district education outcomes and plans.

The use of smartphones for conducting surveys and collecting visual evidence demonstrated GIS to be a powerful diagnostic and monitoring tool. GPS technology can help to map surveyed schools, and present school-based data in a way that helps non-specialists to identify problems quickly.

The Education Department of the GoKP has established an Independent Monitoring Unit, which plans to undertake extensive monitoring of schools. A monitoring officer will visit each school at least once a month for data collection through GIS enabled tools. The data will be available to policy makers in real time. However, this activity has not yet started, and is expected to take several months before it becomes fully operational. In the meantime, the mismatch between needs and plans is holding up the disbursement of conditional grants in the education sector.

It has been agreed that SNG will provide technical support to district education teams for conducting rapid needs assessments. This will facilitate the revision of plans and budgets for Conditional Grants. At a meeting of the Conditional Grants Working Group held under the chairmanship of Finance Secretary, on 31 October, 2013, it was agreed that SNG would provide technical support a planning workshop for district officials to address the mismatch between needs and plans in the health and education sectors. SNG will share its methodology on how the needs assessment was conducted, how data was collected and consolidated, and how it can be used to improve district level planning and budgeting in these sectors quickly and help put the Conditional Grants programme back on track.

The KP Education Sector Programme (KESP) has developed guidelines for PTC training, with the first round of training undertaken in Nowshera. A Training Needs Assessment has recently been conducted. SNG will also work with KESP during programme implementation to support further PTC training with a view to improving further the fit between needs and plans in primary education.

4 Brief assessment of pilot needs assessment methodology

In this section we provide a summary overview of the information the needs assessment methodology provided, as well as recommendations for adaptation and improvements for future needs assessments.

4.1 What information did the pilot needs assessment approach provide?

The pilot assessment approach provided clear information on local government policies and plans. It also provided clear and up-to-date information on budgets and expenditure decisions, showing both recent trends and the differences between provincial- and district-level expenditure decisions.

The approach provided a wealth of primarily quantitative data on a range of education indicators on the supply side (e.g. schools and teachers provided), demand side (e.g. access and uptake) and on outcomes (e.g. literacy rates, etc.). These highlighted key disparities (e.g. those based on gender and rural/urban location) clearly across a range of areas. The comparison of EMIS data to SNG data also provided an indication of the accuracy of EMIS data and the extent to which it could be relied upon for future assessments. The SNG data went further than EMIS data to look at the functionality of infrastructure and not just its existence – this was supplemented by visual evidence to support other data. GIS mapping also provided good visual evidence, which can be mapped onto other information (e.g. population densities) in the future.

Views from a small group of citizens were also gained through FGDs. These provided further (mainly quantitative) data on a number of specific question areas, including on barriers to accessing education services.

4.2 What were the limitations of the pilot needs assessment approach?

Although the methodology provided a range of useful information and evidence to help assess and address needs, limitations included the following:

- There is a lack of forward-looking demographic data that can be used for predicting potential demand changes over the longer term and to shape planning accordingly. The current approach identifies current needs, which are important to understand and address now, but it does not look much further into future changes and trends that may also need to be considered.
- The literature review focused primarily on policy documents, budget data and other sources providing statistical data. Bringing in a much wider range of secondary data (e.g. on gender and social issues, political economy issues, etc.) could help provide more explanatory information that sheds light on the quantitative data (e.g. on disparities and trends).
- There was a lack of qualitative and explanatory data, particularly on informal institutions, which could be gained from much of the secondary literature available on these issues in Pakistan and used to supplement the analysis of primary data if needed.
- Although FGDs were conducted with citizens, these provided a limited amount of data that were easily quantified and thus missed the opportunity to gain more qualitative and explanatory data on citizens' views and perceptions of needs in education services. These could include, for instance, citizens explaining their choices (e.g. why they do not send girls to school in

particular situations) and preferences/priorities (e.g. if both toilets and electricity are lacking, which should be prioritised). This type of information would help policy-makers both address demand-side constraints more effectively (and ensure supply-side initiatives take these into account as far as possible) and also prioritise needs in the face of resource constraints based on citizens' views, which would increase citizen satisfaction with those decisions.

- The community-level work attempted to gain views from both men and women but it was difficult to gain access to women in particular. Future community-level work should ensure appropriate steps are undertaken to do this more effectively.
- A broad look at civil society engagement in education systems and provision and opportunities to build on such engagement to help address needs was also lacking. Better understanding the level and type of existing engagement could provide a basis for policy-makers to examine the opportunities to leverage civil society initiatives in order to improve government education service provision.

4.3 Recommendations for future needs assessments

Future needs assessments need not necessarily attempt to deploy all the approaches used in this pilot needs assessment. They should be designed in different ways so as to focus on understanding different needs as appropriate. For example, in some cases the assessment might be focused on understanding the particular needs in female enrolment in a particular district, while in other cases it might focus on understanding the need to improve the functioning of PTCs, ensuring coverage of schools fits with future population densities, or that needs identified by local government fit with citizen preferences and priorities.

The implication is that the approach taken in the pilot does not need to be replicated in a standard way across all districts but should instead be adapted flexibly to include those elements that provide relevant information (whether from the current elements or those identified as lacking). Secondary sources should be used where possible to avoid duplication – i.e. if NGOs or other programmes have undertaken appropriate needs assessments then the SNG Programme should use these as far as possible.