The Urban Unit

Urban Sector Planning & Management Services Unit (Pvt.) Ltd.

EDUCATION SECTOR

D.G KHAN REGIONAL DEVELOPMENT PLAN

Disclaimer

Urban Sector Planning and Management Sector Unit (Pvt.) Ltd. has prepared this report as an Education Sector Plan for D.G Khan. Maximum care and caution were observed while developing this document.

The opinions expressed in the document are solely those of the authors and publishing in any way constitute endorsement of the opinion by the Urban Unit.

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Introduction

Objectives and Scope of Work

Analyzing the sector's reach and accessibility as well as exploring ways to enhance public service delivery of education services through integrated regional planning are the main goals of the education sector plan. The scope of work is as follows:

- A comprehensive situational analysis of education facilities in the D.G Khan division by benchmarking with the provincial landscape.
- Identification of regional spread of schools and universities and spatially mapping them through GIS-based maps (subject to availability of spatial coordinates and data).
- Identification of development or upgradation needs for existing education facilities and infrastructure through stakeholder engagement.
- Brief Education Sector Plan (with short, medium- and long-term targets), incorporating demand-based project pipeline for ADP and donor funding.

Methodology and Framework

The paper begins with a situational analysis of the D.G. Khan division's existing educational setting. In order to do this, a mixed methods approach utilizing both quantitative and qualitative data has been used to combine primary and secondary sources to give an in-depth examination of the educational facilities. To do a district-level study of the numerical amount, spatial dispersion, infrastructure condition, and student involvement in the educational facilities of D.G. Khan division, data from secondary databases, survey reports, and departmental dashboards were consulted.

Furthermore, to effectively and sufficiently identify the institutional difficulties and administrative gaps that exist in the division and obstruct the delivery of education services, field visits and stakeholder discussions were conducted to further confirm secondary data. A geographical accessibility study is also included to create an integrated plan with short-, medium-and long-term educational goals. With the use of site assessment, this suggested framework determines the kind of intervention that is required and provides general project direction for an integrated social development plan.

Numerous secondary sources, including province and district-level records, have been examined to identify any gaps and other operational concerns that exist in the D.G. Khan region's education system (MICS, PSLM, ASER, ACS etc.) and School Information System (SIS) dashboard. Additionally, in April 2024, the Urban Unit team conducted an initial field tour to educational facilities in the districts of D.G. Khan, Rajanpur, Layyah, and Muzaffarabad to gather primary data. Additionally, important parties from each of the four districts were contacted including Education Team (SED), DD Development (D.G Khan), CEO Education (D.G Khan), CEO Education (Rajanpur), CEO Education, (Layyah) CEO Education, (Muzaffarabad).

The following steps of research framework have been adopted:

- Collection of Secondary Data
- Collection and Access to Departmental data and dashboards (SIS)
- Review of data, literature and desk research
- Ground assessment through field visits
- Stakeholder consultation and meetings
- Situation Analysis to identify gaps and challenges of the education sector
- Development of short-, medium- and long-term plan for both School Education

The following three-tiered approach in assessing the situational analysis of the education sector in D.G Khan division.

Physical Analysis: Three distinct dimensions are used to analyze physical characteristics. The geographic distribution of the educational institutions is the first thing to be considered. The availability research is then carried out by understanding of infrastructure, natural barriers, and other issues.

We can comprehend the people served inside the settlement regions thanks to the accessibility study. Finally, the infrastructure study identifies opportunities for additional improvement and provides an estimate of the quality of the infrastructure. In the D.G. Khan division, these three analyses are carried out for every educational level.

Statistical Analysis: To do the statistical analysis, the condition of education in D.G. Khan is examined through the examination of current data sets, reports, case studies, and literature. The general results associated to schooling are the subject of this investigation. It examines every significant educational statistic, including learning outcomes, completion rates, enrollment, and transition. These figures are critical to improving our awareness of the industry as well as in determining the educational challenges.

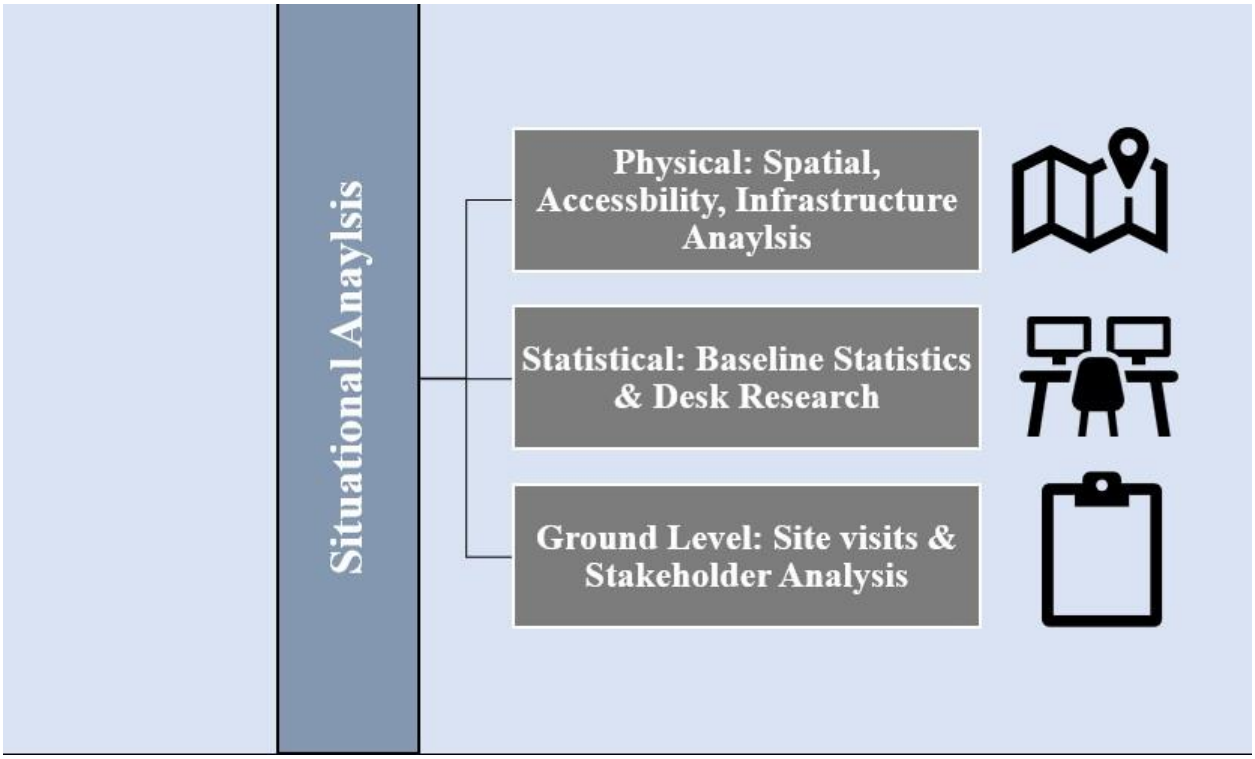


Figure 1: Illustrates the three-tiered approach uses in the assessing the current state of education in D.G Khan Division.

Ground-Level Analysis: In the D.G. Khan division, several site inspections, ground assessments, stakeholder and consultative meetings were conducted to further consolidate the understanding of this sector. The results of the first two evaluations were further validated with the aid of this activity. Along with increasing practical expertise and doing on-site evaluations. The team visited several educational facilities by random sampling and used firsthand observations to evaluate the level of instruction. Various stakeholder and consultation sessions, meetings, and other gatherings contributed to this treasure of information.

Situational Analysis of School Education in D.G Khan Division

Division at a Glance

The cornerstone of human growth, Education lays the foundation for civilizations' future progress. It's a dynamic process that gives people the information, talents, and critical thinking skills they need to successfully traverse the complexity of today's environment. Education is a lifetime process of learning and progress, ranging from the early stages of childhood, when basic reading, writing, and math abilities are acquired, to post-secondary education and chances for lifelong learning. It develops interpersonal responsibility, cultural awareness, and intellectual curiosity. Essentially, education is a life-changing experience that changes a person's character, widens their viewpoints, and opens doors to a world of opportunities rather than just being a means of acquiring knowledge. In order to meet the difficulties and take advantage of the opportunities presented by the 21st century, education is becoming more and more important as we progress through a world that is becoming more linked and changing quickly.

According to the Economic Survey of Pakistan year 2023-24, the Literacy rate of Pakistan is 62.8% & Pakistan spends 1.5% share of GDP on education. Whereas there is still gender disparity in Pakistan showing 73.4% of males & 51.9% of females are literate. In Punjab total 66.3 percent male 74.2 and female 58.4 percent are literate. Pakistan has the second-highest rate of out-of-school children worldwide, with over 26.2 million children between the ages of five and sixteen not attending school.[1] Punjab has 11.73 million OOSC. For females, this figure is considerably greater. Pakistan's low literacy rates and educational gaps have been attributed to a variety of factors, such as resource scarcity, gender discrimination, and poverty. Although there's been progress in improving access to education, much work is needed.

In D.G. Khan division Layyah boasts the highest literacy rate among individuals aged 10 and above in Table 1, standing at 65%. Across Punjab, the total literacy rate is slightly lower at 66.3%. Rajanpur district exhibits the lowest literacy rate among the four districts mentioned, with only 42% literacy. The male literacy rate is the highest in Layyah district (77%) whereas the male literacy rate in Rajanpur (56%) and Muzaffargarh (60%) districts are the lower as compared to Punjab (74.2%), Layyah & D.G Khan district. This indicates that female literacy rates in all four districts are lower than those of males and significantly lower than the provincial average. Layyah generally has a higher literacy rate compared to Punjab's overall average. Rajanpur district highlights the lowest literacy rates across all demographics compared to the other mentioned districts. There's a noticeable gap between male and female literacy rates in all districts, indicating potential gender disparities in access to education or other socio-economic factors influencing

[1] Pakistan Education Statistic report 2021-22

female literacy.

Table 1:Population Literacy rate (10 years and older)

Literacy Rate % (10 years and older)	Male	Female	Total
Punjab	74.2%	58.4%	66.3%
D.G. Khan	65%	36%	51%
Rajanpur	56%	28%	42%
Muzaffargarh	60%	32%	46%
Layyah	77%	52%	65%

Source: PSLM, 2019, Economic survey 2023-24
Table 2:Literate population in DG Khan division

District	Total Population	Education Attainment (%)					
		Below-Primary	Primary	Middle	High	Higher Secondary	Graduate
Punjab	80,760,335	9%	17%	14%	12%	5%	4%
D.G. Khan	2,872,631	7%	9%	6%	4%	2%	1.26%
Rajanpur	1,996,039	5%	7%	5%	3%	1%	0.83
Layyah	1,823,995	7%	14%	9%	6%	2%	1.49%
Muzaffargarh	4,328,549	7%	10%	6%	4%	2%	1.08%

Source: PBS, 2017

Educational attainment refers to the highest level of education that an individual has completed. By tracking attainment levels across countries and over time, the UIS provides unique insights into the benefits that can arise from education – from the earning potential of individuals to the economic growth and well-being of societies at large. This is why educational attainment is one of the indicators to measure progress towards the Sustainable Development Goal. This chart shows the data of the total education attainment ratio of Below-Primary, Primary, Middle, High, High secondary & Graduates from the total population of all four districts. Early childhood education and primary education are all included under middle education. Pre- Primary school programs are made to lay the groundwork in a variety of topic areas. Upper secondary programs are more specialized and give students a wider range of options for finishing their higher education. The following is a detailed analysis of literacy level in the D.G Khan division's population.

- **Below-Primary:** The education attainment for the below-primary stage is quite parallel (7%) in all three districts D.G Khan, Layyah, and Muzaffargarh except Rajanpur, which has the lowest education attainment showing 5%. In Rajanpur, parents, instructors, and students are not happy with the layout and amenities of the institution. A lot of schools just have one room, while some don't have any at all. Many schools operate without a boundary wall. Most of the schools lack both running water and restrooms. Many people are dissatisfied with the course and its accomplishment in elementary schools. The course doesn't finish in a year. Dropout rates are mostly caused by the cruel attitudes of parents and teachers to the worst school infrastructure and missing facilities in the schools. When we compare this with Punjab, the educational attainment of Below Primary school is 9%.
- **Primary:** This shows the proportion of people who can read and write at an elementary school level. The educational attainment ratio is comparatively lower in Rajanpur 7% and D.G Khan 9% than in Layyah & Muzaffargarh. This can be ascribed to a range of factors in D.G Khan such as lack of quality and access, poor infrastructure, and misplaced priorities. Poverty, child labor, gender discrimination, and disability also serve as barriers to education. Layyah is on the top with the proportion of 14% Literate People. From elementary to higher secondary education, Layyah is typically well-served with educational facilities. Roughly 197,620 people are living in the tehsil Layyah, and 685 government educational institutions in total. There are 1,092 Primary Schools. 229 Middle Schools, 182 High Schools, and 10 Higher Secondary Schools are functional. [2]
- **Middle:** Layyah is again on the top 9% in education attainment because of their focus on schools and their infrastructure, teachers' availability etc. Rajanpur faces a downfall in the ratio of only 5% literate people. Whereas D.G Khan and Muzaffargarh are going parallel, 6 % Educational attainment at the middle schooling.

[2] School Census 2022

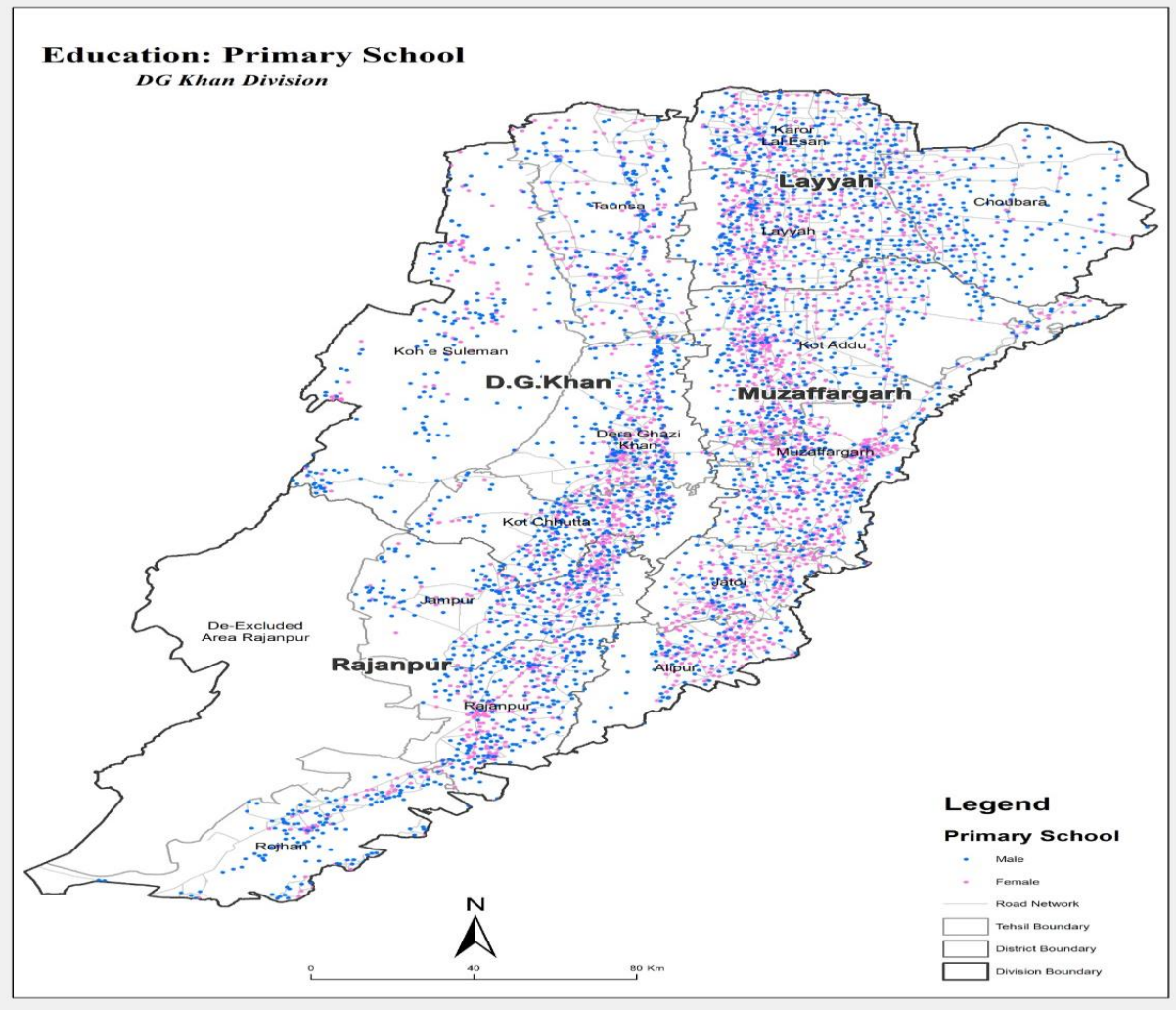
- **High:** This displays the proportion of people who have finished their high school education. Higher education facilities are not properly available in Rajanpur so the lowest educational attainment for higher education is in Rajanpur showing only 3% literate people. D.G Khan and Muzaffargarh are at a slightly better rate of 4% than Rajanpur but still less than Layyah 6%.
- **Higher Secondary:** Here is a representation of the proportion of people who have finished higher secondary education. Higher Secondary Education attainment is comparatively very low in all four districts, but Rajanpur is lowest at 1% while the rest of the three are at 2%.
- **Graduate:** This displays the proportion of people who have finished their undergraduate degrees. In all four districts, only 1% of the population gets a chance to complete their education till undergrad after facing all the hardships and difficulties of the availability of a conducive learning environment. Overall, the literacy rate in all four districts is unsatisfactory, which needs to be improved especially in Rajan.

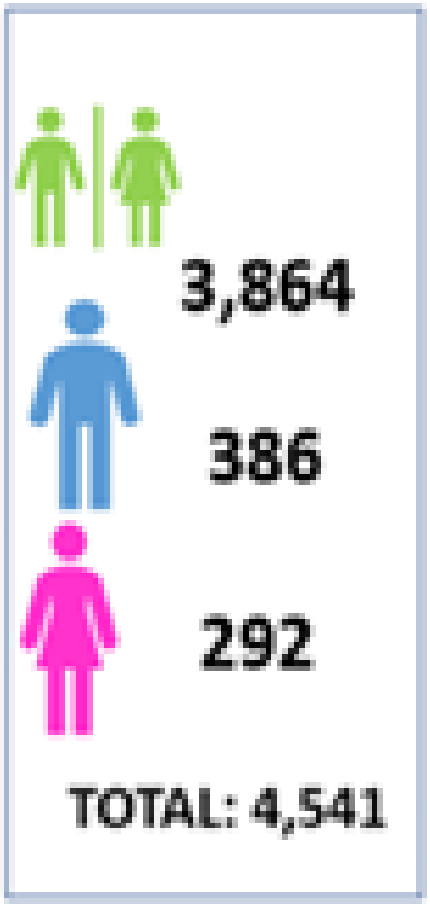
Spatial Spread of Schools

The geographic distribution or structures of schools within the space of D.G Khan division is referred to as spatial dispersion. It explains how things are arranged or dispersed throughout a specific space. Spatial spread of Primary, Middle, High & Higher secondary schools is discussed further. Spatial equity in the distribution of educational services is essential to creating a happy and healthy living environment in urban areas. As a result, experts establish several criteria for choosing school locations.

Primary Schools

This map shows the spatial spread of Primary Schools in D.G Khan Division. The chart shows the number of persons who have access to schools per square kilometer. There are 3,864 co-schools, 386 boys' school, 296 girls' school and in total there are 4,541 Primary Schools in the D.G Khan Division.





Map 1: Spatial Spread of Primary Schools
Source: The Urban Unit GIS

Table 3: School Statistics of Primary Schools

District/ Tehsil	Teaching Staff	Female Enrollment	Male Enrollment	Total Students	Female: Male Ratio	Teacher: Student
D.G Khan	8,779	123,822	170,764	294,586	1:1	1:34
Koh-e-Suleman	947	6,722	20,051	26,773	0:1	1:28
Kot Chutta	1,804	26,490	47,525	74,015	1:1	1:41
Taunsa	2,826	38,354	43,447	81,801	1:1	1:29
Muzaffargarh	10,924	154,699	214,584	369,283	1:1	1:34
Kot Adu	4,122	60,772	79,230	140,002	1:1	1:34
Jatoi	1,526	18,503	36,989	55,492	1:1	1:36
Ali Pur	1,331	17,987	23,851	41,838	1:1	1:31
Laiyyah	4,626	68,778	72,249	141,027	1:1	1:30
Karor Lalisa	2,883	47,665	52,479	100,144	1:1	1:35
Chaubara	1,139	14,770	28,058	42,828	1:1	1:38
Rajanpur	5,592	34,433	43,179	77,612	1:1	1:14
Jampur	2,550	29,708	46,210	75,918	1:1	1:30
Rojhan	632	6,237	20,467	26,704	0:1	1:42

Source: Annual School Census, 2022

Statistical Analysis of Primary Schools

The table provides information regarding teaching staff members, female enrollment, male enrolment, female-to-male ratios, and teacher-to-student ratios in primary schools of D.G Khan division.

Teaching Staff: These figures represent the number of educators available in each district or tehsils. The teaching staff number is the **highest 10,924** in Muzaffargarh from all the districts, Rajanpur district has the lowest number of 5592 teachers available. Rojhan has the **lowest** number of **632** teachers available. In the list of Tehsil, Kot Adu Tehsil is on the **top** with the data showing **4,122** teachers' availability, Rojhan Tehsil is on the **lowest**, showing only **632** teachers available in the Rojhan Tehsil of Rajanpur. Rojhan is the most tribal area, teachers living in the tribal areas do not have proper living spaces, so they face challenges of living in such areas. There are some social issues as well such as security issues, societal norms and culture. Schools in very distant areas etc.

Female and Male Enrolment: These data show the male and female educational participation in the division of D.G Khan including all the districts. In the list of districts Muzaffargarh shows the highest rate of student's participation both male and female comparatively all other districts. The number of male enrollments is higher **214,584** than the female enrollment **154,699** in Muzaffargarh district. Rajanpur district has the lowest rate of female enrollment **34,433** & male enrollment **43,179.** Kott Addu Tehsil of Muzaffargarh is seen on the top in the female and male educational participation with the data of **60,772** & **79,230,** whereas the Rojhan Tehsil of Rajanpur is below average in the number of females **6,237** educational participation in schools and number of males **20,467** is also low comparatively other tehsils.

Female-To-Male Ratio: This reflects the gender balance within the student. Except for Koh-e-Suleman, Tehsil of D.G Khan & Rojhan Tehsil of Rajanpur, all other districts and tehsils have a **1:1** ratio. **1:1** implies that the male and female enrollment ratio is nearly equal. **0:1** in Koh-e-Suleman & Rojhan Tehsil implies that there is the highest ratio of male enrollments, and no educational participation ratio is observed in these tribal areas. There are some social, security & cultural issues in these tribal areas. Schools in very distant areas where girls have limited access to schools, early marriages, security threats, gender disparities etc.

Teacher-To-Student Ratio: This gives a clear picture of how many students get personalized attention from their teacher. A lower ratio indicates a higher level of individual attention, while a higher ratio may suggest a greater workload for teachers and potentially less individualized attention for students. In Muzaffargarh & D.G Khan district the teacher-student ratio is higher, 34, than other districts. That means there is only one teacher for 34 students. Teachers have more pressure and are unable to focus on each student. Teachers have less pressure on Rajanpur because one teacher has to focus on 14 students only. Teacher teacher-student ratio is at a higher level of 42 in Rojhan, the tehsil of Rajanpur. That shows there is only one

teacher for 42 students, there should be more teachers so the students can have complete attention from their teacher. The lowest ratio is in Koh-e-Suleman Tehsil. Only 28 students have 1 teacher in their class.

Conclusion: The table offers a comprehensive analysis of teaching staff, enrollment rates, gender ratios, and teacher-to-student ratios in different districts and tehsils. It reveals variations in educational resources, gender representation and potential levels of individual attention. This information is crucial for evaluating the educational landscape and identifying areas that may require targeted efforts to improve educational outcomes.

Table 4: Availability of School Infrastructure and Facilities

Primary School Analysis				
District/Tehsil	Availability of electricity	Availability of boundary wall	Availability of drinking water	Availability of playground
D.G. Khan	97%	97%	95%	54%
D.G. Khan	99%	99%	98%	63%
Koh-e-Suleman	89%	93%	85%	41%
Kot Chutta	99%	99%	100%	62%
Taunsa	98%	98%	96%	50%
Layyah	99%	99%	100%	42%
Chaubara	99%	100%	100%	71%
Karor Lalisa	100%	100%	100%	46%
Layyah	99%	99%	100%	24%
Muzaffargarh	99%	99%	100%	41%
Ali Pur	98%	98%	100%	36%
Jatoi	100%	99%	100%	33%
Kot Adu	98%	99%	100%	47%
Muzaffargarh	100%	100%	100%	37%
Rajanpur	96%	97%	98%	75%
Jampur	96%	96%	99%	76%
Rajanpur	96%	99%	98%	76%
Rojhan	95%	93%	97%	70%

Source: Annual School Census, 2022

Infrastructural Analysis of Primary Schools:

The table shows the data of the facilities available in the Primary schools of D.G Khan Division.

Electricity Availability: In terms of electricity availability, all the districts and tehsils have high availability, Muzaffargarh & Layyah have the highest rate of availability of electricity in their district 99%, Rajanpur district which is quite underdeveloped area falls at the bottom of the list of the availability of electricity in their schools. Karor Lalisa tehsil of Laiyyah & Jatoi tehsil of Muzaffargarh has 100% availability of electricity. That means all the primary schools have electricity availability whereas, in Rojhan, tehsil of Rajanpur, there are still schools having less or no availability of electricity. Overall, the availability of electricity is still high which is a positive indication of reliable power supply to these educational institutions, those areas should be more focused on who needs more power supplies.

Boundary Wall Availability: Boundary walls guarantee that schools have safe, walled borders, which protect kids' privacy and safety. The availability of boundary walls is also consistently high in the majority of the districts and tehsils except for Rojhan 93%, a tehsil of Rajanpur, & Koh-e-Sulaiman 93%, a tehsil of D.G Khan, these two tehsils are very tribal and undeveloped. Primary schools only in Muzaffargarh and Chaubara Tehsils have a ratio of 100% boundary walls. 99% Schools in Muzaffargarh and Layyah district have boundary walls, 97% primary schools in the D.G Khan and Rajanpur have boundary walls of their primary schools.

Availability of Drinking Water: When it comes to the availability of drinking water, the majority of the primary schools exhibit a satisfactory availability of drinking water at 95%-100% except for Koh-e Suleiman 85%, tehsil of D.G Khan. There should be more water filters installed in the schools.

Availability of Playgrounds: Regarding playgrounds, the data suggests that the areas highlighted in red colour need more playground areas in primary schools. Layyah has the lowest ratio 24% of the availability of recreational activities in their primary schools. Whereas Jampur and Ranjanpur Tehsils have the highest ratio of availability of playgrounds in their schools as compared to other tehsils and districts. Overall, all these districts and tehsils D.G Khan, Kott Chutta, Taunsa, Layyah, Kasur Lalisa, Muzaffargarh, Kot Addu, Jatoi, Ali Purr require improvement in this aspect

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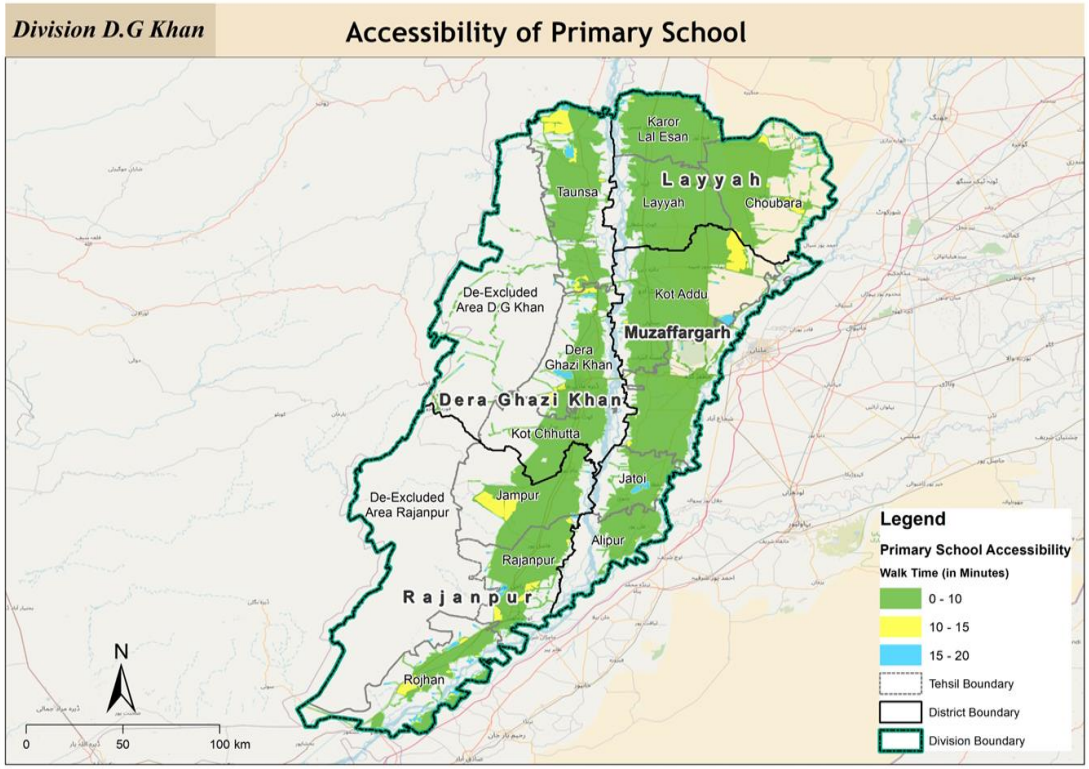
Spatial Analysis: School Accessibility of Primary Schools



Map 2: Accessibility of Primary Schools
Source: The Urban Unit GIS

District	Primary Schools Unserved Population
D.G. Khan	945,902
Layyah	409,999
Muzaffargarh	1,451,401
Rajanpur	611,988
Total	3,419,290

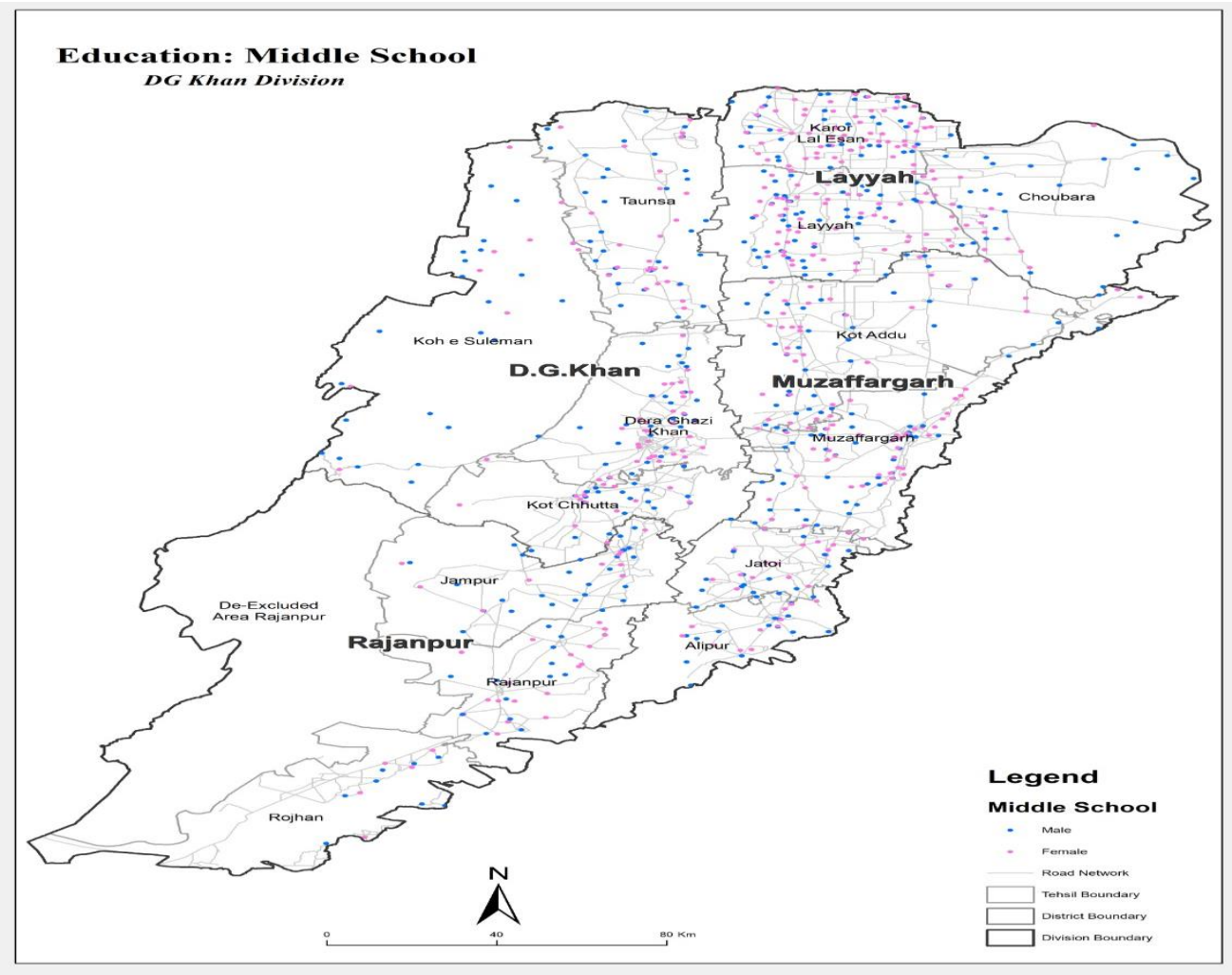
District	Existing Primary Schools
D.G. Khan	1,289
Layyah	1,092
Muzaffargarh	1,379
Rajanpur	783
Total	4,543

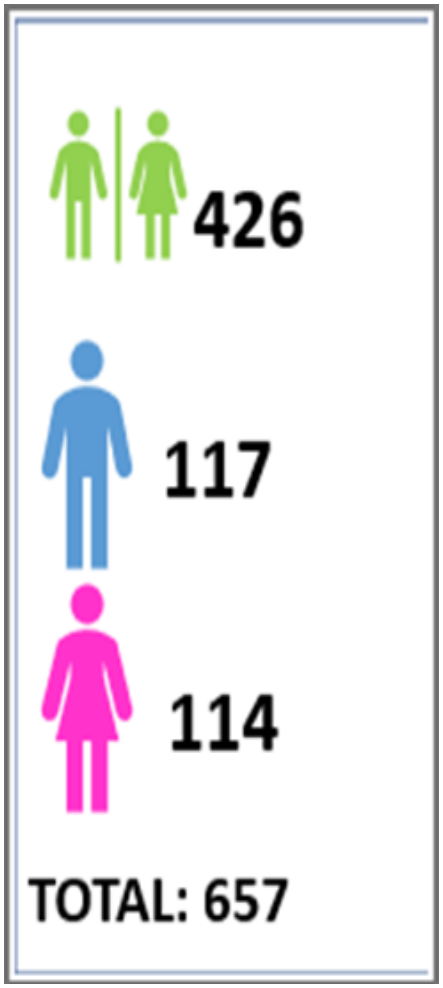
Spatial Analysis of Primary Schools

The overall accessibility of primary schools in D.G. Khan division is unsatisfactory except in district Layyah. Most schools in Rajanpur and D.G. Khan districts are accessible from areas of residence at a walking distance of 10-15 minutes, highlighting moderate accessibility. Tehsil Rojhan, Jatoi, Kot Addu and Taunsa have more schools in distance of 15 to 20 minutes. The unserved population of primary School of Muzaffargarh is higher 145,140,1 than other districts whereas Layyah is doing better at serving the primary school population it's rate of unserved primary school population is lowest 409,999 as compared to other districts. There are only 4,543 existing primary schools in D.G Khan Division, Rajanpur has a smaller number of schools 783 than the other districts.

Middle School

This chart shows the visual representation of male & female middle schools in the D.G Khan Division, the chart shows the number of persons per square kilometer have occupied the space. The data on the right side shows 426 co-schools, 117 schools for boys & 114 schools for girls. In total, there are 657 middle schools available in the D.G Khan Division





Map 3: Spatial Spread of Middle Schools

Source: Urban Unit (GIS)

Table 5: School Statistics of Middle School

District/ Tehsil	Teaching Staff	Female Enrollment	Male Enrollment	Total Students	Female: Male Ratio	Teacher: Student Ratio
D.G Khan	1,560	17,348	25,301	42,649	1:1	1:27
D.G Khan	554	7,394	7,176	14,570	1.0	1:26
Koh-e-Suleman	169	1,284	3,422	4,706	0.4	1:28
Kot Chutta	316	3,161	7,657	10,818	0.4	1:34
Taunsa	521	5,509	7,046	12,555	1:1	1:24
Muzaffargarh	1,999	25,406	29,339	54,745	1:1	1:27
Muzaffargarh	821	25,406	10,551	35,957	2.4	1:44
Ali Pur	265	2,724	3,769	6,493	1:1	1:25
Jatoi	316	3,659	4,982	8,641	1:1	1:27
Kot Adu	597	7,921	10,037	17,958	1:1	1:30
Layyah	1,902	28,958	21,326	50,284	1:1	1:26
Layyah	937	12,259	8,349	20,608	1:1	1:22
Chaubara	258	2,999	4,952	7,951	1:1	1:31
Karor Lalisa	707	13,700	8,025	21,725	2:1	1:31
Rajanpur	799	8,410	15,101	23,511	1:1	1:29
Rajanpur	392	2,068	6,938	9,006	0.3	1:23
Jampur	335	5,075	5,526	10,601	1:1	1:32
Rojhan	72	1,267	2,637	3,904	0.5	1:54

Source: The Urban Unit

Statistical Analysis of Middle Schools

The table presents an analysis of teaching staff, enrolment rates, gender ratios, and teacher-to-student ratios in middle schools of various districts and tehsils. It provides valuable insights into the education system within these areas.

Teaching Staff: These numbers show how available professors are as well as how much one-on-one time pupils might get. We conclude that there is a significant amount of difference between districts and tehsils based on our observation of the teaching staff data. District-wise middle schools in Muzaffargarh have the highest number of teaching staff 1,999 whereas Rajanpur being the less developed district for middle schools has the minimum number of 799 teaching staff available. In tehsils of DG Khan Liyyah tehsil has the highest number of 937 teaching staff available and the lowest number of teachers available is in Rojhan Tehsil only 72.

Female to Male Ratio: These figures demonstrate how different districts' and tehsils' rates of educational engagement vary from each other. Most of the areas have 1:1 that shows equal educational engagement of both male & female except few areas like in Muzaffargarh the female to male ratio is 2:1 means there are 2 females in a class of 4 boys. In Koh-e-Sulaiman, Kot Chutta, Rajanpur, and Rojhan tehsils there are no female enrollments as compared to the 3,4,5 ratio of boys.

Teacher-To-Student Ratio: Lastly, the student-teacher interaction is clarified by the teacher-to-student interaction. Middle schools in Muzaffargarh tehsil should have more teachers because there is one teacher for 44 students in one class. In the case of Rojhan, the situation is even worse there is only one teacher for 54 students. Laiyyah tehsil is doing good in this manner there is one teacher for 22 students which is better than another tehsil.

Table 6: Availability of School Infrastructure & Facilities

Middle School Analysis				
District/Tehsil	Availability of electricity	Availability of boundary wall	Availability of drinking water	Availability of playground
D.G. Khan	98%	96%	98%	71%
D.G. Khan	100%	96%	98%	87%
Koh-e-Suleman	92%	92%	94%	47%
Kot Chutta	100%	97%	100%	53%
Taunsa	100%	98%	100%	82%
Layyah	100%	100%	100%	64%
Chaubara	97%	100%	100%	87%
Karor Lalisa	100%	100%	100%	72%
Layyah	100%	100%	100%	46%
Muzaffargarh	100%	99%	100%	54%
Ali Pur	100%	100%	100%	65%
Jatoi	100%	100%	100%	52%
Kot Adu	100%	98%	100%	66%
Muzaffargarh	100%	100%	100%	43%
Rajanpur	99%	99%	99%	85%
Jampur	97%	97%	97%	84%
Rajanpur	100%	100%	100%	88%
Rojhan	100%	100%	100%	82%

Source: Annual School Census, 2022

Infrastructural Analysis of Middle Schools:

The table provides data on the availability of various amenities in middle schools of D.G Khan division.

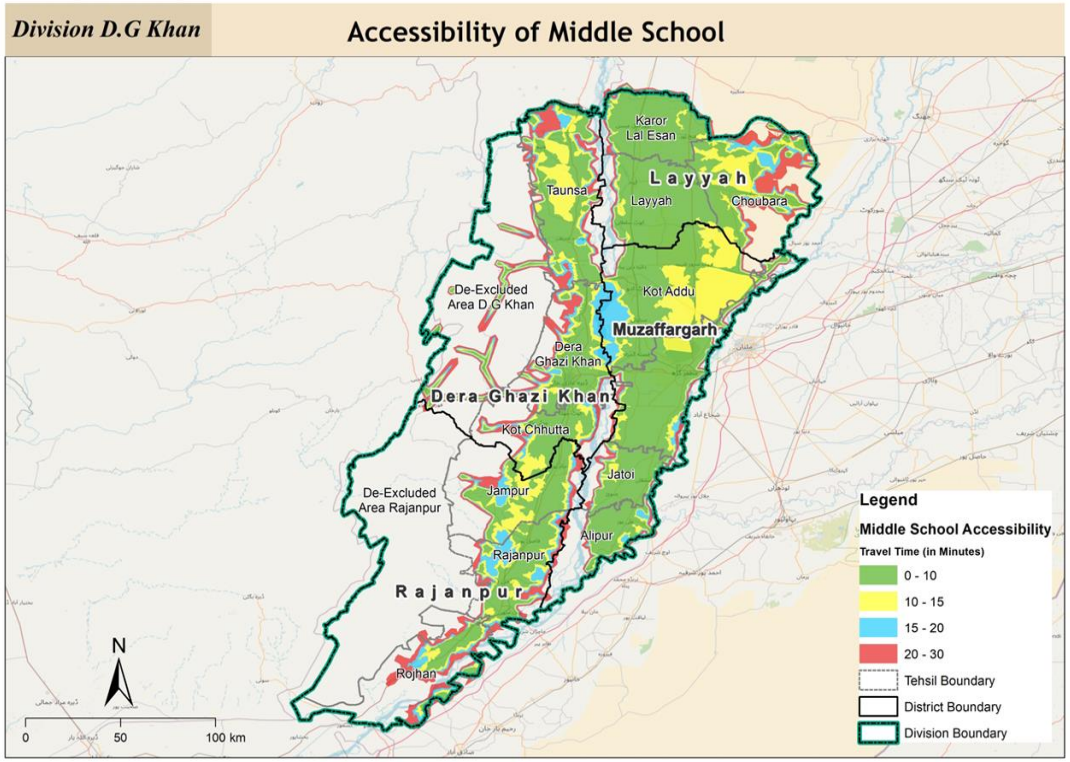
Electricity Availability: Data shows the highest ratio of the availability of electricity in all the districts and tehsil of D.G Khan, which is a positive indicator of reliable power supply to these educational institutions. Most of them have 100% availability of electricity in their middle schools. Koh-e-Sulaiman is only tehsil which provides electricity as low as up to 92% of schools

Boundary Wall Availability: As it can be deduced from the data the availability of boundary walls is also consistently high in the majority of the districts and tehsils except for Koh-e-Suleman only 92% of schools have availability of boundary walls as compared to other tehsils and districts where 96-100% schools have proper boundary walls constructed for their middle schools.

Availability of Drinking Water: When it comes to the availability of drinking water, the majority of middle schools have 100% availability of drinking water. This demonstrates how these educational institutions take good care of and preserve access to clean drinking water, satisfying the basic needs of the kids.

Availability of Playgrounds: There is an obvious demand for playgrounds in the D.G. Khan division, as evidenced by the data for middle schools in this division. Areas highlighted in red colour, Muzaffargarh tehsil, Layyah tehsil, Koh-e-Suleiman tehsil & Muzaffargarh, Jatoi, Kott Chutta, show that the middle schools of these tehsil and districts need more improvements and work to be done for the playgrounds. Overall, these tehsils and districts need to make improvements in this area to assist the kids' extracurricular activities.

Spatial Analysis: School Accessibility of Middle Schools



Map 4: Accessibility of Middle Schools
Source: The Urban Unit (GIS)

District	Middle Schools Unserved Population
D.G. Khan	288,100
Layyah	68,809
Muzaffargarh	321,898
Rajanpur	196,948
Total	875,755

District	Existing Middle Schools
D.G. Khan	169
Layyah	229
Muzaffargarh	184
Rajanpur	75
Total	657

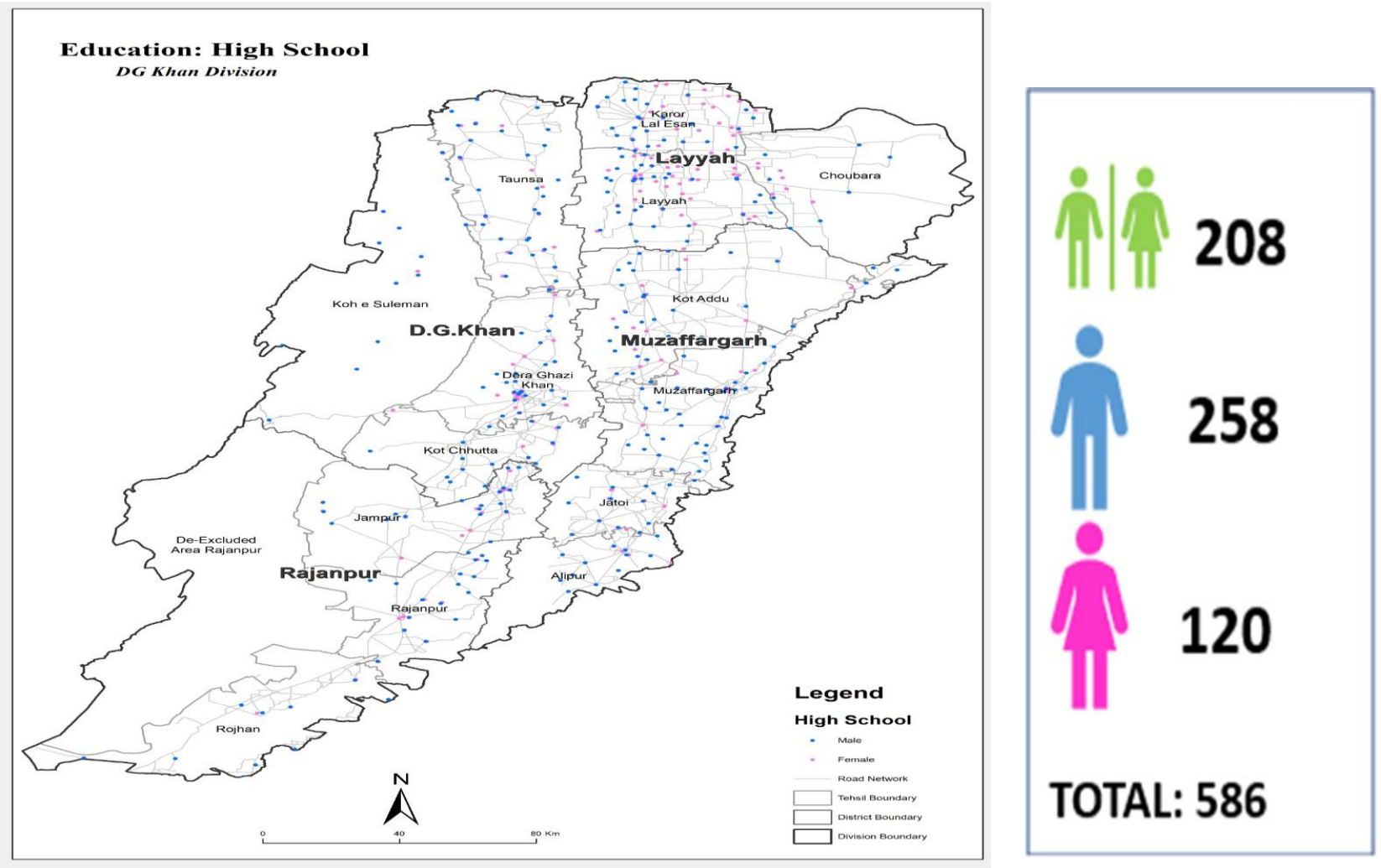
Spatial Analysis of Middle School

The overall accessibility of middle schools in the D.G. Khan division is not satisfactory. The green colour shows that most schools are accessible

from the areas of residence in 10-15 minutes. However, in Districts Rajanpur and D.G. Khan tehsils Rojhan, Jampur, D.G. Khan, Tounsa and Choubara tehsil have accessibility to schools in 20 to 30 minutes shown in red colour on the chart. Which is quite high for female students which becomes a cause to drop the student enrollment ratio in the schools. The data on the right side shows the highest number of populations of middle schools in Muzaffargarh 321,898 remain unserved. Layyah has the highest number of existing middle schools 229 among all the districts. Rajanpur should have more school's establishment to serve their unserved middle school students.

High School

The yellow, grey & red areas in the chart show the number of people per square kilometre who have occupied the space. Data interpretation says that there are 208 co-schools, 258 schools for boys & only 120 schools for girls. So, in total there are 586 High Schools.



Map 5: Spatial Spread of High School

Source: The Urban Unit (GIS)

Table 7: School Statistics of High Schools

District/ Tehsil	Teaching Staff	Female Enrollment	Male Enrollment	Total Students	Female: Male Ratio	Teacher: Student
D.G Khan	**2,346**	**36,571**	**44,605**	**81,176**	**1:7**	**1:35**
D.G Khan	1,066	20,927	18,966	39,893	1:1	1:37
Koh-e-Suleman	130	363	3,639	4,002	0:1	1:31
Kot Chutta	329	5,541	8,428	13,969	1:6	1:42
Taunsa	821	9,740	13,572	23,312	1:6	1:28
Muzaffargarh	**3,424**	**39,021**	**61,037**	**100,058**	**1:5**	**1:29**
Muzaffargarh	1,322	16,150	23,725	39,875	1:6	1:30
Ali Pur	472	3,704	8,623	12,327	0:4	1:26
Jatoi	491	3,859	9,846	13,705	0:4	1:28
Kot Adu	1,139	15,308	18,843	34,151	1:7	1:30
Laiyyah	**2,946**	**50,367**	**47,612**	**97,979**	**1:1**	**1:33**
Laiyyah	1,739	29,727	25,029	54,756	1:2	1:31
Chaubara	240	4,084	4,514	8,598	1:8	1:36
Karor Lalisa	967	16,556	18,069	34,625	1:8	1:36
Rajanpur	**799**	**19,915**	**26,339**	**46,254**	**1:7**	**1:58**
Rajanpur	392	8,589	9,490	18,079	1:8	1:46
Jampur	742	10,624	12,639	23,263	1:7	1:31
Rojhan	118	702	4,210	4,912	0:2	1:42

Source: The Urban Unit (GIS)

Statistical Analysis of High Schools

An examination of the teacher-to-student ratios, enrollment rates, gender ratios, and teaching staff in middle schools across different districts and tehsils is presented in the table. It offers insightful information about the educational system in these regions.

Teaching Staff: Muzaffargarh district is on the top of the list in having the highest number of teachers 3,424 availability for High Schools in the DG Khan division. Koh-e- Suleiman tehsil of D.G Khan should have more teachers in their high schools, currently having the lowest 130.

Female and Male Enrolment: Male enrolment is high in all tehsils/ districts of D.G Khan except Layyah. Women face societal and parental pressure which leads to less engagement in schools or drop-outs only in the case of Layyah have more female enrolments in high school **50,367** than boys **47,612.**

Female and Male Enrolment: The female-to-male ratio fluctuates in high school statistics, D.G khan and Rajanpur district have 1:7 which shows one female student in a class of 7 boys. Layyah shows better results 1:1. Rojhan tehsil of Rajanpur and Koh-e-Sulaiman have 0:2 & 0:1 which shows no female enrolments in the high schools because of societal issues and security threats.

Teacher-To-Student Ratio:

The teacher-to-student ratio explains how many students have one-to-one interaction with their class teachers. Rajanpur districts have a ratio of 58 showing there is one teacher for 58 students which is quite a high number. In this case, teachers cannot focus on all the students equally. Muzaffargarh is doing good in this manner 29 students having one teacher is better than others here the teacher can focus on students individually.

Table 8: Availability of School Infrastructure & Facilities

High School Analysis						
District/Tehsil	Availability of electricity	Availability of boundary wall	Availability of drinking water	Availability of playground	Availability of Science Lab	Availability of Computer Lab
D.G. Khan	98%	99%	97%	63%	56%	82%
D.G. Khan	98%	98%	98%	57%	58%	89%
Koh-e-Suleman	88%	100%	88%	63%	25%	38%
Kot Chutta	100%	96%	100%	65%	57%	91%
Taunsa	100%	100%	98%	67%	62%	85%
Layyah	99%	99%	100%	58%	50%	93%
Chaubara	95%	100%	100%	95%	40%	90%
Karor Lalisa	100%	98%	100%	58%	66%	98%
Layyah	100%	100%	100%	51%	42%	91%
Muzaffargarh	100%	99%	100%	47%	60%	82%
Ali Pur	100%	100%	100%	48%	52%	87%
Jatoi	100%	100%	100%	46%	62%	85%
Kot Adu	100%	98%	100%	46%	57%	75%
Muzaffargarh	100%	100%	100%	47%	63%	85%
Rajanpur	99%	99%	98%	56%	40%	79%
Jampur	100%	97%	100%	49%	36%	79%
Rajanpur	100%	100%	100%	69%	52%	90%
Rojhan	93%	100%	86%	50%	29%	57%

Source: Annual School Census, 2022

Infrastructural Analysis of High Schools

The table provides data on the availability of various amenities in high schools of the D.G Khan division.

Electricity Availability: In terms of electricity availability, all the districts and tehsils exhibit **100%** availability except Koh-e-Suleiman 88% of high schools have power supply.

Boundary Wall Availability: One essential component that guarantees the children's safety is a boundary wall. The chart indicates that a significant number of districts and tehsils consistently have access to border walls for high schools the ratio is 97-100% in the D.G Khan division.

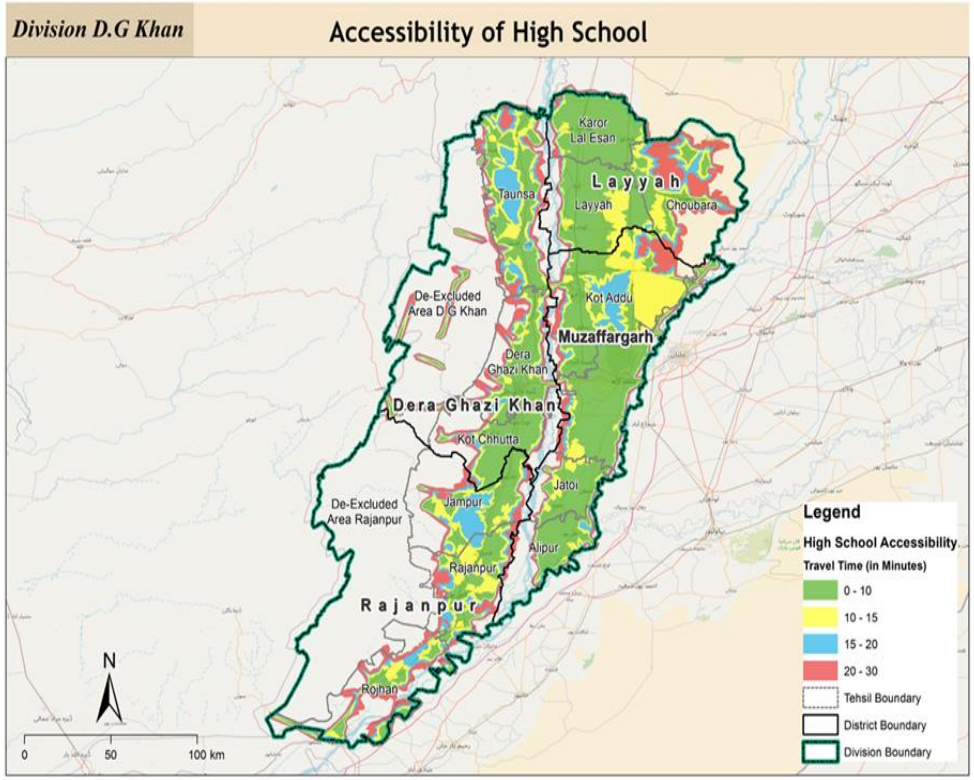
Availability of Drinking Water: Availability of drinking water ranges from **99%-100%** in the high schools of the division, Koh-e Sulaiman & Rojhan Tehsil should have more water filters implications in the high schools for clean drinking water availability. Just like in other tehsil and districts, clean drinking water is well taken care of and is maintained in schools for meeting the essential needs of the students.

Availability of Playgrounds: The table for high schools indicates that the availability of playgrounds in this division varies across different districts and tehsils**.** Red-coloured areas show high alert tehsils and districts where from 46% to 58% of high schools have playground facilities & the availability of playgrounds. These areas should be focused on more students' engagement in recreational activities in their schools.

Availability of Science Labs: Science laboratories give students a variety of chances to explore and participate in their education. All the districts and tehsils of the D.G Khan division show varying trends when it comes to this aspect, The condition of availability of science labs for high schools in the D.G Khan division is not satisfactory majority of the areas are in the red zones Koh-e-Sulaiman has 25%, Rojhan 29% science labs in their all-high schools, which is the lowest ratio of availability for their total schools.

Availability of Computer Labs: The availability of computer laboratories in classrooms guarantees that kids may acquire new skills and become digitally literate. Koh-e Sulaiman 38%, & Rojhan 57% are the lowest among all other districts and tehsils. They should have more computer labs and educate their students about the digital world, which is equally important. The availability of computer labs in the rest of districts and tehsils lie between these 81% to 91% which is quite satisfactory condition

Spatial Analysis: School Accessibility of High Schools



Map 6: Accessibility of High Schools
Source: Urban Unit (GIS)

District	Middle Schools Unserved Population
D.G. Khan	288,100
Layyah	68,809
Muzaffargarh	321,898
Rajanpur	196,948
Total	875,755

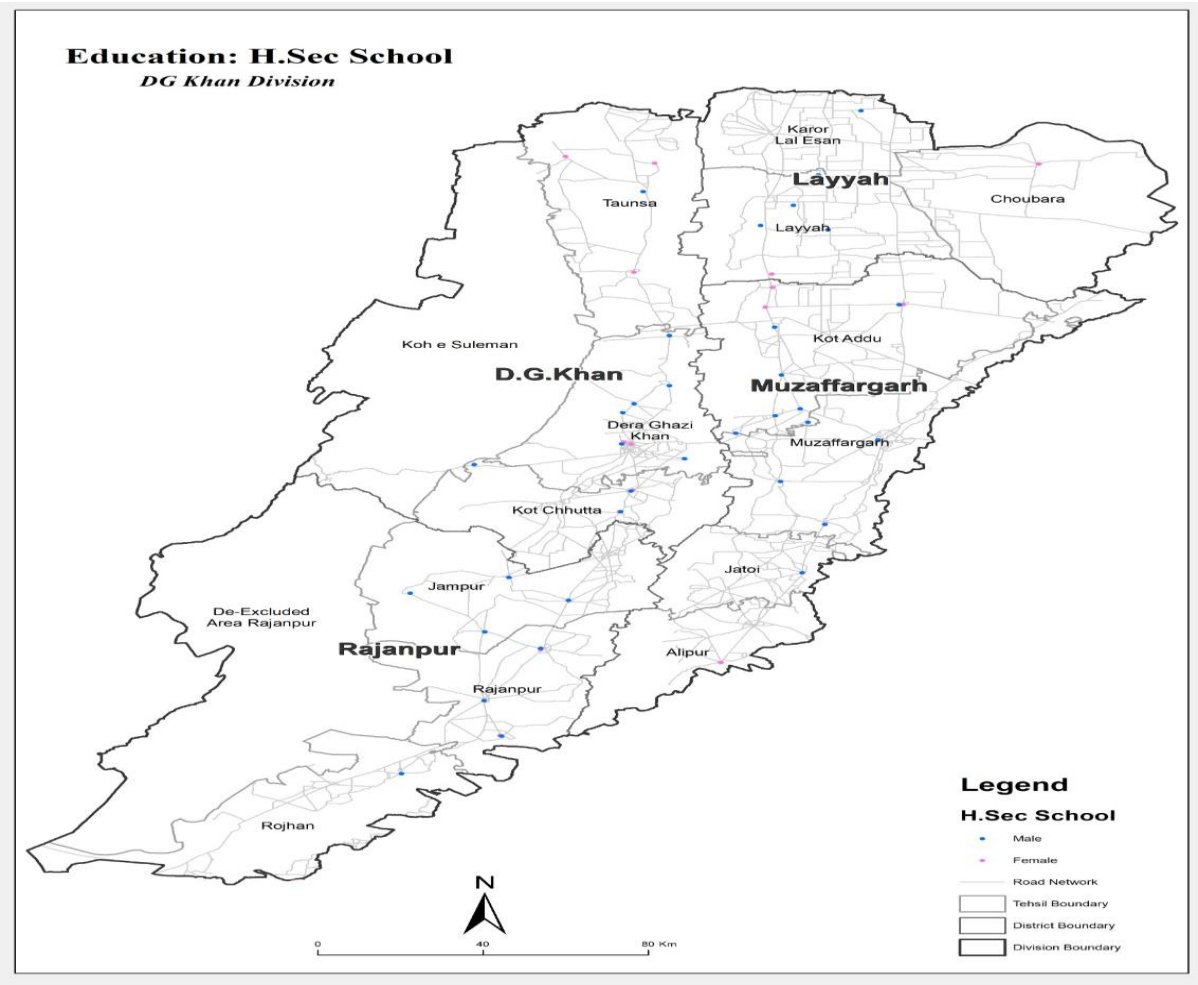
District	Existing Middle Schools
D.G. Khan	169
Layyah	229
Muzaffargarh	184
Rajanpur	75
Total	657

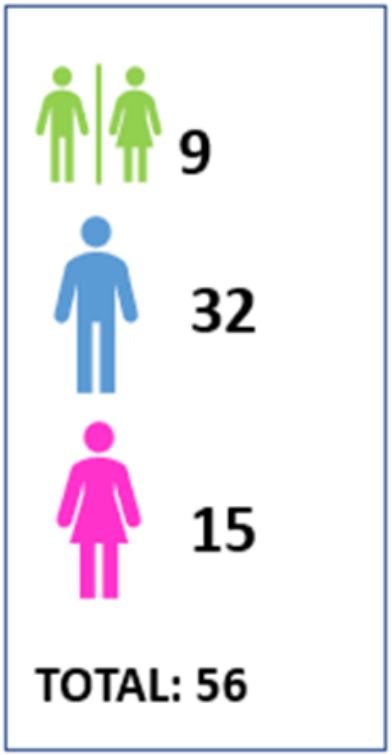
Spatial Analysis of High Schools

The overall accessibility of high schools in D.G. Khan division varies from district to district. In Layyah district, Tehsil Chubara, schools' accessibility is as low as 20 to 30 minutes. In Muzaffargarh tehsil, Kot Addu & Jampur tehsil of Rajanpur, and Taunsa Tehsil of D.G Khan students' accessibility to their high schools is about 15 to 20 minutes. Data shows a clear picture of existing schools and the unserved population of high schools in the D.G Khan Division. Rajanpur district, being the most tribal and underdeveloped, has only 82 existing schools where 164,909 population of high schools remain unserved. Layyah is doing good at their educational needs via having the highest number of existing high schools 182 where their unserved population of high schools is also less than all other districts of D.G Khan division. Muzaffargarh should focus on the establishment of more schools to serve their highest number of unserved populations.

Higher Secondary School

This chart shows the higher secondary schools' spatial spread in D.G Khan division which has four districts D.G Khan, Layyah, Muzaffargarh & Rajanpur. Data gives clear picture where 9 Co-schools, 32 blue schools, 15 girls schools and in total there are 56 higher secondary schools in D.G Khan Division





Map 7: Spatial Spread of Higher Secondary Schools
Source: The Urban Unit (GIS)

Table 9: School Statistics of Higher Secondary Schools

District/ Tehsil	Teaching Staff	Female Enrollment	Male Enrollment	Total Students	Female: Male Ratio	Teacher: Student
D.G Khan	509	**13,149**	10,727	23,876	1:2	1:47
D.G Khan	226	3,759	4,187	7,946	1:8	1:35
Koh-e-Suleman		-	-	-	0:0	0
Kot Chutta	171	3,990	5,771	9,761	1:6	1:57
Taunsa	112	5,400	769	6,169	7:0	1:55
Muzaffargarh	498	5,904	11,013	16,917	1:4	1:34
Muzaffargarh	143	1,528	3,304	4,832	1:4	1:34
Ali Pur	24	584		584	0:0	1:24
Jatoi	40		1,220	1,220	0:0	1:31
Kot Adu	291	3,792	6,489	10,281	1:5	1:35
Laiyyah	298	3,881	7,333	11,214	1:4	1:38
Laiyyah	225	2,239	6,364	8,603	0:4	1:38
Chaubara	16	848	-	848	0.0	1:53
Karor Lalisa	57	794	969	1,763	1:7	1:31
Rajanpur	357	5,069	12,545	17,614	0:4	1:49
Rajanpur	197	3,206	6,277	9,483	1:4	1:48
Jampur	1,358	1,039	4,839	5,878	0:2	1:4
Rojhan	397	824	1,429	2,253	1:5	1;6

Source: Urban Unit (GIS)

Statistical Analysis of Higher Secondary Schools

The table provides information regarding teaching staff members, female enrollment, male enrolment, female-to-male ratios, and teacher-to-student ratios in primary schools of D.G Khan division.

Teaching Staff: These figures represent the number of educators available in each district or tehsils. The teaching staff number is **500** in D.G Khan districts. Rajanpur district has the lowest number of 357 teachers available. Chaubara & Jatoi has the **lowest** number of teachers' 16 &40 availability. In the list of Tehsil. Jampur tehsil of Rojhan has the highest number of teachers available for higher secondary schools 1358.

Female and Male Enrolment: These data show the male and female educational participation in the division of D.G Khan including all the districts. The number of female enrollments is higher **13,149** than the male enrollment **10,727** in D.G Khan district. In all other districts, the male enrolment is higher than females.

Female-To-Male Ratio: This reflects the gender balance within the student. Except for Taunsa, Tehsil of D.G Khan, male enrolments are greater than the females Taunsa shows statistics 7:1 which means there are 7 females in a class of 1 male student. In Jampur tehsil of Rajanpur no female in class of 2 boys.

Teacher-To-Student Ratio: This gives a clear picture of how many students get personalized attention from their teacher. A lower ratio indicates a higher level of individual attention, while a higher ratio may suggest a greater workload for teachers and potentially less individualized attention for students.

In Kot Chutta tehsil of D: G Khan district, the teacher-student ratio is higher. That means there is only one teacher for 57 students. Teachers have more pressure and are unable to focus on each student. Teachers have less pressure in Jampur & Rojhan Schools because one teacher teaches only 4 & 6 students only. This is also not a satisfactory result more students should benefit from the availability of a teacher.

Table 10: Availability of School Infrastructure & Facilities

H.Sec. School Analysis						
District/Tehsil	Availability of electricity	Availability of boundary wall	Availability of drinking water	Availability of playground	Availability of Science Lab	Availability of Computer Lab
D.G. Khan	100%	100%	100%	71%	82%	100%
D.G. Khan	100%	100%	100%	75%	75%	100%
Koh-e-Suleman	100%	100%	100%	%	%	%
Kot Chutta	100%	100%	100%	40%	80%	100%
Taunsa	100%	100%	100%	100%	100%	100%
Layyah	100%	100%	100%	80%	100%	100%
Chaubara	100%	100%	100%	100%	50%	100%
Karor Lalisa	100%	100%	100%	100%	86%	100%
Layyah	100%	100%	100%	71%	100%	100%
Muzaffargarh	100%	100%	100%	63%	100%	100%
Ali Pur	100%	100%	100%	%	100%	100%
Jatoi	100%	100%	100%	100%	100%	100%
Kot Adu	100%	100%	100%	70%	100%	100%
Muzaffargarh	100%	92%	92%	50%	85%	100%
Rajanpur	100%	100%	100%	85%	80%	85%
Jampur	100%	80%	80%	60%	100%	80%
Rajanpur	100%	100%	100%	100%	67%	100%
Rojhan	100%	100%	100%	100%	29%	67%

Source: Annual School Census, 2022

Infrastructural Analysis of Higher Secondary Schools

The table provides data on the availability of various amenities in higher secondary schools of D.G Khan division.

Electricity Availability: Based on the given facts, we can deduce that there is 100% availability of energy in all districts and tehsils.

Boundary Wall Availability: Students' privacy and safety may be at risk if there is no boundary wall. Only in Muzaffargarh & Jampur tehsil with data of 92%-80% of their higher secondary schools have boundary walls the rest of all districts with their tehsils have higher secondary schools with 100% availability of boundary walls.

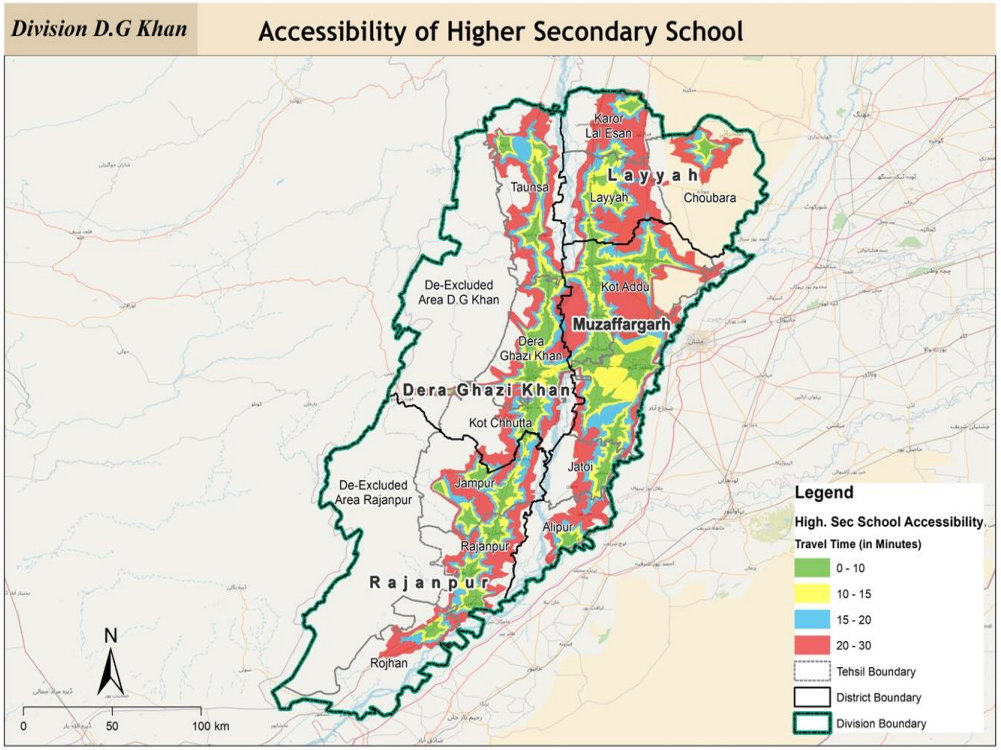
Availability of Drinking Water: Clean drinking water availability in higher secondary schools is ensured in all districts of D.G Khan division data results are satisfactory except Jampur.

Availability of Playgrounds: When we analyze the playground availability data, it is evident that there are differences in this aspect between all the districts and tehsils. Muzaffargarh & Kot Chutta tehsil have the lowest number of available playgrounds. 50% & 40%.

Availability of Science Labs: Science labs are a crucial aspect of the learning experience. Most of the higher secondary schools have 100% availability of science labs whereas the lowest number of science labs available is in Rojhan 29%, Chaubara 50%.

Availability of Computer Labs: The availability of computer labs at higher secondary schools shows a positive trend across all districts and tehsils. Where most districts and tehsils have **100%** availability of computer labs. The availability of computer labs allows students to hone their skills

Spatial Analysis: School Accessibility of Higher Secondary Schools



Map 8: Accessibility of Higher Secondary Schools
Source: The Urban Unit (GIS)

District	Higher Secondary Schools Unserved Population
D.G. Khan	578,868
Layyah	548,441
Muzaffargarh	732,770
Rajanpur	451,245
Total	2,311,324

District	Existing Higher Secondary Schools
D.G. Khan	17
Layyah	10
Muzaffargarh	16
Rajanpur	13
Total	56

Spatial Analysis of Higher Secondary Schools

The overall accessibility of higher secondary schools in D.G. Khan division is very poor. Except for tehsil Layyah, all district's accessibility is low as these schools are accessible at a drive time of 20-30 minutes for almost all tehsils of the division. Muzaffargarh has the highest number of unserved populations of higher secondary schools 732,770 and Layyah has the lowest number of existing higher secondary schools. The unserved population of all districts is high which indicates that new higher secondary schools are required in all districts to solve the accessibility and unserved population issue.

Key Performance Indicators

Digital Inclusion: Digital inclusion refers to the actions that are necessary to guarantee that everyone has access to and can make use of information and communication technologies (ICTs). There are three primary components to digital inclusion

Internet Access: The capacity of people and organizations to link to the internet and use its resources, services, and information is referred to as internet access. There are several ways to begin this by using broadband, wireless, satellite and mobile networks. Users can do a lot of different things with internet access: they can browse websites, send emails, utilize social media, stream media, and make online purchases. Geographical location, amenities and socioeconomic considerations may all have a substantial impact on the quality, speed, and accessibility of internet connection.

Digital Devices: The devices that manage, keep, and transmit data digitally are referred to as digital gadgets. Desktops, Laptops, tablets, smartphones, E-readers etc are digital devices. With features that cover everything from work and health monitoring to communication and entertainment, digital gadgets are an essential part of contemporary life. They allow information to be shared and accessed internationally by connecting to the web and other networks.

Digital Literacy: The term "digital literacy" describes the capacity to locate, assess, produce, and share information using digital technology effectively and efficiently. It includes a variety of abilities required for people to properly engage in the world of technology. Among the essential elements of digital literacy are technical skills, information literacy, communication skills, media literacy, problem-solving skills etc.

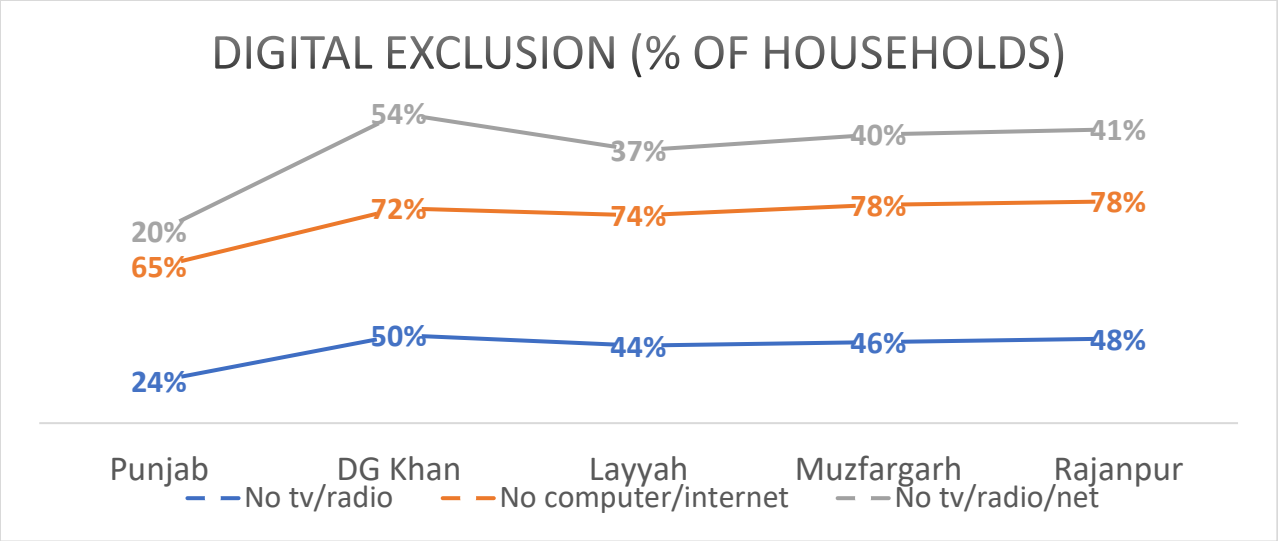


Figure 2: Digital Exclusion
Source : MICS 2022

This chart shows the data trends of digital exclusion, which means lack of access to TV/ radio, computers/ internet, in the household of DG Khan, Layyah, Muzaffargarh, and Rajanpur districts and their comparison with Punjab.

- In Punjab, 65% of households do not have a computer. Whereas in Rajanpur & Muzaffargarh, Layyah & DG khan 72%-78% of households have no computers and internet, which is quite a high number.
- 24% of households in Punjab have no radio or TV this ratio is highest in DG Khan 50%. 44% to 48% of households in Layyah, Rajanpur, and Muzaffargarh have no TV/radio.
- 54% of households of DG Khan district do not have anything digital, tv/ radio/ net. This ratio is the highest in DG Khan. 37% to 41% of households in Layyah, Muzaffargarh & Rajanpur also have no availability of resources to connect to the digital world. Punjab is doing better in this manner, only 20% of households need access to radio/TV/internet.

Foundational Learning Skills

Learning outcomes are important identifiers of a high-quality education because they show whether students are leaving school with the fundamental skills they need to succeed. The reading and numeracy learning objectives for Grades 2 and 3 may be assessed using the MICS module on fundamental learning skills (FL)21 in the questionnaire for kids ages 5 to 17. The capacity to comprehend and manipulate numbers is referred to as numeracy. It includes a variety of abilities such as fundamental arithmetic (addition, subtraction, multiplication, and division) and the capacity to use mathematical ideas to solve problems in practical settings. Rajanpur, being the most underprivileged, has the highest share of children 97% without the foundational skills of numeracy & 81% share of students without reading skills which is quite high as compared to other districts of DG Khan. Between 57-81% of children are without foundational reading skills in the DG Khan division.

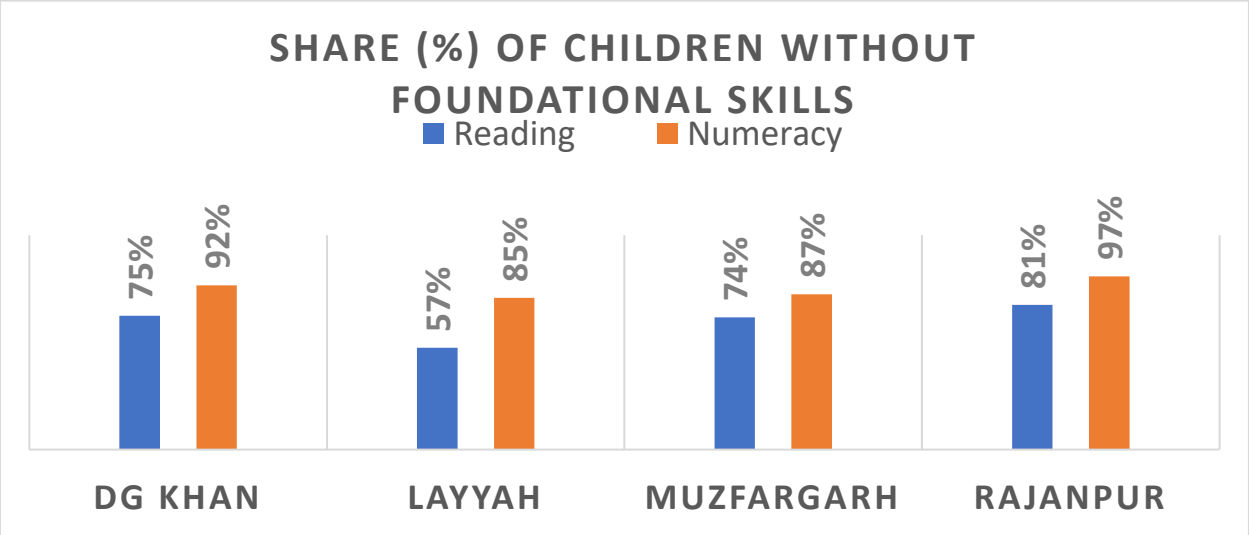


Figure 3 Foundational learning skills
Source: MICS 2022

Out of School Children

Children and adolescents who are within the designated age range for a certain educational level but are not enrolled in pre-primary, primary, secondary, or post-secondary education are considered out-of-school children. The out-of-school children rate aims to determine the portion of the population within the required age range for a certain level of education that is not attending school.

The highest %age of out of school children is in higher secondary school, in all the four districts ranging from 58% to 69%. Out-of-school children increase from primary to Higher Secondary. OOSC rate is high in middle to higher secondary schools reached 18% to 69%. The highest share is in Rajanpur & Muzaffargarh

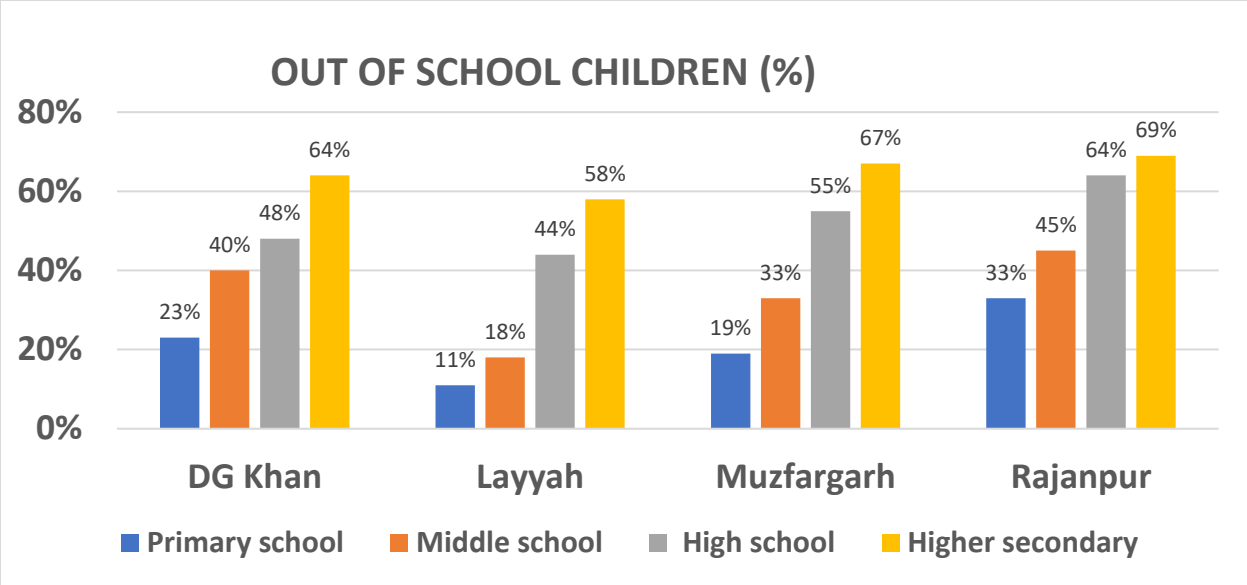


Figure 4 Out of school children
Source: MICS 2022

Repetition, Drop-out & Non-Transition Rate

The table below shows the repetition, dropout and non-transition rates for each district of the D.G Khan division.

Table 11: Repetition, Dropout, Non-Transition Rate

District	Repetition Rate	Drop-out Rate	Non-Transition Rate
DG Khan	3%	3%	2%
Layyah	3%	3%	2%
Muzaffargarh	3%	3%	3%
Rajanpur	6%	6%	2%

Source: MICS 2022

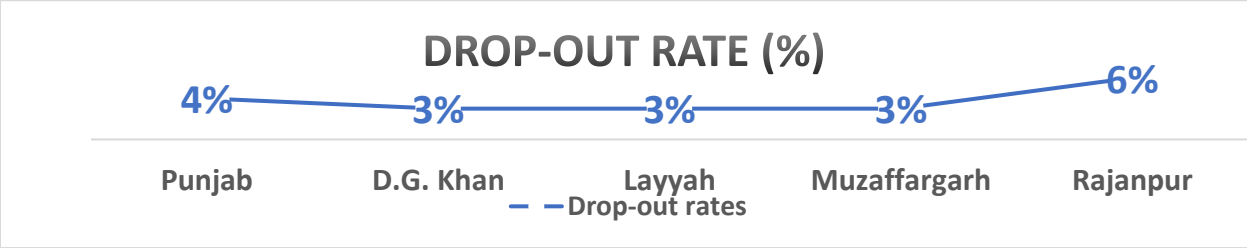


Figure 5: Drop-Out Rate
Source: MICS 2022

The percentage of students from a cohort enrolled in a certain grade during a school year who do not return the following year is known as the dropout rate. It is important to note that students who repeat classes are still counted as enrolled in school and are not factored into the dropout rate calculation. Drop-out rate the is highest in Rajanpur which is 6% higher than Punjab. Other districts are 3% respectively.

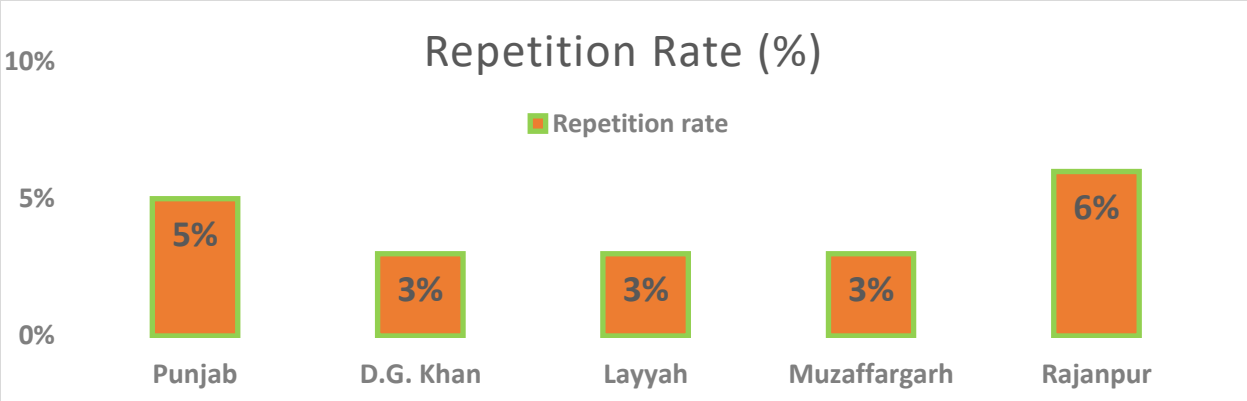


Figure 6: Repetition Rate
Source: MICS 2022

As a percentage of all students who attended the grade the year before, the repetition rate is the proportion of students in a certain grade that repeated that grade in that school year. This indicator is calculated using data on the child's grade attended in the prior and current school years, supplied by the head of the family. Repetition rates an average of 3%. And is highest in Rajanpur 6% higher than Punjab.

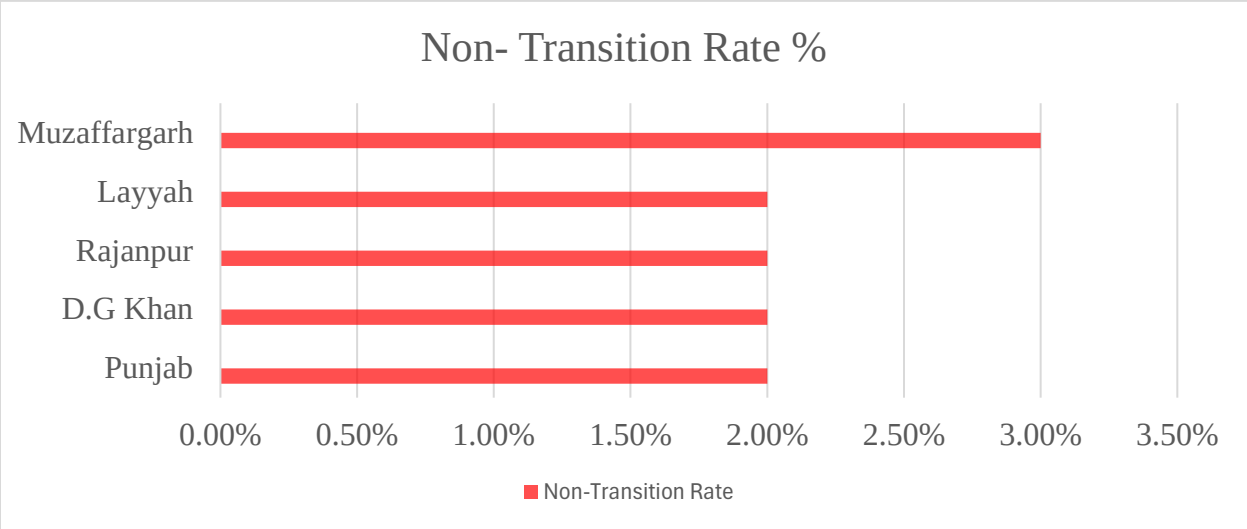


Figure 7: Non-Transition Rate
Source : MICS 2022

Children who completed the final grade of a level but did not advance to the next level of school are referred to as non-transitioners.

The non-transition rate is highest in Muzaffargarh, which is 3%. The remaining is 2% in districts and Punjab.

Table 12: Tehsil Wise Indicators

Tehsil	Teacher Presence	Student Retention	Boundary Wall	Drinking Water	Furniture	Sufficiency of Toilets	School Hygiene
D.G Khan	**90.6%**	**92.13%**	**99.32%**	**100%**	**89.73%**	**71.23%**	**92.57%**
Koh-e-Suleman	**92.9%**	**93.3%**	**97.38%**	**93.72%**	**95.81%**	**81.15%**	**88.95**
Kot Chutta	**89.7%**	**90.44%**	**98.96%**	**100%**	**91.71%**	**86.01%**	**81.5%**
Taunsa	**92.8%**	**92.26%**	**99.27%**	**89.38%**	**90.11%**	**66.3%**	**87.69%**
Muzaffargarh	**90.3%**	**93.43%**	**99.2%**	**98.41%**	**92.83%**	**90.44%**	
Kot Adu	**91.1%**	**91.51%**	**99.7%**	**98.82%**	**84.32%**	**82.54%**	
Jatoi	**91.3%**	**95.2%**	**100%**	**99.41%**	**86.39%**	**86.39%**	
Ali Pur	**93.5%**	**92.06%**	**99.34%**	**100%**	**86.75%**	**90.73%**	
Layyah	**89.9%**	**95.62%**	**98.79%**	**99.52%**	**86.92%**	**92.25%**	**83.2%**
Karor Lalisa	**89.2%**	**96.14%**	**98.76%**	**99.69%**	**84.83%**	**86.38%**	**81.7%**
Chaubara	**90.9%**	**94.26%**	**97.86%**	**100%**	**81.28%**	**84.49%**	**78.82%**
Rajanpur	**85.5%**	**94.27%**	**100%**	**100%**	**93.89%**	**74.81%**	**99.47%**
Jampur	**82.5%**	**92.31%**	**99.14%**	**100%**	**96.55%**	**81.9%**	**94.74**
Rojhan	**86.3%**	**90.9%**	**100%**	**100%**	**100%**	**78.13%**	**90.3%**

Source: PMIU Monthly Indicator

Statistical Analysis:

The table gives details on several aspects of the educational infrastructure in the various D.G. Khan division tehsils (sub-districts). The presence of teachers, student retention, boundary walls, furnishings, the availability of drinking water, the number of bathrooms, and school hygiene are all included in the study. All things considered, many tehsils in the area show excellent levels of teacher attendance, student retention, and the existence of furniture, a boundary wall, and drinking water in classrooms. Nonetheless, there exist certain disparities amongst tehsils concerning the adequacy of restrooms and school sanitation.

Teacher Presence: Every tehsil has a comparatively high number of teachers present—between 82.5% and 92.8%. This suggests that there are enough instructors to successfully educate in many these tehsils' schools.

Student Retention: Different tehsils have varying student retention rates, ranging from 90% to 95%. Those tehsils with most of their percentages closer to 100% demonstrate that efforts are being taken to guarantee that students complete their education without dropping out.

Presence of Boundary Walls: The presence of boundary walls ranges from in tehsils closest to 100%, this parameter is crucial for the safety and security of students within the school premises.

Availability of Drinking Water: The availability of drinking water is rated highly in many tehsils, with percentages ranging from 89%% to 100%. This suggests that all the area's schools provide students with access to safe drinking water.

Availability of Furniture: The availability of furniture in schools ranges from 81.28% to 100%, which is typically good. This implies that classroom seating choices are appropriate for kids. Karoor Lalisa & Chaubara should have better furniture facilities for students.

Sufficiency of Toilets: There are differences in the percentages of toilets that are sufficient amongst tehsils, ranging from 66.67% to 100%. To make sure there are enough restrooms for the kids, some tehsils could need extra care. There are differences in school hygiene as well; figures range from 60% to 90%. It is important to enhance cleanliness standards in certain tehsils since they are critical to preserving a hygienic learning environment.

Stakeholder Consultation and On-ground Analysis

In August 2023, the Urban Unit's Education sector team made council visits to the districts of D.G. Khan, Muzaffargarh, Layyah, and Rajanpur to gain a better understanding of the state of the education sector in the D.G. Khan division, several field tours, stakeholder discussions, and meetings with district education leaders were undertaken during this visit.

Meeting with CEO D.G. Khan

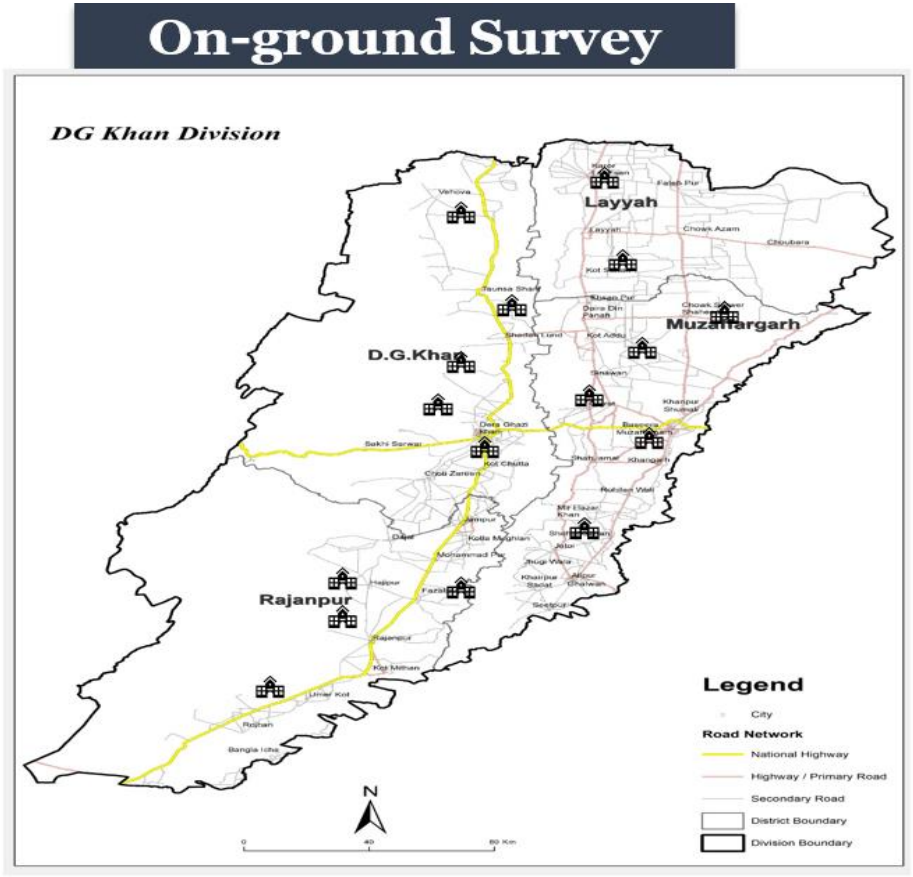
Meeting with CEO Layyah

Meeting with CEO Rajanpur

Meeting with CEO Muzaffargarh

School visit & with principal of primary School Dajall

School visit & Meeting with principal of Elementary School Hafiznagar



Challenges & Recommendations

Seasonal migration: Poses serious issues for the underdeveloped and heavily populated tribal territory of Koh-e-Sulaiman tehsil in DG Khan . In the winter, people relocate from the highlands to the lowlands, which results in a dropout rate and vacant schools. Over time, this movement causes the infrastructure The government need to establish mobile schools to address these problems. These educational institutions may accompany relocating populations, guaranteeing that learners and instructors participate in the learning process all year round. Mobile schools would alleviate the negative consequences of migration on school attendance and infrastructure, assisting in preserving continuity in education despite seasonal moves.

Security Issues: The existence of life risks and social constraints is one of the main factors for poor school attendance rates in DG Khan's and Rajanpur tribal areas. Parents in these areas are discouraged from taking their kids to school due to cultural norms and serious security concerns. Parents prioritize their children's safety over their education. Robbery of schools' infrastructure, computers & lab accessories, is also a major concern. Tehsil Rojhan of district Rajanpur and Koh-e-Sulaiman range of District D.G. Khan are the tribal areas they have no go area in which schools are affected most because of kidnapping & security issues. No teachers and students prefer to go to those schools. These security issues should be resolved.

Flood Affected Schools: Numerous schools have had significant structural damage from floods, making it hazardous for children to attend & use schools. Not much has been done to repair these schools, even though they desperately need to be restored. In response, UNICEF started the Temporary Learning Centre (TLC) project to help schools damaged by flooding right away. This program did not offer a long-term solution, but it did give students with short-term relief and the ability to complete their study. In Tehsil of Taunsa, most school are an example of a flood-affected school which got better over time. There are still many unfinished projects and ongoing restoration projects, which means that many schools are in poor condition and that children do not have a secure place to learn. There are about 47 shelters less schools in district D.G. Khan and Rajanpur. To guarantee the security and continuation of instruction for all impacted students, thorough repair and rehabilitation are necessary.

Poor School Access: The lack or no proper transportation makes it difficult for students to get to school. This restricted access to school exacerbates already existing educational inequalities by influencing student attendance and enrolment rates, which in turn affects how well students learn. Muzaffargarh has the highest number of unserved populations of higher secondary schools 732,770 and Layyah has the lowest number of existing higher secondary schools. Rajanpur district, being the most tribal and underdeveloped, has only 82 existing schools where 164,909 population of high schools remain unserved because of poor access to schools.

Shortage of Teachers: No recruitment of new teachers from the last 5 years in overall Punjab province, Lower enrolment rates and poorer educational outcomes can result from a teacher shortage, which may also deter parents from sending their kids to schools. There are large number of single-teacher schools in district Rajanpur, D.G. Khan, and Layyah that showed a lack of the availability of teachers which may not be enough to provide a quality education for all the students. Ali Pur, Jatoi & Chaubara, Jampur, Rojhan, Karor Lalisa and Kot Chutta tehsils have a shortage of teachers in their schools. The government should recruit new teachers for single-teacher schools, and provide facilities and living allowances for teachers to encourage them to join.

Land Encroachment Issues: One of the main issues is encroachment on school property, which limits the amount of land that can be used to build new educational buildings. As a result of this problem, students have less resources and packed classrooms. Furthermore, a lot of schools deal with ownership conflicts since local people frequently assert their ownership of school property. The difficulties the local school system faces are exacerbated by these land-related concerns, which prevent the development and enhancement of educational facilities.

Infrastructure Degradation: Schools may become less appealing to parents and students due to deteriorated infrastructure, inadequate amenities, and dirty surroundings. There are not enough desks and chairs for all the students in many schools. This can make it uncomfortable for students to learn. There are 47 shelters and fewer schools with a single teacher, excessive shortage of rooms, 633 classrooms are in a dangerous condition and have open-air sections & insufficient furniture. Government should focus on the development and maintenance of schools.

Insufficient Furniture: The comfort and focus of students during class are greatly impacted by the inadequate furnishings in schools. Students are frequently compelled to share resources or sit on the floor when basic furniture like seats and desks is absent, which can be uncomfortable and distracting. Students find it challenging to concentrate on their studies in this unpleasant learning environment, which restricts learning. In 2022, 20 schools were selected for upgradation but infrastructure facilities availability in those schools are still pending.

Improper Sewerage Maintenance: An unclean atmosphere can be caused by inadequate maintenance of sewage systems in schools, which can have a damaging impact on hygiene and the general health of the children. Students may find their surroundings unwelcoming and dangerous due to unpleasant smells, an increase in bugs, and the spread of diseases caused by poor sewage conditions. Because of this circumstance, parents may be reluctant to register their kids in these kinds of schools out of concern for their health and welfare. As a result, poor sewerage maintenance may result in decreased enrollment rates

as parents look for safer and more hygienic learning settings for their kids. To maintain a positive and inviting learning environment that promotes student attendance and enrollment, this issue must be resolved.

Missing IT & Science labs: The educational experience of students is greatly impacted in many secondary schools by the lack of basic amenities like science laboratories and IT. Students lose out on important possibilities for experiential learning and exposure to scientific and technical breakthroughs when these laboratories are unavailable to them. To develop critical thinking abilities and comprehend difficult topics, practical learning is essential.

Conclusion: To address these problems, focused efforts and financial expenditures would be needed to improve infrastructure, facilitate access to resources and facilities, recruit and educate more teachers and guarantee that all students of DG Khan and Rajanpur receive a high-quality education.

Recommended Interventions

RECOMMENDED INTERVENTIONS FOR THE EDUCATION SECTOR (RS. 28.974 BILLION)	
TYPE	**INTERVENTION**
Upgradation of IT labs	**Upgradation of IT facilities across the division would lead to better learning opportunities for students in high and higher secondary schools** ***21 Facilities, Rs. 48 Million***
Reconstruction of dangerous school buildings	**Rehabilitation of school infrastructure affected by monsoon floods '2022 all districts** ***643 Facilities, Rs. 5437 Million***
Provision of Missing Facilities	**Missing facilities (boundary wall, drinking water, playground, furniture) are necessary to secure the safety of schools and govt property** ***2301 Facilities, Rs. 16,616 Million***
Upgradation of Schools Middle to High level	**Reconstruction of buildings blocks to vertical mode** ***66 Facilities, Rs. 975 Million***
Reconstruction of Multipurpose hall	**Hall required for school activities** ***9 Facilities, Rs. 400 Million***
Construction of Shelter Less Schools	**Schools without permanent buildings** ***47 Facilities , Rs. 778 Million***
Education Complex	**Provision for construction of education complex at office of chief executive officer district education authority, Muzaffargarh** ***1 Facilities, Rs.200 Million***

RECOMMENDED INTERVENTIONS FOR THE EDUCATION SECTOR

TYPE	INTERVENTION
Establishment of New School	Government elementary school, EMIS # 3120068 *1 Facility, Rs. 40 Million*
Construction of Additional Classrooms	Additional Classrooms required *1,076 Facilities, Rs. 4,304 Million*
Solarization For High And Higher Secondary Schools	A dire need of solarization required in high and higher secondary schools in all districts *One unit of 5 KV , Rs. 1 Million*
Hiring in Class 4 Required	Human recourse required in whole division for security of schools
Furniture Required	Furniture required in schools *672 Facilities, Rs. 111 Million*
Carvan School Program	Launch of Carvan schools in the tribal and hilly areas *30 Facilities Rs. 30 Million*
Mid day meal scheme	Provide mid day meal to the students & teacher at primary level (tribal areas) *Rs. 30 Million*

Proposed Plan for the Education Sector

This is a list of the projects that have been proposed for the education sector; they are focused on enhancing the quality and accessibility of education in public schools. Additionally, they seek to address systemic problems such as a high percentage of children who are not in school and low rates of completion and transition at the secondary level. Most of the projects focus on renovating and upgrading existing infrastructure, hiring enough teachers, and integrating technology into the classroom to create inclusive and conducive learning

PROJECT DETAILS				
Short Term Projects				
Sr. no	**Proposed Intervention**	**Facilities**	**Location**	**Estimated Cost (Million PKR)**
1	**Furniture Required (Desk & Bench).**	672	Layyah	**111**
2	**Provision Of Missing Facilities in Schools (Boundary Wall, Drinking Water, Electricity, Toilet Blocks, Playgrounds, Furniture Etc.).**	939	D.G. Khan	**12450**
		12	Muzaffargarh	**23**
		20	Layyah	**816**
		1330	Rajanpur	**3327**
3	**Re-Construction of Dangerous Schools Buildings in District.**	223	D.G. Khan	**2637**
		88	Muzaffargarh	**352**
		13	Rajanpur	**52**
		309	Layyah	**2400**
4	**Upgradation Of Schools Middle Level to High Level.**	38 Schemes	D.G. Khan	**395**
		28 Schemes	Muzaffargarh	**580**
Medium Term Projects				

1	**Construction of Additional Classrooms in Schools.**	419 Classrooms	D.G. Khan	**1676**
		646 Classrooms	Muzaffargarh	**2584**
		11 Classrooms	Rajanpur	**44**
2	**Mid-Day Meal Scheme.**	Provide mid-day meal to the students & teacher at primary level (tribal areas)	D.G Khan	**10**
			Rajanpur	**10**
			Muzaffargarh	**10**
3	**Construction Of Multi-Purpose Halls.**	5 Schools	Muzaffargarh	**250**
		4 Schools	D.G Khan	**150**

Long Term Projects				
1	**Construction Of Education Complex/Offices (CEO/DEO's/DDEO's/AEO's) At District Level.**	Education complex & offices for the officials in a single place.	Muzaffargarh	**200**
Long Term Plan				
1	**Construction Of New IT Lab In High Schools.**	21 IT labs required in high schools.	Muzaffargarh	**48**
2	**Establishment of New Schools.**	Government elementary school (3120068).	D.G. Khan	**40**
3	**Construction Of Shelter Less Schools.**	36 Schools	D.G Khan	**722**
		11 Schools	Rajanpur	**56**
4	**Carvan School.**	Launch of Carvan schools in the tribal and hilly areas.	D.G Khan	**10**
5	**Solarization For High and Higher Secondary Schools.**	Price for 5kv	D.G Khan	**1**
			Muzaffargarh	
			Rajanpur	
			Layyah	
Total				**28,974**

Carvan School Program:

The rural tribal areas of D.G Khan division face serious barriers to schooling because of communities' migration from hilly areas leaving empty schools behind. A Caravan School Program has been designed to tackle these issues and engage those temporarily displaced students. This unique method ensures portability and accessibility with a mobile classroom setup that can be packed away at the end of each day and reassembled the next. There should be facility of two classrooms & one toilet. To ensure a complete learning environment, the program attempts to supply not just basic education but also necessities like clean drinking water and bathrooms. For having Carvan School, there should be foldable school furniture, including desks, seats, and whiteboards, are made to be easily assembled and transported in a lightweight manner. With compact solar panels, to ensure a steady source of electricity for lights, fans, and small electronics. Rechargeable battery packs for activities at night or on overcast days to store solar energy. A selection of workbooks, textbooks, and other educational resources that match the complete curriculum. Visual aids and compact projectors for enhancing interactive and captivating teaching techniques. Handwashing stations that are portable and come with water and soap to promote proper hygiene habits. Simple first aid kits to treat small wounds and medical situations, protecting the health and safety of students. For the health of students, portable water purification devices or filters must supply safe and clean drinking water. Students are ensured a comfortable and secure atmosphere with sanitary toilet facilities that have been installed with appropriate waste management systems. Reliable automobiles for carrying the workers and supplies for the caravan school, delivering rapid and efficient transportation to various areas. To guarantee that the school site is secure and safe for personnel and kids such as an emergency plan for natural catastrophes or medical emergencies. We can take example from UNICEF Camps.