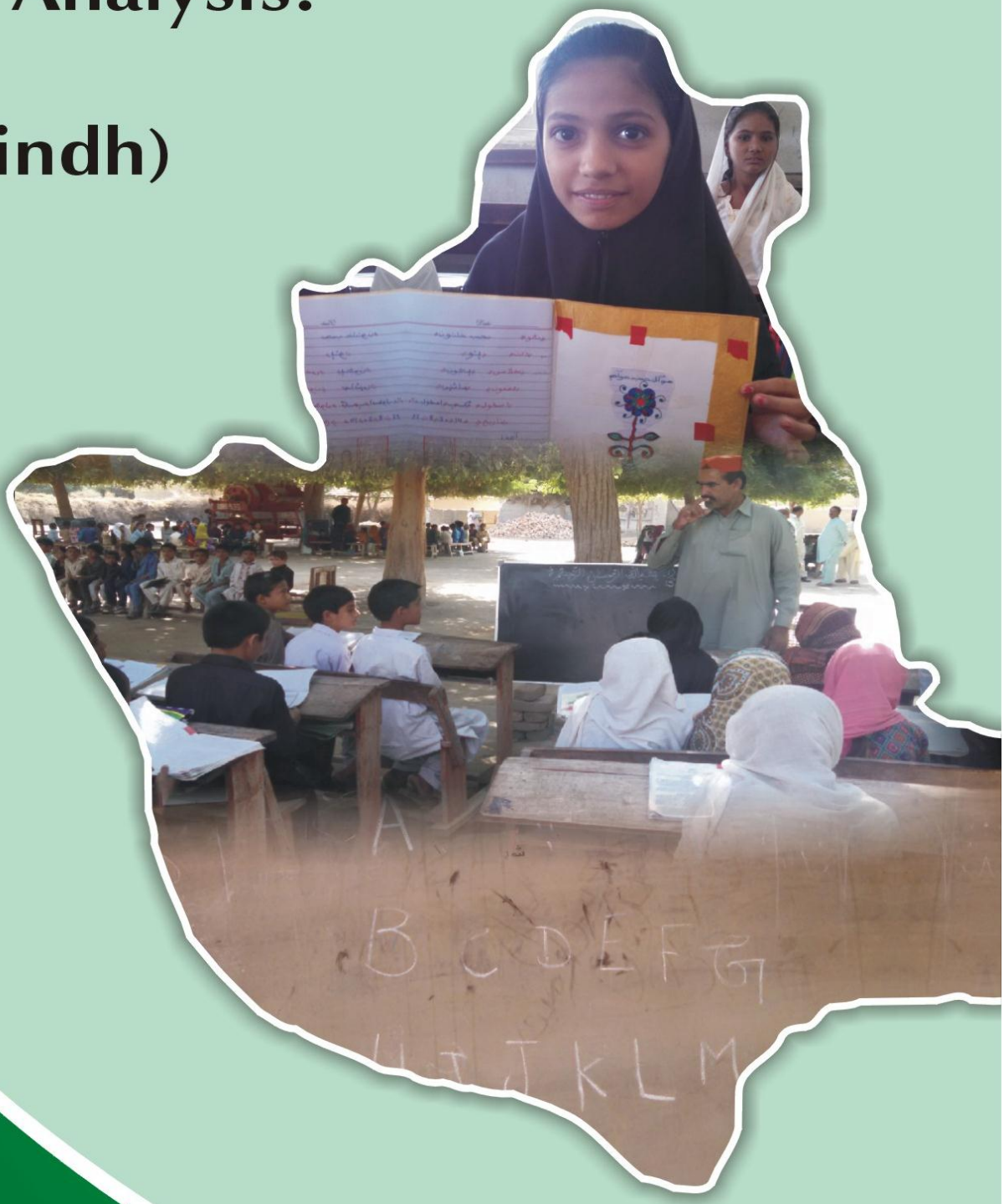
Education Situation Analysis: District Thatta (Sindh)



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LIST OF ABBREVIATIONS

NPER	Net Primary Enrolment Rate
UN	United Nations
SEMIS	Sindh Education management Information System
PSLM	Pakistan Social and Living Standard Measurement
FY	Fiscal Year
OOSC	Out of Schools Children
UNICEF	United Nations Children's Fund
UNESCO	United Nations Educational, Scientific and Cultural Organization
ASER	Annual Status of Education Report
AHRC	Asian Human Right Commission
PACADE	Pakistan Association for Continuing and Adult Education
RSU	Reform Support Unit
GoS	Government of Sindh

SECTION–I: INTRODUCTION

1.1. Background of the Study

Thatta District is located in southern Sindh (Pakistan). It is locally known as *'Laar'*. It shares a border with districts *Sujawal*, *Tando Muhammad Khan*, *Hyderabad*, and *Karachi*. In 2013, the Sindh government carved out the new Sujawal (old taluka) district from Thatta. District Thatta comprises Thatta, Mirpur Sakro, Keti Bunder, and Ghorabari talukas. Besides this, dehs Bablo, Betri, Sookbi, Babyo, Dolo Sholani, Bet Maehar, Mir Wari, Thare Wari, Darsi and Mor Chabuda of Kharochan taluka have also been included in Thatta.[1] The district is spread over an area of 8,570 square kilometres. The total population of the district is 1,49,6952[2]. It has more male population than female, with males constituting 52.9 percent and females constituting 47.1 percent of the total population.

Education is essential for everyone. It not only affects the individual being educated but also the society as a whole at each level, starting with the person's immediate circle of family and friends.. Education plays a significant role in sustainable economic development as well as community development. Therefore, the educational system and the economy are two closely related social institutions. Schools are an important component of the educational system that provide instruction and shape individuals which enables economic progress and community development. Education is a key driving force for development and social change in society.[3]

It has been established worldwide that primary education plays a vital role in reducing poverty and is positively associated with development-related outcomes such as improving productivity. Education particularly that of girls, is also linked with improvements in health, as well as reductions in fertility, infant mortality and morbidity rates.[4] It is due to these universally acknowledged outcomes of education, that achieving universal primary education was included in the Millennium Development Goals (MDGs) that Pakistan is nowhere near meeting. While most

[1] http://www.dawn.com/news/1049252
[2] Authors estimate
[3] http://www.wjeis.org/FileUpload/ds217232/File/04.turkkahraman.pdf
[4] 4 UN Education For All, http://www.un.org/en/globalissues/briefingpapers/efa/

of the global discourse on education has moved on from Education for All to Learning for All, Pakistan continues to grapple with the issue of access to schools for children. Missed education targets paint a dismal picture with almost 25 million school-aged children out of school[5] and calls for strategic adjustments in political and policy circles[6].

The Constitution of Pakistan, framed in 1973, promised to its citizens in Article 37 (b) & (c) that "the State shall remove illiteracy and provide free and compulsory secondary education within the minimum possible period; make technical and professional education generally available and higher education equally accessible to all on the basis of merit". Besides this, the revolutionary 18th amendment bill abolishes the "concurrent list" and gives far more provincial autonomy in matters of education, health and several other sectors than was earlier available to the provinces. Therefore, article 25A of the 1973 Constitution **says that "The State shall provide free and compulsory education to all children of the age of five to sixteen years in such manner as may be determined by law".** However, making education a statutory fundamental right is not enough when there are not adequate schools available to meet the demand of education. The aim of 100 percent enrolment will remain elusive if the capacity to educate all children is not achieved.

The public sector education system is the main provider of primary and secondary education in Sindh. Multiple factors such as a lack of basic facilities, teacher absenteeism, low quality of schoolings, and high student-teacher ratios are affecting the performance of education sector, which leads to a poor quality of education, low enrolment, and high dropout in public schools. These factors also compel middle and upper class parents to shift their children to private schools. Ghost[7] and non-functioning schools are also badly affecting the public education sector in the province. There are around 6,149 ghost schools in Sindh[8].

The standard of education in District Thatta is extremely poor. It is the lowest performing district in Sindh, with a Net Primary Enrolment Rate (NPER) of 32%[9] and a Gross Primary Enrolment

[5] "The State of Pakistan's Children 2012", Society for the Protection of the Rights of the Child
[6] Access to education in Sindh,(2015) Manzil Pakistan
[7] Ghost schools are defined as nonfunctioning schools that continue to exist only on paper.
[8] SEMIS 2014-15
[9] pakistan Social Living Standards measurement Survey (PSLM) 2013-14.

Rate of 57%, and ranks 132 out of the 142 districts[10] in Pakistan. There are 1,538 schools and 2,866 teachers in the district. Around 72,227 children are enrolled in public schools across the district.

The purpose of this study is to analyse the current situation of education services in Thatta district (all references to Thatta in this paper unless stated otherwise refer to the district, not the city). The aim of the study is to analyse the supply side of education services to understand the state of education in the district. The study covers education indicators such as infrastructure, number of schools, teacher-student ratio, school distance, number of rooms and teachers in schools, number of ghost schools and teachers, number of schools illegally occupied, budgetary allocation, and monitoring system of schools.

1.2. Objectives

The study has the following objectives:

- to analyse the situation of education services in the district.
- to identify potential factors affecting the public education sector.
- to identify ghost schools and teachers in the district.

1.3. Organization of the report

This report is divided into four sections. Section I describes the background and objective of the study. Section II deals with the methodology as well as data, which is used for analysis. Section III presents all the tabulated data for each indicator along with the analysis. Section IV presents the conclusion and recommendations.

[10] Alif Ailaan pakistan District education Rankings (2015).

SECTION-II: METHODOLOGY AND DATA

This section presents the research methodology for the current report. It also discusses data sources for various educational indicators to analyse the state of education in the district.

2.1. Methodology

The descriptive method will be used to analyse the situation of education in Thatta. Therefore, **Miles and Huberman's,** the basic framework for analysis ('three concurrent flows of activity' – data reduction, data display, and drawing conclusions from these first two) is used in the current study. The idea of display is central to our methodology. By "display" we mean a visual format that presents information systematically so the user can draw conclusions and take needed action.

This report pulls together several new and existing data sources to profile Thatta to identify its underlying problems and potential solutions, and sets a benchmark against which future improvement can be measured. School education comprises four levels; primary (1-5), middle (6-8), secondary (9-10), and higher secondary (11-12) for public schools.

2.2. Data

The state of education was analysed using the variables and indicators listed in table 2.1. Detailed description of data sets and sources have been listed in the following table.

Table 2.1:

Variables	Indicators	Source of Data
Literacy Rate	Overall Literacy Rate (Thatta)	Pakistan social and living standards measurement survey 2012-13
	Male Literacy Rate (Thatta)	
	Female Literacy Rate (Thatta)	
Enrolment	Boys Enrolment (Thatta)	SEMIS-Thatta (2013-14)
	Girls Enrolment (Thatta)	
	Primary level Enrolment (Thatta)	
	Middle Level Enrolment (Thatta)	
	Secondary Level Enrolment (Thatta)	
	Higher Level Enrolment (Thatta)	
	% of Children out of School District- Wise	
Schools	Total Schools (Boys, Girls, Mix)	SEMIS-Thatta (2013-14)
	Primary Level Schools (Boys, Girls, Mix)	
	Middle Level Schools (Boys, Girls, Mix)	
	Secondary Level Schools (Boys, Girls, Mix)	
	Higher Level Schools (Boys, Girls, Mix)	
	Ghost Schools (Primary, Middle, Secondary, Urban Area, Rural Area)	
	School Teacher Ratio	
	School Student Ratio	
	School Classroom Ratio	
	Classroom (No room, 1 Room, 2 Room, 3 or more room schools)	
Teachers	Total Teachers (Male, Female)	SEMIS-Thatta (2013-14)
	Male Teachers (Primary, Middle, Secondary, Higher Secondary)	
	Female Teachers (Primary, Middle, Secondary, Higher Secondary)	
	Teacher Student ratio	
Facility	Toilets	SEMIS-Thatta (2013-14)
	Drinking Water	
	Electricity	
	Computers	
	Chairs	

SECTION – III: EDUCATION SITUATION ANALYSIS

This section analyses the situation of education in district Thatta. It also discusses the state of public education sector (primary to higher secondary level) as well as budgetary expenditure.

3.1. STATE OF DISTRICT EDUCATION

3.1.1. Schools

The public education sector is the main provider for primary education in the country. Therefore, government schools are the main education providers in Thatta. According to SEMIS Census 2013-14, there are 1,538 public schools out of which 1,441 are primary schools in the district. This indicates that almost 91 percent public schools are primary schools and the remaining 9 percent are middle, secondary, and higher secondary schools. Therefore, 52, 38, and 7 schools are middle, secondary, and higher secondary schools respectively. Table 3.1 shows urban and rural schools at primary, middle, secondary, and higher secondary levels in the district.

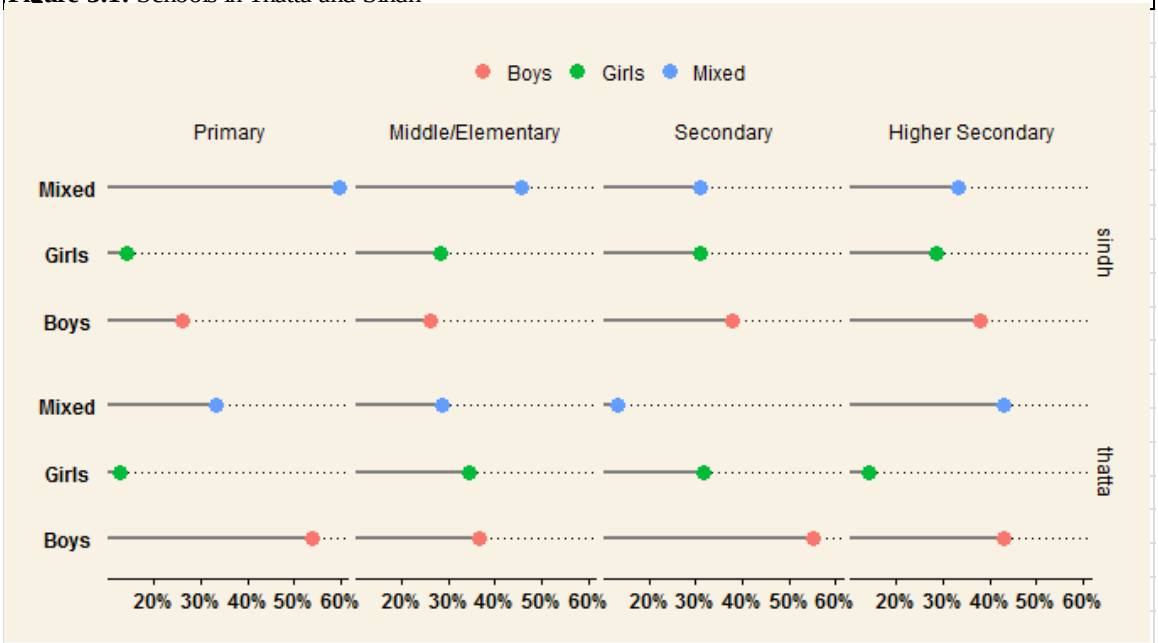
Table 3.1: Number of Schools

School Level	Total Schools	Urban Area Schools	Rural Area Schools
Primary	1441	71	1370
Middle	52	6	46
Secondary	38	6	32
Higher Secondary	7	1	6
Total	1538	84	1454

Source: SEMIS 2013-14

Figure 3.1 compares the ratio of schools for Thatta and Sindh.. There are comparatively less coeducation schools in Thatta as compared to the rest of Sindh. However, there are more boys' schools at primary and secondary level and equal number of boys and co-education schools at higher secondary level in Thatta, with a small number of female schools proportionally.

Figure 3.1: Schools in Thatta and Sindh

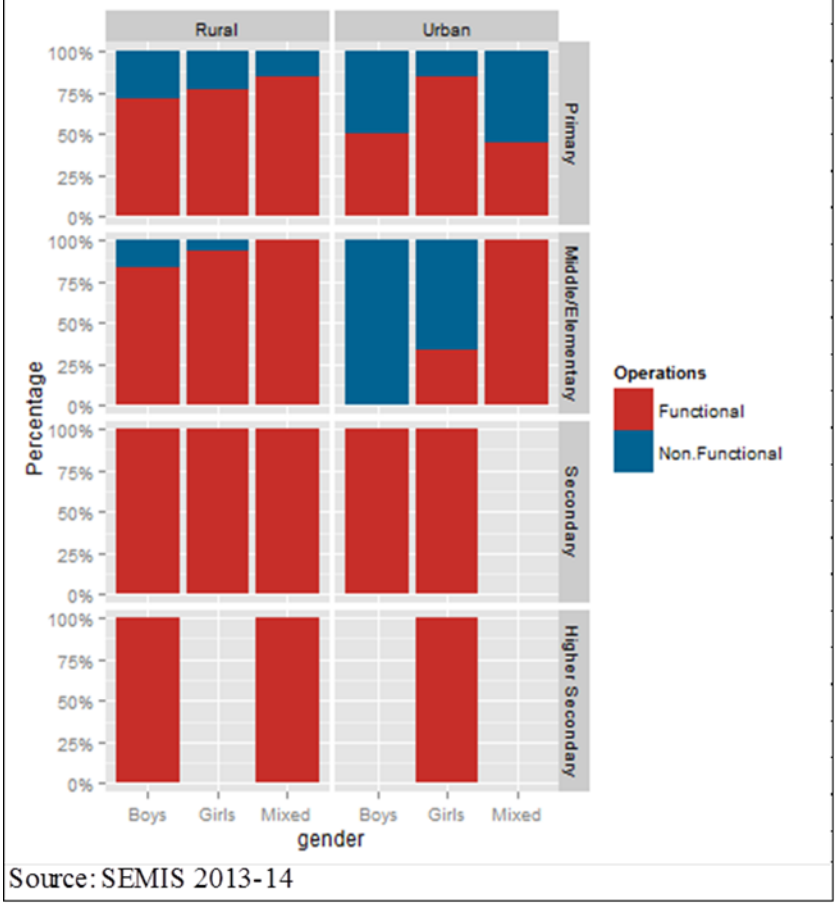


Source: SEMIS 2013-14

There are 6,149 ghost/non-functional schools in Sindh[11], which badly affects the education system and the future of thousands of students. According to a survey conducted on the directives of the Supreme Court, every seventh school in the province is non-functional/ghost school[12]. The SEMIS defines all public schools that are not closed at the time of the visit as functional schools. There are 1,178 functional schools, which is 76.6 percent of the total schools in the district. Figure 3.2 depicts functioning and non-functional schools (primary to higher secondary level) in both urban and rural areas in the district. There are almost 325 schools in rural areas that are non-functional/ghost schools whereas only 35 non-functional/ghost schools are in urban areas of the district.

[11] State of Education in Sindh: Budgetary Analysis (FY2010-11 to FY 2014-15), Manzil Pakistan, Karachi
[12] http://www.thenews.com.pk/Todays-News-4-243264-Every-7th-school-in-Sindh-is-non-functional

Figure 3.2: Functional and non-functional Schools



Source: SEMIS 2013-14

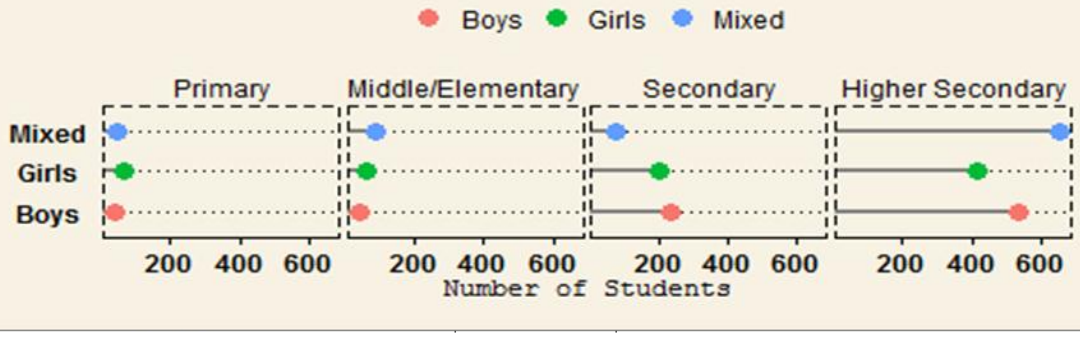
A huge portion of all-boys schools are non-functional/ghost schools out of the total non-functional schools as shown in the above-mentioned figure. The main reasons behind non-functioning schools are poor monitoring mechanisms, a lack of human resources (teaching and non-teaching staff), a lack of basic facilities, unsatisfactory building conditions, and illegal occupation of land by influential people.

Figure 3.3 shows the student to school ratio at all educational level as well as single gender schools. Overall, average student per school ratio is almost 204 in the district where the average for Sindh province is 412[13]. The average number of students per school is 47 and 62 at primary and middle education level respectively. The average number of students per school has significantly increased at secondary and higher secondary level. Therefore, the average number of students per school is

[13] SEMIS 2013-14

171 and 537 at secondary and higher secondary level. It is pertinent to mention that this increase in students is because of a decrease in the number of schools as the tier of education increases from primary up until higher secondary..

Figure 3.3: Student School Ratio



Source: SEMIS 2013-14

3.1.2. Teachers

Teaching is one of the most popular professions in the country with more than 1 million people employed including about 0.6 million in public sector Pakistani schools, colleges and universities with the remainder serving the private sector. In Sindh, 144,170 teachers are serving in the public education sector (primary to higher secondary)[14].

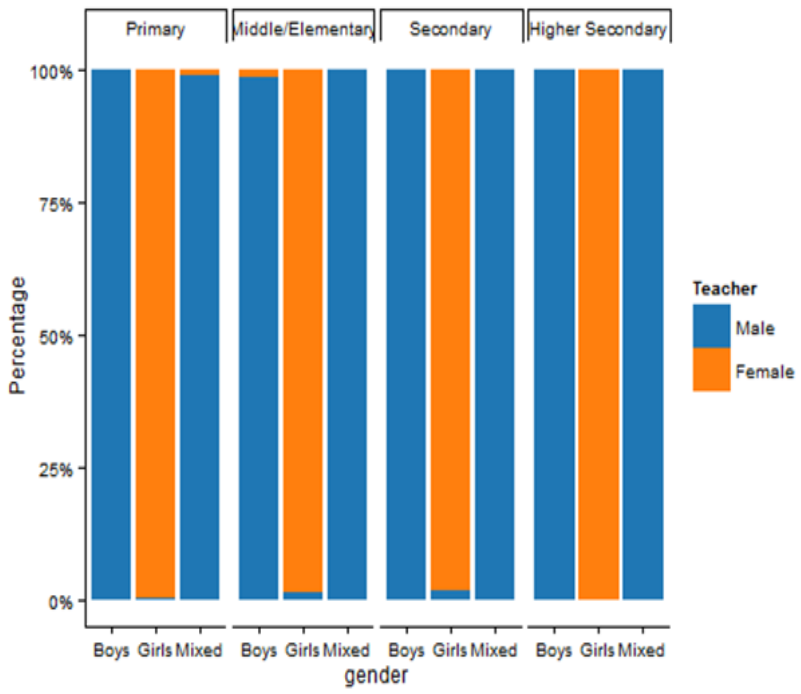
In, Thatta 2,891 teachers have been serving in the education sector (primary, middle, secondary, and higher secondary level) out of which 76.3 percent are males and remaining 23.7 percent females. The majority of teachers (70.2 percent) are working in primary education where as 17.05 percent of teachers are working at secondary level. The remaining 7.4 and 5.4 percent teachers are working at middle and higher secondary levels respectively.

Figure 3.4 shows the percentage of teachers by gender at different levels of schools (primary to higher secondary) in the district. The statistics shows that only male teachers are working at all

[14] Map of School Education, SEMIS Census 2014-15

levels of mixed (coeducation) schools (primary to higher secondary). The overall number of female teachers is less than male teachers. Only eight female teachers are serving in the primary mixed schools across the district. This will hinder the enrolment of girls at different levels of education in the district.

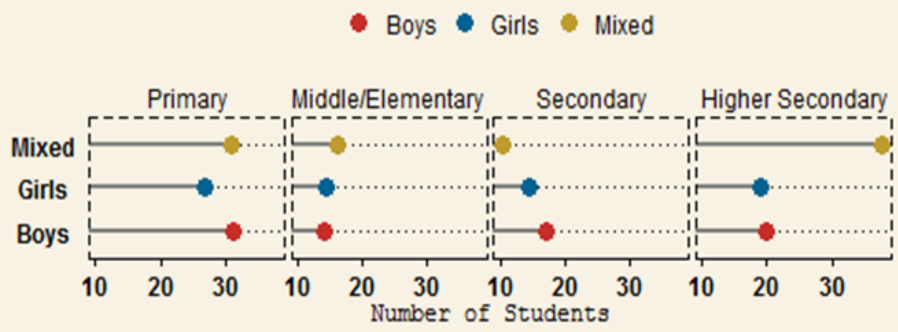
Figure 3.4: Number of teachers



Source: SEMIS 2013-14

The average number of students per teacher is around 21 in the district. Apart from this, an average number of student to teacher ratios are 30, 14, 14, and 26 at primary, middle, secondary, and higher secondary education level respectively. Figure 3.5 presents the state of student to teacher ratio at different educational levels. The ratio of students to teaching staff compares the number of students to the number of teachers at a given level of education and in similar types of institutions.

Figure 3.5: Student Teacher Ratio



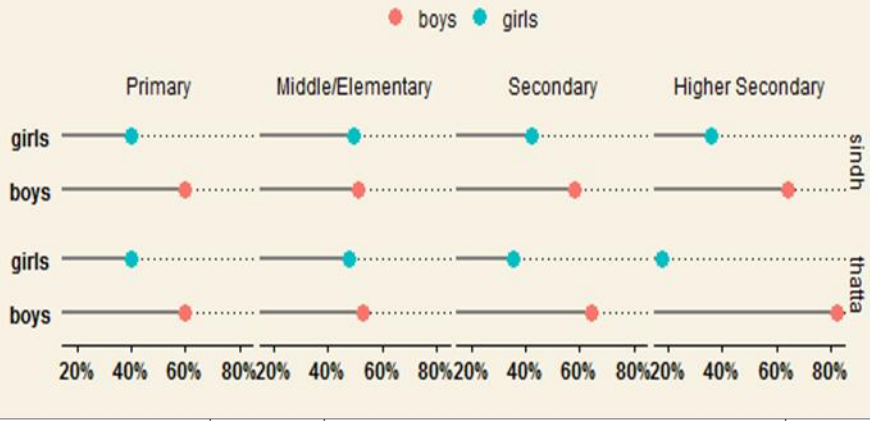
Source: SEMIS 2013-14

3.1.3. Enrolment

In Thatta, the total enrolment in public schools was 79,460 in 2013-14. There are 61,366 children enrolled at primary level, which accounts for 80.44 percent of total enrolment. The remaining near 20 percent of students are enrolled at middle to higher secondary education levels. The enrolment at middle, secondary and higher secondary level is 3,174, 7,745, and 4,001 respectively.

Figure 3.6 depicts the state of gender-wise enrolment at different education levels of both Sindh and district Thatta. At primary level, the number of boys and girls enrolled is 36,812 and 24,554 respectively. At the middle level the distribution is almost similar with 52.58 and 47.41 percent for boys and girls respectively. However, the gender gap again widens at the secondary and higher secondary level. Therefore, boys enrolment is 65 and 82 percent and girls enrolment is 35 and 18 percent at secondary and higher secondary level respectively. Apart from this, boy's enrolment indicates similar trends in both Sindh and district Thatta. In district Thatta, girl's enrolment is much lower as compared to average enrolment in Sindh.

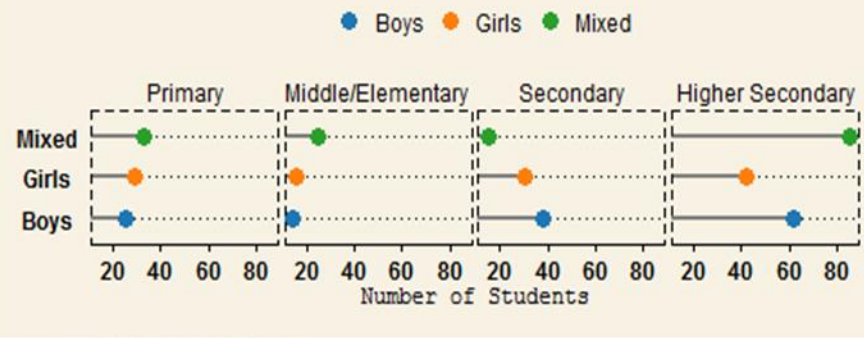
Figure 3.6: Enrolment



Source: SEMIS 2013-14

Student Classroom Ratio is defined as average number of pupils (students) per classroom in a given school-year[15]. Smaller classes are often perceived better as it allows teachers to focus more on the needs of the individual and reduces the amount of class time needed to deal with disruptions.

Figure 3.7: Student-Classroom Ratio



Source: SEMIS 2013-14

Figure 3.7 indicates the ratio of students per classroom at all education levels in Thatta. It ranges from 1:14 to 1:85, where the lowest is for boys at middle level and highest for coeducation schools at higher secondary level. However, the ratios for boys are 1:25, 1:14, 1:37, and 1:62 for primary, middle, secondary, and higher secondary respectively. On the other hand, girls' classrooms ratios

[15] Divide the total number of pupils enrolled in primary/upper primary/secondary schools by the total number of classrooms in primary/upper primary/secondary schools in a given school-year.

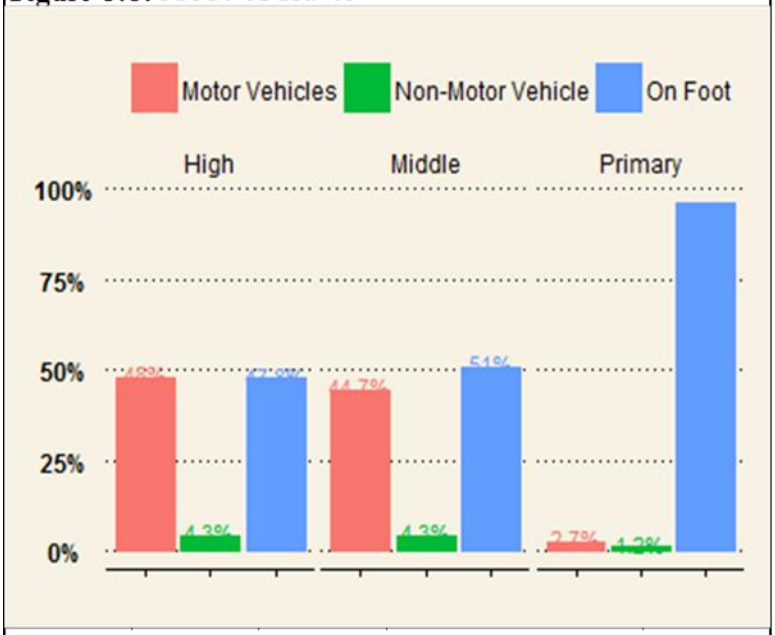
are 1:28, 1:16, 1:30 and 1:41 for primary, middle, secondary and higher secondary respectively. In coeducation schools, the student-classroom ratio shows similar trends as the girls' schools at all education level except higher education, which has 85 students in one classroom. Therefore, for primary, middle, and secondary education level the ratio is considered reasonable. However, for higher secondary the ratio becomes unsatisfactory where classrooms get congested.

'Over the years, education has focused on access and parity—that is, closing the enrolment gap between girls and boys[16]. Similarly, school distance and travel time has a significant impact on student enrolment, particularly girl's enrolment in rural areas. Mode of transport used also has significant influence on enrolment in rural areas. Transport is directly related to the distance of the school from the student which in turn affects enrolment[17].

In Thatta, mode of transport is broadly divided into three categories; motor vehicle (cars and buses), Non-motor Vehicles (Horse carriage, bicycles etc.), and on-foot. Figure 3.8 shows the mode of transport for travelling to school. The overwhelming majority of primary school-going children, i.e. around 96 percent, go to school on foot, which indicates primary schools are located near students' houses. The remaining 2.7 and 1.3 percent of children use motor vehicle and non-motor vehicles respectively. The percentage of students travelling to school on foot decreased up to 50 percent at the middle school level. The percentage of students using non-motor vehicles as a means of transportation almost remained the same as in primary schools. However, the percentage of children travelling by motor vehicle increased up-to 50 percent at middle education level, which indicates the longer distance to high schools. The figure for higher secondary schools shows similar trends to middle schools.

[16] EQUATE Project, 2008
[17] http://www.centralbedfordshire.gov.uk/Images/SustainableModesOfTravelToSchools_Aug2011_tcm6-5947.pdf

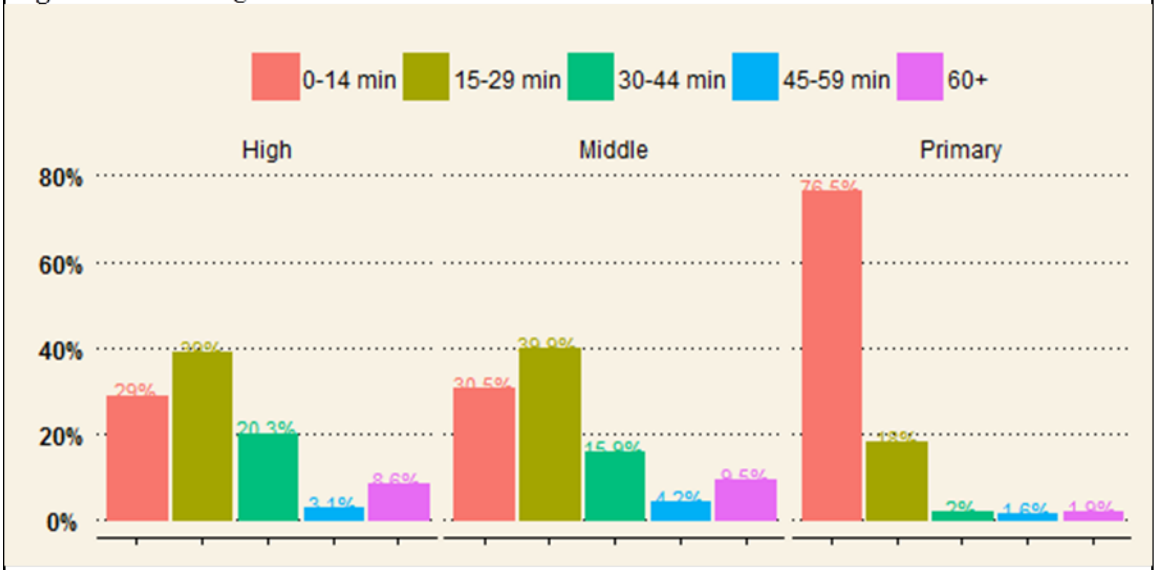
Figure 3.8: Mode of Travel



Source: PSLM 2012-13

Travel time to school plays an important role in enrolment as well as dropout rates. For this purpose, PSLM data sets (2012-13) have been used to identify students travel time to schools. Figure 3.9 compares the average time taken to travel to school for primary, middle, and high school levels. At primary school level almost 76.5 percent of students take 0-14 minutes on average to reach their school whereas 18 percent of children take on average 15-29 minutes. Only 5.5 percent of children take 30 minutes or more to reach their school at primary education level. Middle schools statistics show a different picture from the primary schools in the district. Only 30.5 percent of children reach their schools within 14 minutes. Almost 40 percent of children take 15-29 minutes to reach their middle schools and the remaining 15.9 percent of students take 30-44 minutes. High schools show similar trends for middle schools.

Figure 3.9: Average Travel Time to School



Source: PSLM 2012-13

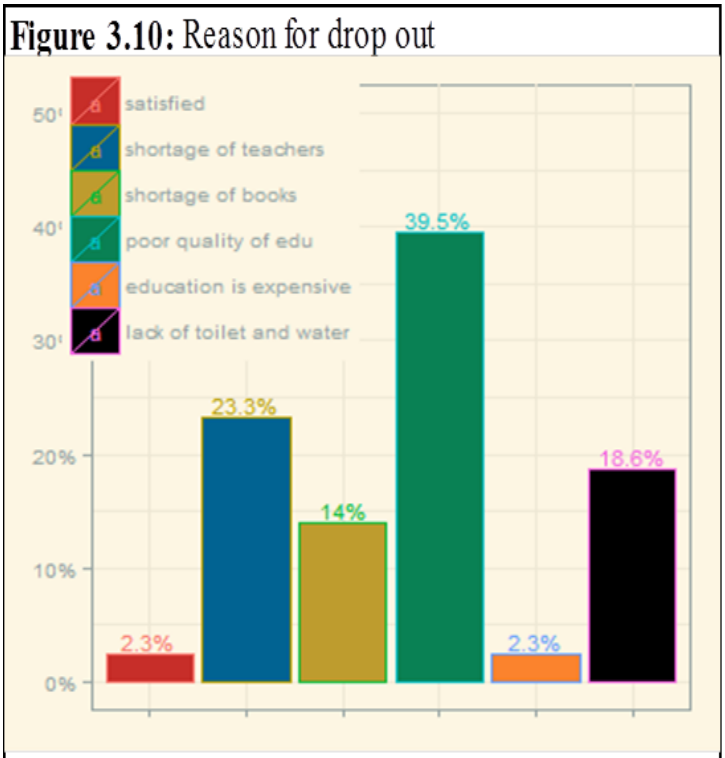
According to research, Children are extremely sensitive to walk travel time, which makes them unlikely to walk long distances[18]. Therefore, school distances and travel times have significant impact on the enrolment. The enrolment rate is high at the primary education level as compared to middle and high levels. The overwhelming majority of primary schools are located near residential neighbourhoods. As a result, parents are likely to send their children to primary school. Therefore, transition rates from primary to middle are very low which results in higher dropout rates.

Estimates suggest that almost half of children initially enrolled drop out before they can complete their primary education. Statistics for Sindh, show that while up to 800,000 children get enrolled in Class I of primary school each year, the survival rate to Class V is only 49%. This means that in the years from 2009-2013, over 400,000 children who were initially enrolled in primary school, did not progress to the next grade or complete their primary education in government schools[19]. PSLM measured out-of-school children (OOSC) as children who are out of school which is either that they never enrolled in any formal educational institution or have dropped out from school. Figure 3.10 provides a picture of OOSC from Thatta district. According to PSLM survey of school

[18] Noreen C. McDonald (2005),Children's Travel: Patterns and Influences, City and regional planning
[19] Pathways through Education: Dropout and Students at Risk in Rural Sindh (Acted, 2015).

dropouts, almost 40% believe that the quality of education is poor. Shortage of teachers and lack of basic facilities (toilet and water) is another reason for dropout which accounts for 42 percent. According to the United Nations Children's' Fund (UNICEF) statistics, one in five girls of school age are not in school as compared to one in six school-going age boys. One factor accounting for this difference is the lack of sanitation facilities for girls reaching puberty. Girls are also more likely to be responsible for collecting water for their family, making it difficult for them to attend school during school hours. The installation of toilets may enable school going age children, especially adolescent girls, to further their education.[20]

Figure 3.10: Reason for drop out



Source: SEMIS 2013-14

[20] http://allafrica.com/stories/201407290618.html

3.1.4. District Literacy Indicators

Pakistan has one of the lowest literacy rates in the world. According to the United Nations Educational, Scientific and Cultural Organization (UNESCO), the literacy rate in Pakistan is 55 percent and stands at 160th in the world[21]. As far as its literacy rates are concerned, it is below 50 percent in rural areas[22]. Figure 3.11a shows the PSLM surveys' response on whether they can read and write. This is taken as a proxy factor for literacy in Pakistan. According to the survey, the literacy rate in Thatta district is 38.36 percent. However, the startling fact is that when the same surveys were asked if they can do basic mathematics, 73.71 percent people responded positively as shown in figure 3.11b.

Figure 3.11a Literacy(Read & Write)

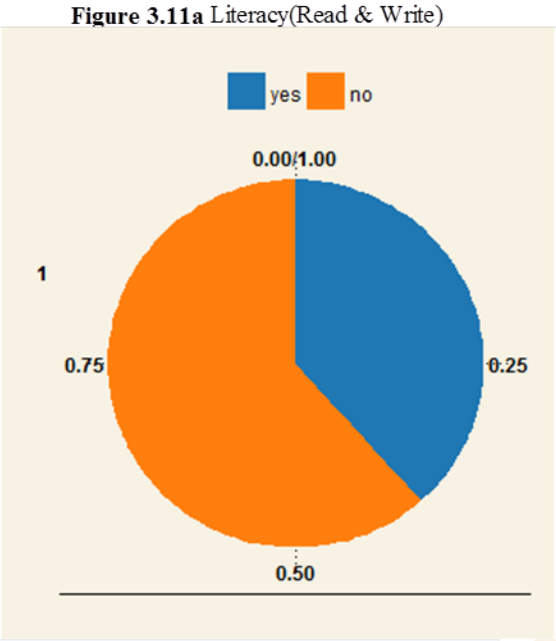
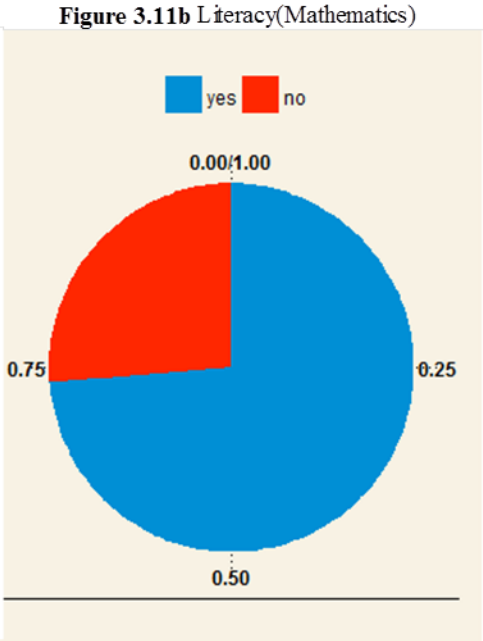


Figure 3.11b Literacy(Mathematics)

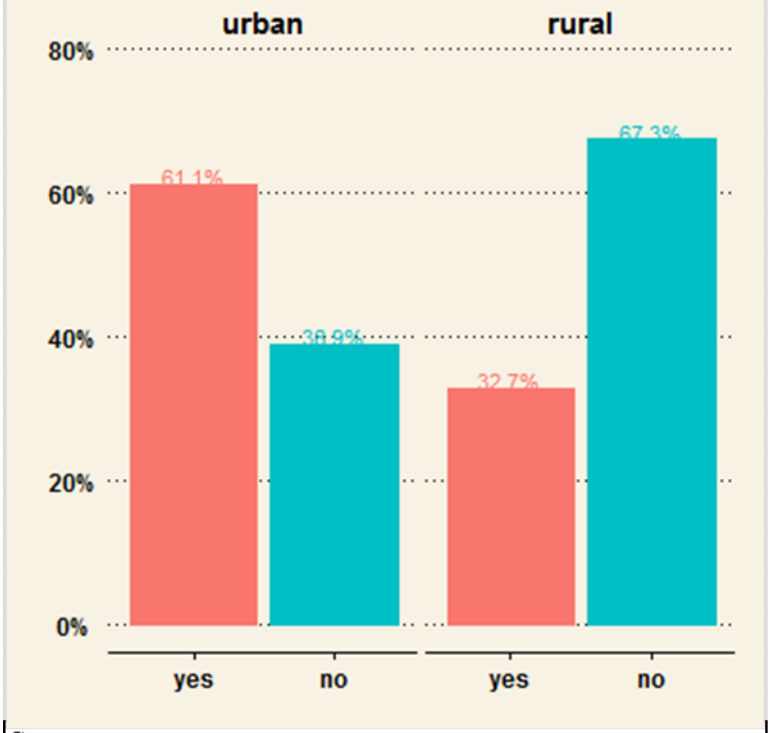


Source: PSLM 2012-13

Dichotomizing the literacy indicator into regions gives further insights of the situation as shown in figure 3.12. In urban regions of the Thatta, 61.1 percent of people can read and write while 38.9 percent cannot read and write. On the other hand, in rural areas only 32.7 percent people can read and write while 67.3 percent are classified as illiterates.

[21] http://www.archivistonline.pk/literacy-rate-in-pakistan/
[22] http://www.archivistonline.pk/literacy-rate-in-pakistan/

Figure 3.12 Literacy by Region



Source: PSLM 2012-13

According to an article, the language dilemma in education remains unresolved in Pakistan because educationists fail to understand how basic language is related to the child's learning process as well as to the psyche of the speakers (teacher)[23].

Figure 3.13 shows the medium of interaction at different education levels, according to gender. On average 76.10 percent of the schools teach in Sindhi language at all levels (primary to higher secondary). Around 96.7 and 94 percent of the school are using Sindhi as a medium of interaction at primary and middle education level respectively. According to a 2012 ASER report, almost 90 percent of parents in Sindh want their children to be taught in Sindhi[24]. However, there are only on average 11.3 percent and 0.8 percent Urdu and English medium schools respectively. On

[23] http://www.dawn.com/news/773980/language-in-sindh-schools

[24]

average 21.94 percent schools (primary to higher secondary) are using multiple languages as a medium of interaction.

Figure 3.13 Medium of Treaching in Schools

Source: SEMIS 2013-14

The National Education Policy (NEP, 2009) of Pakistan mandates that English shall be used as a medium of instruction for certain subjects in Grade 4 and onwards in 2014[25]. However, Figure 3.13 tells different story for English language at different levels of schools (Primary to higher secondary). At the primary level 0.4 percent of schools teach in English. Middle and higher

[25] National education policy(2009), Ministry of education, Government of Pakistan

secondary schools do not use English as a medium of interaction in Thatta. Similarly, Only 2.7 percent secondary schools are classified as English medium schools in the district.

The futile effort to implement English as the medium of interaction can be attributed to a number of reasons. First, it is argued that English was not adequately taught to students in Grades 1, 2, and 3. Over and above that the teachers themselves were also not satisfied with their own English skills. They believed they did not have adequate English proficiency for teaching in English. They thought they needed training to be able to teach in English; and, few believed teaching in English could help them improve their English proficiency and teaching skills[26].

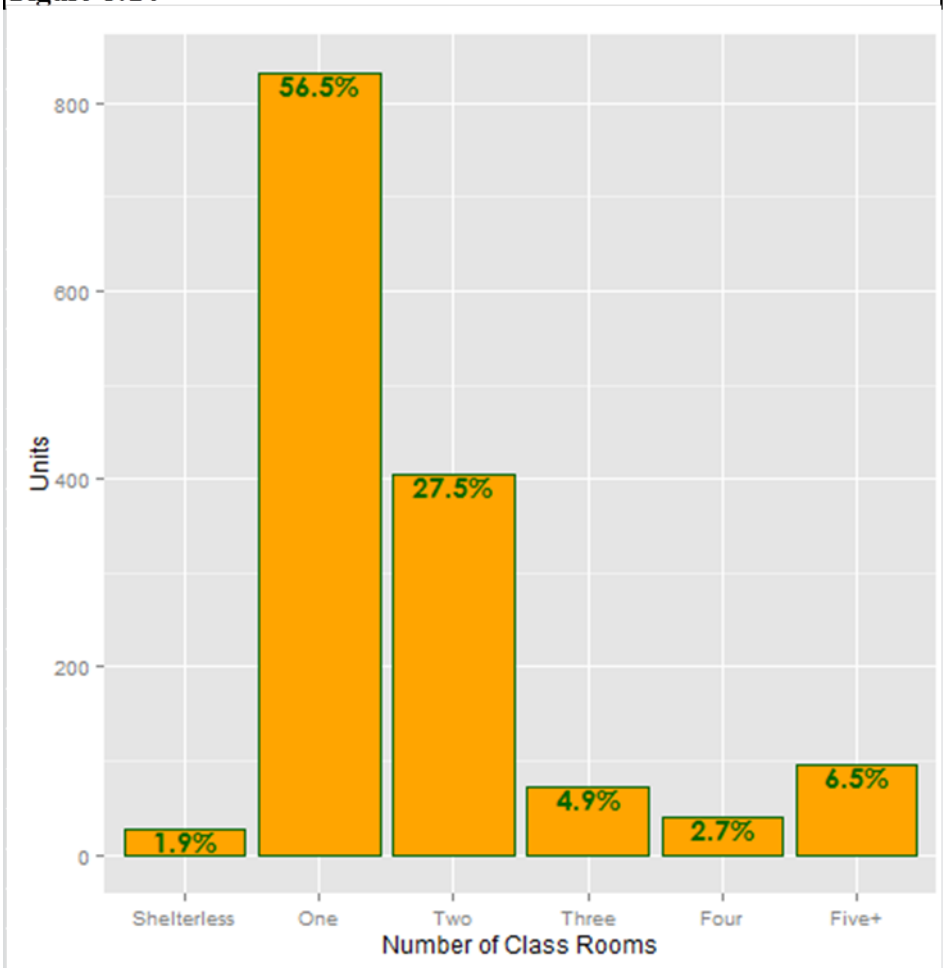
3.1.5. Basic Facilities

In 2014-15the Sindh government allocated Rs.97.81 million for material supplies, library and laboratory for Thatta which accounts for almost 50% of the total school specific budget allocated to Thatta. Thatta gets 5 percent of Sindh's total school specific budget, which is seventh highest in the province.

There are overall 2,826 classrooms in the district. Primary schools have 2,186 classrooms, which accounts for 77.3 percent of the total classrooms in the district. There are 173, 235 and 59 classrooms at middle, secondary, and higher secondary education level respectively. There are 1,410 classrooms for boys, 612 classrooms for girls and 804 classrooms for coeducation in the district. Figure 3.14 shows the number of classrooms in schools in Thatta. There are 831 one-classroom schools, which accounts for 56.5 percent of the total schools. Then are 404 two-classroom schools, which account for 27.4 percent of the total schools. However, it is pertinent to mention that around 1.9 percent of the total schools are functioning without a single classroom or are shelter-less schools.

[26]Channa(2009), **English medium for the government primary schools of Sindh, Pakistan** , university of Georgia

Figure 3.14 Classrooms



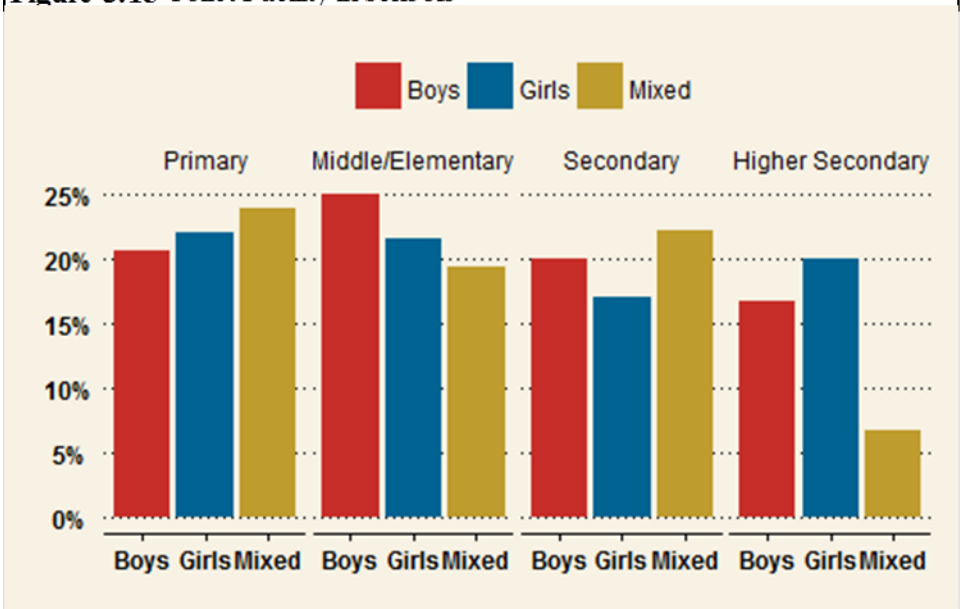
Source: SEMIS 2013-14

According to a 2012 Asian Human Rights Commission (AHRC) report, every child has a fundamental right to get education in a clean and healthy environment[27]. However, thousands of children are being denied their basic rights as they have none or limited access to clean and healthy sanitation facilities in their schools, especially those located in rural areas of the country. Similarly, the Pakistan Association for Continuing and Adult Education (PACADE) newsletter (2012) indicates that in Sindh22 percent of primary schools have no buildings, 86 percent lack electricity, and 46 percent have no *latrines.* Apart from this, there is no proper provision of drinking water in 51 percent of schools in the province.[28]

[27] Lack of sanitation facilities in schools -- an obstacle in girls' education(2012), Asian Human Rights Commission.
[28] http://unesco.org.pk/education/documents/Enforcement_of_Article_25-A_Literacy_Movement_in_Sindh.pdf

In Thatta the situation is far from satisfactory. Only 451 primary schools have toilets, which is 21.9 percent of primary schools. For middle, secondary, and higher secondary 21.9, 19.23, and 13.1 percent schools have access to toilets respectively as shown in figure 3.15.

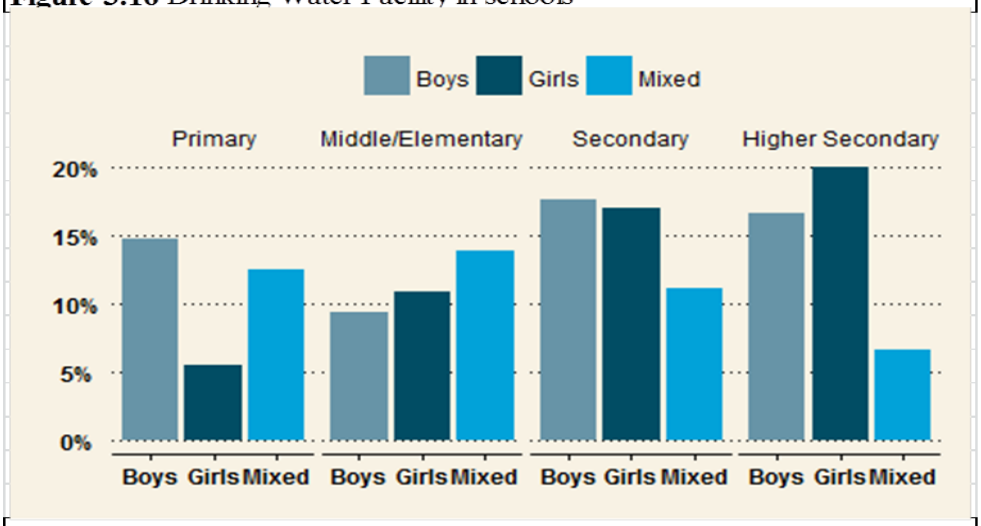
Figure 3.15 Toilet Facility in schools



Source: SEMIS 2013-14

There are only 259 primary schools that have access to drinking water, which accounts for only 12.5 percent of the total primary schools. At middle level only 11.4 percent, at secondary level only 16.6 percent and at higher secondary level only 13.15 percent have access to clean drinking water as shown in figure 3.16. The table shows schools that have access to clean drinking water, according to gender.

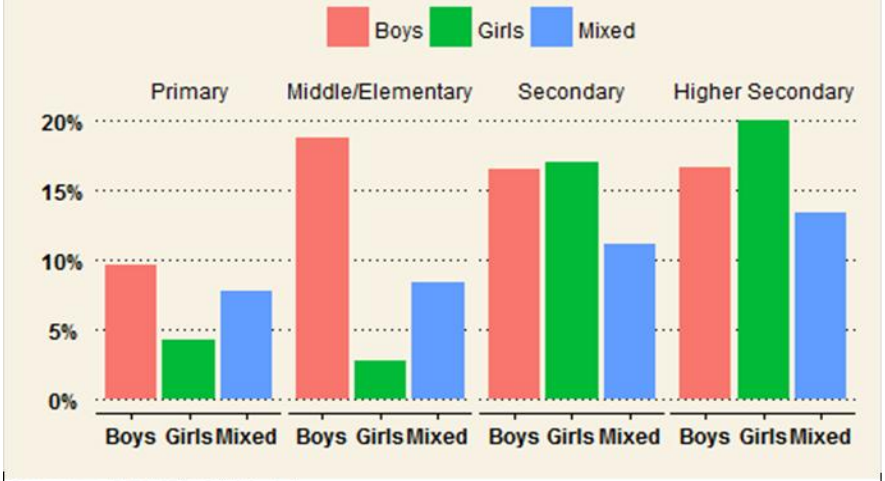
Figure 3.16 Drinking Water Facility in schools



Source: SEMIS 2013-14

On the other hand, the state of electricity in district schools is not encouraging either as shown in figure 3.17., There are 168, 10, 25, and 6 of the primary, middle, secondary, and higher secondary schools that have electricity.

Figure 3.17 Electricity Facility in schools



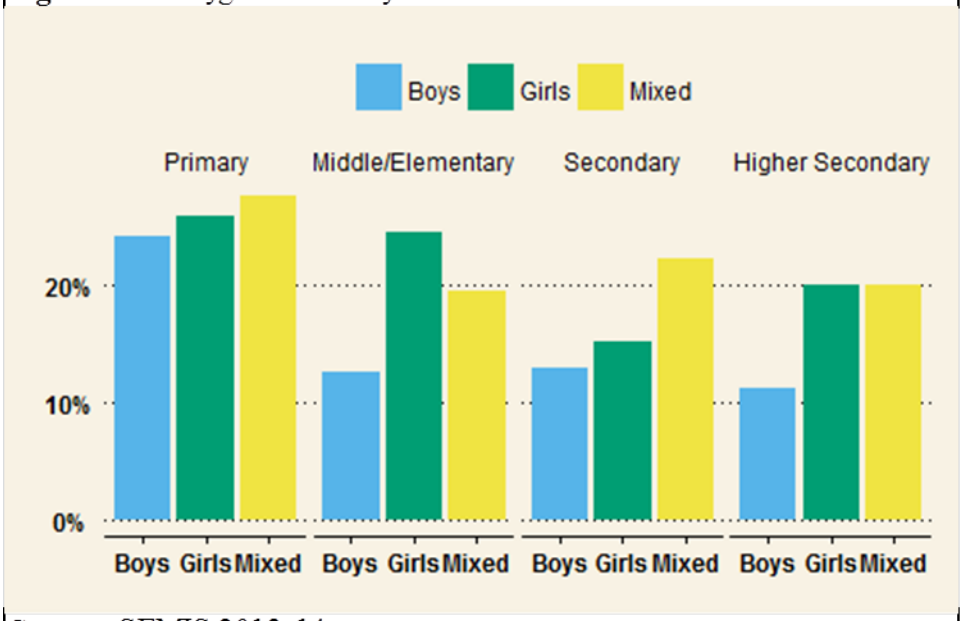
Source: SEMIS 2013-14

As shown in Figure 3.17, on average 15.36 percent of boys' schools have access to electricity while at girls and coeducation schools; the average is 10.99 and 10.14 percent respectively.

The availability of recreational facilities in Thatta is limited as well. At primary level there are only 523 schools that have playground facilities. Only 20 schools at middle level, 23 schools at

secondary level and 6 schools at higher secondary level have playground amenities. Dichotomizing at the gender level, on average 15.5 percent of the boys schools, 21.29 percent of girls schools, and 22.2 percent of the coeducation schools have playground facilities as shown in figure 3.18.

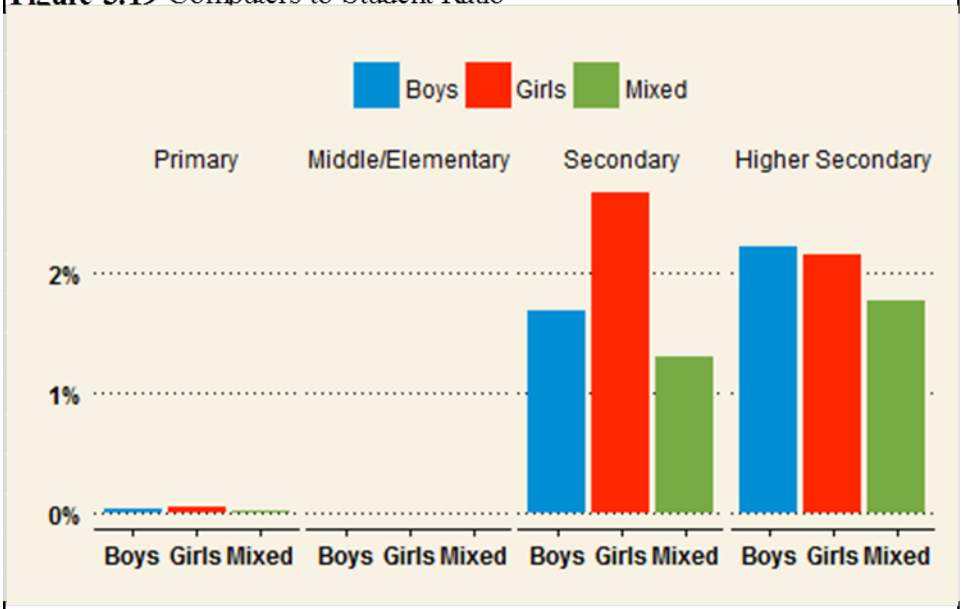
Figure 3.18 Playground Facility in schools



Source: SEMIS 2013-14

Apart from these basic facilities, technical facilities such as computers are almost non-existent as shown in figure 3.19. Primary and middle schools are functioning without any computers in the district. However, at secondary and higher secondary level only 1.9 and 2.04 percent of students have access to computers.

Figure 3.19 Computers to Student Ratio



Source: SEMIS 2013-14

This section clearly identifies schools that are in dire need of restoration and repair to basic facilities. It is important to mention the importance of such facilities, which are non-existent. Only 19.6 percent of schools have toilet facilities and 13 percent have drinking water facilities. Lack of access to safe drinking water and sanitation not only has health consequences through the spread of water-borne diseases and parasitic infections among school-aged children but it is also linked to school attendance and performance (particularly among girls), safety and security of women and girls, and socioeconomic development of communities. Therefore, to achieve universal education and promoting gender equality in terms of infrastructure it is of utmost importance to provide adequate levels of water supply, sanitation and hygiene in schools.

Similarly, only 12.16 percent of the schools have electricity. It is pertinent to mention that Thatta experiences an extremely warm climate for most of the year with average temperature of 26.8 degree Celsius. Lack of electricity in warm climate exacerbates the likelihood of dehydration, fatigue, and heat stroke.

3.2. Education budget analysis

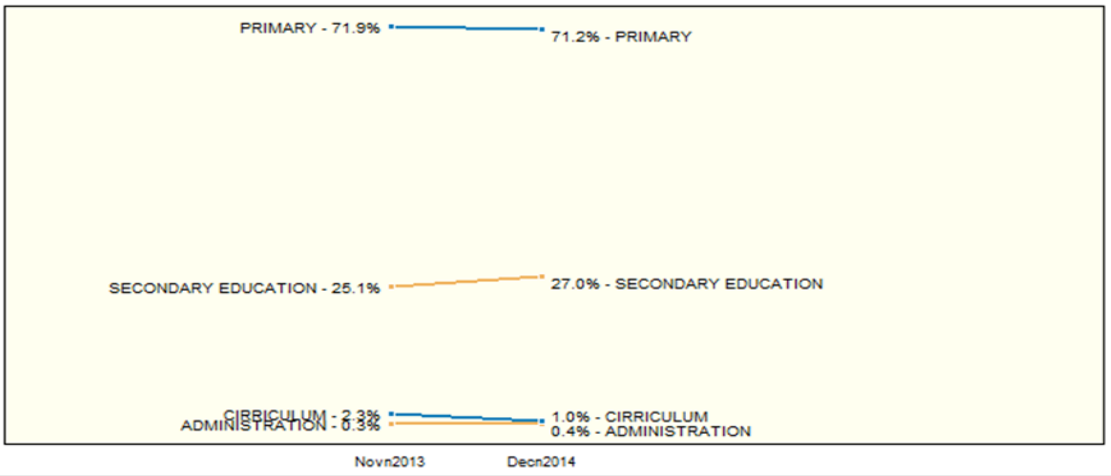
Resource allocation to schools is an instrument of educational reform and an indicator of policymakers' commitment to bringing improvement to the education system. Developed countries have moved on from an evenly-based school funding system to a needs-based funding formula for allocating resources to public schools. A needs-based formula allocates budgets differentially to schools based on the different factors such as socioeconomic background of the students, location, teacher quality, and state of basic facilities etc.

After the 18th Constitutional Amendment in 1973 Constitution of Pakistan, education has been devolved from a federal subject to a provincial one. The Government of Sindh Education Ministry is responsible for resource allocation to school.

In Sindh, of a total provincial budget of Rs 686.18 billion (FY 2014-15), Rs 145.02 billion (21.13 percent) has been set aside for education, Rs 10 billion more from last year's Rs 135.55 billion (FY 2013-14).

For Thatta district, for 2013-14, 3.34 billion is earmarked for education, up from 2.4 billion in 2012-13. The primary schools expenditure gets the biggest chunk of 71.2% as shown in figure 3.20, which is down by .7% from the previous budget. Secondary education gets 27% of the 3.34 billion. Other expenses such as curriculum and administration are apportioned 1% and .04% respectively.

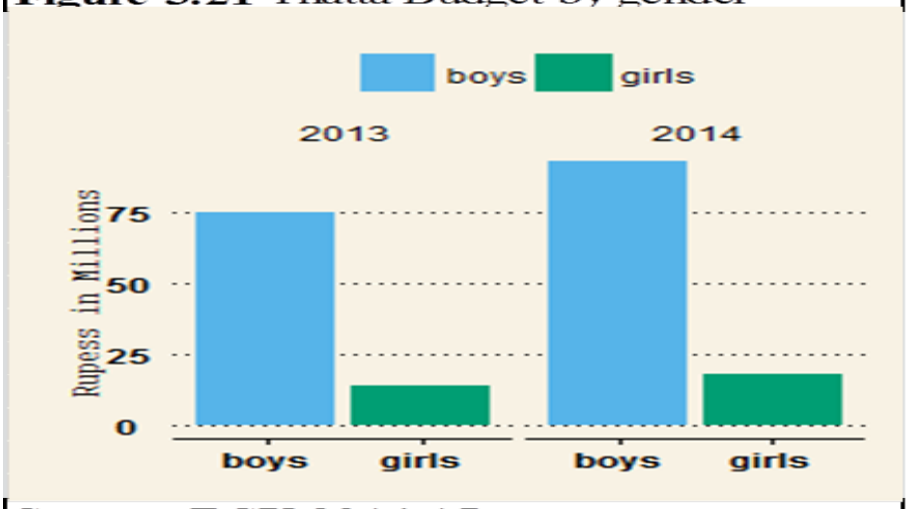
Figure 3.20 Thatta Specific budget



Source: RSU 2014-15

With regards to gender, much of the expenditure is spent on boys schools with very small chunk allocated to girls' schools as shown in figure 3.21. Amounts allocated to boys' schools and girls' schools increased by 24% and 30.8% respectively. However, the difference in the allocation is wide where female enrolment is the lowest in respect to other districts. It is also pertinent to mention that Thatta has the worst condition in terms of facilities as only 33 percent of the schools there have toilets, only 17 percent have water, 12 percent have electricity, and 37 percent have a boundary wall.

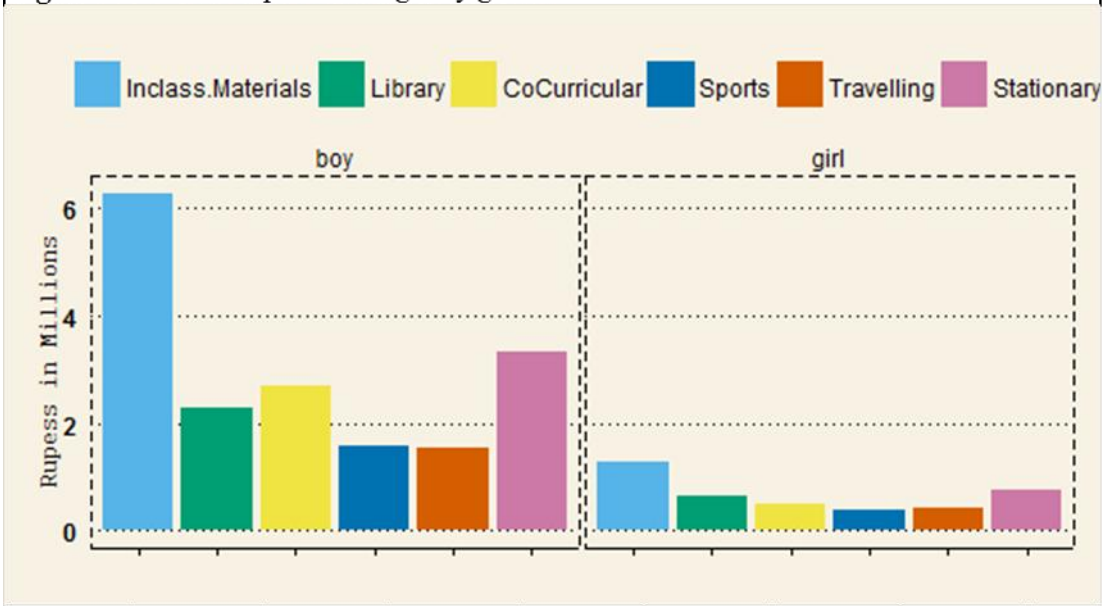
Figure 3.21 Thatta Budget by gender



Source: RSU 2014-15

The current expenditure on education is divided among six broad categories. The categories are in-class materials, library, co-curricular activity, sports, travelling, and stationary. Figure 3.22 shows the bifurcation of expenses by gender. For both genders the in-class materials and stationary accounts for the highest portion of expenditure. However, the magnitude of the expenditure on in-class material and stationary is wide. In-class materials are earmarked at 6.28 million of the total 17.68 million which accounts for 35.5percent of the total expenditure on boys. On the other hand, in-class material for girls accounts for only 1.26 million of the total 3.98 million rupees in Thatta.

Figure 3.22 Thatta specific budget by gender



Source: RSU 2014-15

Expenditure on travelling is an important factor with respect to female enrolment and teachers' absenteeism. Gyansah (2014) claims that travelling long distances to and from schools ultimately results in teachers either arriving late to school or leaving school early to reach home in time[29]. Similarly, an increase in travelling time increases girls' dropout rates from schools at the secondary level mainly due to safety reasons. [30]

Education tops the priority list of the Sindh government. Along with this budget allocation which was a federal subject is now devolved at the provincial level. To make the government conscious of the despicable situation of electricity, water and toilets it is pertinent to mention only 12.6, 12.99 and 19.6 on average schools have these facilities respectively. Therefore a greater proportion of the budget needs to be allocated towards development. There also needs to be better monitoring of human resources to ensure that budget is utilized more effectively. Currently, there is high absenteeism among teachers.

[29] Gyansah et al(2014), teacher absenteeism and its impact on quality education, the international journal of humanities and social sciences.

[30] Rihani, M. A. (2006). Keeping the promise: Five benefits of girls' secondary education. Washington, DC: Academy for Educational Development.

SECTION-IV: CONCLUSION AND RECOMMENDATION

This report presents an analysis of the supply side of public schools and their facilities in Thatta using different benchmarks. It identifies schools that are performing poorly in terms of enrolment, functional schools, and facilities within schools with respect to gender and school level (primary, middle, secondary and higher secondary). Results from Thatta, which is categorized as a poor performer, are analysed to highlight priority areas for government intervention.

Data has been obtained from four sources; SEMIS, ASER, PSLM, reform support unit (RSU) Sindh. The analysis primarily uses SEMIS, which is a census of public schools in Sindh conducted by the Government of Sindh. Since there is no census data for private schools, sample estimates provided by ASER and PSLM have been used. It should be pointed out that the reliability of SEMIS data can be improved by introducing third-party validation. The Sindh Education Management Information System (SEMIS) collects and maintains data from schools across Sindh, but these data are seldom used for policy decisions such as recruitment of teachers and funding allocation.

There is a great disparity amongst schools on various education indicators in Thatta. This report establishes that primary level girls' schools are the worst performing schools in Thatta with respect to facilities that are self-explanatory by the illustrations in section 3.1. The selection of these indicators does not preclude the importance of other determinants. Inclusion of additional and relevant socio-economic factors in further analysis will enhance a broader understanding of the issues at hand. Validation by on-ground surveys will provide information for this analysis. These results will then serve to make comprehensive recommendations to policy maker's vis-à-vis corrective measures to improve enrolment.

This report identifies issues that the GoS needs to address on a priority basis in the worst performing schools. Based on the indicators analysed in the report, these priority areas vary from school to school at gender level as well at school level. Like almost all districts in Sindh, Thatta too faces a shortage of classrooms. Although, for daytime learning, it may be argued that electricity is not as important. However, given the weather conditions, small classrooms without fans, packed

with tens of students, makes for a dysfunctional learning environment. It was also found that basic facilities of electricity and water provided to primary girls' schools is much lower than compared to boys. Technical facilities like libraries and computers are non-existent. It is evident from the analysis in this report that much more needs to be done to address this grave disparity which has pervasive negative effects on the country. There is in particular a need to shift monetary resources from paying salaries to absent human resources, to investing in the physical infrastructure of public schools.

Teachers are important in the attainment of education for the students. This report identifies that for coeducation schools more than 90% are male teachers at all levels of schooling. It must also be noted that there may also be disparity between urban and rural areas. There are more non-functional schools in urban areas of Thatta than in rural areas. There are no functional boys middle/elementary schools in urban Thatta. For rural Thatta most of the non-functional schools are the primary boys' schools.

A variable of critical importance in the study of human development is gender equality. A patriarchal society does not naturally encourage girls to go to school and the government has to introduce incentives to counter this bias. This report presents an expected result; female enrolment is consistently lower than male enrolment at all levels. Even when compared to Sindh, the enrolment is again lower. Similarly, budget allocation which after the 18th constitutional amendment is a provincial matter does not reap any positive results. There is a wide gap in the budget expenditure on boys' schools and girls' schools. In the fiscal year 2014, 93.07 million was allocated to boys' schools while only 17.85 million was earmarked against girls' schools.

Educationists, who delve into the realm of understanding the demand for education assess the conditions of functional schools and debate motivation for young children to attend school. Schools which do not offer any relief from hard conditions at home do not tilt the decision in favour of attending school. In fact the opportunity-cost of attending schools which have poor facilities and an unpleasant environment is higher than the cost of staying away in Thatta. It can be argued, that before educationalists start thinking about improving quality of education, they must focus on getting children to school, and to do so there must be enough schools with a

minimum requirement of essential facilities that provide effective spaces for teaching and learning. Policy makers must recognize that mass education is a precursor to economic development and not the other way round. Hence provision of functioning schools should be of key priority in their development agenda. Policies aimed at increasing the number of functioning schools and at improving enrolment rates in general should also consider the impact of non-economic factors on outcomes.