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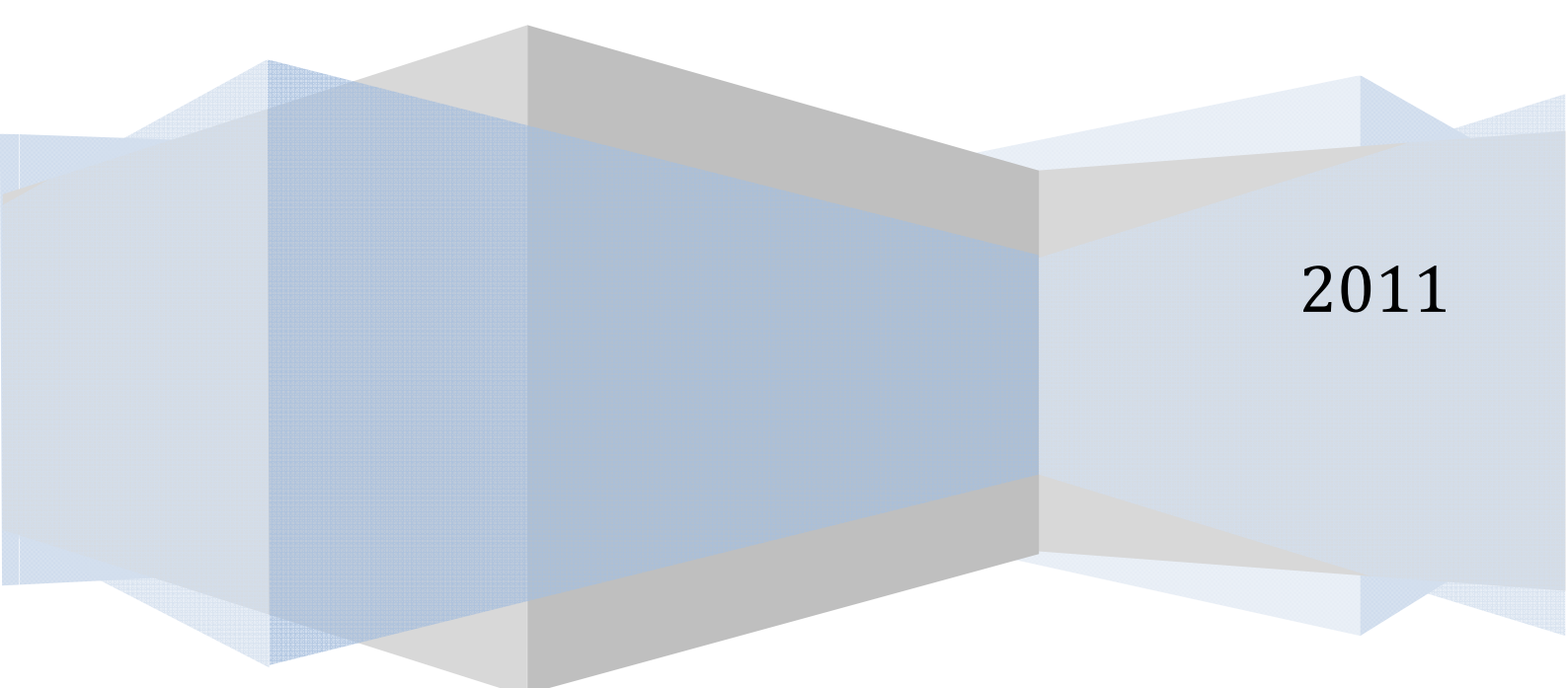


United Nations
Educational, Scientific and
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Policy Analysis of Education in Sindh

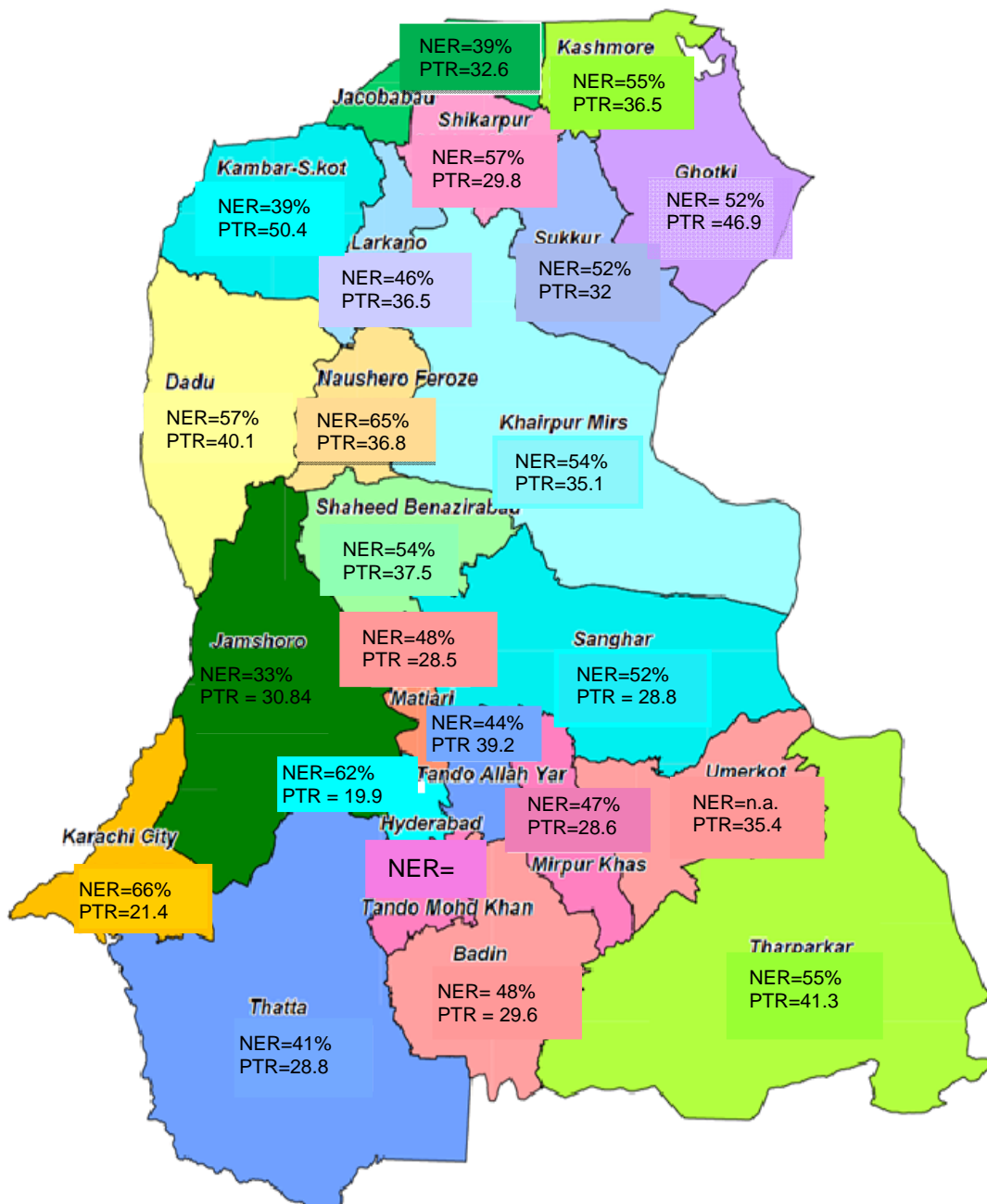
UNESCO, Pakistan

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2011

Sindh's Education Situation at a Glance



NER= Net Enrolment Rate (PSLM 2008-09); PTR=Pupil Teacher Ratio (Public Sector) SEMIS 2009-10

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Abbreviations

ADB	Asian Development Bank
ADP	Annual Development Programme
AEPAM	Academy of Education Planning and Management
AFAQ	Association For Academic Quality
AKES,P	Aga Khan Education Services, Pakistan
AKU	Aga Khan University
AKU-EB	Aga Khan University Examination Board
AKU-IED	Aga Khan University - Institute for Educational Development
BBSYDP	Benazir Bhutto Shaheed Youth Development Programme
BoC	Bureau of Curriculum
BPRM	Bureau for Population, Refugees and Migration (USA)
CEDAW	Convention on Elimination of All Forms of Discrimination against Women
CIDA	Canadian International Development Agency
CRI	Children's Resources International
CT	Certificate in Teaching
DAIs	degree awarding institutions
DEEP	Decentralised Elementary Education Project
DFID	Department for International Development (UK)
EC	European Commission
ECCE	Early Childhood Care and Education
ECE	Early Childhood Education
ECD	Early Childhood Development
ECHO	European Commission's Humanitarian Aid Office
EDI	EFA Development Index
EDO	Executive District Officer
EFA	Education for All
ELP	Early Learning Education Program
ERDC	Education Resource and Development Centre
ESRA	Education Sector Reform Assistance
EU	European Union
GER	Gross Enrolment Rate
HANDS	Health & Nutrition Development Society
HEC	Higher Education Commission
HDP	Human Development Programme, AKU
IDA	International Development Association (World Bank)
IELP	Integrated Education Learning Program
JST	Junior School Teacher
LEF	Labour Education Foundation
LHP	Landless Harees Programme
LHWs	Lady Health Workers
MDGs	Millennium Development Goals
MSP	Middle School Project
NCE	New Century Education
NCHD	National Commission for Human Development
NER	Net Enrolment Rate

NEP 2009	National Education Policy 2009
NGO	Non-Government Organisation
NRSP	National Rural Support Programme
OUP	Oxford University Press
PGDP	Provincial Gross Domestic Product
PSLM	Pakistan Social and Living Standards Measurement
PST	Primary School Teacher
PTC	Primary Teaching Certificate
RCC	Releasing Confidence and Creativity
RSP	Rural Support Programme
RSU	Reform Support Unit
SEF	Sindh Education Foundation
SEMIS	Sindh Education Management Information System
SERP	Sindh Education Reform Programme
SGRRP	Sindh Growth and Rural Revitalization Programme
STB	Sindh Textbook Board
STEP	Strengthening Teacher Education in Pakistan
STEVTA	Sindh Technical Education and Vocational Training Authority
TEVTA	Technical Education and Vocational Training Authority
TDC	Teachers Development Centre
TRC	Teachers Resource Centre
UCBPRP	Union Council Based Poverty Reduction Programme
UN	United Nations
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNFPA	United Nations Fund for Population Activities
WB	World Bank

EXECUTIVE SUMMARY

This policy analysis does a comprehensive review of all the sectors in education from pre-primary till tertiary levels along with vocational, non-formal, special needs and madrassah education sectors. The analysis also looks at the progress of Sindh over EFA and MDG goals, public sector education budget and donors' financial assistance. The implementation of NEP 2009 in Sindh is also looked at in detail. Towards the end the report does some projections regarding EFA/MDG goals, meeting constitutional commitments and proposes strategies to meet pressing needs at various education sectors.

Sindh is the second most populous province and second largest economy of Pakistan. It inhabits 42 million people who will grow to 89.8 million by 2030. Volatile economic growth, troubled political scene and low social development indicators further affected by floods pose serious development challenges for Sindh. The Vision 2030 of Sindh makes commitments to uplift the province to greater heights. The potential is there in the form of natural resources, sea port, coal for energy and industry. The current ADP allocations for Sindh stand at Rs. 127, 050 million with 6.09% allocation for education.

The education policy of Sindh can be understood through its various development projects, governance structure and developments over the implementation of national education policy. In wake of 18th Constitutional Amendment the Education Department is repositioning itself to undertake additional responsibilities. A joint declaration at national level presided by the Prime Minister and represented by all federating units has endorsed NEP 2009 and agreed to national coordination.

Some prominent recent education development projects in Sindh include ESRA, DEEP, MSP and SERP. SERP is a multi-sectoral programme financed by the World Bank and the European Union. It aims to improve governance and quality of education across various sectors in the public education system. The current ADP allocation (2011-12) show a rise of 69.5% compared with ADP 2010-11.

Education Sector Analysis

Sindh has 49,605 institutions from primary till higher secondary level. The share of various sectors is as follows: primary – 90.8%; Middle – 5.4%; Secondary – 3.3% and higher secondary – 0.5%. There are 4.5 million children at these various levels with bulk (62%) going to primary. There is huge decline in middle sector enrolment compared with primary and if the transition gets improved serious efforts would be needed to provide physical space and teachers for increased enrolment. Across all the levels, the student-teacher ratio stand at 1:30; student-school ratio stand at 1:147 and student-classroom ratio stand at 1:44.

Early childhood education (ECE) has been recognised in formal education policy but still require efforts to feature it in regular educational budget. The enrolment at pre-primary level is 704,570 in Sindh. There are no specialised teachers available for this level of education in the public sector, though private sector has provided greater input in terms of school provision and training facilities and recognition for early years' teachers. The government needs to add ECE classes along with provision of trained teachers and teaching resources.

Elementary education forms the bulk of educational provisions in public sector in education. Through SEF the government is trying to promote private participation in educational provisions along with public private partnerships. There are 45,044 primary and 2,668 middle schools in Sindh with significant rural-urban disparities. The enrolment at primary level is 3.4 million and at middle level 0.23 million. The primary NER increased from 48% to 53% during 2004-05 and 2010-11. The middle NER for the same period show a slight increase of 1% and reached at 19%. The quality of physical facilities at primary and middle levels is also quite dismal, only 28% buildings are considered satisfactory for teaching learning purpose. This partly explains huge dropout rate at various levels particularly during transition from grade 5 to 6, where on average 36% students drop out. Interestingly most teachers possess professional qualifications but this does not guarantee provision of quality education at this crucial stage. Unfortunately, the elementary sector enrolments are closely linked with income level. The rich have higher chances of being in school than poor.

Secondary and higher secondary sector has 1,662 and 231 institutions, respectively. The NER at secondary level is very low and has actually declined from 12% to 11% during 2004-05 and 2010-11, with disparities between rural-urban and male-female. There are 0.63 million students enrolled at secondary level and 0.23 million students enrolled at higher secondary level. There are 25,550 teachers at secondary level and 6,530 teachers at higher secondary level. The number of teachers in urban areas is much better than in rural areas at both of these stages. Again the situation of buildings at this stage are not encouraging, only 27% buildings are reported as satisfactory in SEMIS data of 2009-10. The schools also lack lab facilities and subject specialist teachers at this stage. The share of private sector is higher for secondary sector, which is around 65% of the total secondary school, but it caters to only 39% children enrolled at secondary level. Again income is a big determinant of educational situation at this stage. Higher earners are more likely to be enrolled than lower earners.

Tertiary education involves degree colleges, universities and degree awarding institutions (DAIs). There are 240 degree colleges in Sindh in both public and private sectors and 37 universities and DAIs. Degree colleges enrol 81,541, while universities and DAIs enrol 151,099 students. The number of teachers in degree colleges are 5,814 and in universities are 9,314. Around 28% of private university's faculty is associated as part timers.

Technical and vocational education is crucial in building skilled workforce for the country. The government of Sindh created STEVTA as a prime body dealing in all technical and vocational educational affairs. In addition BBSYDP has been launched to impart skills to around 100,000 youth. There are 469 institutions enrolling 57,506 students and impart skills through 2,727 teachers. The sector suffers from lack of resources, low capacity and weak training and market links.

Special Education is another neglected sector in education. There are total 50 institutions for special needs children, 80% of which are located in Karachi and only 20% exist in other parts of Sindh. There are estimated 929,400 people with disabilities in Sindh and the current provisions hardly reach to 4% of the disabled population. The rural population is severely disadvantaged to access these institutions. The institutions cater for various needs such as: hearing impairment, mental retardation, visual impairment and physical handicap. A paradigm shift is needed towards special education changing it from charity-based approach to right-based approach. Streamlining and inclusiveness should be the aim. It is important to institutionalise the inclusive education approach, through which special children should be included in the mainstream regular schools. Regular budget allocations are needed to enhance effectiveness of the sector.

Non formal education and adult literacy is taken care by the Directorate of Literacy and Non formal Education in Sindh. The literacy rate among 10+ years population has increased from 56% in 2004-05 to 59% in 2010-11, with rural growth much steeper than urban. There are 2,075 Non formal Basic Education Schools in Sindh enrolling 78,522 students. NCHD has also targeted to have 5,370 literacy centres with 104,660 enrolment. The sector suffers from lack of funds, lack of capacity and human resource. The sector also suffers from low quality provisions and difficulty in mainstreaming.

Deeni Madrassahs presents a parallel system of education particularly for poor segment. There are 1,885 madrassahs in Sindh with 11,026 teachers and enrolling 326,244 students. Mainstreaming of madrassahs pose a major issue. Incentives should be provided to the madrassahs which also provides education of key subjects of formal schooling.

As far as equity dimension is considered, it is important to note that across all levels; the rural population is disadvantaged compared with urban population. The females across all levels and even in rural population are the most deprived segment of population. The overall net enrolment rate for females at primary level is 48% compared with 57% for male, which becomes 10% at secondary level compared with 12% for males.

Sindh and International Commitments

Pakistan is placed at 119th rank out of 127 countries over EDI ranking by the EFA Global Monitoring Report 2011, even lower than Bangladesh (112). It is unfortunate that

Pakistan will miss out the deadline of 2015 to meet EFA goals. A series of projects over certain EFA indicators are made, which shows following results:

Target	Achievement year given current pace	Distance from 2011 (years)
Achieving Universal Primary Education	2066	55
Survival Rate to Grade 5	2015	0*
Adult Literacy	2052	41
Gender Parity in Primary Education	2163	152**
Gender Parity in Secondary Education	2043	32
Gender Parity in Youth Literacy	2060	49

*The projections for survival rate keep 2015 as the target deadline and suggest a dramatic increase of around 11.8% annually in survival rate.

**The gender parity at primary level has remained almost unchangeable, hence the projections reveal a very distant date for achieving the target.

Educational Financing

The actual expenditures for education in Sindh stand at Rs. 52 billion for 2009-10, which has risen 22% from previous year. The share of educational expenditures in total provincial expenditures has more or less remained unchanged over the years. The share of education in total provincial expenditures in 2009-10 is around 52 billion, which is 22% of the total provincial expenditure. Out of the total educational expenditures of 2009-10, primary education received 38%, secondary 26% and universities 10%.

Donors also play a significant role in educational financing particularly for development side. Through on-going donor assistance, Sindh has been committed of \$ 359,657,411, out of which it has received so far \$ 305,486,213 (85%). The biggest assistance is provided by the World Bank of \$ 300,000,000, which is actually a loan and make up for 83% of the total funds committed to education in Sindh. The rest of the funds are in the form of grants, which amounts to \$ 59,657,411 in total and make up for 17% of the total committed funds to education in Sindh. The biggest assistance is provided by the World Bank, which is actually a loan. As far as the grants are concerned the biggest share has been committed by EU, followed by DFID and Netherlands. The World Bank and EU support the Sindh Education Reform Programme (SERP) implemented by the RSU (Reform Support Unit), Department of Education and Literacy, Sindh. Apart from this USAID has been providing critical support through various programmes such as ESRA, Ed-Links and Pre-STEP targeting various educational development areas mainly focusing on teachers' professional development and management of the sector.

The 18th Amendment has introduced Article 25A which has made education compulsory for ages 5-16 years. Further, the education sector is mostly devolved to the provincial level. Keeping this in view some projections are made to calculate the cost of meeting the constitutional commitments.

With 2009/10 enrolments and actual education expenditures, a series of projections i.e., for unit costs of primary education and share of primary in total education expenditures, were estimated. For each year, calculations were made for primary education expenditures and total education expenditures. The total primary education expenditure required to achieve UPE by 2015/16 is estimated at Rs 311 billion.

Rough calculations suggest, using the secondary school expenditure per student as Rs 8,500, an *additional cost* of about Rs 1,269 million (149,374 @ Rs 8,500¹) for one year only is needed.

Progress over NEP 2009, needs and way forward

A detailed analysis is carried out to see implementation over major policy provisions of NEP 2009 in Sindh (see Table 74). There is some progress made over certain provisions, though majority needs further attention. The discussion with educational officials reveal that there are no proper plans at the provincial level to follow up on NEP 2009 and whatever progress is shown, happens due to province's own choice rather than an effort to implement NEP 2009. The recently passed 'Joint Declaration' (see Box-1) may bring renewed commitment among provinces to take it seriously and plan for its serious implementation.

As far as overall education development needs of Sindh are concerned a detailed analysis shows specific needs, target group and possible strategies (see Table 75). In short, there are needs related to access, quality, equity and governance. The elementary sector needs to improve inequities and enhance enrolment. Quality of instruction, of building facilities and of learning material needs to be enhanced to retain students and ensure their transition to middle, secondary and higher secondary levels. Particular attention needs to be given towards rural female to improve disparities. The disparities based on income group need serious consideration by the government to improve the situation. Governance is a major issue and need to be improved to improve monitoring, and quality of service delivery.

As a way forward the Education Department of Sindh should take following measures:

1. Develop a vision following NEP 2009 and plan for its implementation. Political commitment of leadership need to be demonstrated.
2. Appropriate resources – financial and human need to be made available to act on plan.
3. Proper governance be ensured to see action over plan
4. Partnerships should be developed with private sector, civil society, donors and other government departments to synchronise all efforts towards provincial plan
5. Mass mobilisation – seek inclusion of communities, parents and media to keep plan alive

¹ Assuming a 17.5% increase in unit costs

Patience and persistence are the keys to success.

CHAPTER 1: OVERALL DEVELOPMENT CONTEXT AND PROVINCIAL DEVELOPMENT PRIORITIES

The education sector is intricately connected with the overall developmental context². It is therefore important to understand the overall development context of the Sindh province before embarking upon analysis of the provincial education policy. In order to do that, this chapter looks at the status of Sindh province's overall economic growth and development along with key challenges. It also articulates the major development priorities set out by the province.

1.1 THE DEVELOPMENT CONTEXT

Sindh is Pakistan's second most populous province and second largest economy. The overall development context can be understood through looking at the economic, social and political developments of the province. These developments are articulated below.

1.1.1 ECONOMIC GROWTH

The estimates by the Sindh finance department shows that the provincial Gross Domestic Product (PGDP) has increased from approximately Rs. 1.7 trillion to Rs. 4.1 trillion between 2004-05 and 2009-10 with an average growth rate of 18%. However, at the same time the rate of inflation has also increased which would make this rise not as significant as it appears initially. The recent floods in the province have also affected the GDP growth severely; in addition the law and order situation in Karachi also affects GDP growth negatively.

The World Bank (WB) and Asian Development Bank (ADB) reports suggest that Sindh saw a significant decline in poverty from 35.3% in FY2002 to 22.4% in FY2005, which subsequently worsened³.

Sindh's economy is also starkly divided between rural and urban areas. While 95% of the urban population derive their livelihood from manufacturing and services sectors, 70% of the rural population depends on agriculture, livestock, forestry and fishing sectors. The growth rate of rural economy is slower compared to urban. This rural

² Stern, N. (2001, March 29). Investing in education and institutions: the path to growth and poverty reduction in Pakistan. Paper presented at the National Workshop on Pakistan's Poverty Reduction Programme, Islamabad.

³ Asian Development Bank (2008, November). Sindh Growth and Rural Revitalization Program: Report and Recommendation of the President to the Board of Directors - Project 41545

urban divide has a destabilising effect on overall provincial economy resulting in migration towards urban areas and subsequent burdening of urban social services.

Although the growth in urban Sindh is higher than rural Sindh, it has declined since FY2009 and is not keeping up with rising demands. It is estimated that without a sustained growth rate of 7-8% the number of unemployed in Sindh could rise as high as 1.6 million by FY2014. According to Pakistan Social and Living Standards Measurement (PSLM) survey, a comparison between 2006-07 and 2010-11 reveal that there are lesser people in both urban and rural Sindh who perceive that economic situation of their household has improved compared to previous year.

Despite this bleak situation, the province has huge developmental potential that can trigger significant economic growth. It is a coastal region with developed seaport. It can provide key trade links between various neighbouring countries. Despite its chequered history, Sindh still has high industrial growth potential. It accounts for 40% of large scale manufacturing production of the country and significant contribution to overall agricultural output of the country (32% in rice, 24% in sugar cane, and 21% in wheat)⁴. In addition, Sindh holds around 33% of all the mineral deposits of Pakistan. The recent discovery of coal in the Thar district provides a huge potential for growth in the energy sector.

1.1.2 SOCIAL DEVELOPMENT

The current population of Sindh is around 42 million which is estimated to rise 63.5 million in 2020 and 89.8 million in 2030⁵. The current official population growth rate is 2.8%. The PSLM 2008-09 shows that there is marginal decline in the overall average size of a household from 6.6 to 6.3 between 2004-05 and 2008-09. During the same period, the adult literacy rate has risen from 70% to 72% in urban Sindh and from 36% to 40% in rural Sindh. The education statistics indicate towards a positive trend, though with slower pace than needed. The percentage of population of 10 years and above that has ever attended a school has also slightly improved from 72% to 74% in Urban Sindh, but quite significantly improved in rural Sindh from 39% to 45%.

The health indicators of the province are not encouraging. The percentage of 12-23 years old that have been immunised declined from 64% to 57% in urban areas and from 32% to 28% in rural areas. In terms of pre-natal consultation, while 84% of women consult a health facility in urban areas, only 43% in rural areas consult such health facility.

⁴ Government of Sindh and Development Partners (WB, EC, DFID and ADB). (n.d.). Sindh Province: Public Financial Management and Accountability Assessment – Report No: 46323-PK

⁵ Sindh Vision 2030: Aspiring towards a healthy, productive & prosperous nation. (2007, July). Planning and Development Department, Government of Sindh.

There is also deprivation in terms of access to tap water, which is 74% for urban areas and only 11% for rural areas.

1.1.3 POLITICAL DEVELOPMENT

The urban rural divide in Sindh province is quite stark, which needs to be accounted for in any analysis of the provincial situation. There are significant differences between rural and urban economies of Sindh, urban areas providing more opportunities compared to slow rural growth. Due to this and various other demographic factors Sindh has become the province with the highest percentage of urban population in Pakistan – around 50% mainly owing to Karachi along with Hyderabad and Sukkur. The urban areas particularly Karachi has diverse population mix from all parts of Pakistan. A recent publication *Karachiwalas* by Romana Hussain claims that inhabitants of Karachi represent the whole sub-continent. This diversity, however has led to ethnicity based politics having severe effect on the overall economic and social development of the province. There have been repeated episodes of ethnic violence during 1970s, late 1980s, late 1990s and late 2000s and have continued to surface in recent years. The political developments in the province have strong relations with social, economic and educational developments and need to be accounted for in any analytical work.

1.1.4 PROVINCIAL DEVELOPMENT PRIORITIES

The provincial development priorities are explicitly articulated in ‘Sindh Vision 2030’⁶ document prepared by the Planning and Development Department, Government of Sindh in 2007. The ownership of the vision by the later government is still uncertain, however, this does provide a comprehensive and systematic effort towards achieving future growth. The vision is stated as follows:

‘A united, just, resilient, productive, innovative, industrialised and prosperous Sindh with a disciplined, caring society comprising of healthy, happy and educated people and built upon the enduring pillars of self-reliance, respect, tolerance, equity and integrity’

The vision sets out the following development priorities:

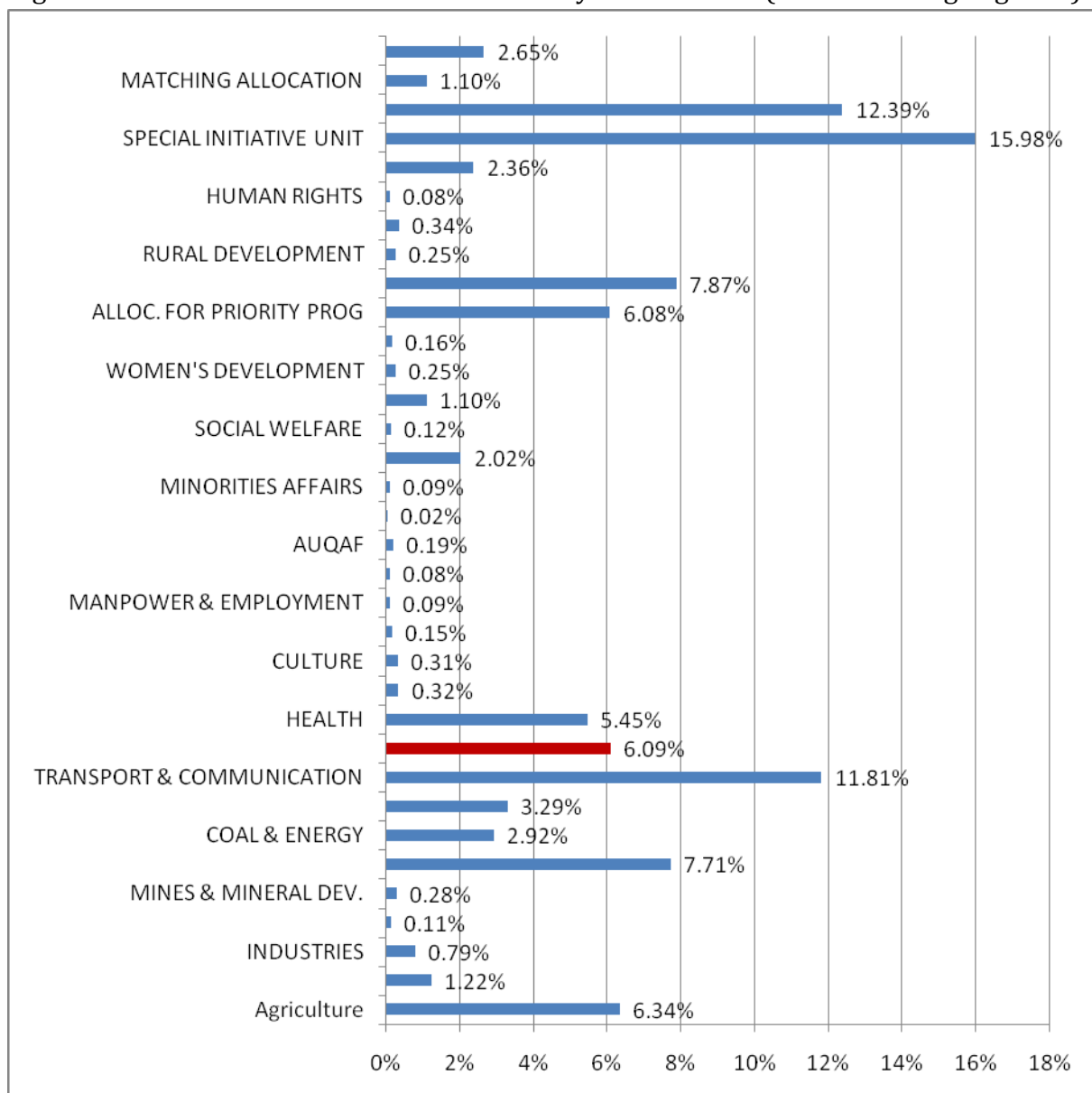
1. Nurturing a caring society;
2. Developing innovative people;
3. Governing effectively and without debt;
4. Enabling competitiveness in agriculture, business and industry;
5. Securing and investing in sound infrastructure and in the Environment.

⁶ Sindh Vision 2030 – Aspiring towards a healthy, productive & prosperous nation. (2007). Planning & Development Department, Government of Sindh.

These priorities are linked with the sectors identified in Pakistan Vision 2030 and the Millennium Development Goals (MDGs). It appears that the aspirations of the vision have been falling short of achieving desired targets, which is also reflected through the worsening development situation.

Apart from the Vision 2030, the development priorities of the province can be ascertained from the allocations of resources in the Annual Development Programme (ADP). The current ADP allocations for the financial year 2011-12⁷ stand at Rs. 127,050 million, which is distributed into various sectors as shown below (Figure 1):

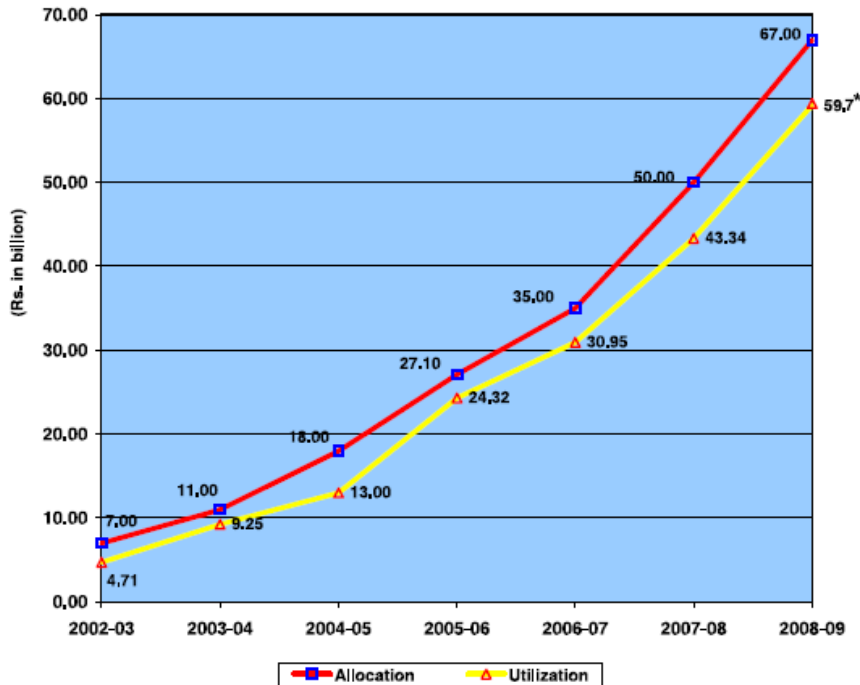
Figure 1: ADP allocations for the financial year 2011-12 (education highlighted)



⁷ Source: Public Sector Annual Development Programme (ADP) 2011-12 Including Foreign Project Assistance (FPA). Planning and Development Department, Government of Sindh.

There remains a usual shortfall between allocations, disbursements and utilisation, which can also be seen from the figure below (Figure 2). The figure⁸ also demonstrates a steady rise in the development budget.

Figure 2: ADP Allocation and Utilisation 2002-03 to 2008-09



* = Projected

Overall, the development focus of the Sindh government seems to be poverty reduction and growth in rural economy through special projects like Thar coal. The floods of 2010 and a recurrence in 2011 have also dislocated a substantial rural population, which requires continuous support and re-development. The advisor to the Chief Minister on Planning and Development in a gathering highlighted three major areas of priority for Sindh at the moment along with others. These include development of the infrastructure particularly roads connecting various parts, re-building of river banks to secure from floods and investment in Thar coal project to ensure future energy needs of the province and the country.

Some of the major development initiatives that the Government of Sindh has been pursuing includes: Benazir Bhutto Shaheed Youth Development Program (BBSYDP), Union Council Based Poverty Reduction Programme (UCBPRP), Landless Harees Programme (LHP), Sindh Growth and Rural Revitalization Programme (SGRRP) and Thar Coal Development.

⁸ Figure reproduced from Sindh Development Review 2008-2009. Planning and Development Department, Government of Sindh.

CHAPTER 2: EDUCATION POLICY IN SINDH

There is no formal policy document available at the provincial level labelled formally as provincial education policy. However, there are discussions within the provincial Ministry of Education on the issues of education policy and curriculum in post 18th Amendment scenario. The National Education Policy 2009 (NEP 2009) does allow for provincial implementation plans along with inter-provincial coordination at federal level. In a joint declaration issued at the end of a high level Education Conference presided by the Prime Minister and attended by all provincial Chief Ministers and Education Ministers on 17th September 2011, it is re-affirmed that NEP 2009 will continue to serve as a guiding policy for the provinces. Within this context, the education policy at the provincial level (the policy in practice)⁹ can be understood through looking at: education development priorities and plans, education governance structure of Sindh and developments on NEP 2009.

2.1 SINDH'S EDUCATION DEVELOPMENT PRIORITIES AND PLANS IN RECENT YEARS

The interviews with key officials in the Reform Support Unit at the Department of Education and Literacy in Sindh reveals the following major educational development projects in Sindh during recent past, some of which are still in operation.

1. Education Sector Reform Assistance Programme (ESRA) (2002 – 2007) funded by USAID
2. Middle School Project (MSP) funded by ADB
3. Decentralised Elementary Education Project (DEEP) 2005 – 2008/09 funded by ADB
4. ED-Links (2008 – on going) funded by USAID
5. Pre-STEP (2008 – on going) funded by USAID
6. Teacher Capacity Building project (2009 – on going) funded by CIDA

Amongst the above programmes, the DEEP and Middle School Project focused on improvement of physical facilities for upgrading existing primary schools into middle schools. The rest of the projects involved capacity building of teachers, education managers and teacher educators (please see Table 71 for detailed description of the donor funded education projects in Sindh).

⁹ Ozga, J. (2000). Policy Research in Educational Settings contested terrain. Buckingham: Open University Press.

Apart from donor financed education development programmes, if the comparison is carried out to see the focus of the Annual Development Programme of 2010-11 and 2011-12 (Table 1), the following picture emerges.

Table 1: Comparison of the Annual Development Programme of 2010-11 and 2011-12

Sub-Sector	ADP 2010 – 11 (Rs. in million)	ADP 2011 – 12 (Rs. in million)	Increase/Decrease %
Elementary Education	436.000	257.997	-40.83
Teacher Education	28.562	81.800	186.39
Sindh Education Foundation	897.793	1468.323	63.55
Special Education	5.000	0	-100.00
Secondary Education	654.767	1162.627	77.56
College Education	2299.176	3976.238	72.94
Miscellaneous	239.202	786.015	228.60
Total	4560.500	7733.000	69.56

Looking at the above table, it is apparent that the overall allocation to the government sector is substantially increased between 2010-11 and 2011-12. The allocation is increased in all sectors except elementary and special education. There are no schemes and hence no allocations for Special Education sector in 2011-12. A major increase in allocation for Teacher Education is due to the launch of two education programmes of teacher education: Associate Degree in Education and Masters Courses for Teacher Training at various teacher training colleges in Sindh. The latter is allocated around 42 million rupees though the scheme is yet to be approved.

The substantial allocation to Sindh Education Foundation under ADP 2011-12 is allocated to the following on-going schemes (Table 2):

Table 2: Allocation to Sindh Education Foundation under ADP 2011-12

Schemes	Allocation for 2011 – 12 (Rs. in million)
Early Childhood Education and Early Learning Education Program	10.418
Promotion of Private Schools in Rural areas / Urban Slums	800.000
Setting up Rural Community Based Schools through Public Private Partnership	207.905
Integrated Education Learning Program (IELP)	450.000
Total	1468.323

The major education reform programme that is being run in the public sector in Sindh is Sindh Education Reform Programme (SERP) which is financed by the World Bank and European Commission (EC). SERP is being implemented by the Reform Support Unit (RSU) of the Education and Literacy Department, Government of Sindh. The programme was started in 2006/07 and is in conclusive stages. It is learnt from the official sources

that this programme will lead to a newer programme, which may be seen as a next phase of SERP. The major pillars of SERP are:

- i) Improving fiscal sustainability and the effectiveness of public expenditures;
- ii) Improving education sector management;
- iii) Improving access to quality schooling in rural areas and for girls;
- iv) Improving the quality of teaching and student learning

The SERP planned to achieve increased school participation, reduce gender and rural-urban disparities, increase progression, and improve the measurement of student learning.

A World Bank appraisal document¹⁰ outlines the following (Table 3) outcome indicators and targets to assess the success in meeting SERP's objectives:

Table 3: Outcome indicators and Targets to assess the success of SERP

Outcome indicator	Latest available baseline	Target, 2011/12
Primary NER (%)	50.0 (2006/07)	55.5
Female-male ratio NER, primary, rural (%)	61.2 (2006/07)	64.6
Class 5-6 transition rate, rural, girls, public school (%)	51.2 (2007/08)	63.4
Learning levels monitored through diagnostic learning assessments	<p>Baseline measurements for diagnostic mathematics, language, science and social studies established for class 4 students in a district-representative sample of public schools in 2008/09, 2009/10, 2010/11, and 2011/12 respectively.</p> <p>Follow up measurements for diagnostic mathematics established for class 4 students in a district representative sample of public schools in 2010/11.</p>	

The RSU as the main governmental unit of the Education and Literacy Department of Sindh for implementing SERP claims following major achievements under this programme so far:

- Adhering to Sindh Public Procurement Act, 2009
- Closure of non-viable 1158 schools
- Rationalization of teachers across schools and the formal allocation of teaching posts to schools
- Distribution of free textbooks – from 2003 to primary level; from 2005-06 expanded till grade X; from 2010-11 further expanded till grade XII

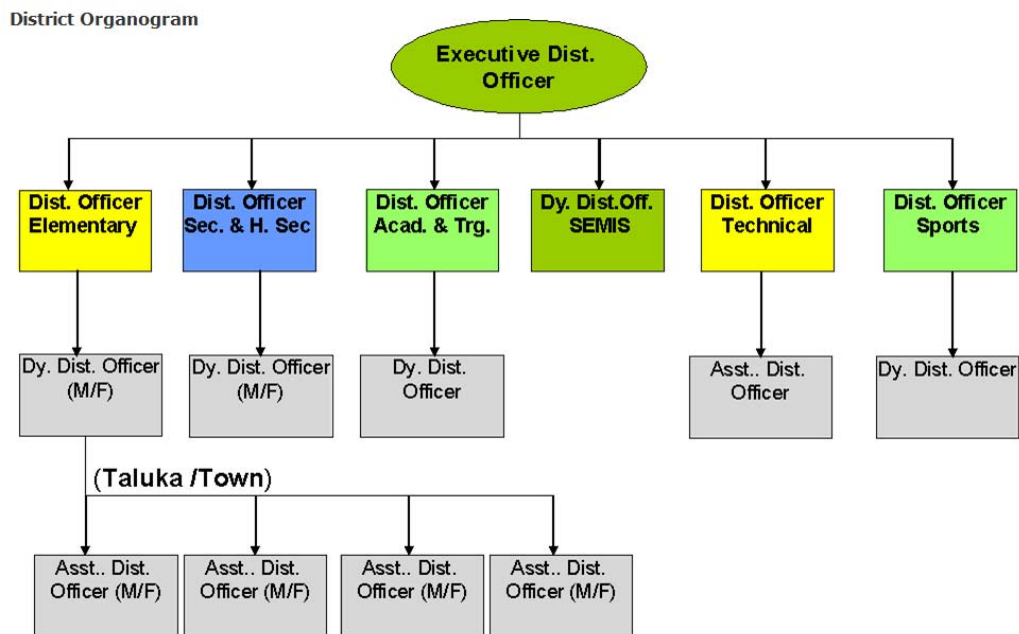
¹⁰ Sindh Education Sector Reform Project: project information document appraisal stage – report no AB4600. (Mar 2009). The World Bank.

- Activation of School Management Committees (SMCs)
- School Rehabilitation grants to all 23 districts under TOP (Terms of Partnerships) agreements
- Distribution of stipends to girls students of classes VI-X
- Merit and needs-based recruitment of teachers in Sindh of around 1200 teachers

2.2 EDUCATION MANAGEMENT STRUCTURE OF SINDH

The district government system which was established in 2001 continued in Sindh until June 2011, when it was abolished and old commissionerate system re-enacted. As a result of political negotiations between coalition partners, the district government system is re-instated through an ordinance which expired in November 2011 again enacting the commissionerate system. Due to uncertain political situation, it is still not clear whether this new arrangement will last longer. Under the district government system, the education governance within a district appeared as below (Figure 3 - reproduced from the website of Department of Education and Literacy, Sindh, accessed in May 2011):

Figure 3: Organogram of District Education Office



The discussions with the education officials reveal that the Education Department is taking cautious steps to reconcile with this legislative and administrative change. An official in the RSU shared that under the district government system, Executive District

Officer (EDO) was the prime authority and single point of contact that could be held accountable for the performance within the district. Under the commissionerate system, the responsibilities are diluted and many officials need to be contacted for ensuring implementation of any order/reform/initiative in districts. It appears that under the current political settlement, the district education system will continue to operate till the ordinance is active. The Education Department is cautious and contemplating possible scenarios and adjust its governance structure accordingly.

2.3 DEVELOPMENTS VIS-À-VIS NATIONAL EDUCATION POLICY 2009 AND NATIONAL CURRICULUM 2006

The officials of the RSU at the Education and Literacy Department maintain that there are no specific initiatives at the provincial level to formally track the policy recommendations of NEP 2009. Apparently, it seems that NEP 2009 is treated as a show piece but not being consulted for overall educational developments in Sindh. However, the officials at RSU maintained that many of the initiatives that are being carried out in the province does relate to the policy recommendations of NEP 2009, for example the issues related to management, teacher education, elementary education and financing of education. Under SERP the government has initiated the process of consolidating schools or clustering smaller schools under one head teacher to improve governance. There are also schools' upgradation schemes going on at various levels from primary till middle, to improve access not only at primary level but also at secondary levels and beyond. The recent joint declaration after the Education Conference in September 2011 under the chairmanship of the Prime Minister does provide a fresh perspective in understanding the provincial attitude towards NEP 2009. It is recommended in the declaration that the provinces take NEP 2009 as an overarching education policy. The coordination between provinces for the implementation of NEP 2009 recommendation would be carried out by the Planning Commission as per the declaration. Chapter 8 presents a detailed analysis of the implementation status of NEP 2009 in Sindh.

As far as the implementation of Curriculum of 2006 is concerned, the officials at Bureau of Curriculum (BoC) shared that there are initial developments towards updating provincial textbooks in accordance with the curriculum guidelines of the National Curriculum of 2006. There was a consultation made in the month of July 2011 pertaining to the review of National Curriculum 2006, where various stakeholders from public sector, private sector, NGOs and donors participated. BoC intends to review the Curriculum of 2006 and adapt it for Sindh as per specific provincial context; this is more important due to the devolution of curriculum development functions at the provincial level under the 18th Amendment.

The officials at the Sindh Textbook Board (STB) suggest that the Textbook Policy of 2007 could not be implemented in Sindh for many reasons. This policy which gave a substantive role to the private sector, does not seem to be taken up by the STB, though officials state that they plan to revise textbooks as per the revised curriculum of 2006 and through public private partnership in textbook production.

Box 1: Joint Declaration on Education

On 16th September a National Education Conference was held at Prime Minister Secretariat in Islamabad. The Conference was presided by Prime Minister Syed Yusuf Raza Gilani and attended by Governor of Khyber Pakhtunkhwa (KPK), Chief Ministers of Punjab, Sindh, KPK and Baluchistan, AJK Prime Minister, provincial education ministers, Federal Finance Minister, Deputy Chairman Planning Commission, senior education officials and representatives of key educational institutions. A 'Joint Declaration on Education' was issued as follows:

- The Federal and Provincial Governments reaffirm their commitment to Education as a priority.
- National Education Policy 2009, subject to such adaptations as are necessitated in view of the 18th Constitutional Amendment, shall continue to be jointly owned national document.
- Education is a fundamental right of all children aged 5-16, guaranteed through Article 25A of the Constitution of the Islamic Republic of Pakistan, following the 18th Constitutional Amendment, which received assent on April 19, 2010; Provincial Governments shall enact legislation for the implementation of Article 25A.
- Each province/area shall develop an Action Plan which shall commit to appropriately raise allocations for education, set priorities according to provincial needs of access and quality of education and provide implementation strategies/processes with time frame and key indicators; ensuring fulfilment of constitutional needs with respect to education and meet the international commitments including targets of Millennium Development Goals (MDGs) and Education for All (EFA).
- The Planning system (the Planning Commission, Provincial Planning Departments, and Education Departments) shall be jointly the secretariat for the Education Ministers' Conference.
- Each year a high level National Summit on Education shall be convened to review progress during the year and decisions taken to further improve the situation to achieve national and international commitments.

(Signed by: Prime Minister, Chief Minister Sindh, Governor KPK, Chief Minister KPK, Chief Minister Baluchistan; Chief Minister Punjab, Prime Minister AJK, Minister for Education Gilgit Baltistan)

Dated: 16th September, 2011

2.4 The 18th Constitutional Amendment and Education

The Constitutional provisions pertaining to education are found in Articles 25A, 31 and 37 (a, b and c). While Articles 31 and 37 have already been there a new Article 25A has been added under the 18th Constitutional Amendment. The Article 31 under the chapter of 'Principles of Policy' emphasises the teaching of Quran, Islamic studies and the Arabic to Muslim students. The education related clauses under Article 37 in the chapter 'Principles of Policy' read as follows:

“The State shall:

- (a) promote, with special care, the educational and economic interests of backward classes or areas;
- (b) remove illiteracy and provide free and compulsory secondary education within minimum possible period;
- (c) make technical and professional education generally available and higher education equally accessible to all on the basis of merit;”

The Article 25A has recently been added through the 18th Amendment under the chapter 'Fundamental Rights'. The Article reads as follows:

“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.”

The 18th Amendment has also abolished the Concurrent Legislative list and has practically shifted most educational responsibilities to the provincial government. Thus the provision of Article 25A bears a huge significance for provincial governments. Sindh province has yet to legislate and plan for achieving the objectives of Article 25A. The chapter 7 discusses in detail the requirements for Sindh to meet its constitutional obligations.

CHAPTER 3: EDUCATION SECTOR ANALYSIS: POLICY, STATUS AND KEY ISSUES

This chapter investigates each sector of education from early childhood to tertiary and to non-formal and technical education. Each of these sub-sectors are analysed under the following thematic areas: policy, status (access and quality), role of private sector, inequities and key issues. The education development needs and strategies are discussed in detail in Chapter 9: Sindh's Educational Development Needs and strategies. It would be useful, if each of these thematic areas is clarified further before we proceed to present the actual analysis.

Policy: Professor Jenny Ozga, a reputed British education policy scholar, suggests that policy is 'any vehicle or medium for carrying and transmitting a policy message'¹¹. The policies generally include formal national policies and federal plans. In Pakistan, the Education Policy is formulated at the federal level and recent being NEP 2009. At provincial level there is no formal education policy. Since the National Report will focus on national policy, in the provincial context of Sindh the policy will be discussed through the major government initiatives like SERP (Sindh Education Sector Reform) and Annual Development Programme. The emphasis here is on 'policy in practice' i.e. to see what derives education in a particular sector in Sindh. An analysis of the implementation of key policy provisions of NEP 2009 is carried out in Chapter 8: The status of Sindh regarding implementation of National Education Policy 2009.

Status: The statistical and secondary data (both qualitative and quantitative) on access and quality is analysed here. Some data particularly on quality is generated through discussions and interviews with education officials and through secondary research. Main sources of quantitative data include Pakistan Social and Living Standards Measurement (PSLM) survey, Sindh Education Management Information System (SEMIS) and Academy of Education Planning and Management (AEPAM).

Role of private sector: The contribution of the private sector as well as Non-Government Organisations (NGOs) in relative sector of education is looked at here. Wherever possible, statistical figures of comparative nature are provided.

Inequities and disparities: Under this theme the disparities are analysed based on gender (male, female), geography (rural, urban) and class (where ever data is available).

¹¹ Ozga, J. 2000. *Policy research in educational settings contested terrain*. Buckingham: Open University Press. Page 33.

Key Issues: Here the focus is on the most pressing issues that need urgent attention in a particular sub-sector of education. This section draws from the section on policy, status and inequities. These issues are further considered later to determine the key needs of education development in Sindh (Chapter 9: Sindh’s Educational Development Needs and strategies).

Before moving into each of the sub-sectors, it would be useful to note the overall salient features of education Sector in Sindh.

The following table (Table 4) shows the total number of educational institutions in Sindh from primary to higher secondary level. There are 49,605 institutions in Sindh, out of which the biggest share is taken up by the primary sector (90.8%). The number of institutions at middle level are only 5.4% and hardly sufficient if the transition from primary to middle get increased. According to the latest available data with SEMIS, the drop out from grade 5 to 6 is 35%. Keeping this in view, the efforts to improve the transition rate will certainly require higher number of schools and teachers for the middle level. Based on the data of past five years the average growth rate of middle schools is 0.6%, which is not sufficient to accommodate a higher influx of primary graduates if that may become the case.

Table 4: Number of Institutions in Sindh level and gender wise

School Level	Number of Institutions			
	Boys	Girls	Mixed	Total
Primary	10,416	7,283	27,345	45,044 (90.8%)
Middle	679	889	1,100	2,668 (5.4%)
Secondary	663	518	481	1,662 (3.3%)
H. Secondary	73	71	87	231 (0.5%)
Total	11,831	8,761	29,013	49,605

Source: SEMIS 2009-10

Another particular feature of Sindh is the prevalence of various mediums of schools, including Urdu, Sindhi, English and mixed (Table 5). Majority of the schools (87%) are of Sindhi medium and majority of them (93%) are in the primary sector.

Table 5: Schools according to medium of instruction

Medium	Number of Institutions			
	Boys	Girls	Mixed	Total
Urdu	1,146	1,183	1,632	3,961
Sindhi	10,114	7,082	25,978	43,174
English	43	34	89	166
Mixed	528	462	1,314	2,304
Total	11,831	8,761	29,013	49,605

Source: SEMIS 2009-10

There are around 4.5 million children enrolled at various school levels from primary to higher secondary levels (Table 6). The bulk of the enrolment (76%) is enrolled at primary level, out of which there are 41% girls. There is deep slump after the primary level, followed by some recovery at secondary level but again dropping at higher secondary level.

Table 6: Enrolment in Sindh according to level and gender

Level	Enrolment		
	Boys	Girls	Total
Primary	2,016,185	1,386,206	3,402,391
Middle	117,146	111,686	228,832
Secondary	376,766	253,571	630,337
Higher Sec.	146,523	81,126	227,649
Total	2,656,620	1,832,589	4,489,209

Source: SEMIS 2009-10

In order to see the availability of basic educational ingredients to each of the pupil the SEMIS data 2009-10 has provided the ratio of students over teachers, schools and classroom across levels including from pre-primary till higher secondary. These are produced in table below (Table 7). It is visible that the student-teacher ratio has remained constant between 2006 and 2009 and stand at an overall ratio of 30 student per teacher. The other ratios of student-school and student classroom have also shown very little variation over the same period. The student-school ratio has fluctuated between 134-148 students per school. The student-classroom ratio has ranged between 42-44 students per classroom. The student/teacher ratio in urban areas has remained better than rural areas.

Table 7: Ratio of students over teachers, schools and classroom with rural urban division across all levels from pre-primary till higher secondary

Year	Student/ Teacher			Student/ School			Student/ Classroom		
	Urban	Rural	Overall	Urban	Rural	Overall	Urban	Rural	Overall
2006	24	36	30	232	64	148	43	43	43
2007	24	37	30	198	70	134	41	44	43
2008	23	35	29	210	70	140	40	44	42
2009	24	37	30	221	72	147	42	45	44

Source: SEMIS 2009-10

3.1 EARLY CHILDHOOD EDUCATION (ECE)

The importance of education during early years has been recognised globally and there is growing body of literature showing that investment in early years not only improve

children's readiness for formal schooling and retention but also their achievements in later stages of life (Lunenburg, 2000)¹².

There are various terms used to denote early years of educational provision, such as ECE (Early Childhood Education); ECCE (Early Childhood Care and Education) and ECD (Early Childhood Development)¹³. It is generally accepted that ECD focuses both on education and health elements, while ECE mainly focuses on educational provisions. For the purpose of this analysis, the report focuses on the ECE and considers the initiatives taken by the government and non-government organisations in the field. There is recognition in the government that different stages of early life require various support related to both health and education. However, this support is divided into various ministries as a result: Ministry of Women Development and Social Welfare; and Ministry of Health take care of the health development which starts from pre-natal. The education departments focus on Early Childhood Education of ages 3-5 years.

The provision of early education and care is in line with several international conventions and declarations such as: Conventions on the Rights of the Child; World Summit on Children; Convention on Elimination of All Forms of Discrimination against Women (CEDAW); Millennium Development Goals (MDGs); Education for All (EFA) goals.

The following sub sections present the policy, status, role of private sector, inequities and key issues of the sector.

3.1.1 POLICY

In public sector schools in Pakistan *katchi* class has traditionally been in place, though un-recognised until 1990s. Several developments both at national and global levels finally convinced the government to recognise the *katchi* class. The 1998-2010 education policy formally recognises the status of *katchi* class as pre-primary class in public schools for children of ages 3-5 years. It is important to recognise that private sector has long before established the pre-primary classes and the success of those have also indirectly affected government's policy decision. The Education Sector Reforms (2001 – 2005) gave strong impetus towards early years' education and as a result a formal curriculum for early childhood was introduced in 2002 and subsequently revised in 2007¹⁴.

¹² Lunenburg, F. C. (2000). Early childhood education programs can make a difference in academic, economic, and social arenas. *Education*, 120(3), 519-528

¹³ Early childhood development initiatives in Pakistan: a mapping study. (2010). Sindh Education Foundation.

¹⁴ National Curriculum for Early Childhood Education. (2007). Islamabad: Ministry of Education, Government of Pakistan.

In the context of Sindh province, it is worth noting that the Annual Development Programme (ADP) prepared by the Planning and Development Department does not contain separate head for early childhood education, though there are separate heads for elementary and secondary. However, a deeper scrutiny of the ADP reveals that most of the early childhood education initiatives are taken up by the Sindh Education Foundation (SEF) (a semi-autonomous body financed through the Education Department). The ADP 2010-11 shows that the government is financing an Early Childhood Education and Early Learning Education Program (ELP) from 2008-11 at a total estimated cost of Rs. 200 million. The ELP has established early childhood classes in 150 public schools spread over 5 districts of Sindh. The programme provides teachers, learning resources and trainings. Apart from this SEF has also been involved in an early childhood development programme RCC (Releasing Confidence and Creativity) since 2003 until 2011, involving many other partners and donor agencies.

The other initiative of the government is visible through NCHD (National Commission for Human Development) – a federal semi-autonomous body also working in Sindh. NCHD works mainly in the non-formal sector and focusing on health but also involving health education through its schools. NCHD has been working in 134 districts around Pakistan.

3.1.2 STATUS

Access

Schools

The SEMIS 2009-10 data does not specify the number of pre-primary schools in public sector. The SEMIS data collection form also does not contain category of pre-primary school, suggesting that the pre-primary schools do not stand on their own as separate entity. It is to be noted that most pre-primary classes (*katchi*) are attached to primary schools with or without proper rooms allocated. Sometimes these children are treated as un-admitted children and not formally counted in enrolment.

Enrolment

There are 704,570 children enrolled at pre-primary level in public schools in Sindh, of which 81% belong to rural areas (Table 8; Figure 4). According to a survey by Pakistan Education Task Force¹⁵, the private sector receives a bigger share of enrolment in urban areas, even in poor localities compared to public sector. This could possibly explain

¹⁵ Karachi low-cost private school survey 2010, Pakistan Education Task Force (100 schools, 25,000 students).

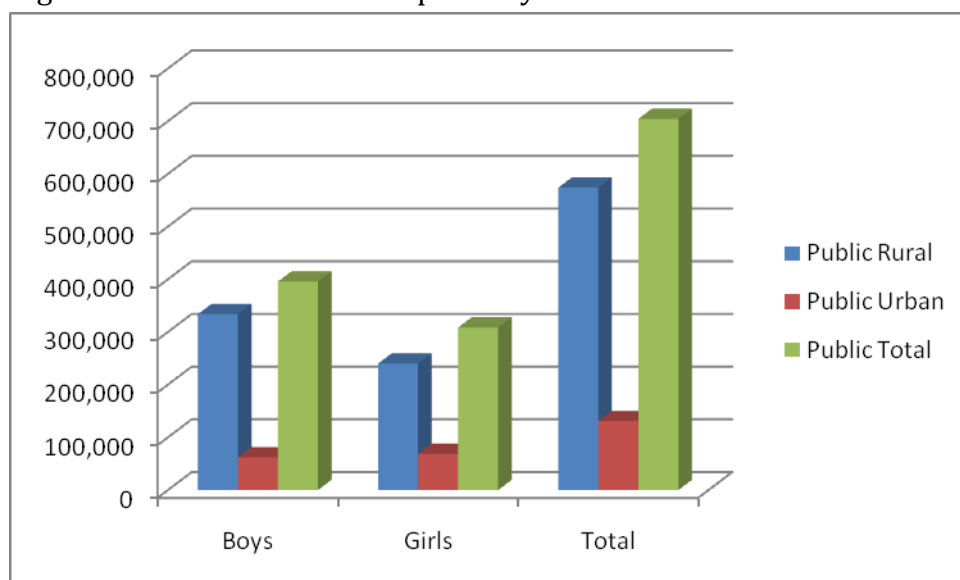
substantially low enrolment in pre-primary sector in urban areas. The Pakistan Education Statistics 2008-09 by Academy of Education Planning and Management (AEPAM) suggest that the share of private sector at pre-primary level in Sindh is around 82%.

Table 8: Enrolment at pre-primary level - Sindh

	Public		
	Rural	Urban	Total
Boys	333,885	62,001	395,886
Girls	240,053	68,631	308,684
Total	573,938	130,632	704,570

Source: SEMIS 2009-10 (pre-primary includes enrolment of un-admitted and *katchi* stage data)

Figure 4: Enrolment at Pre-primary level - Sindh



The Provincial Plan of Action for achieving EFA goals by 2015 stipulated that there would be 60% enrolment at ECE level in Sindh by 2015¹⁶. Ambitious targets were set to establish 10,600 ECE centres in existing government primary schools along with a target to appoint 24,734 ECE teachers. However, the progress on this front has remained dismal. The PSLM 2010-11 shows that the NER (including *katchi* class) for ages 4-9 years for Sindh is 52%. There is no separate statistics available in PSLM for pre-primary level, though the NER including *katchi* does suggest that provincially set targets are still far from being attained. In terms of material aspects, around 103 classrooms for ECE were constructed under DEEP project by 2009. Another 150 ECE

¹⁶ Education for All & Sindh. (December, 2009). Directorate of Literacy & Non-Formal Basic Education, Department of Education and Literacy, Government of Sindh.

classes were established by SEF under Early Learning Programme (ELP). These are very small contributions to what has been proposed as targets.

Teachers

There is no particular designation created for early childhood teachers in public sector on the pattern of PST (Primary School Teacher) or JST (Junior School Teacher). There are some teachers appointed under ELP (Early Learning Programme) by SEF in the government schools, particularly for early childhood classes. They are also given special training, but there is still no recognition of early childhood teacher in public sector like PST or JST. The SEMIS and NEMIS do not provide any information about the number of pre-primary teachers. Private sector has given particular emphasis on early childhood classes and there are recognised designations for Montessori mistresses in private schools.

Quality

The *katchi* class is formally recognised by the government and thus students enrolled in these classes are counted as formally enrolled. There also exists a formal ECE curriculum for age groups 3-5 since 2002.

The Early Learning Programme (ELP) has been working out in Sindh since 2008 – 11 to improve the quality of ECE classes in government schools in 150 schools of Sindh spread over 5 districts. The outcomes of the project are positive at behavioural, pedagogical and administrative levels. The teachers were reported to have shown positive behaviour towards students and colleagues. Students have shown confidence and activeness in the classrooms. The parents have also developed positive attitudes towards school and would be willing to keep their children longer in schools. There is need that such programme be scaled up to cover the entire province.

3.1.3 ROLE OF PRIVATE SECTOR

In urban areas the private sector is contributing towards improving the quality of ECE. The survey by Task Force on Education suggests that in Karachi which makes of 75% of urban Sindh there exist a huge population of private schools, which range from low cost to elite private schools. Notwithstanding their type, the private schools invariably provide ECE education through formal classes of Nursery and Kindergarten.

The private sector is also coming fast in terms of ECE training. Several institutions exist that provide Montessori training to teachers. Some of the prominent providers are: Education Resource and Development Centre (ERDC), Aga Khan University - Institute for Educational Development (AKU-IED), Teachers Resource Centre (TRC), Teachers

Development Centre (TDC). There are also those which have developed curriculum for early years, prominent ones include: New Century Education (NCE), Association for Academic Quality (AFAQ), Oxford University Press (OUP) and Book Group.

The engagement of NGO sector in this area is quite significant, which are briefly captured in table below (Table 9):

Table 9: Contribution of NGO sector at ECE level

Organisation	Contribution
Teachers Resource Centre (TRC)	Development of National ECE curriculum; Training of teachers in ECE area
Aga Khan Education Services, Pakistan (AKES,P)	Establishment of quality schools with ECE emphasis with thriving ECD classes and Montessori section
Health & Nutrition Development Society (HANDS)	Working in 10,000 villages of 5 districts of Sindh, focusing on ECD
Human Development Programme (HDP) of AKU	Focusing on ECED 0-8 years, target of intervention include teachers, caregivers, lady health workers (LHWs)
Aga Khan University – Institute for Educational Development (AKU-IED)	Teacher training and continuous professional development through certificate and master programme, development of material for ECE classes, research on ECE.
Other organisations include: CGN, HOPE, PAVHNA etc.	Provision of ECED and advocacy
Children’s Global Network-Pakistan (formerly Children’s Resources International (CRI))	Provided technical and financial assistance to a programme titled Child-Friendly School Programme along with UNICEF.

3.1.4 INEQUALITIES AND DISPARITIES

A research report by Sindh Education Foundation¹⁷ asserts that ECE classes have increased the primary enrolment for girls in Sindh. Therefore, SEF is actively using ECE as a strategy to enhance girls’ enrolment in Sindh. Under the RCC¹⁸ Programme, they maintain a ratio of 66:34 for girls and boys. However, a critique on SEF programme and also on many other small initiatives is their reach. Despite their novel work, the scope of the activities of NGOs is still limited.

Another aspect to note is the disparity between *katchi* class in government sector and the Montessori and kindergarten classes in private sector. While the situation of *katchi* classes is quite far from desirable, the situation of Montessori classes is quite appealing to the students of that age. This presents quite an inequitable situation based on the affordability at a very early stage.

3.1.5 KEY ISSUES

¹⁷ Early childhood development initiatives in Pakistan: a mapping study. (2010). Sindh Education Foundation.

¹⁸ RCC:ECD (Releasing Confidence and Creativity: Early Childhood Development) programme; initiated in 2002 and now in third phased (2007-2011); 9 partners; managed by AKF; funding be Royal Netherlands Embassy; working in Sindh, Baluchistan, Gilgit Baltistan and Chitral (p. 23, SEF Report)

Based on the above analysis several issues emerge at the level of Early Childhood Education level that needs to be considered. These issues have been categorised into the categories of policy, governance and quality related themes. In light of these issues the needs of various sectors, possible strategies and target groups will be worked out in chapter 9.

Policy	<ul style="list-style-type: none"> - Focus on both education and health elements for ECE classes; - Sustainability of ELP¹⁹ and its expansion - ECE does not feature as a separate budget line in ADP except through SEF projects - Low expenditure levels make it hard to invest in non-compulsory education sector
Governance	<ul style="list-style-type: none"> - Partnerships between government, NGOs and community; - Resource shortage – teachers and facilities - Multiple Organisations working in one area/school - Delay in supplies of material in project based reforms e.g. ELP - Conflicts between regular & ELP teachers in project schools - Changed expectations of ELP teacher and education supervisor/ ADO - Delay in salary releases of ELP teachers and staff - No specific designation for ECE teachers
Quality	<ul style="list-style-type: none"> - Training of teachers and care-givers; - Capacity of education managers to supervise and provide field support; -The ECE programmes have focused only on impacting the <i>katchi</i> class and the business is usual in the rest of the classes. Therefore, the sustainability will be an issue. A down side could be the feeling of deprivation in older classes.

3.2 ELEMENTARY EDUCATION

In Sindh the primary education refers to grades I-V for age group 5-9 years, while middle education refers to grades VI-VIII for age group 10-12. The primary (5-9 yrs) and middle (10-12 yrs) together comes under elementary education covering grades I-VIII. In fact ADP allocation does not use separate heads for primary and middle and instead allocates for elementary education as a single sector. This section discusses policy, role of private sector, inequities, key issues and needs of education at elementary level of education. The primary and middle levels' status is treated separately to understand the variations even within these two.

It is important to note that the NEP 2009 proposes the age groups 6-10 years for primary and 11-13 for middle, however, the data in SEMIS is still reported on the basis of 5-9 years for primary and 10-12 years for middle levels. The PSLM presents both the gross and net enrolments for age groups 5-9 and 6-10 years for primary and 10-12 and

¹⁹ Early Learning programm, run by SEF in public schools

11-13 for middle. However to maintain consistency this report presents the gross and net enrolment of primary sector for 5-9 years and 10-12 years for middle level.

3.2.1 POLICY

The focus of national education policy at elementary level is to achieve the goals of EFA by ensuring access, encouraging retention and transition to higher levels of schooling. In Sindh, as mentioned earlier, the major education reform programme SERP (Sindh Education Reform Programme) is in place. The SERP has four major pillars: i) improving fiscal sustainability; ii) improving education sector management; iii) improving access to quality schooling; and iv) improving quality of teaching and learning. The SERP is mainly financed by the World Bank and European Commission and is managed by the Reform Support Unit (RSU) of the Department of Education & Literacy, Government of Sindh. Under SERP the Sindh government has initiated various programmes²⁰ for improvements which include the following:

- i) Adhering to Sindh Public Procurement Act, 2009²¹
- ii) Closure of non-viable 1158 schools²²
- iii) Rationalization of teachers across schools and the formal allocation of teaching posts to schools; Preparation and management of school-specific budgets²³
- iv) Distribution of free textbooks – from 2003 to primary level; from 2005-06 expanded till grade X; from 2010-11 further expanded till grade XII
- v) Activation of School Management Committees (SMCs)
- vi) School Rehabilitation grants to all 23 districts under TOP (Terms of Partnerships) agreements
- vii) Distribution of stipends to girls students of classes VI-X
- viii) Availability of schools based data through SEMIS on RSU website
- ix) Merit and needs-based recruitment of teachers in Sindh of around 1200 teachers

The ADP allocations for the year 2010-11 (focusing on revised allocation for 2009-10) reveal the following major schemes within the middle education sector, which alludes to government's priority in education at elementary level.

- i) Enhancing Girls Enrolment through Reopening of 400 Closed Schools through Rural Support Programme (RSPs); period Jan-jun 2010; total cost –Rs. 299.241 m; revised allocation in ADP 2009-10 – Rs. 96.110 m

²⁰ See RSU website www.rsu-sindh.gov.pk

²¹ See Notification No. SORI(SGA&CD)2-30/2010, March 8th, 2010, Government of Sindh, Services, General Administration and Coordination Department (Regulation Wing)

²² RSU Public Notice No. RSU/ Publications/1(2)2010-11, October 25th, 2010, Government of Sindh

²³ Sindh Education Sector additional financing : integrated datasheet appraisal stage – report no AC5898. (Mar 2011). The World Bank

- ii) Promotion of Private Schools in Rural areas / Urban Slums; period 2008-12; total cost - 2997.613 m; revised allocation in ADP 2009-10 – Rs. 800 m
- iii) Setting up Rural Community Based Schools through public private partnership; period 2007-2012; total cost – Rs. 427.133 m; revised allocation in ADP 2009-10 – Rs. 100 m
- iv) Integrated Education Learning Program (IELP); period 2009-11; total cost – Rs. 2085.109 m; allocation in ADP 2009-10 Rs. 700 m

3.2.2 STATUS

Access

Primary Schools

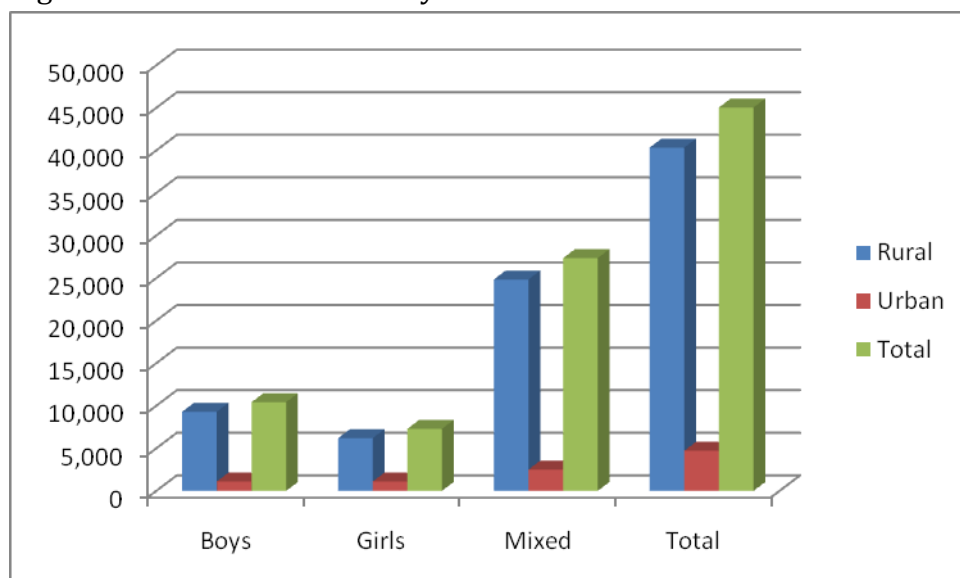
According to SEMIS 2009-10 data, there are 45,044 primary schools in Sindh. Majority of the primary schools fall within the category of ‘mixed’ schools (61%), of which 91% are in rural and 9% in urban areas (Table 10; Figure 5). In addition to the number of primary schools the SEMIS data also provides further details about schools in terms of their status as ‘functional’ or non-functional/ closed schools. There exist 5,185 non-functional or closed schools at primary level (Urban – 220; Rural - 4,965), however these are still counted in official SEMIS calculation. To maintain consistency with national reports and other sources the following table shows all the schools (not only functional).

Table 10: Number of Primary Schools - Sindh

	Public		
	Rural	Urban	Total
Boys	9,306	1,110	10,416
Girls	6,188	1,095	7,283
Mixed	24,838	2,507	27,345
Total	40,332	4,712	45,044

Source: SEMIS 2009-10

Figure 5: Number of Primary Schools - Sindh



As far as the data from private sector is concerned, it is quite patchy as many of them refuse to submit proforma to SEMIS. The concerned authorities in the SEMIS shared that the private sector is not very cooperative in data compilation. The government department also seems to have little authority for getting it done.

Enrolment

There are around 3.4 million children enrolled in primary schools in public sector. Most of these children belong to rural areas – 75%. The estimated population by SEMIS 2009-10 for children aged 5-9 years is 6.2 million (boys-3.2m; girls-3m). Based on these figures of SEMIS, it is estimated that around 46%²⁴ (2.8 million) children of ages 5-9 are out of school (boys-1.3m; girls 1.5m). It is important to note that SEMIS data does not include enrolment in private sector, hence these estimations be looked cautiously and in conjunction with the figures of NER and GER presented in tables 12 and 13 below.

Table 11: Enrolment at Primary level - Sindh

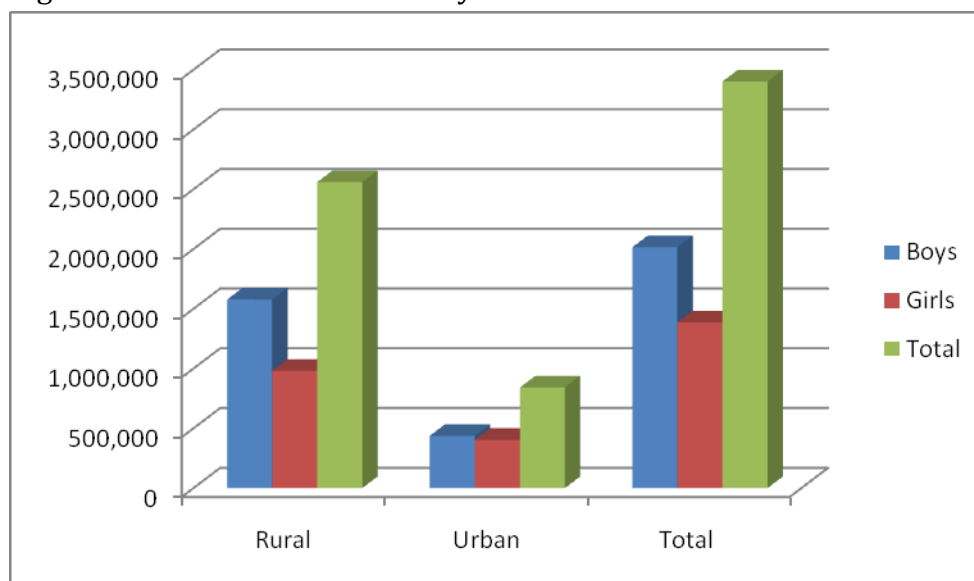
	Public		
	Rural	Urban	Total
Boys	1,578,373	437,812	2,016,185
Girls	982,187	404,019	1,386,206
Total	2,560,560	841,831	3,402,391

Source: SEMIS 2009-10²⁵

²⁴ There seems to be some error in SEMIS estimations because the figures for enrolment in primary are 3,402,391 but when calculating the children out of school, the SEMIS used the figure of 2,773,724 as primary enrolment of ages 5-9 without giving any explanation.

²⁵ SEMIS data does not show pre-primary as a separate level, hence the primary level enrolment presented here also contains the enrolment of unadmitted and *katchi* stages. In order to maintain consistency with SEMIS published data the report uses the same published figures.

Figure 6: Enrolment at Primary level – Sindh



Looking at the Gross Enrolment Rate (GER) at the primary level there is steady rise in both male and female enrolments (Table 12). There is rise in GER at primary level in urban areas between 2004-05 and 2010-11, however, the rise in rural areas is much steeper moving from 58% to 72% during the same time. It is also important to note that there has been no change in overall GER between 2008-09 and 2010-11, though during the same time there are slight shifts in rural areas whereby male GER increased from 83% to 87%, while female declined from 57% to 55%. This results in an overall decline in female GER and slight increase in male GER.

Table 12: Gross Primary Enrolment Rates (5-9 years) by Sex (percentage)

	2004-05	2008-09	2010-11
Urban			
Male	103	107	107
Female	94	99	99
Both	99	103	103
Rural			
Male	70	83	87
Female	44	57	55
Both	58	72	72
Overall			
Male	84	93	94
Female	65	75	72
Both	75	84	84

Source: PSLM 2008-09 and 2010-11; excluding katchi class

The same trend visible in GER can also be observed in Net Enrolment Rate (NER) which has overall risen from 48% to 54% in Sindh during 2004-05 and 2008-09 and showing

steeper rise in rural than in urban areas. However, there is slight decline between 2008-09 and 2010-11 mainly because of decline in rural females' NER (Table 13).

Table 13: Net Primary Enrolment Rates (5-9 years) by Sex (percentage)

	2004-05	2008-09	2010-11
Urban			
Male	64	64	63
Female	59	62	62
Both	61	63	63
Rural			
Male	45	53	54
Female	29	40	39
Both	38	47	47
Overall			
Male	53	57	57
Female	42	49	48
Both	48	54	53

Source: PSLM 2008-09 and 2010-11; excluding katchi class

There could be several factors contributing to the steeper rise in rural areas between 2004-05 and 2008-09 including efforts of public sector, private sector and NGOs. Several initiatives by SEF to promote community based schools and establish schools through public private partnership must have contributed. Some other policies of the Sindh government like free textbook provision and stipends to girls may have also contributed towards overall improvements particularly of girls. It is however, concerning to note the decline in rural females' NER during 2008-09 and 2010-11.

Teachers

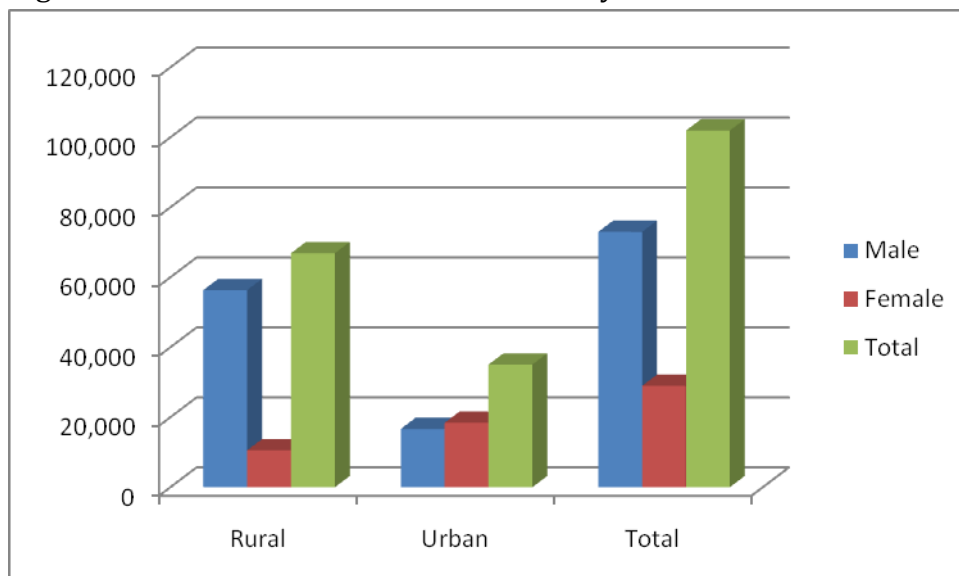
For 45,044 primary schools, there are 101,944 primary teachers. Majority of these teachers (66%) belong to rural areas compared with urban (34%) (Table 14; Figure 7). It is also interesting to note that there are more male teachers compared with females in rural areas, while in urban areas there are more female teachers than male. Perhaps culture and restricted mobility of females in rural areas play some part towards this situation.

Table 14: Number of Teachers at Primary level - Sindh

	Public		
	Rural	Urban	Total
Male	56,331	16,648	72,979
Female	10,559	18,406	28,965
Total	66,890	35,054	101,944

Source: SEMIS 2009-10

Figure 7: Number of Teachers at Primary level - Sindh



Middle Schools

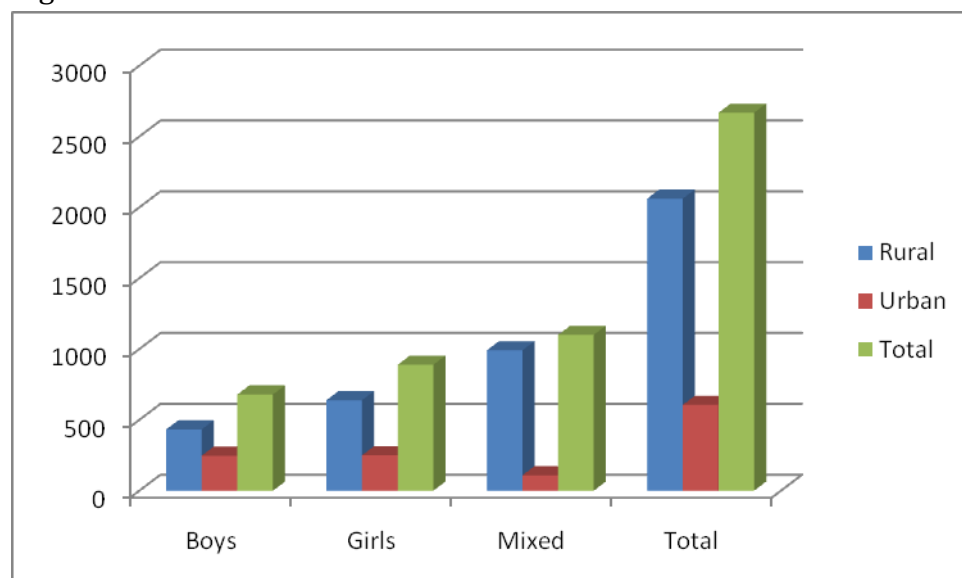
The grades 6-8 are considered as middle sector and it falls officially within the age range of 10-12 years. The table below shows that there are 2,668 middle schools in Sindh (Table 15; Figure 8). Majority of them are mixed schools (41%) followed by girls (33%) and boys (26%). It is interesting to note that majority of the middle schools (90%) are also in rural areas. It is useful to note that there are 45,044 primary schools while there are only 2,668 middle schools, reducing to almost 17 times.

Table 15: Number of Schools at Middle level - Sindh

	Public		Total
	Rural	Urban	
Boys	432	247	679
Girls	639	250	889
Mixed	991	109	1,100
Total	2,062	606	2,668

Source: SEMIS 2009-10

Figure 8: Number of Schools at Middle level - Sindh



Enrolment

There are over 0.23 million children enrolled at middle level in Sindh. The disparity between the number of rural and urban schools as can be seen in table above (Table 15) is also reflected in the enrolment in urban and rural areas (Table 16; Figure 9).

The estimated population by SEMIS 2009-10 for children aged 10-12 years is 3.3 million (boys-1.8m; girls-1.5m). Comparing the enrolment figures with the estimated population of children, it is estimated that around 3.1 million (93%)²⁶ children of ages 10-12 are out of school. It is important to note that SEMIS data does not include enrolment in private sector, hence these estimations be looked cautiously and in conjunction with the figures of NER and GER presented in tables 17 and 18 below.

The data provided by SEMIS 2009-10 further shows that there are 389,457 students enrolled in grade 5 and 240,083 in grade 6. Assuming that there is not a significant difference between this year and the next year data, a difference of 149,374 is noticed between the enrolment of grade 5 and 6. This suggests that around 38% of students enrolled in grade 5 do not continue in grade 6.

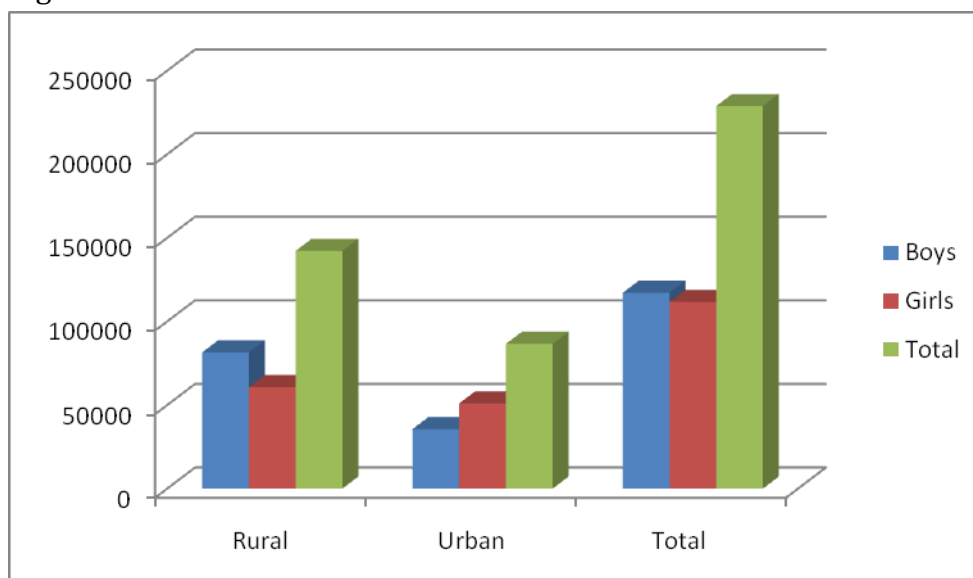
Table 16: Enrolment at Middle level - Sindh

	Public		Total
	Rural	Urban	
Boys	81,530	35,616	117,146
Girls	60,688	50,998	111,686
Total	142,218	86,614	228,832

Source: SEMIS 2009-10

²⁶ There seems to be some error in SEMIS estimations because the figures for enrolment in middle are 228,832 according to SEMIS, however when calculating the children out of school, the report used the figure of 637,148 as primary enrolment of ages 10-12 without giving any explanation.

Figure 9: Enrolment at Middle level – Sindh



The GER at middle level has risen overall from 42 to 49% during 2004-05 and 2008-09 but has declined slightly in 2010-11 (Table 17). There is a concerning lag between rural and urban GER, the GER of rural is almost half of urban areas. However, the overall growth of GER in rural areas appears to be slightly faster than in urban areas. This growth has however declined between 2008-09 and 2010-11, which is not a positive indication.

Table 17: Gross Middle Enrolment Rate (10-12 years) by Sex (percentage)

	2004-05	2008-09	2010-11
Urban			
Male	64	68	67
Female	58	68	72
Both	61	68	69
Rural			
Male	34	45	43
Female	13	19	18
Both	25	34	32
Overall			
Male	47	54	52
Female	35	41	42
Both	42	49	48

Source: PSLM 2008-09 and 2010-11

The NER shows an alarming picture i.e. at middle level only 19% of eligible age population is actually enrolled in the relevant classes, with female NER lower than male (Table 18). Again the rural population is more disadvantaged than urban population.

Table 18: Net Middle Enrolment Rate (10-12 years) by Sex (percentage)

	2004-05	2008-09	2010-11
Urban			
Male	28	24	26
Female	25	24	30
Both	26	24	28
Rural			
Male	14	19	18
Female	5	8	8
Both	10	14	13
Overall			
Male	20	21	21
Female	15	15	17
Both	18	18	19

Source: PSLM 2008-09 and 2010-11

Teachers

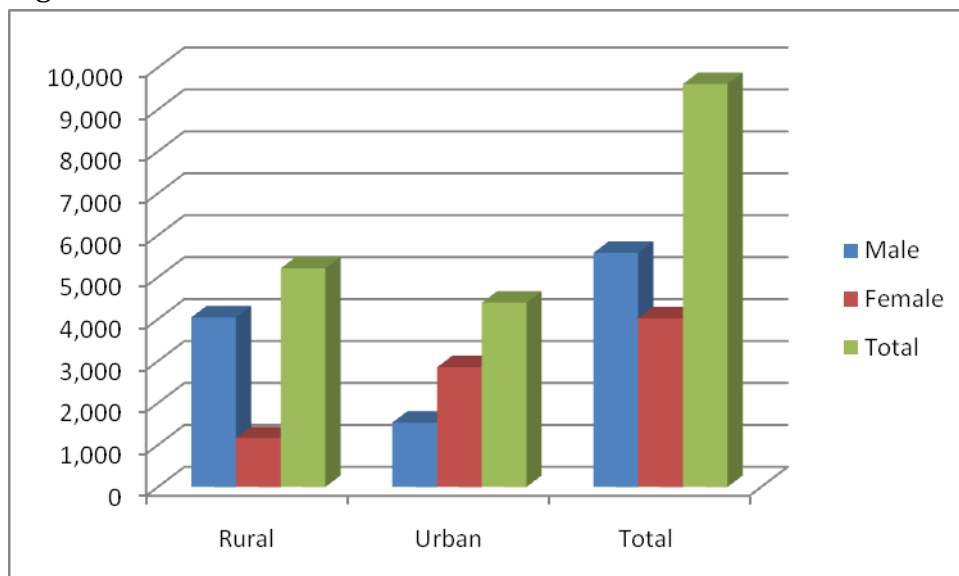
There are 9,610 teachers at middle level, amongst whom the number of male teachers is slightly higher than female teachers (Table 19; Figure 10). The number of rural teachers is also a little higher than urban teachers. Interestingly, in rural areas the male teachers are almost 3.5 times more than female teachers, while in urban areas the number of female teachers is almost double than male teachers.

Table 19: Number of Teachers at Middle level - Sindh

	Public		Total
	Rural	Urban	
Male	4,047	1,538	5,585
Female	1,168	2,857	4,025
Total	5,215	4,395	9,610

Source: SEMIS 2009-10

Figure 10: Number of Teachers at Middle level - Sindh



Quality

Condition of Buildings for public schools

An alarmingly high number (10,268) of schools in primary sector are shelterless, which make up for around little less than quarter of total primary schools. Another 4,724 are in dangerous condition (Table 20). The condition of middle schools is a bit better than primary schools, having 362 schools as shelterless and another 298 as dangerous. Together they make up around quarter of all middle level schools.

Table 20: Condition of Buildings for Public Schools - Sindh

Level	Other ownership	Govt. ownership			Rental	Shelterless	Total
		Satisfactory	Repairable	Dangerous			
Primary	1,133	12,398	16,328	4,724	193	10,268	45,044
Middle	65	778	1,139	298	26	362	2,668
Total	1,198	13,176	17,467	5,022	219	10,630	47,712

Source: SEMIS 2009-10

School facilities

Overall the middle schools are relatively better off compared with primary schools in terms of basic facilities available at schools (Table 21). Around half of the primary schools do not have toilets, drinking water or boundary wall. Only 14% has electricity connected. The situation of middle schools is relatively better but not ideal in any sense. Only 26% of middle schools have electricity.

Table 21: Basic Facilities available at Public Schools - Sindh

	Electricity	Toilets	Drinking Water	Boundary Wall
Primary	6,292	24,412	21,979	22,119
%	14%	54%	49%	49%
Middle	695	1,828	1,467	1,774
%	26%	69%	55%	66%

Source: SEMIS 2009-10

Class wise dropout rates

The trend in dropouts of boys and girls show quite similar trends on the whole, hence only the total dropout figures are produced below (Table 22). The biggest dropout occurs between grades 1 to 2 (33%) and 5 to 6 (36%). The table also shows that from 2006-07, there is decline in average dropouts, though it is not too dramatic. The drop out from grade 5 to 6 is perhaps due to issues related to transition from primary to middle level school. In many cases there are no middle level schools nearby for children graduating from grade 5, which also causes significant drop out.

Table 22: Class wise Dropout Rates - Sindh (percentage)

Grades	Total Dropout of both boys and girls (in %)					Average Dropout
	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	
2006-07	36	19	17	16	36	25
2007-08	38	12	10	10	37	21
2008-09	26	14	12	13	35	20
Average	33	15	13	13	36	22

Source: SEMIS 2009-10, Sindh Education Profile p.21

Teachers Professional Qualification

It is clear from the table below (Table 23) that majority of the teachers possess some sort of professional qualification at both primary and middle levels. The bulk of the teachers possess PTC qualification along with a significant number of BEd. In wake of such training record, it is expected that teachers should be professionally competent ensuring high student achievement and lower students' dropout. Unfortunately, this is not the case and this situation raises concerns towards the quality of professional qualifications that these teachers have. It is important that the certificates and degrees of these teachers be verified and more importantly there should be policy provision to create an authority that regularly assesses teachers' competencies for their licensing to improve the quality of education.

Table 23: Teachers' Professional Qualification - Sindh

Level		PTC	CT	BEd	MEd	Other	Un-trained	No Info	Total
Primary	Male	38,791	5,634	19,009	3,753	253	3,581	1,958	72,979
	Female	15,291	3,361	6,252	1,848	79	1,226	908	28,965
Middle	Male	896	746	1,748	1,250	681	169	95	5,585
	Female	926	713	1,259	796	181	81	69	4,025
Total		55,904	10,454	28,268	7,647	1,194	5,057	3,030	111,554

Source: SEMIS 2009-10

As far as the teachers' training facilities in Sindh are concerned. There are 68 institutes in Sindh, of which 48 are in government sector while 18 are private and 2 are autonomous institutes²⁷. Of these institutes 11 are for male, 13 are for female and 44 are for both male and female. The institutes provide a range of qualifications from certificate to postgraduate level, whereby most concentrating at Primary Teaching Certificate (PTC) and Certificate in Teaching (CT) qualifications. It is important to note that the qualifications of PTC and CT are going to be gradually phased out to be replaced with Associate Degree in Education.

Student Teacher Ratio

The overall student teacher ratio according to SEMIS 2009-10 data stands at 31 students per teacher in 2009-10, including primary to higher secondary level. The student teacher ratio at primary level is 33 students per teacher, at middle level is 24 students per teacher, at secondary level is 25 students per teacher, and at higher secondary level is 35 students per teacher.

Curriculum and Textbooks

The main public sector arms responsible for curriculum and textbook development in Sindh are Bureau of Curriculum (BoC) and Sindh Textbook Board (STB). With the introduction of 18th Amendment the role of BoC will become significantly enhanced as the curriculum development is also devolved to the provinces. The interview with the officials at BoC suggests that it used to be engaged mainly in in-service professional development but gradually moving more towards curriculum concerns. BoC is planning to carry out a revision of National Curriculum 2006 in coming months.

The STB has been the sole body responsible for development and printing of textbooks for public schools in Sindh. The 2007 national textbook policy suggests an enhanced

²⁷ Teacher Education / Training Institutes in Sindh: A comprehensive Directory of Public and Private Institutes Operating in the Province. (2009). Provincial Institute of Teacher Education (PITE) with support from UNESCO and USAID.

role of private sector in the development of textbooks. This policy, however, has not been implemented in Sindh so far. The discussion with the officials at STB suggests that this policy would not be implemented as the experience of engaging private sector turned out to be challenging. STB is however, interested in developing public private partnerships in developing textbooks in future. Previously, the engagement of AKU-IED with STB in production of textbooks supports this assertion.

3.2.3 ROLE OF PRIVATE SECTOR

There are 2,678 private²⁸ schools at primary level and 3,196 at middle level in Sindh. This makes up for 6% of total primary and 53% of total middle schools. Hence, while the public sector predominantly provides primary schools, the share of private sector at middle level is much higher²⁹. Looking at the enrolment figures, there are 944,539 students enrolled at primary level and 369,495 enrolled at middle level. The primary enrolment in private sector makes up for 25% of overall primary sector enrolment, while middle enrolment at the private level make up for 39% of the total enrolment at middle level.

The figures show that at primary level, only 6% of private schools cater to 25% of enrolment, which means two things that either the government facilities are under-utilised or the private facilities are over-utilised. It is also possible that private schools may be of larger size or have over-crowded class rooms. We do not have data at this stage to confirm either but anecdotal evidence suggests that many of the government primary schools' buildings are under-utilised.

3.2.4 INEQUALITIES AND DISPARITIES

There are vast gaps in terms of the population that has ever attended school in both rural and urban areas according to their income quintiles (Table 24). The difference in income does determine the chances of population to attend a school in both urban and rural areas. In the highest income quintile³⁰ in urban areas 87% of population has attended school which is reduced to 51% in lowest quintile. Although there are differences between male and female attendance of schooling in both urban and rural areas, this is more pronounced in rural than in urban areas. In the lowest income quintile in rural areas the difference between male and female is 34%, whereby only 15% females have ever attended school.

²⁸ Source: Pakistan Education Statistics 2008-09, AEPAM

²⁹ Please note that comparisons are made between 2008-09 data from Pakistan Education Statistics and 2009-10 data of SEMIS. There ought to be variations due to change in years.

³⁰ 1st Quintile shows the lowest income group while 5th shows the highest

Table 24: Percentage of population that has ever attended school according to income quintiles (percentage)

Income Quintile	Urban			Rural		
	Male	Female	Both	Male	Female	Both
Sindh	82	66	74	59	22	41
1st Quintile	60	43	51	49	15	33
2nd Quintile	67	50	58	60	19	40
3rd Quintile	74	58	66	60	26	44
4th Quintile	86	68	77	66	30	49
5th Quintile	93	81	87	79	41	61

Source: PSLMS 2007-08

The GER at primary level is closely linked to the income quintile (Table 25). This suggests that low income groups are less likely to be enrolled at primary level than higher income groups. Comparing the rural urban data the lowest quintile has the GER of only 54% in rural areas compared with 74% in urban areas. Females are more disadvantaged than males in lowest to highest income quintiles in both urban and rural areas except the females in 2nd, 3rd and 4th income quintiles in urban areas, where the female GER is higher than male.

Table 25: Gross Primary Enrolment Rate by Income Quintiles (percentage)

Income Quintiles	Urban			Rural		
	Male	Female	Both	Male	Female	Both
SINDH	102	100	101	78	54	66
1st Quintile	83	66	74	63	44	54
2nd Quintile	84	84	84	80	48	65
3rd Quintile	102	115	107	91	71	82
4th Quintile	118	120	119	95	78	87
5th Quintile	110	105	107	127	81	105

Source: PSLM 2007-08; excluding katchi

The inequities prevalent in primary continue to exist at middle level with almost same features, that is, the chances of getting into middle school get increased with increase in income (Table 26). Interestingly the advantage that urban females had in primary level for 2nd – 4th quintiles also exist for middle level but only for 2nd and 3rd income quintiles.

Table 26: Gross enrolment rate at middle level (age 10-12) by Income Quintiles

Income Quintile	Urban			Rural		
	Male	Female	Both	Male	Female	Both
SINDH	70	66	68	41	14	28
1st Quintile	46	40	43	34	5	20
2nd Quintile	44	63	53	42	10	27
3rd Quintile	61	73	67	44	23	33
4th Quintile	106	70	87	44	38	41
5th Quintile	75	72	74	82	41	66

Source: PSLMS 2007-08

3.2.5 KEY ISSUES

In addition to some of the issues that exist at early childhood level there are some specific issues faced at elementary level, which are categorised into: policy, governance and quality issues below. In light of these issues the needs of various sectors, possible strategies and target groups will be worked out in chapter 9.

Policy	<ul style="list-style-type: none"> - There are 45,044 primary schools and only 2,668 middle schools, which means that there are not sufficient middle level schools if the transition rate to middle schools is increased. The current enrolment at primary level is 2.8 million and at middle level is 0.6 million. - Admitting out of school children - Improving retention rates at least up to grade 5; simultaneously ensuring provision of schools and teachers for middle level and increasing retention up to grade 10. - Implications of 18th Amendment and Article 25A – resource constraints for the province - Rural urban divide and boys girls disparity - Income level disparities for enrolling into schools - Very little non salary budget
Governance	<ul style="list-style-type: none"> - Limited institutional capacity and human resource - Lack of monitoring and supervision; non-existence of standards to monitor performance - Transfer of teachers not on the basis of data/need but on political grounds
Quality	<ul style="list-style-type: none"> - Curriculum – to be made interesting and attractive; - Issues around language of instruction need to be resolved, so as issues with teaching of English - Teachers’ capacity and managers’ capacity need to be enhanced and their performance monitored afterwards against some criteria linked to their promotion - Availability of proper building facilities for schools - Provision of teaching learning resources and supplementary material for reading and writing

3.3 SECONDARY AND HIGHER SECONDARY EDUCATION

In the context of Sindh the secondary education refers to grades 9-10, which falls within the age range of 13-14 years old. The Higher Secondary education refers to grades 11-12, which falls within the age range of 15-16 years old.

This section presents the policy, status, role of private sector, inequities and key issues pertaining to the secondary education in Sindh province.

3.3.1 POLICY

The stages of secondary and higher secondary education are quite critical in the lives of young students. The present system in Sindh requires young students to make early choices for their future careers into the streams of science, arts, commerce and computer studies. The science stream further divides into pre-engineering and pre-medical groups at the higher secondary level. Although the graduates of science can move to other streams, the reverse is not possible.

In Sindh the education beyond secondary (matric as it is commonly known) is imparted by Higher Secondary schools and Intermediate colleges. While SEMIS data report the higher secondary schools, it does not contain data on colleges, which are extracted from other sources for this report.

The NEP 2009 makes two significant policy provisions for this level of education. First, the provision of counselling facilities for meeting students' psychological needs and career concerns. Second, making grades 11 and 12 as part of school education rather than college education. There are no signs of implementation of these policy provisions in Sindh. The second one is quite sensitive and NEP 2009 recommends a thorough research before its introduction.

The budgetary allocations 2009-10 for College education was Rs. 10.7 billion with 76.6% as recurrent and 23.4% as development. This allocation is around 16.5% of the total allocation for education. The development allocations contain a substantial portion for the construction of cadet colleges in Sindh.

3.3.2 STATUS

Access

Secondary Schools

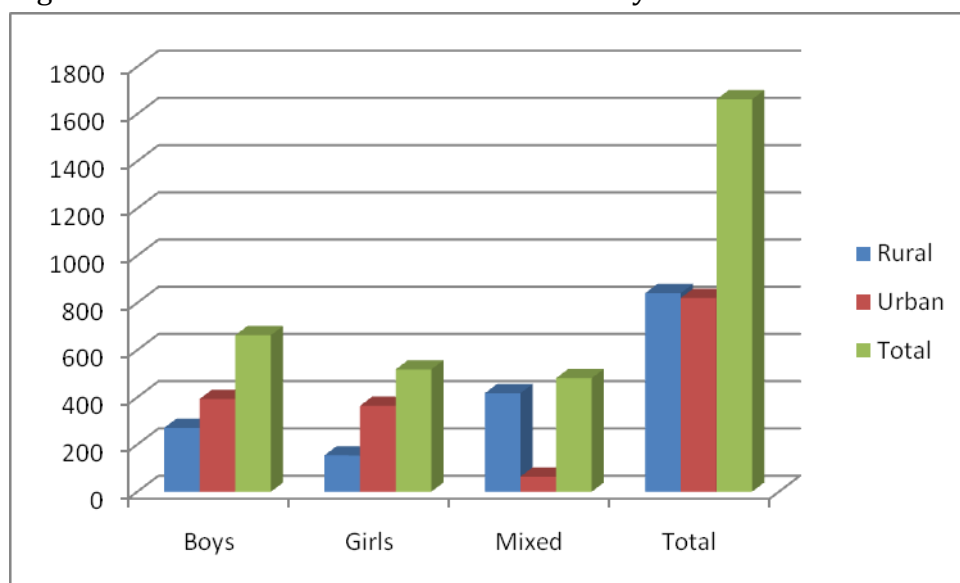
The secondary schools are almost equally distributed within rural and urban areas (Table 27; Figure 11). Though the numbers of secondary schools for boys (40%) are a little higher than girls (31%), there are a significant number of mixed schools (29%) too. However, given the cultural sensitivities particularly at secondary level education, it is quite likely that girls may not prefer to join mixed secondary schools, more so in rural areas.

Table 27: Number of Schools at Secondary level - Sindh

	Public		
	Rural	Urban	Total
Boys	270	393	663
Girls	154	364	518
Mixed	417	64	481
Total	841	821	1,662

Source: SEMIS 2009-10

Figure 11: Number of Schools at Secondary level - Sindh



Enrolment

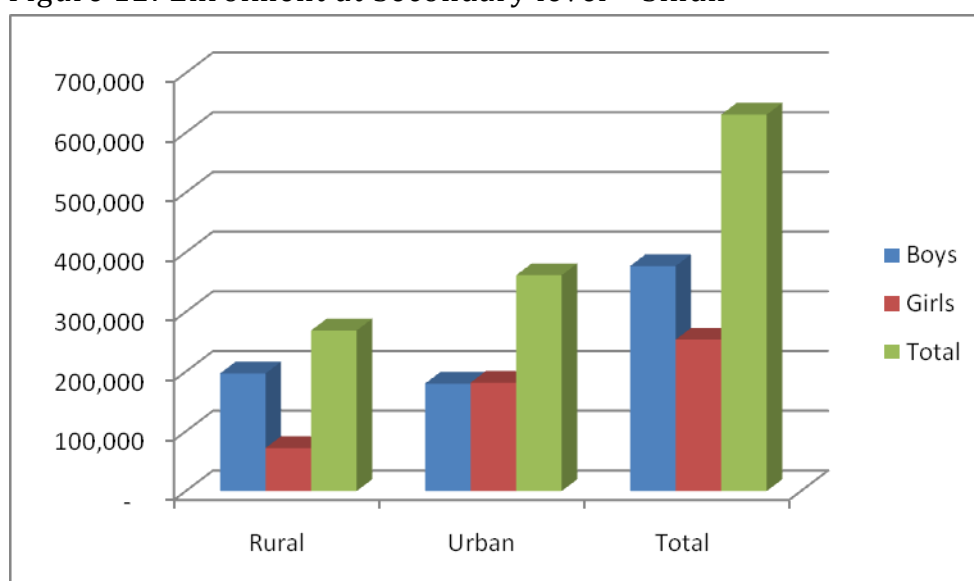
The concern alluded to earlier about girls not readily enrolling in mixed schools appears more plausible when enrolment figures for secondary level are considered (Table 28; Figure 12). The share of girls' enrolment at secondary level is quite low (40%) compared with boys (60%). Further, the girls enrolment in rural areas is much lower (28%) of the total girls' enrolment compared with urban areas (72%). This shows that rural girls are much less likely to be in secondary education than urban girls. The situation in urban areas is encouraging where boys and girls are almost at par in terms of their enrolment.

Table 28: Enrolment at Secondary level - Sindh

	Public		
	Rural	Urban	Total
Boys	196,822	179,944	376,766
Girls	72,063	181,508	253,571
Total	268,885	361,452	630,337

Source: SEMIS 2009-10

Figure 12: Enrolment at Secondary level – Sindh



Looking at the GER growth from 2004-05 to 2010-11, there are significant improvements in both rural and urban areas and across gender. During this period the growth of GER in urban areas is significantly higher than rural areas. Between 2004-05 and 2010-11 the GER in urban areas increased by 12%, while in rural areas increased by 7%. The growth in GER was higher in rural areas between 2004-05 and 2008-09 but then quite high in urban areas between 2008-09 and 2010-11. (Table 29).

Table 29: Gross Secondary Enrolment Rates (13-14 years) by Sex (percentage)

	2004-05	2008-09	2010-11
Urban			
Male	73	73	84

Female	61	64	75
Both	67	69	79
Rural			
Male	37	43	46
Female	10	16	15
Both	25	31	32
Overall			
Male	55	57	63
Female	37	42	45
Both	47	50	55

Source: PSLM 2008-09 and 2010-11

The situation of secondary enrolment is quite alarming when we look at the NER comparisons between 2004-05 and 2010-11 (Table 30). While the NER in rural areas has remained mostly unchanged, the NER in urban areas has declined mainly because of the decline in girls NER in urban areas.

Table 30: Net Secondary Enrolment Rates (13-14 years) by Sex (percentage)

	2004-05	2008-09	2010-11
Urban			
Male	17	17	17
Female	19	14	16
Both	18	16	16
Rural			
Male	9	9	8
Female	3	4	3
Both	6	7	6
Overall			
Male	13	13	12
Female	11	10	10
Both	12	11	11

Source: PSLMS 2008-09 and 2010-11

Teachers

There are noticeable disparities between male-female and rural-urban teachers (Table 31; Figure 13). Out of total secondary teachers, there are 60% male and 40% female and almost on a similar pattern there are 63% urban and 37% rural teachers at secondary level.

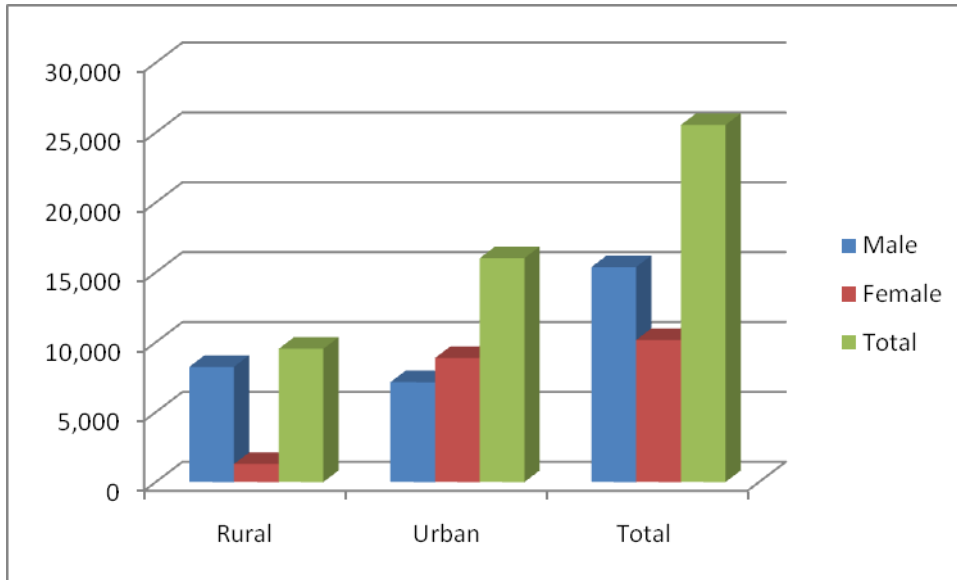
Table 31: Number of Teachers at Secondary level - Sindh

	Public		
	Rural	Urban	Total
Male	8,242	7,142	15,384

Female	1,289	8,877	10,166
Total	9,531	16,019	25,550

Source: SEMIS 2009-10

Figure 13: Number of Teachers at Secondary level - Sindh



Higher Secondary Institutions

There are almost equal numbers of boys and girls institutions at higher secondary level (Table 32; Figure 14). In addition there are a significant number of mixed institutions (38%). However, there are drastic rural-urban disparities. 62% of institutions are in rural areas, while 38% are in urban areas. As alluded to earlier, there are also intermediate colleges that impart education at grade level 11-12 but are not accounted in SEMIS data. Based on the data extracted from AEPAM³¹ there are additionally 38 intermediate colleges (15 boys, 18 girls and 5 mixed).

Table 32: Number of Higher Secondary Schools - Sindh

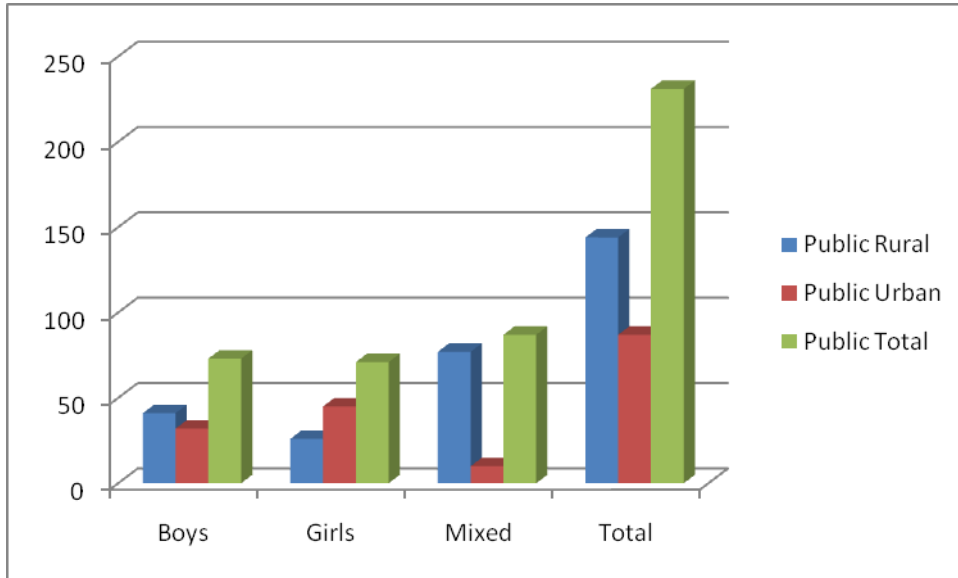
	Public		
	Rural	Urban	Total
Boys	41	32	73
Girls	26	45	71
Mixed	77	10	87

³¹ Pakistan Education Statistics 2008-09, AEPAM

Total	144	87	231
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Source: SEMIS 2009-10

Figure 14: Number of Higher Secondary Schools - Sindh



Enrolment

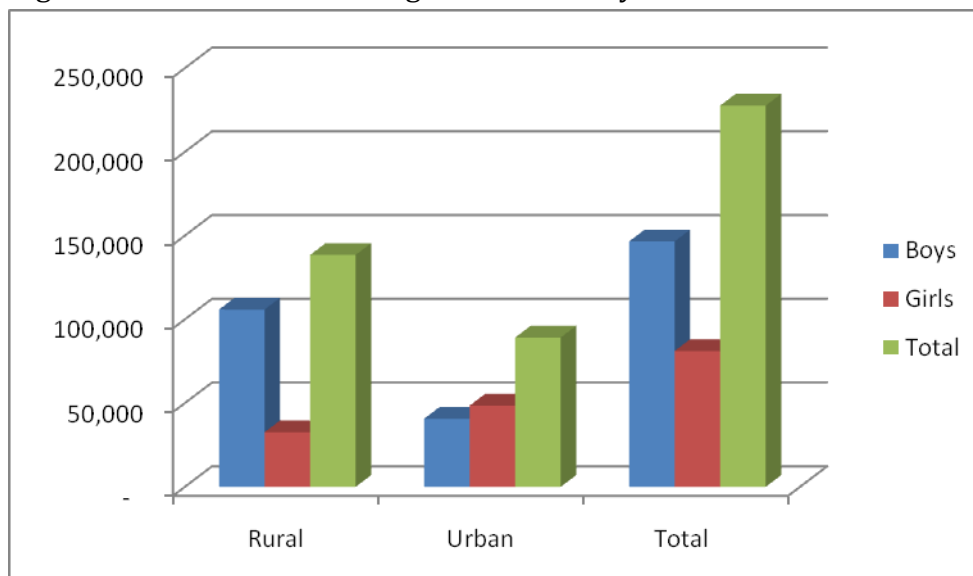
Interestingly, the enrolment in rural areas (61%) is higher than in urban areas (39%) (Table 33; Figure 15). However, even with the positive rural enrolment figures, these are the rural boys who are advantaged. Their share is 76% in total rural enrolment, much higher than those of girls 24%. A possible explanation of lesser enrolment in urban areas could be the rise of private institutions and the movement of students to O and A levels of educational institutions.

Table 33: Enrolment at Higher Secondary level - Sindh

	Public		Total
	Rural	Urban	
Boys	105,866	40,657	146,523
Girls	32,623	48,503	81,126
Total	138,489	89,160	227,649

Source: SEMIS 2009-10

Figure 15: Enrolment at Higher Secondary level – Sindh



Teachers

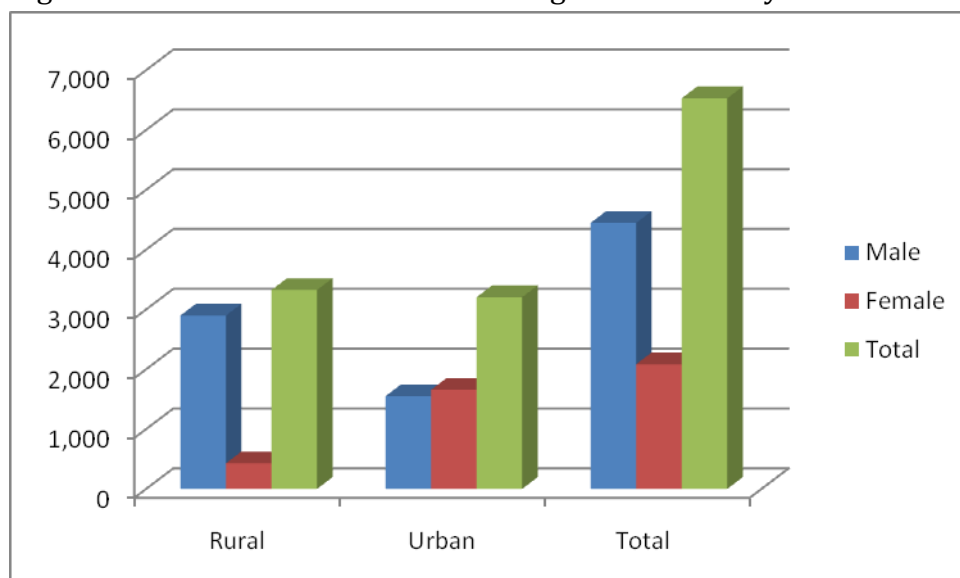
The distribution of teachers in rural and urban areas is almost at par 51-49% (Table 34; Figure 16). However, there are stark differences between male and female teachers, males having a share of 68% and females 32%. This difference is further pronounced in rural and urban areas, whereby 87% of teachers in rural areas are male and only 13% female. The low number of female teachers in rural areas also explains an important reason for low female enrolment there.

Table 34: Number of Teachers at Higher Secondary level - Sindh

	Public		
	Rural	Urban	Total
Male	2,897	1,549	4,446
Female	428	1,656	2,084
Total	3,325	3,205	6,530

Source: SEMIS 2009-10

Figure 16: Number of Teachers at Higher Secondary level - Sindh



Quality

Condition of Buildings for public schools

There are around 14% of buildings at both secondary and higher secondary level which are either shelterless or in dangerous condition (Table 35). More than half of the buildings require repair work at both levels. At secondary level, 55% of the buildings require repair work and at higher secondary level 59% are in need of repair. This leaves only 27% of the government owned secondary level buildings and 25% of higher secondary level buildings as satisfactory for educational purposes. Such poor physical condition of school buildings are also one of the reasons for very little growth in GER and NER.

Table 35: Condition of Buildings for public schools at Secondary & H. Sec. level

Level	Other ownership	Govt. ownership			Rental	Shelterless	Total
		Satisfactory	Repairable	Dangerous			
Secondary	32	450	918	223	29	10	1,662
High. Sec.	1	58	136	33	2	1	231
Total	33	508	1054	256	31	11	1,893

Source: SEMIS 2009-10

School facilities

Both secondary and higher secondary schools appear better off in terms of availability of basic facilities (Table 36). Except electricity, all other basic facilities are available in more than 80% of both levels of schools. It can be observed that though the condition of buildings is not satisfactory, they are better off in terms of availability of basic facilities.

Table 36: Schools having basic facilities available at Secondary & H. Sec. level

	Electricity	Toilets	Drinking Water	Boundary Wall
Secondary	1,169	1,448	1,355	1,467
%	70	87	82	88
Higher Sec.	204	204	210	200
%	88	88	91	87

Source: SEMIS 2009-10

Lab Facilities

One of the most important requirements for the secondary and higher secondary schools is the availability of appropriate laboratories where they can perform practical work. Although the lab facilities are not adequately available at all schools, the higher secondary schools seems to be better equipped compared with secondary schools (Table 37). Again the availability of general lab or science lab is more prominent than specific labs. The availability of computer labs in only 18% of secondary schools is appalling, given the ambition of the country to move on the information superhighway.

Table 37: Lab facilities available at Secondary and H. Sec. Levels

	Lab/ Science lab	Biology lab	Chemistry Lab	Physics lab	Home Eco. Lab	Computer lab
Secondary	825	624	552	599	60	299
%	50	38	33	36	4	18
Higher Sec.	160	129	130	135	16	122
%	69	56	56	58	7	53

Teachers Professional Qualification

The teachers at secondary and higher secondary level generally possess higher professional qualifications particularly B.Ed and M.Ed (Table 38). It is probably due to the fact that at senior levels of education these teachers are generally required higher level of qualifications and competence.

Table 38: Teachers' Professional Qualification at Secondary & H. Sec. levels

Level		PTC	CT	BEd	MEd	Other	Un-trained	No Info	Total
Secondary	Male	139	1,246	4,209	7,471	1,889	294	136	15,384
	Female	116	1,026	5,037	3,312	532	68	75	10,166
	Total	255	2,272	9,246	10,783	2,421	362	211	25,550
Higher Sec.	Male	24	234	915	2,807	353	75	38	4,446
	Female	22	104	689	1,150	83	32	4	2,084
	Total	46	338	1,604	3,957	436	107	42	6,530

Source: SEMIS 2009-10

In the secondary and higher secondary levels the schools need specialist subject teachers in the areas like biology, physics, chemistry, maths, computer science apart from English. Given the dearth of specialist teachers, the low number of specialist teachers is not only an issue of access but of quality as well. The recent announcement of the government of Sindh to introduce Chinese language at secondary level also requires the availability of specialist teachers in this language.

Student Teacher Ratio

According to SEMIS 2009-10 the student teacher ratio at secondary level in Sindh stand at 25, which gets increased to 35 at higher secondary level. The overall student teacher ratio across all levels stands at 31 students per teacher across levels. The teacher school ratio according the AEPAM 2008-09 statistics is 17 for secondary and 31 for higher secondary levels.

3.3.3 ROLE OF PRIVATE SECTOR

Institutions

There are 3,108 secondary schools in private sector compared with 1,707 in public sector, which is around 65% of total secondary schools. At higher secondary level the number of private schools is also higher than public sector. The share of private sector at higher secondary level is 59%. Majority of the private schools both at secondary and higher secondary levels exist in urban areas and have only 139 schools in rural areas (Table 39). Most of these schools are also mixed schools.

Table 39: Number of Institutions in Private Sector at Secondary & H. Sec. levels

Level	Urban				Rural				Total			
	Boys	Girls	Mixed	Total	Boys	Girls	Mixed	Total	Boys	Girls	Mixed	Total
Secondary	97	105	2,785	2,987	2	1	118	121	99	106	2,903	3,108
Higher Sec.	14	11	271	296	4	-	14	18	18	11	285	314
Total	111	116	3056	3283	6	1	132	139	117	117	3,188	3422

Source: Pakistan Education Statistics; AEPAM 2008-09

Enrolment

Although there are more private secondary schools than public, the enrolment figures of public and private reveal that more children are enrolled in public sector compared with private sector. The private sector takes care of 39% of enrolled children at secondary level (Table 40).

The numbers of children enrolled at higher secondary level are also higher compared with private sector. The share of private sector is only 12%.

Table 40: Enrolment in Private sector at Secondary & H. Sec. levels

Level	Urban			Rural			Total		
	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
Secondary	106,825	90,670	197,495	3,582	1,715	5,297	110,407	92,385	202,792
Higher Sec.	20,415	16,477	36,892	1,539	144	1,683	21,954	16,621	38,575
Total	127,240	107,147	234,387	5,121	1,859	6,980	132,361	109,006	241,367

Source: Pakistan Education Statistics; AEPAM 2008-09

Teachers

The teachers employed by the private sector are more than double the number of teachers in public sector secondary schools. The share of private sector is 66%. This suggests that the teacher student ratio of private school is much better than public secondary schools.

The number of teachers employed by the private sector at higher secondary level is also higher compared with public sector (Table 41). The share of private sector is 58%. This also suggests that private sector provides better teacher student ratio to its students at higher secondary level compared with public sector.

Table 41: Number of Teachers in Private sector at Secondary & H. Sec. levels

Level	Urban			Rural			Total		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Secondary	11,945	41,983	53,928	536	921	1,457	12,481	42,904	55,385
Higher Sec.	2,649	5,829	8,478	325	216	541	2,974	6,045	9,019
Total	14,594	47,812	62,406	861	1,137	1,998	15,455	48,949	64,404

Source: Pakistan Education Statistics; AEPAM 2008-09

Another important visibility of private sector at this stage of education is through private tuition/coaching centres. The private coaching centres attract students due to both pull and push factors. The provision of tuition at public sector institutions is questionable hence it pushes students to take extra tuition through these centres. Secondly these centres provide ready solutions and exam focused approach to achieve better scores, hence attracting students who need it badly to survive tough competition – pull factor.

A significant share of upper class students are also attracted to O' and A' levels education managed by the British Council in Karachi.

The private sector has also made inroads in the examination system through the establishment of the Aga Khan University Examination Board (AKU-EB). The AKU-EB has created a name for quality examination services which discourage cheating culture

and encourage a more comprehensive learning among students refraining them from rote memorization.

3.3.4 INEQUALITIES AND DISPARITIES

The income group has a high predictive value for the children's enrolment at secondary level. The higher the income, the higher the chances are for the child to be in school at this stage (Table 42). There are disparities between rural urban and male female population. The worst placed are the poor females in rural areas. The lowest income group have only 2% rural female enrolled in secondary, which is way below rich females of rural areas.

Table 42: Gross Enrolment Rate at Matric level according to Income Quintiles (percentage)

Quintile group	Urban			Rural		
	Male	Female	Both	Male	Female	Both
SINDH	65	63	64	37	13	25
1st Quintile	52	25	38	22	2	12
2nd Quintile	50	38	43	27	7	18
3rd Quintile	58	47	52	52	21	33
4th Quintile	59	78	68	76	35	58
5th Quintile	95	110	103	82	216	108

Source: PSLM 2007-08

The figures clearly indicate that Sindh's education system (just like overall Pakistani system) is divided on class basis. The rich can afford better education for their children and can even opt for international examinations like O' and A' levels, while poor have very little options other than sending their children to low quality public schools, if they send them at all.

3.3.5 KEY ISSUES

In addition to the general issues raised in the preceding sections of elementary education, there are some particular issues concerning secondary education in Sindh highlighted in the table below under the categories of policy, governance and quality. In light of these issues the needs of various sectors, possible strategies and target groups will be worked out in chapter 9.

Policy	<ul style="list-style-type: none"> - Class based education system divided into public private and then further into Matric/ Intermediate board and O & A level examination system. - Exam boards and coaching centres promoting rote learning and
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	truncated syllabus
Governance	<ul style="list-style-type: none"> - Political interventions, particularly at higher secondary level and at intermediate colleges - Weak data of private sector and weak regulation of private sector - Need for introducing a standards based monitoring of public and private schools (e.g. HMI & OFSTED pattern)
Quality	<ul style="list-style-type: none"> - Tuition/coaching culture discouraging broad based learning - Early choice of career at grade 8th should be deferred and opportunities for later career choice be introduced - Career counselling as proposed by NEP 2009 need implementation - Female teachers at secondary and higher secondary levels particularly in rural areas can increase female enrolment and retention at that level. - Non availability of subject specialist teachers (Science, Math, English) needs serious attention - High student/teacher ratio be checked - Laboratories not available and poorly equipped where they are

3.4 TERTIARY EDUCATION

Higher education is governed by the Higher Education Commission (HEC) at federal level. There are three categories of institutions that are considered within tertiary education: degree colleges, universities and degree awarding institutions (DAIs) in this report.

3.4.1 STATUS

Access

The tertiary education in Pakistan takes place at the universities. In Sindh, like other provinces, the colleges over the years have also offered degree level education. Though these colleges (known as 'Degree College') only provide tuition and do not take exams and neither award degrees, which are provided by the universities that these colleges are affiliated with. Apart from universities, there is another category of tertiary institutions called degree awarding institutions (DAIs). These are not full-fledged universities, but based on their expertise and scholarship in particular field have been awarded the status of degree awarding institutions.

The detailed list of universities and DAIs in Sindh can be seen in Appendix B. It is quite noticeable that the tertiary educational institutions are concentrated heavily in Karachi. The only other place where one finds more than one universities in Sindh is Jamshoro having three.

The two tables below (Table 43; Table 44) show the number of tertiary institutions. The first table shows that there are total 240 degree colleges in Sindh, most of which (92%)

are concentrated in urban areas and only 8% in rural areas. The second table (Table 44) shows the number of universities and DAIs in both public and private sectors in Sindh. The private sector dominates with 62%.

Table 43: Number of Degree Colleges in Sindh (Public and Private)

Urban				Rural				Total			
Boys	Girls	Mixed	Total	Boys	Girls	Mixed	Total	Boys	Girls	Mixed	Total
85	75	61	221	4	4	11	19	89	79	72	240

Source: Pakistan Education Statistics 2008-09; AEPAM

Table 44: Universities/ Degree Awarding Institutions Sindh

Public Institutions	Private Institutions	Total
14	23	37

Source: Pakistan Education Statistics 2008-09; AEPAM

Enrolment

There are 81,541 students enrolled in degree colleges both in public and private sectors (Table 45). Just as there were more degree colleges in urban areas, there are more students enrolled in urban than in rural areas. Also the proportion of boys is higher than girls.

Table 45: Enrolment at Degree Colleges (Public and Private)

Urban			Rural			Total		
Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
43,407	33,793	77,200	3,772	569	4,341	47,179	34,362	81,541

Source: Pakistan Education Statistics 2008-09; AEPAM

In the universities, both public and private, there are 1.5 million students enrolled (Table 46). Majority, just over 1 million are enrolled at Bachelor level, the rest are divided into postgraduate qualifications ranging from PGD to PhD levels. The balance between male and female students is in favour of males, who are higher in numbers both in public and private sectors. In fact the private sector disadvantage female more than public sector. This probably also reflect the cultural perception, attaching more value to educated male than female and hence ready to provide more expensive private education to males than females.

Table 46: Enrolment in Universities in Sindh (Public and Private)

Level	Public			Private			Total		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Bachelor	37,589	26,167	63,756	28,657	16,793	45,450	66,246	42,960	1,09,206
Master of 16 yrs of Education	7,391	8,485	15,876	11,092	3,902	14,994	18,483	12,387	30,870
Master of 16 +yrs	4,679	1,613	6,292	924	203	1,127	5,603	1,816	7,419
Ph.D	1,051	688	1,739	89	44	133	1,140	732	1,872
PGD	614	422	1,036	360	336	696	974	758	1,732
Total	51,324	37,375	88,699	41,122	21,278	62,400	92,446	58,653	1,51,099

Source: Pakistan Education Statistics 2008-09; AEPAM (Table 0.36)

Teachers

There are 5,814 teachers teaching at degree colleges, who are more concentrated in urban areas than rural (Table 47). This corresponds to the figure of number of degree colleges. Again there are more male teachers than female.

Table 47: Teachers at Degree Colleges in Sindh (Public and Private)

Urban			Rural			Total		
Male	Female	Total	Male	Female	Total	Male	Female	Total
3,097	2,436	5,533	256	25	281	3,353	2,461	5,814

Source: Pakistan Education Statistics 2008-09; AEPAM

There are 9,314 faculty members in universities and DAIs. 28% of these faculty members are associated in part-time position with the universities, more in private than public sector (Table 48). Just as there are more universities in private sector, there are more faculty members in private sector too.

Table 48: Faculty at Universities/ DAIs in Sindh (Public and Private)

Faculty	Public Teachers	Private Teachers	Total
Full Time	3,362	3,290	6,652
Part Time	717	1,945	2,662
Total	4,079	5,235	9,314

Source: Pakistan Education Statistics 2008-09; AEPAM (Table: 0.35)

3.4.2 KEY ISSUES

Based on research and discussion with senior university professors the following issues arise that need to be seriously looked at to improve the tertiary education in Sindh under the themes of policy, governance and quality. The needs and strategies to deal with these issues will be discuss in chapter 9.

Policy	<ul style="list-style-type: none"> - Balance between social and physical sciences - Policy wings of government should be encouraged to commission research to university's relevant department following the tradition of developed countries. This will be win-win particularly for social sciences research - Establishment of funding body at provincial level to encourage research at universities, particularly in education sector
Governance	<ul style="list-style-type: none"> - Political interference in decision making need to be stopped - Affordability for poor on the basis of need. Due to poverty, poor are generally poorly educated and are in the low strata of educational achievements. - Politically motivated appointments of VCs be discouraged - Increasing Corruption is crippling universities in the areas of appointments and academic quality - Increasing threats to faculty and staff and use of violence, gun culture need to be stopped - Lack of Accountability - Wrong appointments particularly in teaching staff - Faulty admission policy
Quality	<ul style="list-style-type: none"> - Out-dated and overly theoretical curriculum - Faculty capacity to teach and do research need to be enhanced - Multi-medium Education - Lack of Academic honesty and lack of discipline - Decreased Professionalism among faculty - Lack of educational Aids - Unjustified Teaching Load - Lack of good research - Lack of cordial educational environment.

3.5 TECHNICAL & VOCATIONAL EDUCATION

The lack of skilled workforce particularly in a country like Pakistan which has significant youth population is a great impediment to growth. The unskilled or low qualified labour reduces the capacity of the country to be competitively productive. The Pakistan competitiveness Report 2009 suggests that lack of skilled workforce is quite prominent amongst the most problematic factors of doing business in Pakistan.

3.5.1 POLICY

The technical and vocational education in Sindh was in fragments and under various authorities including Education Department, Labour Department and Social Welfare Department. As a result the sector was weak in terms of its offering, keeping in view the national and international demands of labour market. In 2008 the Sindh government created a new body Sindh Technical Education and Vocational Training Authority (STEVTA), which brought all the technical and vocational provisions under one umbrella. STEVTA is managed by a board whose members are drawn mainly from the private sector. These are steps in the right direction, which have also been appreciated by donor agencies³² and need to be further strengthened.

In association with donor agencies, the government has also launched Benazir Bhutto Shaheed Youth Development Programme (BBSYPD). The BBSYPD targets to reach 100,000 semi-literate and educated youth across Sindh through skill development courses of 3 to 12 months. The programme also provides stipends to various categories of unemployed educated youth to support their income during training.

Another programme with the title of Sindh Skill Development Programme by the World Bank is in the making and the project's initial documentations suggest that it aims to reach 50,000 youth between the ages 18-35 yrs. The programme will be implemented by BBSYPD and STEVTA. The project has three main components:

Component 1: Improving and Expanding Short-term Training

Component 2: Establish Market-driven Institutional Training Programs

Component 3 – Capacity Building of Sindh TEVTA

Technical Education is not allocated a separate budget head in the educational allocations. It is subsumed under College education, which had a budget allocation of Rs. 10.7 million in 2009-10 with Rs. 2.4 million for development expenditures. A little evaluation of development schemes reveals that most of this budget is allocated to colleges or cadet colleges.

3.5.2 STATUS

The table below (Table 49) shows the situation of technical and vocation institutions in Sindh, their enrolment and teachers. There are total 469 institutions, among which 415 are vocational, 30 are monotechnic and 24 are polytechnic. These institutions enrol

³² Sindh Skill Development Project: project information document appraisal stage – report no AB6354. (Jan 2011). The World Bank

57,506 students, of which the males are advantaged over females. There are 2,727 teachers whose majority (63%) is also male.

Table 49: Technical and Vocational Institutions (Public, Other Public & Private)

Level	Institution				Enrolment by Stage			Teachers		
	Male	Female	Mixed	Total	Male	Female	Total	Male	Female	Total
Monotechnic	19	5	6	30	12,709	949	13,658	576	35	611
Polytechnic	17	-	7	24	3,123	294	3,417	102	3	105
Vocational	41	162	212	415	21,093	19,338	40,431	1,262	749	2,011
Total	77	167	225	469	36,925	20,581	57,506	1,940	787	2,727

Source: Pakistan Education Statistics 2008-09; AEPAM

The discussion with the officials at STEVTA reveals that the situation of technical and vocational education was quite dismal in terms of enrolment prior to the launch of BBSYPD, which has substantially improved the numbers. However, the independent functioning of BBSYPD from STEVTA again creates a similar situation which marred the sector before the creation of STEVTA, whereby parallel structures are created to achieve similar objectives and which inadvertently undermine each other.

3.5.3 KEY ISSUES

Based on the above analysis several issues emerge concerning technical and vocational education sector. These are highlighted below under the categories of policy, governance and quality. The needs of the sector, possible strategies and target groups will be worked out in chapter 9.

Policy	<ul style="list-style-type: none"> - Weak linkages between industry and TVET Institutions - linkages between training programmes and employers' demands - Low government budget - Attracting private funding - Development of a coordinated and effective sector policy - Development of quality assurance mechanisms, occupational standards and certifications - Linking technical education and training with the general education system - National and international recognition and equivalence
Governance	<ul style="list-style-type: none"> - Shortage of staff and filling up of vacant posts - Need to improve accountability mechanisms - Incentives for better performance - System for managing teachers - Quality assurance mechanisms and authorities
Quality	<ul style="list-style-type: none"> - Delivery of market relevant and need based courses - Introduction of apprenticeship model - Out-dated curriculum - Dismal condition of infrastructure - Obsolete machines and equipment - Lack of teacher training - lack of industry exposure for teachers and students - Capacity building of teachers

3.6 SPECIAL EDUCATION

This sector of education is severely neglected in Pakistani education system. It is a fact that most of the world's disabled children live in developing countries. This has various reasons like awareness about health issues, vaccination, cultural practices etc. The United Nations Standard Rules on the Equalisation of Opportunities for Persons with Disabilities state that 'people with disabilities – as citizens of their societies – should have the same rights and obligations as all other citizens'. The recent performance of Pakistani squad for special persons' Olympics has demonstrated that they can bring international repute to the nation through their talent and dedication.

There exists a National Policy for Persons with Disabilities (2002) with a vision to "full realization of the potential of persons with disabilities through their inclusive mainstreaming". In 2005 a declaration jointly supported by several government departments both at federal and provincial levels along with members of donor agencies and civil society was passed, which is known as 'Islamabad Declaration 2005'. The declaration seeks to have equal opportunities and access for people with special needs without discrimination. However, the implementation of such policy commitments did not meet substantive measure.

The EFA goals and the Constitution of Pakistan also demands that free educational provisions be made available to *all* the children.

3.6.1 STATUS

Sindh is still far from achieving better treatment and facilities for children with special needs or to make our classrooms 'inclusive' to allow mainstreaming of special children. The data compiled from various sources for this analysis reveals that there are total 50 institutions for special needs children (Table 50). 80% of these institutions are located in Karachi and only 20% for the rest of the Sindh (See Appendix-B: Institutions for Special Needs in Sindh to see details of these institutions). The rural population is severely disadvantaged to access these institutions. These institutions cater for various needs such as: hearing impairment, mental retardation, visual impairment and physical handicap. Most of these institutions also tend to be located in urban areas, disadvantaging rural population. The situation is not good even at the national level in comparison.

Although it was not possible to confirm the status of these schools, whether they are in public sector and private sector, the discussion with the expert suggests that most of them particularly in Karachi are in private sector. It is however, possible that some of them also qualify to receive grant-in-aid from the Department of Education, Sindh.

Table 50: Institutions for Special Education in Sindh

Location	Total
Sindh Karachi	40
Sindh Other	10
Total	50

Source: Data compiled by Special Education Expert; website: www.specialsedu.com

The figures quoted in a non-dated report compiled by the Director Inclusive Education at the Directorate General of Special Education show that there are 929,400 people with disabilities in Sindh, which makes up 3.05% of the population and is the highest among other provinces. The report also estimates that putting together all the efforts by federal, provincial and NGOs only cater to merely 4% of disabled population. This is partly because of estimated high cost of educating a special child, which is estimated to be Rs. 30,000 per annum comparing with normal child per annum schooling cost of Rs. 2000.

The experts and advocates in the field of special education, therefore, promote the idea of inclusive education, which fundamentally demands provision of learning opportunities for all but emphasises mainstreaming of children with minor disabilities. This however requires special training for mainstream teachers to cater for various needs. The lessons from international experiences can guide in this regard.

As far as the initiatives to train human resource for inclusive education are concerned, there are small initiatives in Sindh in both public and private sectors. The University of Karachi has a department of Special Education, which is providing graduate and post-graduate qualifications for the teachers interested in developing their expertise in this area. Smaller contributions are also made by various projects and private institutions like Institute for Educational Development, Aga Khan University, which offers courses and certifications in the area of special and inclusive education. Given the needs, this can hardly be termed as sufficient.

3.6.2 KEY ISSUES

The key issues that emerge in the sector of special education are discussed below under the categories of policy, governance and quality. In light of these issues the needs of the sector, possible strategies and target groups will be worked out in chapter 9.

Policy	<ul style="list-style-type: none"> - Low priority in provincial policy - Inclusiveness of children with smaller disabilities to be part of mainstream schools - Charity based approach – not rights based approach, results in
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	<p>seeing special schools as kind of ‘glorified babysitting facilities’. Paradigm shift is needed.</p> <ul style="list-style-type: none"> - Major focus should be on rehabilitation and inclusion into mainstream society - Vocational orientation for these children – relevant, productive and employment based e.g. data entry in PC. Usual vocation at the moment is very weak like paper meshing or knitting. - Segregated setups – no connection with mainstreaming education and industry. Link with industry could guide the training and rehabilitation. Due to segregation the expectations are very low. Though one positive thing happens e.g. school of visual impairment teach performing daily chores without vision – how to walk, find way out unknown place, organise. Likewise school for deaf resulted in an inward looking community. Community development is good but it cuts them off from the rest of the world, living parallel separate lives, which trigger problem of employment.
Governance	<ul style="list-style-type: none"> - Coordination between Department of Education, Department of Social Welfare and STEVTA - Social attitude needs changing – movies contribute to create awareness e.g. <i>Taare Zameen per</i>; media should be utilised for this - Seeking private contribution e.g. KFC opened a branch with deaf staff in Karachi.
Quality	<ul style="list-style-type: none"> - Training of teachers in handling with children with special needs - Quality issues in schools - Access issues – Enough centres are not available. Literacy rate among disabled are very low roughly providing support to only 4% of disabled.

3.7 NON FORMAL EDUCATION AND ADULT LITERACY

The Sindh Vision 2030 cannot be materialised with dismal level of literacy in the province which further disadvantage girls and rural communities. The literacy is also a pre requisite of a functional democracy and basis for economic growth. The human capital theory, suggests that investing in the education of citizens and their skills reward countries equally if not more than material capital. The Article 37(b) of Pakistani constitution explicitly states that the State of Pakistan shall endeavour to remove illiteracy and provide free and compulsory secondary education within minimum possible period.

The Directorate of Literacy and Non Formal Basic Education working under the Education and Literacy Department of Government of Sindh is responsible for programmes on literacy and non-formal education in Sindh. The department has tried to develop a Sindh Literacy Plan 2010-2015 with a vision of 'Literate, educated and prosperous Sindh province'. The plan is still in the draft form and due to the lack of human resource and budget constraints the plan could not be finalised till the preparation of this report.

3.7.1 STATUS

Access

The 1998 national census adopted the definition of literacy as a person of above 10 years who can 'read a newspaper and write a simple letter, in any language'. The White Paper on Education 2007 proposed that the element of numeracy should be placed in addition to reading and writing for a better definition of. However, most surveys like PSLM still stay with above definition. The following table (Table 51) shows the literacy rates for population above 10 years of age from 2004-05 to 2010-11.

Table 51: Percentage of literate population 10 years and older (percentage)

	2004-05 PSLM			2006-07 PSLM			2008-09 PSLM			2010-11 PSLM		
	M	F	Both	M	F	Both	M	F	Both	M	F	Both
Urban	80	62	72	80	65	73	81	65	73	82	68	75
Rural	56	18	38	52	16	36	61	22	43	60	22	42
Overall	68	41	56	67	42	55	71	45	59	71	46	59

Source: PSLM 2008-09 and PSLM 2010-11

The above table (Table 51) shows that literacy rate saw a decline from 2004-05 to 2006-07 and then rose to 59% in the year 2008-09 and remained same till 2010-11. The one per cent decline is contributed mainly by the decline in males' literacy in 2006-07, which later became better. There are continuous disparities between male and female literacy rates. Looking at the rural and urban literacy trends, it is important to note that the literacy rates in both rural and urban areas have improved only 3-4% during six years. Let us now look at the percentage of population that has ever attended school (Table 52).

Table 52: Percentage of population that has ever attended school (percentage)

	2004-05 PSLM			2006-07 PSLM			2008-09 PSLM			2010-11 PSLM		
	M	F	Both	M	F	Both	M	F	Both	M	F	Both
Urban	80	62	72	81	65	74	82	66	74	82	69	76
Rural	57	18	39	54	17	37	63	23	45	61	22	43
Overall	69	41	56	68	43	56	73	45	60	72	47	60

Source: PSLMS 2008-09 and PSLM 2010-11

The population that has ever attended school is very closely related and in some cases almost identical to the literacy rates of the 10+ population. The most disadvantaged group in these cases are the rural females, while most privileged are the urban male.

Non-formal basic education has been used as an instrument in Pakistan to improve literacy particularly in youth and adults. There have been some derives in the past too like the '*Nai Roshni*' schools in 1980s across the country to provide expedited education to those who missed their first chance. Following data (Table 53) shows the number of overall non-formal basic education schools, teachers and students in Sindh.

Table 53: Non Formal Basic Education Schools and Enrolment - Sindh

NFBE Schools	Teachers		Students		
	Male	Female	Boys	Girls	Total
2,075	757	1,318	34,389	44,133	78,522

Source: National Education Foundation 2009-10

In 2005, National Commission for Human Development took over a massive programme of non-formal basic education across the country to improve overall literacy situation. The NCHD data (Table 54) for Sindh is presented below:

Table 54: NCHD Centres and Enrolments in Sindh

Target Centres	Established Centres	Enrolled Learners
5,370	4,151	104,660

Source: NCHD, March 2010

With the devolution of education to the provinces as a result of 18th Amendment, the future of the NCHD literacy centres is unclear. The discussion with officials at the department of education suggests that the department may take over these centres. However, in doing so it might face other challenges particularly of budgets, therefore, they are taking a cautionary approach at the moment.

National Rural Support Programme (NRSP) also provides Adult Literacy programmes across country including Sindh through various projects.

Under the Education Sector Reform Assistance (ESRA) programme funded by USAID, literacy skills were provided to around 100,000 youth and adults during 2002-2007.

Some NGOs like HANDS and Labour Education Foundation (LEF) also provide adult learning programmes in various parts of Sindh.

Quality

The non-formal schools generally work on a cheap educational model. Some basic physical facility is usually arranged by the community, the relevant agency generally arrange basic furniture along with teachers' salary ranging between Rs. 1000-1500. A research study of NCHD schools reveals the following quality issues:

- Teachers of NCHD were getting low salary of around Rs. 1500
- NCHD provided just one chair and *chattai* (plastic mat) on account of furniture
- Most schools are facing fewer enrolments and shortage of teachers
- Multi-grade classes are held in all schools
- Most schools have no toilet and boundary wall
- Most schools have no basic facility like electricity, furniture and transportation
- Most teachers' qualification range between matriculation to intermediate
- Some schools were running at female teacher's home

Inequities and Disparities

Looking at the data (Table 55) on income quintiles against the literacy rate of rural and urban population, it is clear that the literacy rate increases as we move up the income quintile. The income and literacy appears to be directly proportional, the increase in one increases the other. Again male are better off than females and urban areas are more advantaged than rural. The rural females are the most deprived.

Table 55: Literacy rate in population 10+ years by Income Quintile (percentage)

Income Quintile	Urban			Rural			Overall		
	Male	Female	Both	Male	Female	Both	Male	Female	Both
SINDH:	81	64	73	57	20	40	69	42	56
1st Quintile	57	41	49	46	12	30	48	18	34
2nd Quintile	64	46	55	58	18	38	60	28	44
3rd Quintile	73	55	64	59	24	42	65	38	52
4th Quintile	86	66	76	66	27	47	78	50	65
5th Quintile	94	81	87	78	40	60	91	75	83

Source: PSLM 2007-08

3.7.2 KEY ISSUES

Based on the above analysis several issues emerge that have been categorised into the themes of policy, governance and quality related themes. In light of these issues the needs of the sector, possible strategies and target groups will be worked out in chapter 9.

Policy	- Due to 18 th amendment the initiatives for literacy taken by the federal departments like NCHD and National Education Foundation have shifted to the provinces, which require proper planning to
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	<p>look after and synergise provincial and former federal initiatives.</p> <ul style="list-style-type: none"> - Policy framework to integrate and coordinate formal and non-formal streams - Certification and accreditation need to be established for equivalency and employment
Governance	<ul style="list-style-type: none"> - Regulation of literacy programmes which are offered by various government and non-government organisations - Under financing of the literacy initiatives - Inadequate administrative structure - Unavailability of training institutions to train trainers - Lack of coordination between various agencies like NCHD, Literacy and non-formal education department - Lack of monitoring and evaluation due to lack of human resource, capacity and formal governance mechanisms - Coordination with STEVTA be established
Quality	<ul style="list-style-type: none"> - Minimum quality standards need to be established - Link to employment opportunities be created - Capacity building of trainers - Still not enough centers that could fulfill the need - Teachers' training in handling multi-grade classes

3.8 DEENI MADRASAHs

The madrasahs in the sub-continent have existed for a very long time. In fact, historically speaking madrasahs were an organised system of education existed in the Muslim world since 6th century dealing with both religious and worldly knowledge. In the sub-continent, the colonisation of Britishers and the introduction of English system of schooling gradually deteriorated the madrasah system, which subsequently reduced to the education of religious knowledge only. Dr. Tariq Rahman in his book 'Denizens of Alien Worlds'³³ explains that madrasahs generally cater to the poorest segment of the population by providing free boarding, lodging and tuition. These madrasahs run on community charity and range from very poor resourced to well established institutions.

The madrasah system is spanned over a 16 years qualification/ graduation framework with following equivalence with formal schooling:

1. Nazra (primary)
2. Hifz (middle)
3. Tajvidh (secondary)

³³ Rahman, T. (2004). Denizens of alien worlds: a study of education, inequality and polarization in Pakistan. Karachi: Oxford University Press..

4. Tehniti (higher secondary)
5. Moquf-Alaih (bachelor)
6. Alim (post graduate)

The Education Sector Reforms launched in 2001 tried to reform madrasah education and introduce mainstream subjects of maths, science and computer studies into madrassah curriculum. It is worth remembering that since the inception of Pakistan most education policies and conferences have suggested reforming and mainstreaming of madrasah. However, this has never been implemented, mainly due to its sensitive political nature.

3.8.1 STATUS

Institutions

In Karachi the major *Darul Uloom*s (Universities) include: Darul Uloom Korangi, Darul Uloom Binori Town, Ashraf ul Madaris, and Jaamiatur Rasheed. The type and quality of madrasahs vary just as they vary in formal schooling system. There are mainly three major bodies that register madrasahs across the country, which are Rabita-tul-Madaris Islamia, Wafaq-ul-Madaris and Tanzeem-ul-Madaris Ahle Sunat Pakistan (Table 56). Amongst them Wafaq-ul-Madaris is the largest one having 524 institutions attached to it. A large body of madrasahs are not affiliated with any of these bodies and stand on their own. Most of these madrasahs are mixed genders, which also tend to be more of primary level madrasahs.

Table 56: Deeni Madaris by Wafaqs and Gender (Sindh)

Wafaqs/ Tanzeem/Rabita	Institutions			
	Male	Female	Mixed	Total
Rabita-tul-Madaris Islamia	44	10	115	169
Wafaq-ul-Madaris	145	45	334	524
Tanzeem-ul-Madaris Ahle Sunat Pakistan	131	36	290	457
Other bodies	41	17	117	175
Not Affiliated	99	27	316	442
Not Reported	39	10	69	118

TOTAL	499	145	1,241	1,885
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Source: Pakistan Education Statistics 2008-09; AEPAM (Table: 0.37)

Teachers

There are 11,026 teachers teaching in madrasahs in Sindh with most teachers belonging to Rabita-tul-Madaris Islamia (Table 57). Also the number of male teachers is almost four times higher than female teachers.

Table 57: Deeni Madaris Teachers by Wafaqs and Gender (Sindh)

Wafaqs/ Tanzeem/Rabita	Teacher		
	Male	Female	Total
Rabita-tul-Madaris Islamia	827	219	1,046
Wafaq-ul-Madaris	3,175	1,009	4,184
Tanzeem-ul-Madaris Ahle Sunat Pakistan	2,126	425	2,551
Other bodies	721	229	950
Not Affiliated	1,480	376	1,856
Not Reported	385	54	439
TOTAL	8,714	2,312	11,026

Source: Pakistan Education Statistics 2008-09; AEPAM (Table 0.37)

Enrolment

There are 326,244 students enrolled in these madrasahs at various levels in Sindh (Table 58). Out of which majority are male (62%); the female enrolment comprises 38% of the overall enrolment. Wafaq-ul-Madaris has the highest share of student population. A significant population belongs to madrasahs which are not affiliated to any of these bodies.

Table 58: Deeni Madaris Enrolment by Wafaqs and Gender (Sindh)

Wafaqs/ Tanzeem/Rabita	Enrolment		
	Male	Female	Total
Rabita-tul- Madaris Islamia	18,467	10,522	28,989
Wafaq-ul-Madaris	73,810	48,269	122,079
Tanzeem-ul-Madaris Ahle Sunat Pakistan	48,902	27,743	76,645

Other bodies	16,846	10,208	27,054
Not Affiliated	36,556	23,108	59,664
Not Reported	7,429	4,384	11,813
TOTAL	202,010	124,234	326,244

Source: Pakistan Education Statistics 2008-09; AEPAM (Table: 0.37)

3.8.2 KEY ISSUES

The emerging issues related to madrasa education have been detailed below under the categories of policy, governance and quality. In light of these issues the needs of the sector, possible strategies and target groups will be worked out in chapter 9.

Policy	<ul style="list-style-type: none"> - Mainstreaming of madrasa education with inclusion of subjects of regular schooling - Coordination between Ministry of Education and Interior - Creation of regulatory/coordination authority
Governance	<ul style="list-style-type: none"> - Strengthening collection and reliability of data of madrassas - Incentives for madrassas to abide by standards
Quality	<ul style="list-style-type: none"> - Opportunities for madrasa teachers to get equipped with the teaching of modern subject and teaching methodology. There should be incentives attached to such trainings. - Public awareness needed to let people know that all madrassas are not bad, there are few bad apples as argued by Winthorpe Report by Brooklyn Institute

CHAPTER 4: SINDH AND INTERNATIONAL COMMITMENTS (EFA/MDGs)

Pakistan has committed to the achievement of Millennium Development Goals (MDGs) and the Education For All (EFA) goals. There are specific targets under each of these goals, which are supposed to be achieved by 2015. It is now clear belief that Pakistan will not be able to achieve these targets by the given date, nevertheless this should not deter us to still continue to move towards achieving these targets in the minimum possible time frame.

The education related MDGs and targets are stated below:

Goal 2 Achieve universal primary education

Target 2.A Ensure that by 2015, children everywhere, boys and girls alike, will be able to complete a full course of primary schooling

Goal 3 Promote gender equality and empower women

Target 3.A Eliminate gender disparity in primary and secondary education, preferably by 2005, and at all levels of education no later than 2015

The six goals of EFA are as follows:

Goal 1 – Expand early childhood care and education

Goal 2 – Provide free and compulsory primary education for all

Goal 3 – Promote learning and life skills for young people and adults

Goal 4 – Increase levels of adult literacy

Goal 5 – Achieve gender parity and gender equality

Goal 6 – Improve the quality of education

It can be noticed that the education related MDGs also feature under EFA goals hence an assessment of EFA is in fact also an assessment of education specific MDGs. The Global Monitoring Report team under UNESCO has devised an index to monitor the overall progress of countries over EFA targets and represent this through a single figure. This index is called EDI (EFA Development Index). The creation of index acknowledged the difficulty of quantifying goals 1 and 3 and incorporating them into EDI. Hence, the EDI accounts for the developments on four goals – 2, 4, 5, and 6. Below (Table 59) is the EDI ranking from GMR 2011 of selected countries for comparative purposes (last rank is 127)

Table 59: Ranking of selected countries as per EDI scores

EDI Ranking out of 127	Country	EDI	Primary adjusted NER	Adult literacy rate	Gender-specific EFA Index (GEI)	Survival rate to grade 5
1	Japan	0.995	1.000	0.992	0.999	0.990
46	United Arab Emirates	0.969	0.990	0.900	0.986	1.000
73	Turkey	0.919	0.947	0.887	0.901	0.942
107	India	0.769	0.955	0.628	0.834	0.658
112	Bangladesh	0.723	0.884	0.550	0.909	0.548
119	Pakistan	0.656	0.661	0.537	0.727	0.697

Source: EFA Global Monitoring Report 2011; UNESCO

Based on the EDI preferences, this report will focus on the following indicators to see the progress of Sindh province on EFA targets.

- a. Net primary enrolment rate – as proxy for Universal Primary Education
- b. Survival rate till grade 5 – as proxy for quality of education
- c. Adult literacy rate
- d. Gender parity in primary education
- e. Gender parity in secondary education
- f. Youth (10+ yrs) literacy gender parity

A. NET PRIMARY ENROLMENT RATE

Since 2004-05 until 2010-11 the average rate of growth in net primary enrolment rate is found to be merely 0.83%. Given that population remains constant and there is no drastic improvements in the average growth rate the target to reach 100% net primary enrolment rate will be achieved by the year 2066 in Sindh province (Table 60; Figure 17). Interestingly the target in rural areas with existing growth rate seems achievable much earlier than urban areas, which may not be true in reality³⁴.

Table 60: Achievement of Net Primary Enrolment Rate target in Sindh (percentage)

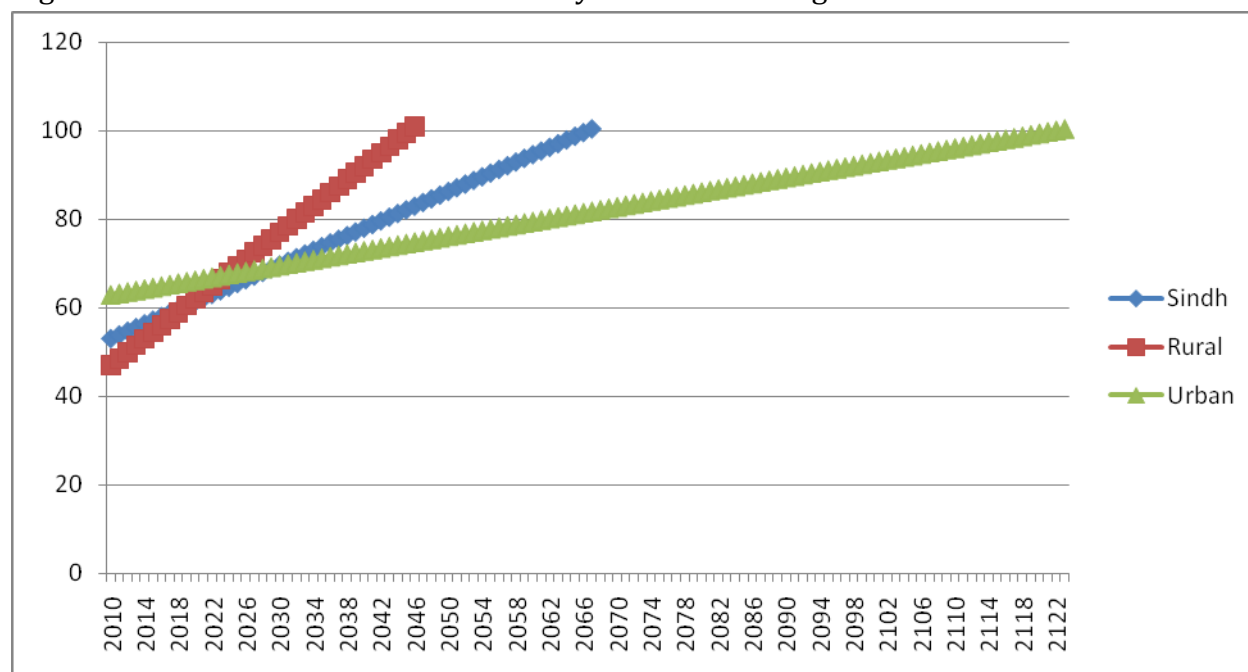
	2004-05	2006-07	2008-09	2010-11	Average Growth rate	MTDF Target 2010	EFA Target 2015	Target achievement Year
Sindh Overall	48	50	54	53	0.83%	77	100	2066
Rural	38	41	47	47	1.5%			2045
Urban	61	64	63	63	0.33%			2122

Source: PSLMS 2010-11

The graph below (Figure 17) shows the projected achievement of the target based on current rate of progress.

³⁴ Note: The projections show that rural areas will achieve the targets before urban areas. This is because the projections are made based on the average rate of change, which is generally higher for rural areas than urban areas. This however, may not be the case in actuality due to a variety of reasons.

Figure 17: Achievement of Net Primary Enrolment target in Sindh



B. COMPLETION/ SURVIVAL RATE TILL GRADE 5

The survival rate to grade 5 based on the table below (Table 61) stand at 41% i.e. for every 100 students enrolled in grade 1, only 41 survive till grade 5. The target for MTDf was 80% and EFA target requires the survival rate to be 100% by 2015.

Table 61: Grade wise enrolments showing survival of students till grade 5

Grade Years	1	2	3	4	5
2006	959,288				
2007		601,713			
2008			524,561		
2009				460,938	
2010					388,618

Source: SEMIS 2009-10; data for grade 5 shared by SEMIS as draft

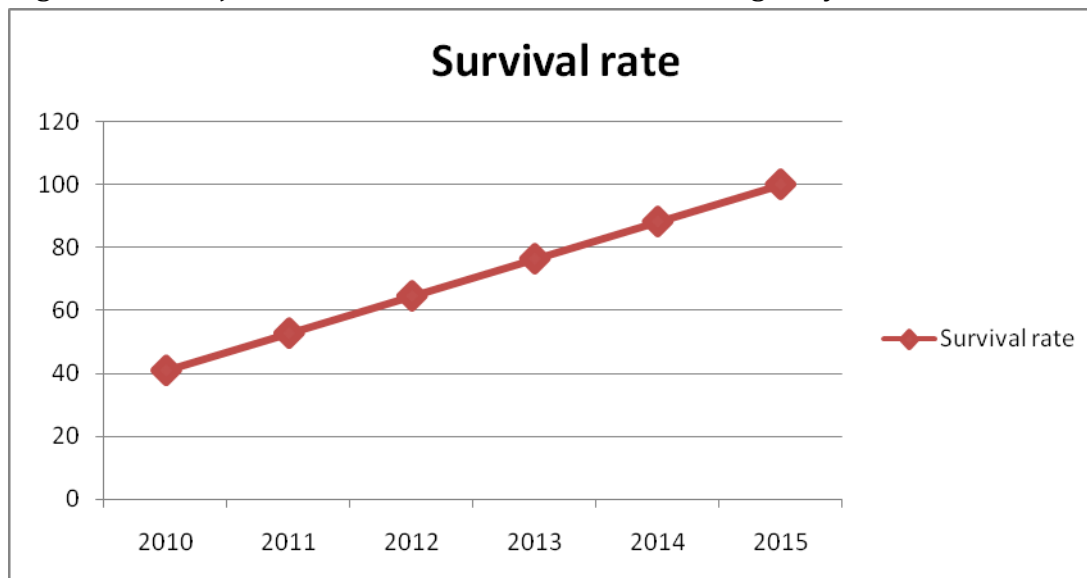
In order to meet the target the average survival rate has to grow for about 11.8% annually. This will result in the following projections:

Table 62: Projections to achieve Survival rate target by 2015

Years	2010	2011	2012	2013	2014	2015

Survival rate	41%	52.8%	64.6%	76.4%	88.2%	100%
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Figure 18: Projections to achieve Survival rate target by 2015



C. ADULT LITERACY RATES (15+ YRS)

The MTFD target for adult literacy was 77% by the year 2010. The EFA target for adult literacy is 86% by the year 2015. Based on the past figures the adult literacy rate has on average grown 0.67% annually. If there are no major initiatives and we continue to progress with the same rate the desired EFA target will be reached by the year 2037. Further details can be seen from the table and graphic projection below (Table 63; Figure 19).

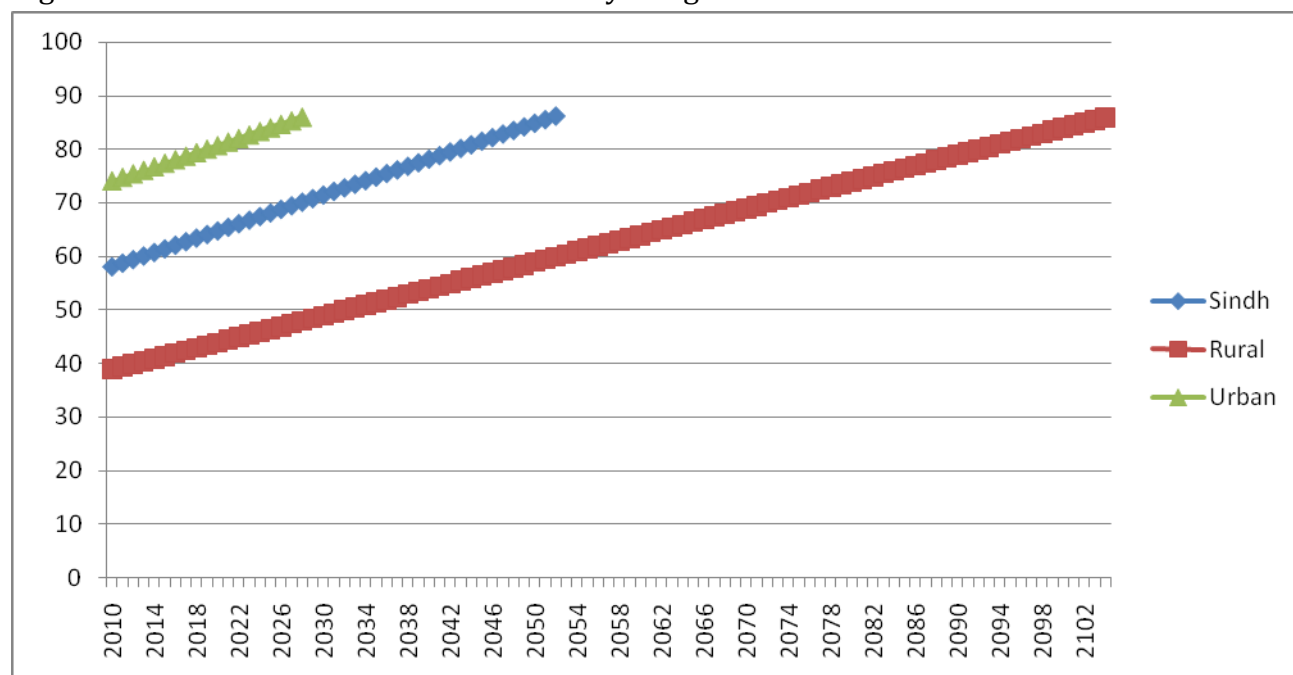
Table 63: Achievement of Adult Literacy Target

	2004-05	2006-07	2008-09	2010-11	Average Growth rate	MTDF Target 2010	EFA Target 2015	Target Achievement Year
Sindh Overall	54	54	57	58	0.67%	77	86	2052
Rural	36	33	40	39	0.5%			2104
Urban	70	71	72	74	0.67%			2028

Source: PSLMS 2010-11

The graph below show the projected achievement of the target based on current rate of progress.

Figure 19: Achievement of Adult Literacy Target



D. GENDER PARITY IN PRIMARY EDUCATION

The gender parity is calculated by dividing female GER with male GER. The MTFD target for gender parity at primary level was 0.94 by the year 2010. The EFA target for adult literacy is 1 by the year 2015. Based on the past figures the gender parity at primary has on average grown with the rate of 0.0013 annually. If there are no major initiatives and we continue to progress with the same rate the desired EFA target will be reached by the year 2163. This is alarmingly distant and caused due to no or negative growth in GPI at primary level during past six years. More alarming is the situation in rural areas, which starts from a lower starting point. Further details can be seen from the table and graphic projection below (Table 64; Figure 20).

Table 64: Achievement of Gender Parity Index Target at Primary level

	2004-05	2006-07	2008-09	2010-11	Average Growth rate*	MTDF Target 2010	EFA Target 2015	Target Achievement Year
Sindh Overall	0.77	0.77	0.81	0.77	0.0015**	0.94	1	2163
Rural	0.63	0.58	0.69	0.63	0.001			2380
Urban	0.91	0.96	0.93	0.93	0.002			2045

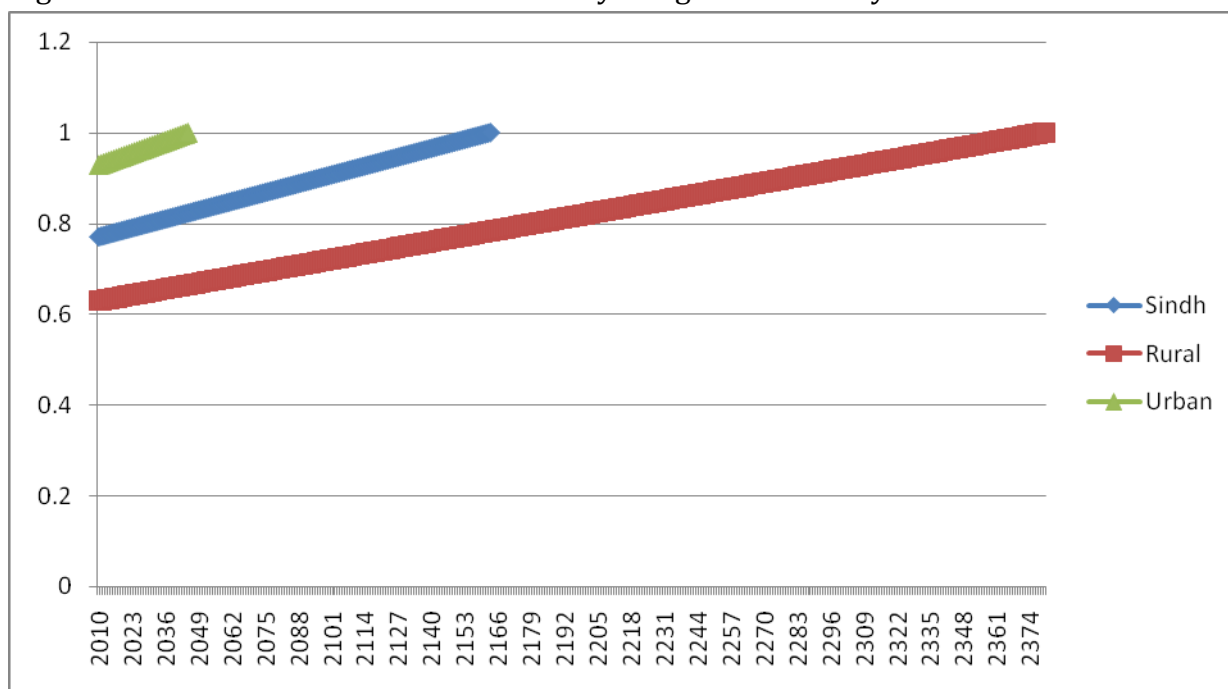
Source: PSLMS 2008-09

*For the projection purposes the growth rates are calculated in Excel to the sixth place after decimal, hence these growth rates come about despite apparent lack of growth

** There is almost no growth in overall GPI at primary level in Sindh, in fact negative growth observed between years 2008-08 and 2010-11. For the purpose of projections, the overall growth is taken as the average of rural and urban growth.

The graph below shows the projected achievement of the target based on current rate of progress.

Figure 20: Achievement of Gender Parity Target at Primary level



E. GENDER PARITY IN SECONDARY EDUCATION

The MTFD target for gender parity at secondary level was 0.9 by the year 2010. The EFA target for secondary level gender parity is 0.94 by the year 2015. The gender parity at secondary level has on average grown with the rate of 0.03 annually. If we continue to progress with the same rate the desired EFA target will be reached by the year 2043 (Table 65; Figure 21).

Table 65: Achievement of Gender Parity Target at Secondary level

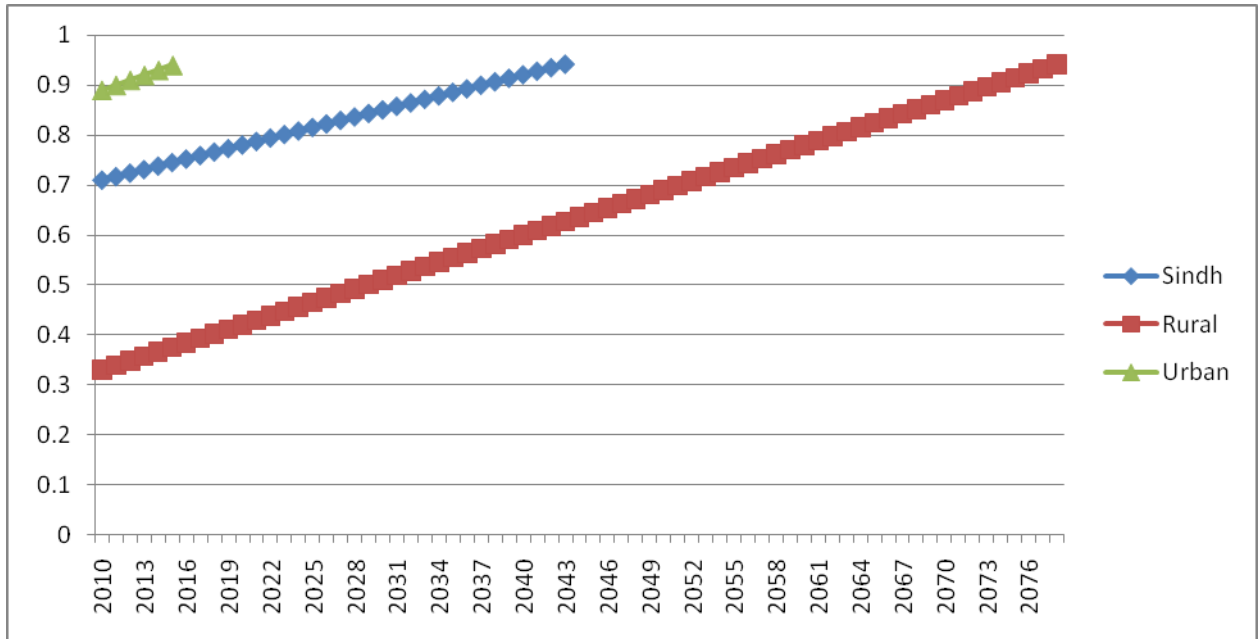
	2004-05	2006-07	2008-09	2010-11	Average Growth rate	MTDF Target 2010	EFA Target 2015	Target Achievement Year
Sindh Overall	0.67	0.68	0.74	0.71	0.007	0.9	0.94	2043
Rural	0.27	0.28	0.37	0.33	0.009			2078

Urban	0.84	0.79	0.88	0.89	0.01			2015
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Source: PSLM 2008-09

The graph below show the projected achievement of the target based on current rate of progress.

Figure 21: Achievement of Gender Parity Target at Secondary level



F. GENDER PARITY IN YOUTH LITERACY (10 YRS AND ABOVE)

The MTF target for gender parity in youth literacy was 0.8 by the year 2010. The EFA target for youth literacy is 1 by the year 2015. The gender parity in youth literacy has on average grown with the rate of 0.007 annually. If we continue to progress with the same rate the desired EFA target will be reached by the year 2060 (Table 66; Figure 22).

FEMALE/MALE

Table 66: Achievement of Gender Parity Target for Youth Literacy (10+ yrs)

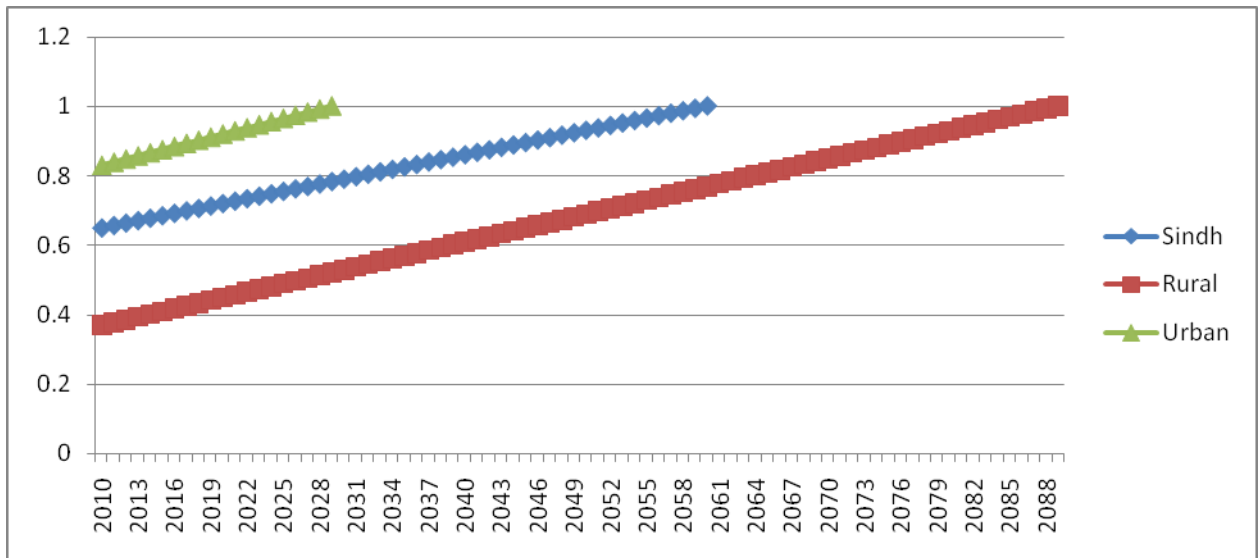
	2004-05	2006-07	2008-09	2010-11	Average Growth rate	MTDF Target 2010	EFA Target 2015	Target Achievement Year
Sindh Overall	0.60	0.63	0.63	0.65	0.007	0.8	1	2060

Rural	0.32	0.31	0.36	0.37	0.008			2089
Urban	0.78	0.81	0.80	0.83	0.009			2029

Source: PSLM 2008-09

The graph below show the projected achievement of the target based on current rate of progress.

Figure 22: Achievement of Gender Parity Target for Youth Literacy (10+ yrs)



SUMMARY OF TARGETS' ACHIEVEMENTS

Table 67: Summary of Targets' Achievement

Target	Achievement year given current pace	Distance from 2011 (years)
Achieving Universal Primary Education	2066	55
Survival Rate to Grade 5	2015	0*
Adult Literacy	2052	41
Gender Parity in Primary Education	2163	152
Gender Parity in Secondary Education	2043	32
Gender Parity in Youth Literacy	2060	49

*The projections for survival rate keep 2015 as the target deadline and suggest a dramatic increase of around 11.8% annually in survival rate.

CHAPTER 5: PUBLIC SECTOR BUDGETARY ALLOCATIONS/ EXPENDITURES

In 2011-12, the total allocated educational budget at national level is Rs. 195.76 billion showing an increase of 10.9% over the allocation in the previous year and 19.5% increase over the revised allocations in 2010-11. In comparison the budgetary allocations of Sindh for 2010-11 are as follows:

Table 68: Budgetary Allocations to Education* (Rs million)

	2010/11 Budget	2010/11 Revised	2011/12 Budget
Sindh	25,708	26,199	32,310
NATIONAL	176,520	163,724	195,764

*Allocations does not include the budget that is transferred directly to district
Source: Budget Documents 2011/12

Comparing the budgetary allocations for education with the total provincial allocations, it is clear that educational allocations have remained between 7-8%, which is nevertheless higher than the national average of 4-5%.

Table 69: Education Allocations as Percentage of Provincial Total Allocations

	2010/11 Budget	2010/11 Revised	2011/12 Budget
Sindh	7%	8%	8%
NATIONAL	5%	4%	5%

Source: Budget Documents 2011/12

Looking at the actual expenditures Sindh has shown a steady rise in past six years. However, the share of educational expenditure as percentage of total provincial expenditures has remained largely constant.

Table 70: Sindh Actual Education Expenditures & Share in Total Provincial Expenditures (2009/10) (Rs million)

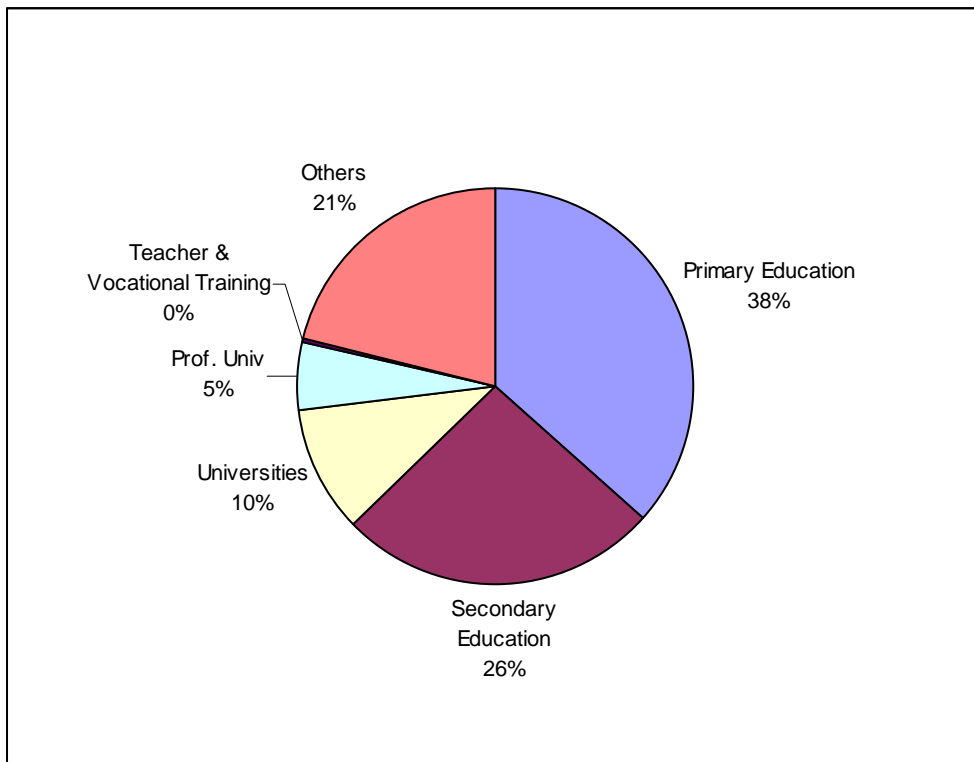
	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10
Total Education Expenditure	20,641	27,600	23,221	37,452	48,875	52,955
<i>Current</i>	20,110	25,244	20,051	31,221	40,036	44,745
<i>Development</i>	531	2,356	3,170	6,231	8,839	8,210
Share of Education in Total Provincial Expenditure	19.93%	21.77%	16.35%	21.62%	23.09%	22.40%
<i>Current</i>	23.76%	28.30%	21.16%	28.45%	29.47%	30.23%
<i>Development</i>	2.80%	6.28%	6.72%	9.82%	11.66%	9.29%
Total Provincial Expenditure	103,587	126,762	141,985	173,227	211,658	236,423
<i>Current</i>	84,630	89,217	94,779	109,753	135,831	148,020
<i>Development</i>	18,957	37,545	47,207	63,474	75,827	88,403

Source: Budget Documents

Despite 157% increase in the overall provincial educational expenditures the bulk of the expenditures goes to recurrent budget (mainly salaries) and only a meagre amount is spent on development.

The graph below shows the sector wise distribution of actual educational expenditures for the year 2009-10. Primary education enjoyed top priority, with 38% of the education expenditures (Rs. 19,462 m) being spent on it, followed by secondary 26% (Rs. 13,809 m) and tertiary education 15% (Rs 8,293 m). There are expenditures categorised as others and account for 21% (Rs 11,143 m) of educational expenditures, while very little amount is spent on teachers and vocational training (Rs 248 m).

Figure 23: Distribution of Actual Education Expenditures by Sub-Sectors in Sind (2009/10)



Very little amount spent on teacher and vocational training appear as 0% in relation to other segments.

CHAPTER 6: INTERNATIONAL DEVELOPMENT PARTNERS IN SINDH

Below is a detailed description of donor assistance to Education sector in Sindh. The table (Table 71) is generated through the Development Assistance Database (www.dadpak.org). The funding agency, title of the project, duration, quantum and type of funding is mentioned in the table along with brief description of the project.

Through on-going donor assistance, Sindh has been committed of \$ 359,657,411, out of which it has received so far \$ 305,486,213 (85%). The biggest assistance is provided by the World Bank of \$ 300,000,000, which is actually a loan and make up for 83% of the total funds committed to education in Sindh. The rest of the funds are in the form of grants, which amounts to \$ 59,657,411 in total and make up for 17% of the total committed funds to education in Sindh. The biggest share has been committed by EU, followed by DFID and Netherlands. The World Bank and EU support the Sindh Education Reform Programme (SERP) implemented by the RSU (Reform Support Unit), Department of Education and Literacy, Sindh.

Apart from the listed donor assistance through the database, there are big USAID assistance programmes: Ed Links and Pre-STEP. Another country wide programme by the DFID titled Reforming Education in Pakistan is about to be commenced.

The assistance by the World Bank and EU towards SERP is helping government to target the whole education sector. Other assistance for example by Netherlands is mostly directed towards ECE programmes. Some of these grants may have also been committed as a result of floods in Sindh last year. The contribution of donors in the absence of very low development budget for education sector is a positive contribution. However, this also has a tendency to create an un-coordinated educational response and duplication of efforts. Due to the weak capacity of government sector, the donors tend to dominate the development agenda, which has also been identified as a strong factor for distorted policy implementation in the White Paper³⁵.

Table 71: Donor Funded Projects in Education - Sindh

Funding Agency	Title	Start Date	End Date	Type	Committed (USD)	Disbursed (USD)	Description
Australia	Assistance to Afghan & Non-Afghan refugees in Pakistan - 2011	1-Jan-11	31-Dec-11	Grant	14,240	14,240	

³⁵ White Paper on Education in Pakistan (2007), Ministry of Education, Pakistan.

BPRM (USA)	RAHA (Refugees Affected and Hosting Areas) Project - UNHCR	27-May-09	26-May-14	Grant	21,991	21,991	Afghan refugees' educational provision lead by UNHCR
Canada	Assistance to Afghan & Non-Afghan refugees in Pakistan - 2011	1-Jan-11	31-Dec-11	Grant	101,937	101,937	
CIDA	STRENGTHENING TEACHER EDUCATION IN PAKISTAN (STEP)	26-Sep-08	28-Feb-15	Grant	745,842	232,781	Quality elementary education. Professional development teachers, teacher educators and managers
DFID	Integrated Early Recovery Programme for Revitalization of the Education System in Sindh and Punjab Provinces, Pakistan			Grant	2,989,537		Flood 2010
DFID	An Integrated Approach to School Revival			Grant	4,556,682		Flood 2010
ECHO	Assistance to Afghan & Non-Afghan refugees in Pakistan - 2011	1-Jan-11	31-Dec-11	Grant	92,190	92,190	
EU	Sindh Education Plan - Support Programme (SEP - SP)	22-Dec-06	28-Feb-12	Grant	46,695,402	27,072,646	
Germany	RAHA (Refugees Affected and Hosting Areas) Project - UNHCR	27-May-09	26-May-14	Grant	8,8457	8,8457	Afghan refugees' educational provision lead by UNHCR
World Bank (IDA)	Sindh Education Sector Project	9-Jun-09	30-Jun-12	Loan	300,000,000	274,768,856	Support SERP. To increase school participation, reduce gender and rural-urban disparities, increase progression and the measurement of learning.
International Private Donors	Assistance to Afghan & Non-Afghan refugees in Pakistan - 2011	1-Jan-11	31-Dec-11	Grant	847	847	
Japan	RAHA (Refugees Affected and Hosting Areas) Project - UNHCR	27-May-09	26-May-14	Grant	12,855	12,855	Afghan refugees' educational provision lead by UNHCR
Netherlands	Releasing Confidence and Creativity	1-Oct-06	30-Sep-11	Grant	3,645,282	2,387,264	
Norway	Assistance to Afghan & Non-Afghan	1-Jan-	31-Dec-	Grant	71,556	71,556	

	refugees in Pakistan - 2011	11	11				
Spain	Gender Equality Programme	19-Nov-09	31-Dec-11	Grant	159,481	159,481	UNESCO as implementing agency integrate gender within literacy and educationally focused interventions.
Switzerland	Assistance to Afghan & Non-Afghan refugees in Pakistan - 2011	1-Jan-11	31-Dec-11	Grant	13,441	13,441	
UNESCO	Promotion of HIV / AIDS Prevention Education and School Health Programs in Pakistan	1-Jan-09	30-Dec-11	Grant	0	0	Regular Program – Education of HIV/AIDS and health. Review of curriculum and textbooks for this at secondary and higher sec. levels.
UNFPA	Enhanced National Expertise and facilitating transfer of knowledge	1-Jan-07	31-Dec-11	Grant	44,7671	44,7671	Enhanced National Expertise and facilitating transfer of knowledge towards population and reproductive health.
Total					359,657,411	305,486,213	

Source: Development Assistance Database, Pakistan (www.dadpak.org); report generated 19th September 2011 with filters: Sector=Education; Province=Sindh

CHAPTER 7: MEETING CONSTITUTIONAL COMMITMENTS

The 18th Constitutional Amendment in Pakistan has devolved the education to the provinces and at the same time it has also committed through Article 25A that State will provide free and compulsory education for children of ages 5-16 years. This commitment has a huge implication for the provincial education departments in terms of both cost and human resource. In the following section an assessment of implementation of NEP 2009 is done. In this chapter a rough estimation of the cost to implement Article 25A - free education to all children aged between 5-16 years has been presented.

7.1 UNIVERSAL PRIMARY EDUCATION

Based on Population Census 1998 projections and using PSLMS (2008/09) net participation rates as base year rates, annual projections for enrolments were made for a seven year period, enabling the achievement of UPE by 2015/16 (Tables U1 and U2).

Table 72: Population and Enrolment Projections at Primary Level (in millions)

	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
Projected Total Population† (5-9 yrs)	4.139	4.039	3.961	3.884	3.814	3.776	3.714
Projected Net Primary Enrolment Rate (%)‡	60.6	67.2	73.8	80.4	87	93.6	100.2
Projected Total Net Primary Enrolment	2.508	2.714	2.923	3.123	3.318	3.534	3.721
Over age Primary Students*	1.254	1.357	1.462	1.561	1.659	1.767	1.861
Projected Total Gross Primary Enrolment	3.762	4.071	4.385	4.684	4.977	5.302	5.582
Projected Public Sector Primary Enrolment**	2.634	2.850	3.069	3.279	3.484	3.711	3.907

† Source: NIPS estimates

‡ Annual growth rate of 6.6% from 54% for base year 2008-09

* calculated as 50% of net enrolment

** 70% of gross primary enrolment is in government schools

With 2009/10 enrolments and actual education expenditures, a series of projections i.e., for unit costs of primary education and share of primary in total education expenditures, were estimated. For each year, calculations were made for primary education expenditures and total education expenditures. The total primary education expenditure required to achieve UPE by 2015/16 is estimated at Rs 311 billion.

Table 73: Projections of Cost Estimates of UPE by 2015/16

	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
Projected Public Sector Primary Enrolment (million)	2.634	2.850	3.069	3.279	3.484	3.711	3.907
Estimated Primary Education Expenditure* per primary student (Rs)	7,640	8,977	10,548	12,394	14,563	17,111	20,106
Estimated Total Primary Expenditure (Rs m)	20,124	25,584	32,372	40,640	50,737	63,500	78,553
Projected Total Educ Expenditure**	52,955	69,147	89,921	116,113	149,226	192,424	245,479

*calculated for 2009/10 as 38% of actual education expenditure of Rs. 52,955 million divided by the number of public sector gross enrolment. For 2010/11 onwards, it was calculated on the basis of annual increase of 17.5%.

** calculated on the basis of share of primary education (38% for 2009/10 & declining gradually to 32% by 2015/16) in total education expenditure

7.2 INITIAL SECONDARY EDUCATION

As a strategy to provide secondary education to all potential “qualified” candidates i.e., those who have completed primary schooling, the province should *at least* cater to the stream of successful primary candidates entering the initial first year of secondary schooling. For each successive year, similar batches be accommodated while also ensuring the retention of these cohorts through Class X. For instance, each year would appear as follows:

Year 0: Primary Students in Class V → Year 1: Potential Secondary (first year) Candidates

Example

Assuming that all public school class 5 students qualify for entry into (public) secondary school, there would be an additional 149,374³⁶ (389,457 – 240,083)³⁷ students to be accommodated in public sector Class 6. (*This assumes that public middle/secondary school Class 6 has a present capacity of 240,083 students*).

Rough calculations suggest, using that middle/secondary school expenditure per student is Rs 8,500, an *additional cost* of about Rs 1,269 million (149,374 @ Rs 8,500³⁸) for one year only.

Improvements in quality of education, etc. may enhance the total outlay. The need for additional buildings to accommodate increased inflow of and retention will also enhance the outlay.

There is also need to cater to those who have missed out the formal schooling. The population 15+ should be catered for literacy. This will also add to the overall cost. Unfortunately, in Sindh there is hardly any development budget released for literacy department. There have been allocation of Rs 37 million, Rs 27 million and Rs 10 million in budgets of 2009-10, 2010-11 and 2011-12 respectively, but no releases.

It is important to note that these projections are made utilising the best possible statistics available. However, these are at best crude estimate for future planning purposes. These projections would likely change due to various economic factors in future including GDP growth, inflation, investments in education sector etc.

³⁶ Assuming the drop outs would balance the fresh students (those who may have completed primary schooling in earlier years and desire to re-join)

³⁷ Figures are from SEMIS 2009/10; using current enrolment of 6th grade as same for next year

³⁸ Assuming a 17.5% increase in unit costs

CHAPTER 8: THE STATUS OF SINDH REGARDING IMPLEMENTATION OF NATIONAL EDUCATION POLICY 2009

The Education Policy 2009 (NEP 2009) was developed following country wide consultations and taking provinces on board. The NEP 2009 suggests that provinces would make their own plans to implement on policy provisions set out in the NEP 2009. Due to devolution of education through 18th Amendment is even more important for the provincial education departments to devise strategies to achieve the objectives of NEP 2009. In the following table (Table 74) an assessment is carried out to see the extent of policy implementation of NEP 2009 by Sindh Education Department.

Table 74: Implementation status of NEP 2009 in Sindh

Theme	Prominent Policy Provisions in NEP 2009	Status at Provincial Level
Special/ Inclusive education	5. Special measures shall be adopted to ensure inclusion of special persons in mainstream education as well as in literacy and Technical and Vocational Education (TVE) programmes.	No such initiative is taken so far.
Access	2. Provincial and Area Governments shall develop plans for achieving these targets [UPE by 2015 & UP Sec by 2025], including intermediate enrolment targets and estimates of the required financial, technical, human and organizational resources. (p. 19)	Sporadic developments but no coherent plan
Quality Standards	7. National Standards for educational inputs, processes and outputs shall be determined. A National Authority for Standards of Education shall be established. The standards shall not debar a provincial and area government/ organization from having its own standards above the prescribed minimum. (p. 20)	Sindh Teacher Education Development Authority (STEDA) is constituted (Yet to be promulgated by the Provincial Assembly). Assessment through PEACE is carried out to assess quality of output. Other standards for educational inputs, processes and outputs need to be established and monitored. National standards developed by NACTE. Accreditation of teacher

		education institutions and assessment of competencies of teachers for their licensing not yet started in Sindh.
	8. Provincial and district governments shall establish monitoring and inspection systems to ensure quality education service delivery in all institutions. (p. 20)	Current supervisory structure need to be upgraded to Standard Based Monitoring and support e.g. Ofsted and HMI. Monitoring should be based on minimum standards.
Resources	1. The Government shall commit to allocating 7% of GDP to education by 2015 and necessary enactment shall be made for this purpose. Formula for proportional allocation (out of available funds) to different sub-sectors of education shall be evolved by the provincial/ area governments. (p.20)	7% of national GDP is still quite distant.
Public Private partnerships	3. For promoting Public-Private-Partnership in the education sector, particularly in the case of disadvantaged children, a percentage of the education budget as grant in aid (to be decided by each Province) shall be allocated to philanthropic, non-profit educational institutions. (p. 20)	PPP is being promoted through SEF
Private school regulation	4. A system of checks and balances for the private sector shall be formed to oversee the issues of fees, school standards, pays of teachers, conduct and hygiene etc. (p. 20)	The directorate of private schools need to be strengthened for this purpose. Registration of private schools should be mandatory. Registered schools should provide educational data to regulatory authority of Sindh government, every year.
Implementation	1. The Ministry of Education shall be responsible for ensuring coherence with other socio-economic policies of the Government. (p. 23)	Very little progress if at all MoE has been abolished at federal level.
Decentralisation	6. Decentralisation shall be pursued at each level of governance to move decision making closer to the point of implementation and shall eventually move to the school level, which shall become the basic unit for planning, including school based budgeting. (p. 24)	Not implemented at school level
Curriculum Framework	4. A common curricular framework in general as well as professional education shall be applied to educational institutions in both the public and the private sector. Governments shall take steps to bring the public and private sectors in harmony	Not Implemented

	through common standards, quality and regulatory regimes.	
Subsidising private schools	5. Where already a private school exists with additional admission space, the children shall be accommodated in it, through public financing and the public sector new school shall either be developed in separate vicinity or for different levels. Private sector schools shall be provided permission on a need cum quality basis.	Per child subsidy to private schools is being promoted through SEF project
English language policy	3. Ministry of Education in consultation with Provincial and Area education departments, relevant professional bodies and the wider public, shall develop a comprehensive plan of action for implementing the English language policy in the shortest possible time, paying particular attention to disadvantaged groups and lagging behind regions. (p. 28)	Provincial policy and action plans still needed for language policy taking guide from NEP 2009 (also from the White Paper 2007)
Madrassa and formal subjects	10. Federal, provincial and area governments shall develop joint strategies with main Madrassah systems, through consultations, to introduce formal subjects including market-oriented and skills-based subjects that would enable the children graduating from Deeni Madaris to have more employment options. (p. 28)	Not explicitly pursued
Education management cadre	1. A management cadre for education, with specified training and qualification requirements, shall be introduced.	Not implemented
EMIS expanded to private and non-formal sector	5. Besides, collection and dissemination of education statistics of Public sector education institutions, its jurisdiction shall be extended to private education institutions as well as Non-Formal schools all over Pakistan	SEMIS still weak on private sector data SEMIS may get required data from/through Regulatory Authority for registration of private schools
Personnel and Financial Management System	6. A Personnel Management Information System (PMIS) as well as Financial Management Information System (FMIS) shall be developed to support the planning, implementation and evaluation function. These shall be linked to the existing Educational Management and Information System (EMIS).	Not implemented
SMCs	1. School Management Committees (SMC) shall be strengthened through involvement of students, teachers, educationists, parents and society (STEPS).	Is being implemented
Madrassa Education Authority	13. Madrassah Education authority shall be established by Ministry of Interior. (p. 34)	Not implemented
ECE	2. ECE age group shall be recognised as	Piloting of ECE classes through

	comprising 3 to 5 years. At least one year pre-primary education shall be provided by the State and universal access to ECE shall be ensured within the next ten years. (p.35)	SEF. Still need further developments.
Elementary	2. Official age for primary education shall be 6 to 10 years. The official age group for next levels of education shall also change accordingly. (p. 36)	Not implemented
Middle schools	4. Wherever feasible, primary schools shall be upgraded to middle level. (p. 36)	Being done under a donor financed project
Incentives for girls enrolments	Food based incentives shall be introduced to increase enrolment and improve retention and completion rates, especially for girls.	Girls' subsidy is being provided.
EMIS	Every child, on admission in Grade I, shall be allotted a unique ID that will continue to remain with the child throughout his or her academic career.	Not implemented The ID may be the same as the registration number allotted by NADRA in <i>bay</i> form
Secondary Education	7. Counselling at higher secondary level must also address the career concerns of young students and encourage them to take up studies as per their aptitude other than the "accepted" fields of study, be it technical, vocational or any other area of study. (p. 37)	Not implemented
Higher Secondary and Inter College	9. Grades XI and XII shall not be part of the college level and shall be merged into the school level forming part of existing secondary schools, where needed and provision of necessary human and physical resources shall be ensured. This exercise shall be undertaken after a detailed study of the failures of previous such efforts. (p. 38)	Not implemented
Ranking schools	A system for ranking of primary and secondary educational institutions across the country shall be introduced with rankings based on result outcomes, extracurricular activities and facilities provided to the students, in order to encourage healthy competition between schools. (p. 38)	Not implemented
Mainstreaming non-formal education	5. A system shall be developed to mainstream the students in non-formal programmes into regular education system, and a system of equivalence shall be developed to permit such mainstreaming. New literates shall receive formal certification so as to facilitate their entry into government schools. (p. 39)	Thinking is under way but no concrete measures yet
Teachers' Qualification	1. A Bachelor degree, with a B.Ed., shall be the requirement for teaching at the elementary level. A Masters level for the	In progress. USAID funded Pre-STEP project is assisting in implementation

	secondary and higher secondary, with a B.Ed., shall be ensured by 2018. PTC and CT shall be phased out through encouraging the present set of teachers to improve their qualifications, while new hiring shall be based on the advanced criteria. Exceptions shall be made in case of less developed areas where teachers with relevant qualifications are not available. Diploma in Education (D.Ed) may be used as an intermediate qualification till B.Ed teachers are available universally. (p. 42)	Accreditation of TTIs and Licensing of teachers need be started urgently by Sindh
Teacher education standards	2. Teacher training arrangements, accreditation and certification procedures shall be standardised and institutionalised. (p. 43)	STEDA is notified, it need to be made more functional
Teacher deployment	10. Provincial and Area Administrations shall develop effective accountability mechanism including EMIS data on teacher deployment, to control absenteeism and multiple job-holding. (p. 43)	Not implemented
Textbooks	2. Textbook Boards shall be transformed into competent facilitating, regulating and monitoring authorities. The Boards shall review and help support the process of approval of textbooks for use in schools in their respective areas of jurisdiction. (p. 46)	STB may not follow this and revert to earlier setup
Mobile library	16. Mobile library services for rural areas shall be introduced. (p. 47)	Not implemented
Basic school facilities' standards	1. A framework setting out the basic standards for school facilities and teaching aid materials including playground shall be established by 2012 and shall form the basis for allocation of funds. (p. 49)	Thinking is going on particularly for flood affected areas
Corporal punishment	7. An awareness campaign against corporal punishment shall be initiated and teachers shall be held accountable for violations.	Not implemented
Technical Education	1. Inputs of all stakeholders like Industrial/Agricultural/Service sectors & Business community etc. shall be institutionalized to ensure their inclusion in all current and future reforms of TVE to enable the sector to meet market needs. (p. 53)	Sindh Technical Education and Vocational Training Authority (STEVTA) established

CHAPTER 9: SINDH'S EDUCATIONAL DEVELOPMENT NEEDS AND STRATEGIES

In this report we have looked in detail the situation of each of the sectors in terms of the number of institutions, enrolments, and teachers. We have also analysed the equity issues across sub-sectors and the major issues for each of them. Later we also looked at the status of government of Sindh in terms of achievement of EFA/MDG target, constitutional changes, budgetary allocations and implementation of NEP 2009.

Following this comprehensive analysis, a matrix is developed below to look at the major issues of education across sub sectors and identify needs and possible strategies accordingly.

Table 75: Sindh's Educational Development Needs and Strategies

Needs	Target Group	Strategies
Early Childhood Education		
Establishment of well-resourced pre-primary (<i>katchi</i>) classes	Pre-primary age group 3-4 yrs	Scaling up of ELP programme of SEF
Admitting children of ages 3-4 yrs into ECE classes	Pre-primary age group 3-4 yrs	Admission campaign on the pattern of 'polio' campaign
Hiring and capacity building of ECE teachers	ECE teachers	Proper designation of ECE teachers on the pattern of PST and JST
Data collection of private sector to be improved in SEMIS	SEMIS	Legislation to have access to private sector schools
Liaison with private and NGO sector	Education department	PPP strategy by government
Mapping of who is working in education in Sindh – sector, geography, type of intervention	Reform Support Unit	Data gathering and plotting on GIS
ECE to feature as separate head in ADP allocations	Planning & Development Department	Across department coordination
Elementary Education		
Increase number of elementary schools	Ages 10-12	Estimation of needs, using GIS extend existing schools through merger first
Campaign to enrol out of school children	Out of school children & their parents/guardians	Utilising media, celebrities, politicians
Increase retention during primary & transition to middle	Enrolled primary and middle children	Improving quality factors – building, resources, teachers etc.
Income should not deter from enrolling into school	In and out of school	Vouchers to low income quintiles

Stopping endless transfer and postings	Teachers	School based teachers' appointment; Utilisation of EMIS and GIS in decision making
Most teachers are professionally qualified. What is the missing element	RSU with research organisation	Research and propose reasons/solutions
Language policy to be implemented	Education department	Gradual introduction of language policy, remain flexible, change supported by PR campaign
Building and teaching resources	Schools	Need based school provision; school autonomy for utilisation of resource budgets
More female teachers in rural	Primary and middle teachers	Hiring campaign, quality teachers. Advance preparation of teachers before their appointments
Secondary and Higher Secondary		
Discourage class based education system	Education department, private sector	Improve public education sector, development of standards and following them
Establishment of Standards of performance and of school	Monitor quality of provision	Supervisors and ADOs to be given standards of performance; creation of OFSTED or HMI kind of authority Publishing outcomes in papers
Improve examination boards	Exam boards	Positive competition between public and private sectors
Discourage tuition culture	Education department	Rigorous monitoring of colleges and higher secondary schools; ensuring proper classes and teaching
Provision of subject specialists	Teachers/ Education department	Development of specialisation among existing teachers; hiring of subject specialist teachers specially in deprived areas with school/college based appointments
Tertiary Education		
Establishment of funding body at provincial level to encourage research at universities, particularly in education sector	Education department with HEC	Need assessment
Discourage political intervention	Politicians	All parties denouncements; standards based working
Improvements in University	University leadership	HEC guidelines; Board of

governance		Governors appointment
Faculty and curriculum Development	Faculty	HEC guidelines and utilisation of opportunities
Technical and Vocational Education		
Linkages with industry	STEVTA and BBSYDP	Joint working group of STEVTA and industrialists
Needs/Market based curriculum	STEVTA Curriculum committee/ faculty of technical colleges	Market survey, demand analysis
Development of quality assurance mechanisms, occupational standards and certifications	Departments of Education and Labour	Development of certification framework
National and international recognition and equivalence	STEVTA and Education department	Equivalence framework
Special Education		
Social attitude need changing	General public	Media campaign, political commitments for inclusive education
Vocational orientation for these children	STEVTA + Education department	Need analysis
Seeking private contribution	Education department	Increased allocations and contribution from private sector
Literacy and Non-formal Education		
Province to take responsibility of literacy centres	Directorate of literacy and Non-formal education	Develop policy
Certification and accreditation need to be established for equivalency and employment	Directorate of literacy and NCHD with RSU	Equivalence framework
Policy framework to integrate and coordinate formal and non-formal streams	-- same --	Certification framework
Regulation of literacy programmes offered from various organisations in government and non-government sectors	Directorate of literacy	Mapping exercise
Madrassa Education		
Mainstreaming of madrassa education with inclusion of subjects of regular schooling	Education department, Ministry of religious affairs and various Madrassa boards	Dialogue and pilot programmes
Coordination between Ministry of Education and Interior	Education and Interior ministries	Regular meetings
Opportunities for madrassa teachers to get equipped with modern teaching methodologies	Madrassa faculty	Exchange visits to madrassas of other countries like Indonesia, Malaysia. Scholarships for madrassa faculty for growth.

WAY FORWARD

Having looked at the situation of all the various sectors of education, the projections for achieving our national and international commitments and needs, it is now time to see clearly how to start moving from here. After all, a good analysis should lead to actions. A five-step strategy is proposed here:

1. Vision – plan and political commitment

The Department of Education and Literacy Sindh (particularly RSU) should seriously think and develop a vision for education in the province in accordance with NEP 2009 and constitutional obligations. This should be followed up with a macro exercise of planning for implementing the policy provisions of NEP 2009 across various sectors. After the recent Joint Declaration by top political leadership, it is important that this political commitment be harnessed in support of such a plan.

2. Resources – financial and human

Ambitious plans need extra resources both financial and human. Thorough and viable financial projections be made to calculate financial impact of the plan. This will help prioritise several efforts proposed in the plan. It will also help formulate future demands linked to overall plan. Donor financing could also be channelized through such planning estimations. Deficiency of human resource can be overcome through partnerships.

3. Good governance

A good plan needs an efficient governance structure to ensure action and achievement of targets. Achievement indicators be developed, transparent monitoring mechanisms be put in place along with standard operating procedures to follow planned activities.

4. Partnerships

Active partnerships with private sector, civil society, donors and other governmental departments should be developed around the overall vision and plan. This will help in synchronising efforts that exist in parallel by various organisations.

5. Mass mobilisation

Community, parents and media be mobilised to get masses behind the overall strategy and provide continued life to plan. Good efforts need appreciation, bad efforts needs checking and revision.

It is important that we should not forget the value of patience and persistence while following these steps.

APPENDIX-A: UNIVERSITIES AND DAIs IN SINDH

S. No	University/DAI Name	Main Campus Location
1	Isra University, Hyderabad	Hyderabad
2	Liaquat University of Medical and Health Sciences, Jamshoro Sindh.	Jamshoro
3	Mehran University of Engineering & Technology, Jamshoro	Jamshoro
4	University of Sindh, Jamshoro	Jamshoro
5	Dawood College of Engineering & Technology, Karachi	Karachi
6	Pakistan Naval Academy, Karachi	Karachi
7	Aga Khan University, Karachi	Karachi
8	DOW University of Health Sciences, Karachi	Karachi
9	Institute of Business Administration, Karachi	Karachi
10	NED University of Engineering & Technology, Karachi	Karachi
11	University of Karachi, Karachi	Karachi
12	Baqai Medical University, Karachi	Karachi
13	Dadabhoy Institute of Higher Education, Karachi	Karachi
14	Greenwich University, Karachi	Karachi
15	Hamdard University, Karachi	Karachi
16	Indus Institute of Higher Education, Karachi	Karachi
17	Indus Valley School of Art and Architecture, Karachi	Karachi
18	Institute of Business Management, Karachi	Karachi
19	Institute of Business and Technology, Karachi	Karachi
20	Iqra University, Karachi	Karachi
21	Jinnah University for Women, Karachi	Karachi
22	Karachi Institute of Economics & Technology, Karachi	Karachi
23	KASB Institute of Technology, Karachi	Karachi
24	Muhammad Ali Jinnah University, Karachi	Karachi
25	Newport Institute of Communications & Economics, Karachi	Karachi
26	Preston Institute of Management, Science and Technology, Karachi	Karachi
27	Preston University, Karachi	Karachi
28	Shaheed Zulfikar Ali Bhutto Institute of Sc. & Technology (SZABIST), Karachi	Karachi
29	Sir Syed University of Eng. & Technology, Karachi	Karachi
30	Sindh Institute of Medical Sciences, Karachi	Karachi
31	Textile Institute of Pakistan, Karachi	Karachi
32	Zia-ud-Din University, Karachi	Karachi
33	Shah Abdul Latif University, Khairpur	Khairpur
34	Shahaeed Mohtarma Benazir Bhutto Medical University, Larkana	Larkana
35	Quaid-e-Awam University of Engineering, Sciences & Technology, Nawabshah	Nawabshah

36	Sukkur Institute of Business Administration, Sukkur	Sukkur
37	Sindh Agriculture University, Tandojam	Tandojam

Source: HEC website

APPENDIX-B: INSTITUTIONS FOR SPECIAL NEEDS IN SINDH

Special Schools in Karachi

1. ACELP Institute of Child Development (Rafique Shaheedi Road)
2. Al-Umeed Rehabilitation Association (AURA) (PECHS)
3. Aasra Special School (Gulshan-e-Iqbal)
4. Association for Retarded Children (Gulshan-e-Iqbal)
5. Danish Gah School (Kehkashan, Clifton)
6. Autism Institute (Karachi Administrative Society, Near Baluch Colony)
7. MA Ayesha Memorial Schools (KMCHS, Hill Park)
8. Balkhi Massarat Institute, Balkhi Foundation (Gulshan-e-Iqbal)
9. Darul Khushnood (Staff Lines, Fatima Jinnah Road)
10. Darul Massarat (Ghaddafi Colony, Baldia Town)
11. Darul Sakoona (Kashmir Road, PECHS)
12. Interline School for Special Children (Abul Hassan Isfahani Road, Gulshane Iqbal)
13. Institute of Behaviour Psychology (DHA Phase 7)
14. Iqbal memorial Special Education Centre (Gulshan-e-Iqbal)
15. Islamic School for Deaf (Surjani Town)
16. IBP School of Special Education (DHA Phase 7)
17. Ida Rieau School for the Blind and Deaf (Purani Numaish, Nizami Road)
18. Karachi Vocational Training Centre for MRC (DHA Phase 4)
19. Karachi School for the Deaf (Korangi)
20. Karachi Vocational Training Centre (DHA Phase 4)
21. Manzil School for Special Children (PECHS)
22. Mashal School for Hearing Impaired Children (Gulshan e Hadeed)
23. Markaz-e-Umeed (APWA College Compound, Karimabad)
24. Milestone School for Special Education (Clifton)
25. PAFWA Mishal School for Special Children (P.A.F Faisal Base)
26. Spellbound School for Learning Disabilities (Clifton)
27. Sky Special Children's Educational Institute (DHA Phase II Extension)
28. School for Slow Learners (Gulshan-e-Iqbal)
29. SCINOSA Day Home (North Nazimabad)
30. Shaheed e Millat Special Education Centre (Gulistan e Jauhar)
31. Rahatgah (Gulshan-e-Iqbal)
32. Vocational Training Centre for Disabled Persons (Gulistan-e-Jauhar)
33. Al-Mustaid Home for Handicapped (Malir Halt)
34. DEWA School for the Deaf (Nazimabad)
35. Adult Blind Centre (Garden East)
36. Day Home Society for the Care of Handicapped (Jamshed Quarters)
37. ABSA School for the Deaf (Korangi Road, DHA)
38. The Association for the Welfare of the Adult Deaf and Dumb (Frere Market, Shahrah-e-Liaquat)
39. The Hope Centre for Mentally Retarded (Nazimabad)
40. Society for the Rehabilitation of Cripple Children (Garden Road)

Special Schools Other than Karachi

1. Municipal Deaf and Dumb School (Station Road, Hyderabad)
2. Rotary School for the Deaf and Dumb (Eidgah Road, Sukkur)
3. Leprosy Unit (Hussainabad, Hyderabad)
4. School for the Blind (Shahdadpur Road, Nawabshah)
5. School for the Deaf (Nawabshah)
6. Unit for the Handicapped Children (Near Government Training School, Sanghar)
7. Unit for the Handicapped Children (Near Government Training School, Kandhkot)

8. Unit for the Handicapped Children (Near Government Elementary College of Education, Larkana)
9. Unit for the Handicapped Children (Near Government Training School, Dadu)
10. Government School for the Blind Children (Khairpur)

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