

School Education Department, Government of Punjab

Punjab School Education Sector Plan

2013-2017



PREFACE

In an invigorating reform environment in the province and with school education completely under the ambit of the provinces after the 18th Constitutional Amendment, Punjab School Education (SED) has been a primary focus area for the provincial government. In April 2011, Government of Punjab announced the School Education Reforms Roadmap with the objective to ensure quality education to all and 100% enrolment and retention of all school going age children. The Punjab School Education Sector Plan (PSESP) has been developed in order to strategize and provide an operational plan to implement the school education reforms for improving the quality, access and governance of education in the province. The document lays the path for achievement of the goals of Article 25-A.

The PSESP has been developed in three phases which included conducting a sectoral analysis, defining and prioritizing strategies and thirdly the development of a costed implementation framework followed by defining and prioritizing strategies to address challenges at hand, and thirdly, costing of implementation. Stakeholder participation and engagement at all levels of educational management has been ensured in the process.

The PSESP provides a guideline to the strategic objectives with identified activities that are to be translated in the work plans and budgets of all departments at the provincial, district and school level. The document also provides a performance assessment tool in order to monitor the implementation of the Plan. Thirdly the Plan gives an overview of resource mobilization required for implementation and to what extent external support of development partners is required to achieve its objectives.

The document begins providing a context an in-depth analysis of various facets of the education sector. Chapter 3 highlights intrinsic gaps that need to be addressed. Chapter 4 further analyzes the gaps and strategic approach that is required. Chapter 5 provides an elaborated strategic framework based on improving quality, access, and governance. Chapter 6 identifies key strategies covering all focal areas. The next chapter discusses costing of the PSESP implementation and the final chapter describes the implementation and monitoring framework.

The PSESP has been developed with the technical support of GIZ. Additionally, the inputs and work of PMIU and all attached departments is acknowledged in developing the Punjab School Education Sector Plan (PSESP). Feedback from all development partners engaged in the education sector in Punjab also enriches the document. It is important that the PSESP is implemented with the same spirit with which it was developed in and utilized as an effective tool for the provincial government to fulfil its obligations of providing quality education for all.

Abdul Jabbar Shaheen Secretary School Education Department Government of Punjab

TABLE OF CONTENTS

	Preface	
	LIST OF ACRONYMS.	v
	LIST OF TABLES	VII
	LIST OF FIGURES	VIII
E>	XECUTIVE SUMMARY	ıx
1.	BACKGROUND AND METHODOLOGY	1
	1.1 OBJECTIVES OF PUNJAB SCHOOL EDUCATION SECTOR PLAN	1
	1.2 Process – Education Sector Planning, Punjab	1
	1.2.1 Situation Analysis of School Education Department- Punjab	2
	1.2.2 Prioritization of Issues – Situation Analysis Report	3
	1.2.3 Capacity Gap Analysis	3
	1.2.4 Capacity Development Strategies	4
	1.2.5 Costed Strategies of Prioritized Issues	5
	1.2.6 School Education Sector Implementation Plan	5
2.	. NATIONAL POLICY, LEGAL AND MACRO-ECONOMIC FRAMEWORK	6
	2.1 Macro-economic Framework	
	2.1.1 History	6
	2.1.2 Geography	6
	2.1.3 Demography	7
	2.1.4 Economy	7
	2.1.5 Agriculture	8
	2.1.6 Industry	8
	2.1.7 Services	9
	2.2 SOCIAL SECTORS	9
	2.3 Public Finance	11
	2.4 THE LEGAL FRAMEWORK	14
	2.4.1 The 18th Amendment	14
	2.5 POLICY FRAMEWORK	15
3.	. THE EDUCATION SECTOR	16
	3.1 THE EDUCATION SYSTEM (LEVELS AND OVERALL STRUCTURE)	16
	3.1.1 School Education Department	16
	3.1.2 Higher Education	19
	3.1.3 Technical and Vocational Education	20
	3.1.4 Adult Literacy and Non Formal Basic Education	21
	3.1.5 Department of Special Education	21
	3.2 RECENT HISTORIC DEVELOPMENTS: EXPERIENCE, CHALLENGES, OPPORTUNITIES	21

	3.3 KEY EDUCATION INDICATORS	22
	3.4 DISTRICT ANALYSIS OF EDUCATION INDICATORS	26
	3.4.1 Comparison of NER in Districts	26
	3.4.2 Comparison of GPI Districts	29
	3.5 MODALITIES OF SERVICE DELIVERY AND STRUCTURAL DIVIDE	31
	3.6 Governance (Federal, Province, District)	37
	3.7 KEY FINDINGS OF SITUATIONAL ANALYSIS	40
	3.7.1 Cross-cutting Issues	40
	3.7.2 Challenges & intrinsic gaps identified in specific focal areas	40
4.	4. STRATEGIC FRAMEWORK	
	4. 1 Access	44
	4.1.1 Data	44
	4.1.2 Evidence-Based Research	45
	4.1.3 Intervention Strategies to Increase Access and Reduce Dropout	45
	4.2 EQUITY	46
	4.2.1 Disaster Risk Reduction	46
	4.2.2 Inclusive Education	47
	4.3 Quality and standards	48
	4.3.1 Quality of Inputs	49
	4.3.2 Quality of Processes	53
	4.3.3 Quality of Outputs	54
	4.4 Management and Governance	56
	4.4.1 Stakeholder Analysis	57
	4.4.2 The Sector Strategies	60
5.	5. STRUCTURE AND FUNCTIONS OF THE EDUCATION SECTOR	63
	5.1 QUALITY	63
	5.1.1 Standards	64
	5.1.2 Curriculum	65
	5.1.3 Textbooks and Learning Materials	66
	5.1.4 Teacher Development	67
	5.1.5 Examinations/Assessments	69
	5.1.6 School Environment	70
	5.2 EARLY CHILDHOOD EDUCATION	71
	5.3 School Language Policy	72
	5.4 Enrolments	72
	5.4.1 Relevance	73
	5.4.2 Cost Reduction (Free Education)	73

5.4.3 Community Involvement	74
5.4.4 Improved Confidence in Education System	75
5.4.5 Effective Non-Formal Education	75
5.4.6 Disaster Risk Reduction	76
5.4.7 Inclusive Education	77
5.5 GOVERNANCE AND MANAGEMENT OF PUBLIC EDUCATION SECTOR	80
5.5.1 Merit Based HRM	81
5.5.2 Improve Managerial Efficiency and Development of Expertise	83
5.5.3 Utilization of Data	84
5.5.4 Integrated and Research-based Planning Process	84
5.5.5 Improved Monitoring and Evaluation Processes	85
5.5.6 Coordination Mechanism to Strengthen Reform Process	86
5.5.7 Gender Sensitized Management	86
5.5.8 Public-Private Partnership	87
5.5.9 Private Sector Schools	82
5.5.10 Awareness and Involvement of Key Stakeholders	88
6. FINANCING THE SECTOR PLAN	90
6.1 Data Limitations	92
6.2 Costing Factors	92
6.2.1 'Scale' Factors	92
6.2.2 'Non Scale' Factors	103
6.3 TOTAL EXPENDITURE	106
6.4 RESOURCE ANALYSIS	107
6.5 NFE: THE MISSING LINK	108
6.1 Data Limitations	109
6.2 COSTING FACTORS	110
6.2.1 'Scale' Factors	110
6.2.2 'Non Scale' Factors	119
6.3 Total Expenditure	122
6.4 RESOURCE ANALYSIS	122
6.5 NFE: THE MISSING LINK	124
7. IMPLEMENTING THE SECTOR PLAN	125
7.1 OVERSIGHT MECHANISM	125
7.2 DECENTRALISATION	125
7.3 DISSEMINATION	125
7.4 Performance Assessment Framework	126
REFERENCES	129

LIST OF ACRONYMS

ACR Annual Confidential Report
ACS Additional Chief Secretary
ADP Annual Development Plan
AEO Assistant Education Officer

ASER Annual Status of Education Report

BISE Boards of Intermediate and Secondary Education

CGA Capacity Gap Analysis

CIF Curriculum Implementation Framework

CM Chief Minister

CPD Continuous Professional Development

DAE Diploma of Associate Engineer
DCO District Coordination Officer
DED District Education Department
DEO District Education Officer
DOH Department of Health

DP Divisible Pool

DPI Directorate of Public Instruction
DPS Divisional Public School

DRR Disaster Risk Reduction

DSD Directorate of Staff Development
Dy. DEO Deputy District Education Officer
ECE Early Childhood Education
EDO Executive District Officer

EFA Education for All

EMIS Education Management Information System

ESD Education System Diagnosis

FATA Federally Administered Tribal Areas

FGD Focus Group Discussion

FM Finance Ministry

GCET Government College for Elementary Teachers

GER Gross Enrolment Rate

GIZ German Agency for International Cooperation

GOP Government of Punjab
GPI Gender Parity Index
GPP Gross Provincial Product
GST General Sales Tax

HRM Human Resource Management

KPK Khyber Pukhtoonkhwa

LEAPS Learning and Educational Achievement in Punjab Schools

LGO Local Government Ordinance

LM Learning Material

MDG Millennium Development Goal

MoE Ministry of Education

MTDF Medium Term Development Framework

NACTE National Accreditation Council for Teacher Education

NEAS National Education Assessment System

NEMIS National Education Management Information System

NEP National Education Policy
NER Net Enrolment Rate

NFC National Finance Commission
NFE Non-Formal Education

NGO Non-Governmental Organization
NIPS National Institute of Population Studies

NOC No Objection Certificate
NPA National Plan of Action
NTS National Testing Services

OPF Overseas Pakistanis Foundation

P & D Planning & Development

PAF Performance Appraisal Framework **PEAS** Puniab Education Assessment System **PEC** Punjab Examination Commission **PEF** Punjab Education Foundation

PEMIS Provincial Education Management Information System

PESRP Punjab Education Sector Reform Program

Provincial Finance Commission **PFC**

Project to Improve Financial reporting and Auditing **PIFRA** Programme for International Student Assessment **PISA** Provincial Institute of Teacher Education, Lahore PITE

PKR Pak, Rupee

PLGO Punjab Local Government Ordinance

PMIU Programme Management and Implementation Unit

Participatory Poverty Assessment PPA **PPSC** Punjab Public Service Commission **PSDP** Public Sector Development Programme **PSESP** Punjab School Education Sector Plan

PSLM Pakistan Social and Living Standards Measurement Survey

PSTE Punjab Strategy for Teacher Education

PTB Puniab Textbook Board Puniab Textbook Board **PTBB**

PTBE Punjab Board of Technical Education

Primary Teacher Certificate PTC

Punjab Technical Education and Vocational Training Authority **PTEVTA**

SDC Skill Development Council, Lahore **SED** School Education Department SLO Student Learning Outcome School Management Committee **SMC SNGPL** Sui Northern Gas Pipeline Limited SOLO Structure of Observed Learning Outcome

SWOT Strength, Weakness, Opportunity, Threat

TIMMS Trends in International Mathematics and Science Study

TLA Teaching Learning Aids TLM Teaching Learning Materials TMA **Tehsil Municipal Administrations**

Terms of Reference TOR

Technical and Vocational Education and Training **TVET**

Union Council UC **United Nations** UN

UoE University of Education

WAPDA Water and Power Development Authority

LIST OF TABLES

Table 2.1: Immunization of Children between 12-23 Months	10
Table 2.2: Labour Force Participation Rate	10
Table 2.3: Comparative Education Indicators Pakistan	10
Table 3.1: GPI (NER) 2004-5 to 2010-11	23
Table 3.2: Key Education Indicators-Public Sector	23
TABLE 3.3: NON-SED SCHOOL BY TYPES	31
Table 3.4: Comparison of School Types	32
Table 3.5 Comparison of Enrolment of Public and Private Sectors	33
Table 3.6: Public Private Comparison by Level and Gender	36
Table 3.7: Schools offering O/A level course	37
Table 3.8: Inter-Tier Distribution of Functions	37
TABLE 4.1: No. of Schools affected by Floods in 2010	47
Table 6.1: Comparative NER figures of PSLM and Nielsen Survey	110
Table 6.2: Population Projections	111
Table 6.3 Teacher Student & Classroom Student Ratio	112
Table 6.4: Key Indicators	113
Table 6.5: Teachers Salary	113
Table 6.6: Text Books (Average Cost)	114
Table 6.7: Cost of Establishment and Upgradation:	114
Table 6.8: Costs for Establishing ECE centres	114
Table 6.9: Scale Factor Cost Outlays	115
Table 6.10: Additional Children in Schools	116
Table 6.11: Level Wise Out of School as %age of Population	118
Table 6.12: Standards Input and Activities Requirement	119
TABLE 6.13: COST OF INSTITUTIONS CAPACITY DEVELOPMENT	120
Table 6.14: Cost of Proposed Studies	120
Table 6.15: Curriculum Implementation Framework Cost	121
Table 6.16: Summary of PSESP Budget (Additional Resources)	122
Table 6.17: Budget (2008-09 to 2012-13)	123
Table 6.18 Projected Budget (2103-14 to 2017-18)	123
Table 6.19: Teacher Requirement Over Plan Period	123
TARLE 7.1. DERECTION AND CE ASSESSMENT EDANGUAGON TEMPLATE 9. INDICATORS	126

LIST OF FIGURES

Figure 1.1 Methodology of Situational Analysis	2
FIGURE 2.1: SECTORAL SHARES IN PUNJAB, GPP 2007	7
Figure 2.2: Sectoral Shares in Industry	9
Figure 2.3: District Wise Primary NER	11
FIGURE 2.4: RELATIVE SHARES IN PROVINCIAL BUDGET	12
FIGURE 2.5: PROVINCIAL SHARE IN REVENUE	13
Figure 2.6: Main Sources of Budget Increase	14
FIGURE 3.1: DISTRIBUTION OF PUBLIC SECTOR SCHOOLS	17
FIGURE 3.2: ORGANOGRAM OF SCHOOL EDUCATION DEPARTMENT AND ATTACHED DEPARTMENTS	17
Figure 3.3: NER Trends 2004-5 to 2010-11	23
FIGURE 3.4: DISTRICT-WISE PRIMARY EDUCATION NER-2011	26
FIGURE 3.5: DISTRICT-WISE MIDDLE SCHOOL EDUCATION NER-2011	27
Figure 3.6: District-wise Secondary Education NER-2011	28
Figure 3.7: GPI for Primary Education Districts (NER)-2011	29
FIGURE 3.8: GPI FOR MIDDLE SCHOOL EDUCATION DISTRICTS (NER)-2011	30
Figure 3.9: Facilities Comparison at Primary Level	34
Figure 3.10: Facilities Comparison at Middle Level	35
FIGURE 3.11 FACILITIES COMPARISON AT HIGH LEVEL	35
FIGURE 3.12: MEDIUM OF INSTRUCTION IN PRIVATE SCHOOLS	36
Figure 4.2: Stakeholder Mapping Matrix	58
FIGURE 4.3. COMPARATIVE SITUATION OF SERVICE DELIVERY MODES	61

EXECUTIVE SUMMARY

OBJECTIVE OF PUNJAB SCHOOL EDUCATION SECTOR PLAN (PSESP)

The objective of the Punjab School Education Sector Plan is to provide a comprehensive systemic analysis of issues and gaps within the School Education Sector; to suggest strategies for improvement in access, quality, relevance, equity, and management of education; and to synergize reforms within existing policy frameworks. The Plan translates the proposed strategies into an operational framework identifying resource and capacity requirements for its effective implementation and achieving desired goals.

POLICY FRAMEWORK OF PSESP

The goals of the PSESP have been defined within the policy framework of the 18th Amendment (devolution of responsibilities of curriculum and free school education to the provinces), National Education Policy 2009, Textbooks and Learning Materials Policy 2007; and within operational framework of the Chief Minister's Road Map, along with other initiatives such as the Punjab Education Sector Reform Project (PESRP).

METHODOLOGY OF PSESP DEVELOPMENT

The Punjab Education Sector Plan (PSESP) has been developed in three phases which included conducting a Sector Analysis, followed by defining and prioritizing strategies to address challenges at hand, and thirdly, costing of implementation. In parallel to these activities, a capacity gap analysis was also undertaken. Key stakeholders (i.e. policy-makers, drivers of change, and beneficiaries of reforms) were involved and consulted at all stages of the process.

The scope of the situational analysis included an assessment of quality and relevance of education being provided, equitable access to education for all and challenges of governance and management. The organizational analysis principally included the School Education Department (SED), district education departments, along with all relevant or attached departments working with the SED¹. Fourteen districts were selected on the basis of various education indicators. Survey tools included focus group discussions and interview with stakeholders (provincial and district education managers, students, teachers, head teachers, school councils, community, NGOs, school observations, and interviews) and secondary data sources (i.e. EMIS, PSLM, PEC, PEAS, NEAS, NEMIS, including other studies and researches). However, information gaps were observed in secondary sources

¹Directorates of Public Instruction, Directorate of Staff Department, Punjab Textbook Board, Punjab Education Assessment System, Punjab Curriculum Authority, Punjab Examination Commission, Punjab Education Foundation, Directorate of Community and Public Participation and such as Examination boards, DPI (colleges), University of Education, Technical and Vocational Education bodies, Literacy and NBFE and Special Education Departments

on qualitative indicators, private schools and madrassas, and out-of-school children. In some reports population data is based on projections and disaggregated data is not available, hence overlooking region-specific issues.

SITUATIONAL ANALYSIS OF PUNJAB SCHOOL EDUCATION SECTOR: KEY FINDINGS

Punjab generally has stronger indicators in education on all major counts as compared to other provinces. NEAS results reveal that Punjab has a better score sheet than the rest of the country. The province is the first to start work on rationalization of teaching staff in schools and has been successful is ensuring greater accountability at the district-level. There is currently high political will to improve the conditions of education sector creating a conducive and dynamic environment for reforms. Punjab has also been a pioneering province in shifting its policy focus towards "quality" as opposed to traditional approach of limiting reforms to improving access.

There is however immense room for improvement as education indicators still remain below regional indicators. Secondly huge variations exist across districts within the province. Poor retention and transition rates reveals issues regarding quality of education services and internal inefficiencies within the school education sector.

The situation analysis conducted by the SED with technical support of GIZ, indicated the following cross-cutting gaps across the education sector:

Quality

- Lack of output and outcome-focused interventions especially with regards to the quality of curriculum (implementation), textbooks, teachers, school environment and infrastructure;
- Absence of quality standards, especially at the output and outcome levels, defined and implemented by the SED and relevant departments.
- More specific issues include: the generally poor quality of teachers with lack of observation of standards for recruitment, evaluation of performance and teaching practices. Traditionally there has been no linkage of teacher training with outputs to assess impact of training but now the Department of Staff Development (DSD) has initiated a process of linking training impact to learning outcomes of students. Substandard and unregulated pre-service teacher education remains a more serious concern. Curriculum dissemination is limited at all levels and the quality of textbooks is poor due to lack of implementation of standards and expertise. Support learning facilities such as libraries and labs are barely equipped or non-functional. Similarly there are no standards for examination procedures. There is no analysis of results to provide feedback to improve the education system (PEC and BISEs).

Access

While access indicators of the province are better than the rest of the country there are district wise differentials and high levels of drop-outs continue. The recent enrolment drive has increased enrolment levels but the ability to retain the numbers will be a key factor. Gender disparities are also not very stark at the overall provincial level but differentials exist across districts. Two main issues impact access:

- Poor perceptions of quality of education offered by public education sector
- Inadequate community involvement

Relevance

 There is no evaluation of outcomes of education for school students and no formal assessment of the relevance of educational content and skills being offered.

Governance

- Lack of integrated information systems and research-based policy planning and implementation;
- Absence of a standards regime and effective monitoring mechanism has resulted in poor management and accountability;
- Dearth of capacity in terms of technical expertise across the sector for policy making, planning, management, and delivery of inputs and processes;
- Lack of coordination between provincial departments and stakeholders within the sector. Similarly there are no cross-linkages between school education, college education, technical and vocational and literacy and non-formal education. This hampers sustainability and cumulative impact of reforms.
- Challenges of additional responsibilities and requirements of the provincial education department with the enactment of the 18th constitutional amendment Act, 2010. This requires reconfiguring/restructuring departments and developing capacity accordingly.
- Lengthy approval processes, lack of capacity and ineffective monitoring for utilizing funds, and dependency on international donors leads to non-sustainability of reform.

STRATEGIC FRAMEWORK OF PSESP

The strategic framework of the PSESP approaches the challenges of the sector with a three-pronged multi-faceted approach. The first perspective centres on achieving Article 25 A i.e. free and compulsory education for children between 5 and 16 years. The second approach is to develop strategies to bring improvement in cross-cutting areas of quality (inputs, processes and outputs), relevance, access, equity and governance. The third strategic standpoint is to explore the potential roles and capacity of the public sector, private sector and public-private partnerships and to develop minimum uniform standards applicable to all sectors.

STRUCTURE OF PSESP

The Education Sector Plan is a five year plan. The PSESP provides a comprehensive overview of challenges within the sector, strategic objectives and strategies with rationale based on sector analysis, implementation and result frameworks, performance assessment framework with monitoring indicators, and budget of activities.

SUMMARY OF KEY STRATEGIES

Quality

- Standards: Standards need to be developed and notified for all education inputs, processes and outputs with SLOs as the main indicator for quality. The capacity development of the Curriculum Authority is needed to develop and manage standards of education.
- Curriculum: A comprehensive curriculum implementation framework (which includes textbooks, teacher training, assessments, a dissemination plan of the curriculum and feedback mechanism) is required. Standards for curriculum review need to be developed and implemented. Expertise and capacity development is required to review, implement and monitor implementation of the curriculum.
- Textbooks and Learning Materials: Standards to prepare and evaluate quality textbooks need to be developed. Capacity development of textbook publishers, authors and editors is required for development of student-centred activity-based TLM and standards. The PTBB and PCA's capacity also needs to be developed according to their new functions.
- Teacher Development: The draft 'Punjab Strategy for Teacher Education (PSTE)' needs to be finalized, approved and implemented to improve quality of teacher education and teaching practice. Standards need to be developed and implemented for pre-service and in-service teacher education and the curriculum & training content for both needs to be aligned with school curriculum based on SLOs. Capacity development of DSD will be required to undertake regulation of in-service and preservice teacher education standards, implementation of PSTE and to conduct induction trainings.
- Examinations/Assessments: Assessments need to encourage higher order thinking skills. Standards need to be developed/reviewed and implemented for exams conducted by PEC and BISEs. Expertise and capacity in assessment and evaluation in the province needs to be developed. Use of assessments for system diagnosis needs to be practiced, for which dissemination processes and feedback mechanism for PEC, PEAS and BISEs needs to be reviewed. All examination related bodies require effective coordination. Assessment techniques need to be a part of inservice teacher training and pre-service teacher education curriculum. Monitoring and mentoring for assessments is required at the school level.
- School Environment: The school environment strategies target both the physical
 infrastructure and internal school culture. Standards for school infrastructure need to
 be reviewed keeping local environment and learning needs in mind. Awareness
 campaigns are needed against corporal punishment and teacher and head-teachers

require training on child-friendly approaches in school and class management. In addition health and nutrition programmes in schools need to be introduced for students.

Early Childhood Education (ECE)

 Pre-primary ECE needs to be institutionalized and awareness and training of education managers, head teachers and teachers on ECE is required. Pre-primary ECE programmes need to be prepared, implemented, piloted and then expanded to at least 5000 primary schools.

School Language Policy

 A research study on school language with a view to developing a policy that ensures a balance between proficiency in the English and Urdu languages and cognitive development.

Enrolment

- Relevance: A tracer study is needed to evaluate educational outcomes for graduates
 and the curriculum/syllabi needs to be reviewed accordingly to enhance relevance to
 the world of work (i.e. enhance employability). A study is required to identify causes
 of failure of technical stream. Linkages of general education need to be developed
 with TVE and Higher Education.
- Cost Reduction (Free Education): Provision of incentives/stipends for children of poor families.
- **Community Involvement:** School Councils need to be mobilized and made functional. Head teachers also need to be trained to effectively engage community.
- Improved Confidence in Education System: Awareness campaigns are required to inform parents about the school reforms. PTAs need to be formed in all schools to encourage regular parent-teacher meetings.
- Effective Non-Formal Education: Formal linkages between the NFE and regular schools need to be established. Students enrolled in NFE and Adult Literacy programs need to be registered and tracked. EMIS is to provide NFE students and award unique ID.
- Disaster Risk Reduction: An education system diagnosis (ESD) of the effect of
 disasters on the performance of the system needs to be conducted. Policy objectives
 and DRR priority programmes need to be designed. School building designs need to
 be reviewed in light of DRR diagnosis and policy. Teachers, head teachers and
 students need to be trained in DRR preparedness and TLM resources on DRR
 preparedness need to be available. The capacity of the district needs to be
 developed to integrate DRR principles in planning and management.
 - **Inclusive Education:** Teachers require training in pedagogy of inclusive education. Standards of physical infrastructure of schools need to be revised for children with special needs. Sensitization of children and the community at large towards marginalized groups and special children is required through advocacy campaigns. A

formal coordination mechanism is required between special education and school education departments.

Governance and Management of Public Education Sector

- Merit Based HRM: Specialized recruitment tests for teachers and managers on the pattern of independent testing services.
- Performance Appraisal and Promotions: A performance appraisal system that
 evaluates outputs transparently and objectively and forms the basis for accountability
 is required. Current performance appraisal system needs to be reviewed and new
 evaluation criteria need to be notified. SED's capacity needs to assessed and
 developed in performance evaluation of HR.
- Retention of Quality Managers and Educationists: Security of tenure of key
 positions in the district, and incentives for key managerial positions and subject
 specialists in rural areas need to be provided.
- Improve Managerial Efficiency and Development of Expertise: A separate cadre
 for educational managers is required. Capacity development of education managers,
 newly inducted managers and district education departments is needed to implement
 and monitor effective education service delivery.
- Utilization of Data: A culture of data-based decision making needs to be introduced.
 Managers require training in utilization of data. An EMIS decision support system has to be developed for managers. A consolidated database for all education related information including quality related data and indicators.
- Integrated and Research-based Planning Process: Capacity development for integrated and research-based planning is required.
- Improved Monitoring and Evaluation Processes: Both input and output based monitoring indicators for various tiers of management are required. An oversight mechanism for sector plan implementation is needed. The capacity development of PMIU, SED and DEDs for monitoring is required.
- Coordination Mechanism to Strengthen Reform Process: A mechanism to improve coordination between various departments and tiers of the education sector is required. Coordination of education sector with private sector, technical streams and higher education sector needs to be improved and institutionalized.
- **Gender Sensitized Management:** Gender balanced managerial approach introduced in work places
- Public-Private Partnership: In order to achieve targets of Article 25-A the capacity
 of PEF and community schools under the Directorate of Community Public
 Participation needs to be utilized. It needs to be ensured that PEF and SED follow
 common set of standards.
- **Use of ICT:** Use of ICT needs to be explored to support efficiency in management, monitoring, quality of learning and other aspects of education.
- **Private Sector Schools:** The private sector needs to be integrated into the government's policy framework.
- Awareness and Involvement of Key Stakeholders: Community involvement needs to be increased. Political representatives need sensitization of educational issues

and a standing committee on education should be made as the highest oversight body for the education sector plan.

COSTING OF PSESP

The strategies have four possible implications: immediate implementation on the basis of operationalization of strategies, process designing which would lead to development of an implementation plan, studies that would explore specific strategies and capacity development plans that would create their own costed strategies.

The PSESP costing has been undertaken broadly in two categories: 'scale' and 'non scale' factors. Population projections and costing have been based on moderate estimates made by the National Institute of Population Studies (NIPS) and on the EMIS enrolment. Other than costing of enrolments, unit costs used have been the actual calculated by the SED for its various inputs, i.e. teacher salaries, textbooks, infrastructure development and upgradation, ECE centre establishment, PEC costs. Non-scale factors include costing of developing and implementing standards, capacity development, studies and operationalizing the curriculum implementation framework.

The total outlay comes out to about Rs. 426 billion over a period of 5 years.

The costing-plan process faces two major resource constraints: finances and teacher availability. The current plan also needs to build in strategies and costs of interventions of NFE and Department of Literacy (assuming that the departments will also develop similar plans).

IMPLEMENTATION OF PSESP

Implementation of the sector plan will require the oversight and monitoring by senior education management and political tier. At the second tier, there will be a technical level committee at the provincial level involving heads of various education departments. The second step is that of dissemination of the plan. A multi-tool awareness and education campaign will be designed to target teachers, education managers, parents, media and political leadership. This is to be followed by decentralization in management at the provincial and district level to ensure efficiency in service delivery. The implementation process includes strategies that will co-opt political and community oversight. The Plan also provides for capacity assessment and development processes for various organisations. A Performance Assessment Framework (PAF) is also added in the document to measure performance by comparing actual performance values against a set of target and base-line values.

1. BACKGROUND AND METHODOLOGY

The current document, the Punjab School Education Sector Plan (PSESP), is an instrument intended to translate the education policy objectives of the Government of Punjab into an operational framework. It is a strategic plan that identifies thematic areas where intervention is required in order to achieve policy goals. It formulates these areas into major policy programmes and it designates operational structures and institutions that will be responsible for carrying out the diverse functions assigned to them.

1.1 OBJECTIVES OF PUNJAB SCHOOL EDUCATION SECTOR PLAN

The objectives of the Punjab School Education Sector Plan are:

- To provide a comprehensive systemic and synergized overview of the education sector with identification and analysis of gaps.
- To propose strategies for improvement in access, quality and equity of education by addressing gaps and challenges within the sector.
- To synergize reforms within the framework of the CM's Roadmap to optimize returns on investment; improve efficiency of the sector; and ensure sustainability of reforms.
- To identify and determine resource and capacity requirements for implementation of strategies to achieve desired goals.
- To serve as a guiding document to harmonize and align donor support.

1.2 PROCESS - EDUCATION SECTOR PLANNING, PUNJAB

The Punjab Education Sector Plan (PSESP) has been developed on the basis of a detailed consultative process in three phases: Situation Analysis, Preparation of Education Strategies, and Preparation of Costed Strategies. In parallel to these activities, a capacity gap analysis was also undertaken which resulted in the preparation of prioritized capacity development strategies. The analysis also fed into the sector analysis.

The process leading to the current plan has been underway for more than two years. It has involved the completion of several studies and the implementation of a large number of stakeholder workshops at various levels, from SED senior management to district and school levels.

- The first step in this process was to conduct a Capacity Gap Analysis. A capacity assessment of the School Education Department, District Education Department, and Punjab Textbook Board was conducted by April 2011.
- The next step was the launching of a *Situation Analysis of School Education Department-Punjab* which was also completed in April 2011.
- The third step has been the prioritizing of issues of the Capacity Assessment and Situation Analysis of the School Education Sector. The "Costed Capacity Development Strategy for

the School Education Development Plan, Government of Punjab" and "Situation Analysis for Punjab Education Sector Plan – Prioritized Issues" reports were developed with stakeholder participation and submitted by July 2011.

- Following prioritization of issues, an international consultant was engaged to assess provincial and district budgets, develop strategies based on the prioritized issues, estimate unit costs and develop a simulation model. Stakeholder workshops were conducted in September 2011. Outputs of the process include the following reports: "Punjab Education Sector Plan: Costed Strategies and Resource Mobilization", "Punjab Schools' Education Sector Plan Strategic Interventions" and "Punjab Simulation Model", November 2011.
- Based on the prioritized issues, GIZ supported SED to develop the "Punjab Education Sector Plan Implementation Plan 2012-13 to 2015-16" in June 2012.

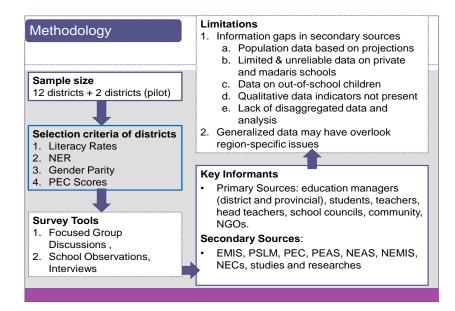
The current PSESP is a complete redesign of the June 2012 plan.

1.2.1 Situation Analysis of School Education Department- Punjab

The 'Situation Analysis' of school education in the Punjab was commissioned to identify gaps in the current school education system. The reform process was evaluated through analyses of on-going development interventions in terms of coverage of various aspects of education. Interventions and management and monitoring mechanisms for reforms were prioritized. Analyses of linkages across the various reforms and of the capacity of the planning and monitoring processes were undertaken.

In this regard, analyses were completed using a mix of secondary sources and primary information collected from 12 districts. The tools used for the latter included school observations, interviews and focus group discussions with school teachers, students, education managers, parents, other community representatives and experts. Data was gathered through FGDs at district as well as at provincial levels. Both public and private sectors were targeted. The Project Management Implementation Unit (PMIU) supervised the exercise. Issues of quality, access and governance have been reported in the findings, with gender discussed as a crosscutting issue.

Figure 1.1 of Analysis



Methodology Situational

1.2.2 Prioritization of Issues - Situation Analysis Report

Once all the major issues and gaps were identified through the situation analysis, the School Education Department prioritized the issues through a consultative process with a diverse group of stakeholders and adopting both qualitative and quantitative methods. It was decided by the SED to prioritize 8-10 key issues to be addressed in the Education Sector Plan. Not only would these issues have a broader impact on quality and access of education but from a cost-benefit perspective it is feasible to tackle them in the programmatic space available and keeping in mind the education targets in Millennium Development Goals and Education for All. A stakeholder workshop was conducted to prioritize issues through criteria based on a systematic and participatory approach.

To ensure a truly representative view of all stakeholders, and buy-in from key decision-makers, following departments were invited to the multi-stakeholder workshop.

- 1. Secretary School (Secretary School Education, Additional Secretary, DPI)
- 2. Secretary Higher Education / Secretary Non-Formal Education
- 3. PMIU
- 4. GCET (Pre-Service/UoE)
- 5. DSD
- 6. Finance
- 7. P&D
- 8. PEC, PEF, BISE
- 9. PTBB
- 10. Teachers (Primary, Middle, High)
- 11. Parents Teachers Council
- 12. Students (Positions-holders from public schools)
- 13. Private School Associations
- 14. Education Experts
- 15. Public Representatives (District and Provincial)

The prioritized issues were presented in the report "Situation Analysis for Punjab Education Sector Plan – Prioritized Issues."

1.2.3 Capacity Gap Analysis

To identify the specific capacity needs of SED and its attached department (provincial level to school level), 120 capacity assessment workshops and interviews (with heads of institution) were conducted to gather data. At the district level, 70 SWOT workshops and interviews were conducted in 6 sample districts of the Punjab. 50 SWOT workshops were conducted at the provincial level to cover provincial level education institutions. Interviews were also conducted with individual heads of department. Data was gathered from the following departments:

School Education Department (Secretary Schools and Staff)

- Directorate of Staff Development
- Provincial Institute of Teachers' Education (PITE) (now merged into DSD)
- Government Colleges of Elementary Teachers
- District and Cluster Teacher Training Centre (affiliated with DSD)
- Directorate of Public Instructions (DPI Schools)
- Programme Management and Implementation Unit
- Punjab Textbook Board
- Teachers of primary, elementary, secondary higher secondary schools (male &female)
- Ministerial staff of EDOs, DEOs, Dy. DEOs, high and higher secondary schools (male and female)
- AEOs (male &female)

As a result of this exercise, the following 3 documents were generated:

- 1. Capacity Assessment of Punjab Education System: District Education Department (April 2010)
- 2. Capacity Assessment of Punjab Education System: School Education Department and its Attached Departments (April 2010)
- 3. Capacity Assessment of Punjab Education System: Punjab Text Book Board

1.2.4 Capacity Development Strategies

The purpose of this exercise was to assist the Government counterparts in developing criteria for prioritization of issues identified in the Capacity Gap Analysis in consultation with various stakeholders and move the process towards the finalization of a comprehensive strategy. Also, the aim was to produce a mid-term capacity development plan to implement the comprehensive capacity development strategies.

The selection and prioritization of capacity gaps was achieved through participatory workshops with representation from all stakeholders as well as experts of the education sector so as to doubly ensure that concerns of all stakeholders (including those having relatively little voice and clout)were also addressed along with the more sophisticated and complex governance and policy issues.

A two-phase prioritization process was developed. In the first phase, selected representatives of SED, DED, DSD, PMIU, GCET, UoE, PTBB, PEC, PEAS, PEF were invited to six workshops. Exclusive workshops were arranged for SED, DED, DSD, PMIU and PTBB, and a workshop was arranged for representatives of PCE, PEF, PEAS, GCET and UoE. In the second phase, the ranked capacity gaps, prioritized by employees of the same department/organization, were shared with the heads of each department/organization, key informants and education experts, civil society representatives and educationists in order to reach a final prioritized list. This

ensured that capacity gaps at strategic policy and planning levels were not missed out. This was also done to check and/or reduce bias in the CG prioritization ranking scores.

1.2.5 Costed Strategies of Prioritized Issues

The final step in the process, so far, has been GIZ assistance to the School Education Department (SED) of the Government of Punjab (GOP) to prepare strategies for identified prioritized issues of "Costed Capacity Development Strategy for School Education Development Plan, Government of Punjab" and "Situation Analysis for Punjab Education Sector Plan – Prioritized Issues" reports. For this purpose, an international consultant was engaged to conduct this study. The consultant conducted six stakeholders' workshops to discuss strategic interventions based on the previously prioritized issues. Stakeholders from districts and provincial level institutions were invited to these workshops. The workshops were held in September 2011 in Lahore. The following outputs were ensured through these workshops:

- Provincial and districts' budgets were analysed and recommendations made.
- Data and information available for private sector education was assessed and recommendations made.
- Strategies were developed based on previously prioritized issues in primary and secondary education subsectors.
- Unit costs for primary and secondary subsectors were estimated
- A simulation model was developed and refined. It includes public and private provision of primary and secondary education. It can be utilized to construct alternative budgetary scenarios as well as calculate the costs of different education polices.

The consultant (Dr. Sarah Tirmizi) finalized and submitted her reports titled "Punjab Education Sector Plan: Costed Strategies and Resource Mobilization", "Punjab Schools' Education Sector Plan Strategic Interventions" and "Punjab Simulation Model", November 2011.

1.2.6 School Education Sector Implementation Plan

Based on the prioritized issues, GIZ supported SED to develop a School Education Sector Implementation Plan. For this purpose, technical support was provided and a consultant was hired to initiate this task. Based on the available studies and reports, a document titled "Punjab Education Sector Plan – Implementation Plan 2012-13 to 2015-16" was developed in June 2012.

2. NATIONAL POLICY, LEGAL AND MACRO-ECONOMIC FRAMEWORK

Punjab is the most developed province in Pakistan. It is also the largest in terms of population, constituting almost 55% of the country's total population. Its economic contribution dominates in major economic sectors like agriculture and manufacturing and services. Despite the relatively higher levels of development, it contains large pockets of poverty, especially, in the South of the province. It has social indicators far below equivalent regions in South Asia. High population growth and rapid urbanization has exasperated Punjab's development challenge.

2.1 MACRO-ECONOMIC FRAMEWORK

2.1.1 *History*

Historically, the Punjab has been a riverine agrarian society and part of the Indus Valley Civilization. At the time of independence, the British partitioned the province into Indian Punjab (known as East Punjab) and Pakistani Punjab. This created a water apportionment issue, which was resolved in 1960 through the signing of the Indus Basin Treaty between Pakistan and India to divide rights of use of the five rivers of the Punjab between the two countries. The use of rivers Ravi, Sutlej and Bias was given to India while Pakistan got to control the use of the waters from the rivers Indus, Jhelum and Chenab. Since independence the province has also developed a strong industrial base and a substantive services sector.

2.1.2 Geography

The Punjab borders India on the east, Khyber-Pakhtunkhwa on the west, Balochistan in the southwest, Sindh in the south and Azad Kashmir in the north. The province can be divided into three regions: The Potohar in the northwest, including the lower Himalayan region further north; the (eastern² and) central plains rising to higher ground and some hilly terrain in the west; and the semi-desert region in the South. According to Participatory Poverty Assessment (PPA)³, Punjab can be divided into three 'agro-ecological zones': (i) northern Punjab (characterized by higher rates of urbanization and the predominance of rain-fed agriculture), (ii) central Punjab (characterized by irrigated agriculture and fertile lands), and (iii) southern Punjab (characterized by an arid climate that allows only limited agriculture).

The northern region has the least dependence on agriculture and can be considered a semi-arid plateau (the Potohar). The central region has the maximum rainfall, a wide corridor of the Indus

²"Eastern" in the context of Pakistani Punjab, though the term "central", as it would have been within the former British Punjab, is used to include the central eastern region including Sialkot, Lahore, Sahiwal etc.

³Government of Punjab, Planning and Development Board. 2003. *Pakistan Participatory Poverty Assessment: Punjab Report*. August.

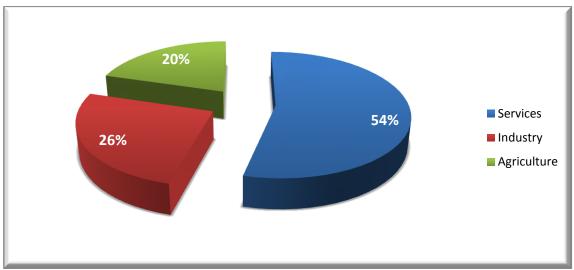
and its canal network and the major industry of the province. In the South, the Indus corridor narrows limiting agricultural related affluence.

2.1.3 Demography

The province has a population of almost 100 million and is the fastest urbanising province in the country. The significance of urban growth has shifted the focus of the government and that of professionals in the development sector to issues of urban development. Linguistically, the three regions discussed in the previous section also have different dialects of the Punjabi language known as Potohari (in Potohar), Punjabi (in East and Central) and Saraiki (in South).

2.1.4 *Economy*

Agriculture was the mainstay of the economy in 1947 and Punjab's main assets were fertile land and one of the largest irrigation systems in the world. While agriculture continues to be an important contributor, the shares of services and manufacturing have become larger⁴. Services sector is the largest in the economy of the Punjab at 54 %, with agriculture and industry combined contributing 46 %(Figure 2.1).



Source: Punjab Economic Report 2007

Figure 2.1: Sectoral Shares in Punjab, GPP 2007

Wholesale and retail form the largest component of the services sector and together constitute 37% of the sector, followed by transport and communications accounting for 21%.

⁴Unless otherwise mentioned data in this chapter has been taken from Punjab Economic Report 2007, prepared by World Bank.

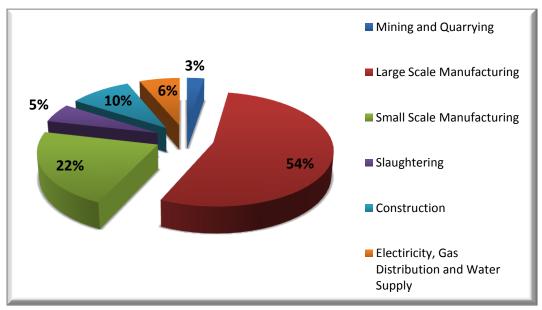
2.1.5 Agriculture

While agriculture has a lower share in the Gross Provincial Product (GPP), it continues to be the largest employer in the economy and accounts for 44% of total employment in the province. The main crops of the Punjab are rice, cotton, sugarcane and wheat. They together contributed 47% of the total value added in agriculture in 2006. Wheat, at 40%, has the highest share of value addition among the major crops. The share of rice and cotton has been fluctuating with the latter suffering attacks from pests in some years. Total share of crops in agriculture has reduced from 64% in 1999 to 60% in 2006-7 while that of livestock increased from 35% to 39% during the same period.

Despite the significant share of agriculture, the yields per hectare remain on the low side. According to the Punjab Economic Report 2007, average yields in Punjab are 50% to 83% lower than averages in other countries. One of the reasons for the low yields has been increased water scarcity and low irrigation efficiency.

2.1.6 Industry

Punjab's industrialisation after independence has been a success story. Most of the industry is concentrated in the central part of the province in the cities of Lahore, Gujranwala, Gujrat, Sialkot and Faisalabad. Large-scale manufacturing has the largest share at 55.03%, followed by small-scale manufacturing at 20.52% (see figure below).



Source: Punjab Economic Report 2007

Figure 2.2: Sectoral Shares in Industry

Capital-intensive manufacturing limits the employment elasticity in various sub-sectors of large-scale manufacturing. Average growth rate for the sector was 10.5% between 2003-4 and 2006-7.

In recent years though, manufacturing has seen setbacks due to the on-going energy crisis in the country. Punjab accounts for 62% to 68% of the total national electricity consumption. Yet it faces a shortfall of 3300MW. It also faces gas shortage as the Sui Northern Gas Pipeline Limited (SNGPL) has a deficit of 700MMcfd of gas⁵. The situation has led to loss of employment in the sector, especially, in Faisalabad - the textile headquarters of Punjab and Pakistan.

2.1.7 Services

As already shown in figure 2.2, the services sector comprises 53.9% of the economy of the province. It contributes substantially to employment with only the wholesale and retail sectors employing about 14% of the total workforce. While the latter is the largest sub-sector within services, finance and insurance taken as a single sector has grown at a fast rate (8.7% between 2001-2 and 2006-7). Nearly 38% of the value added in the sector is contributed by Punjab.

2.2 SOCIAL SECTORS

According to the Punjab Poverty Reduction Strategy Paper 2003, the province's urban poverty level of 26% was higher than the country's 22% in 1999. For the same year, rural poverty at 36% was worse than the levels for Sindh and Balochistan. Spatially, most studies⁶ agree that the bulk of poverty is in the South and Southwest regions⁷.

Another study⁸ on determinants of rural poverty (also covering villages in Punjab) highlighted two factors as important for households to emerge from poverty: ownership of land and opportunities for off-farm employment. The latter, in case of the northern district of Chakwal, for example, included ability to obtain public sector jobs which became accessible even to the lower 'kinship groups' through education.

On almost all social indicators Punjab scores better than the rest of the country. Table 2.1 shows coverage of immunization. The overall level of 60% remains above the average for the country, which is 53%. For both urban and rural populations (female and male), the scores for Punjab are better. However, a gap between male and female coverage exists.

⁵http://energy.punjab.gov.pk/punjab_energy_scenario.html visited on 19 September 2012

⁶ Ali Cheema*, Lyyla Khalid** and Manasa Patnam:"The Geography of Poverty: Evidence from the Punjab" The Lahore Journal of Economics Special Edition (September 2008): pp. 163-188

⁷ These poverty studies divide the province into four areas: north, central, south and southwest.

⁸ "Rural Economy and Livelihoods in Pakistan" Harris Gazdar ADB 2007

Table 2.1: Immunization of Children between 12-23 Months									
Province	Urbar	Ì	Rural			Total			
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Pakistan	64	60	62	50	48	49	54	52	53
Punjab	69	62	66	59	57	58	62	59	60
Sindh	61	59	60	28	26	27	40	40	40
KP	56	59	58	49	52	50	50	53	52
Balochistan	28	41	35	20	15	18	22	23	22

Source: Pakistan Social and Living Standards Measurements Survey 2011

Table 2.2 shows labour force participation and unemployment rates for 2007. While labour force participation rate for both males and females exceeds the country average, stark gaps exist, nevertheless, between male and female participation.

Table 2.2: Labour Force Participation Rate							
Province	Emplo	yed	Unemployed				
	Total Male			Total	Male	Female	
Pakistan	45.06	69.31	20.66	5.46	4.46	9	
Punjab	47.22	70.11	23.82	5.9	5.07	8.4	
Sindh	45.61	70.74	16.57	3.32	2.56	7.06	
KP	40.17	64.28	16.92	8.5	6.95	14.2	
Balochistan	41.83	66.17	11.44	2.88	1.14	15.49	

Source: Pakistan Labour Force Survey 2011

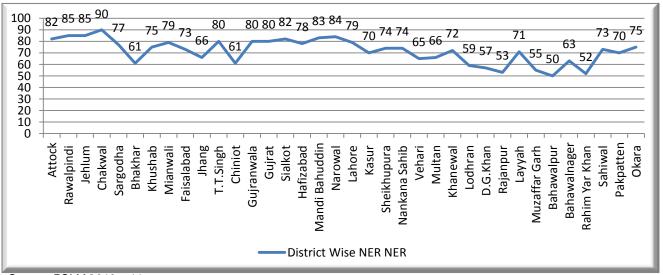
The province also has stronger indicators in education on all major counts as compared to other provinces. However, these remain below regional indicators.

Table 2.3: Comparative Education Indicators Pakistan							
	Gender	Punjab	Sindh	KPK	Balochistan		
Pop. that ever	М	72	72	71	61		
attended school	F	53	47	35	20		
Pop. that completed	М	60	62	57	48		
primary or above	F	44	40	26	13		
GER Primary (6-10)	М	103	91	100	92		
	F	92	71	76	54		
NER Primary (6-10)	М	73	68	71	68		
	F	68	55	56	40		
NER Middle (11-13)	М	38	39	40	34		
	F	32	32	25	13		
NER Secondary (14-	М	24	26	23	21		
15)	F	21	20	14	4		

Literacy Rate 15+	М	67	71	65	56
	F	47	43	28	15

Source: Pakistan Social and Living Standards Measurements Survey 2011

While the province has relatively stronger indicators in absolute terms, the education situation remains far from satisfactory. Secondly variations exist across districts (shown in Figure 2.3 below).



Source: PSLM 2010 - 11

Figure 2.3: District Wise Primary NER

The disaggregated view reveals serious points of concern for the government, as some of the southern districts have low NER values.

2.3 PUBLIC FINANCE

The provincial resources depend on federal transfers and own resources. The federal divisible pool forms the source for the bulk of federal transfers. These funds are apportioned among the provinces on the basis of a National Finance Commission (NFC) award where the NFC is formed under Article 160 of the Constitution of Pakistan. The last award made in 2009, the 7th NFC award, had the following criteria and the weightage given to each:

1.	Population:	82.0%
2.	Poverty/Backwardness:	10.3%
3.	Revenue Collection/Generation:	5.0%
	Inverse Population Density (Urban-Rural):	2.7%

The Federal government reduced its own share to increase the provincial divisible component to 57.5% of the total divisible pool. Out of the 57.5% total share for the provinces, the allocations for each province were the following:

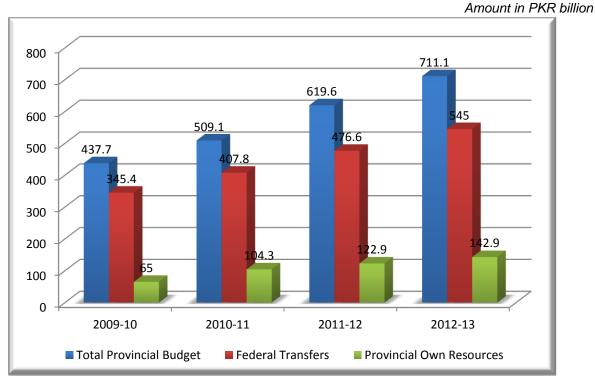
Punjab: 51.74%
 Sindh: 24.55%
 Khyber-Pakhtunkhwa: 14.62%
 Balochistan: 9.09%

As shown in figures 2.4 and 2.5, the federal government contribution exceeds the province's own revenues by a huge margin. Three main trends are visible in Punjab's case:

1. The total budget has continued to increase

The

- 2. The federal contribution continues to exceed the provincial resources by a large value.
- 3. The provincial contribution has been steady at around 20% since 2010-11.



Source: Department of Finance, The Provincial Resource Envelope, p.2 (provided August 2011)/"Costing Strategies for PSESP"

main 25.00% 20.49% 19.84% 20.00% 20.10% 15.00% 14.85% 10.00% 12 5.00% 0.00% 2009-10 2010-11 2011-12 2012-13

Provincial Share in Revenue

Figure 2.4: Relative Shares in Provincial Budget

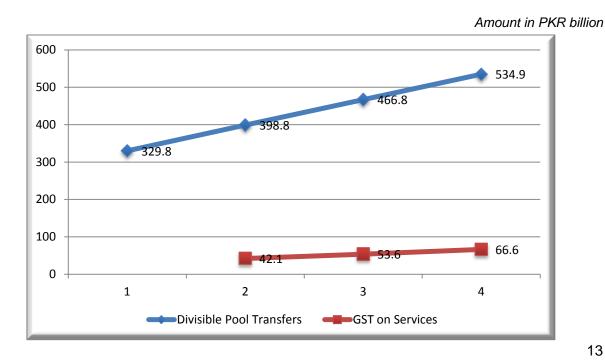
component of the Federal contribution has been the divisible pool transfers. The increase in the provincial share from 15% to 20% in 2010-11 is owed to the new provincial tax on services.

> Source: Department of Finance, The Provincial Resource Envelope, p.2 (provided August 2011)/ "Costing Strategies for PSESP"

Figure 2.5: Provincial Share in Revenue

Figure 2.5 reveals the provincial share's trend as a percentage of the total provincial budget and as can be seen, it steadies after the inflection in 2010-11.

The Federal government is currently collecting the Sales Tax on services and some transitional issues remain unaddressed. Once fully established as a provincial levy, it promises substantive improvements in domestic resources, given the large size of the services sector in the province.



Source: Department of Finance, the Provincial Resource Envelope, p.2 (provided by GIZ, August 2011)/"Costing Strategies for PSESP"

Figure 2.6: Main Sources of Budget Increase

2.4 THE LEGAL FRAMEWORK

Pakistan is a federation of five provinces, namely, Punjab, Sindh, Khyber Pakhtunkhwa, Balochistan and Gilgit-Baltistan and the special areas of Azad Jammu and Kashmir, Federally Administered Tribal Area (FATA) and the Islamabad Capital Territory. The relations between the Federating units and the federal government and their respective jurisdictions are determined by the Constitution.

Until recently, the jurisdiction with respect to education was divided between the federal and provincial governments. While the latter had the main responsibility for service delivery, curriculum development, approval of textbooks and maintenance of standards were within the federal jurisdiction. The situation changed after the passage of the 18th Constitutional Amendment. It has devolved a number of functions exclusively to the provinces. The transferred subjects include education.

2.4.1 The 18th Amendment

The 18th Constitutional Amendment made two significant changes in the education governance framework of Pakistan:

- I. Curriculum has become a provincial responsibility
- II. Free and compulsory education for children between 5 and 16 years has been added to the list of fundamental rights.

Prior to the 18th Amendment, curriculum and national policy were in the Concurrent List of the Constitution upon which both the provincial and federal governments had the jurisdiction to legislate. However, in case of a conflict federal law would prevail over provincial law. Using the Concurrent List, the Federal Legislature passed the 'National Curriculum, Textbooks and Maintenance of Standards Act of 1976'. Under the law the Federal government was given the authority to prepare the national curriculum. With the abolishment of the Concurrent List the law has become redundant and the provincial law on the subject now prevails instead.

The second, even more critical, change made by the 18th constitutional amendment has made free and compulsory education for children of ages between 5 and 16 a fundamental right. The provision in the Constitution allows the provincial legislature to pass a law for implementation of the Article. A commission is currently in place under the chairmanship of a former Chief Justice of the High Court to formulate the statute.

2.5 POLICY FRAMEWORK

The overall operational policy framework is the 'Chief Minister's Roadmap' for education. Its main parameters include quality education, enrolments, accountability of the service delivery set-ups at the district level and transparency in human resource management. Other important initiatives at policy level include the Punjab Education Sector Reform Project (PESRP) funded by the World Bank.

The PESRP has been functioning in the province for almost ten years now. It has worked in the spheres of quality, public-private partnership, effectiveness of schools through monitoring, provision of missing facilities and provision of stipends to middle level schools in the poorest districts.

National policies including the National Education Policy (NEP) 2009 and the Textbooks and Learning Materials Policy of 2007 have also been factors in influencing policy. The latter has changed the approach of the Punjab Textbook Board in textbook development in a shift from internal to external publishing. NEP 2009 was prepared through a national consultative process and shifts the emphasis to quality and standards-based education service delivery. Education for All (EFA) and Millennium Development Goals (MDGs) also drive policy and planning.

3. THE EDUCATION SECTOR

The Education Sector in the province is divided into school education, higher education, technical and vocational education, and adult literacy and non-formal education. Separate government institutions exist to manage each one of these areas. In addition to the provincial education departments, institutions run by the federal government and autonomous bodies also function in the province. Following the provincial public sector, the next largest number of students exists in the private sector. The latter has continued to grow at a rapid pace over the last decade.

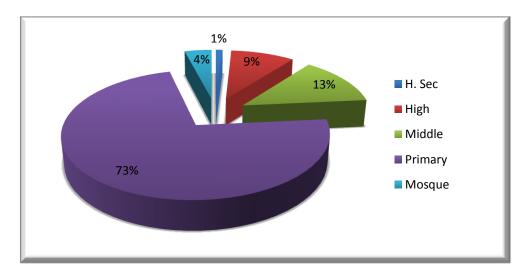
3.1 THE EDUCATION SYSTEM (LEVELS AND OVERALL STRUCTURE)

3.1.1 School Education Department

School education in the public sector begins with the 'kachi' class. These are children of preprimary age, normally accommodated with those in grade 1. The primary level consists of grades 1 to 5. The medium of instruction in the primary schools is either Urdu or English. In the Urdu medium schools, English is taught as a language from grade 1.

The next level is Middle school, which consists of grades 6 to 8. The medium of instruction at this level is English. The Secondary level, which consists of grades 9 and 10, is the first important career deciding level where students can opt for either science or arts groups. The terminal examinations at the end of each of the two Secondary grades are conducted externally and form an important landmark for future options for the child.

Grades 11 and 12 are part of high schools as well as a number of graduate colleges. The latter fall in the jurisdiction of the Higher Education Department and not the School Education Department. These grades provide the second important career direction as children opt for preengineering or pre-medical groups (or other specialized groups), making them eligible for degrees in engineering or medicine, respectively.



Source: Punjab EMIS 2010-11

Figure 3.1: Distribution of Public Sector Schools

The School Education Department, responsible for the above institutions in the public sector, is headed by the Secretary, supported by three Additional Secretaries and a number of other officers and staff functioning at the Secretariat. SED has a number of attached departments and autonomous bodies functioning under it. The Executive District Officer (EDO), Education has the responsibility for school management in the districts.

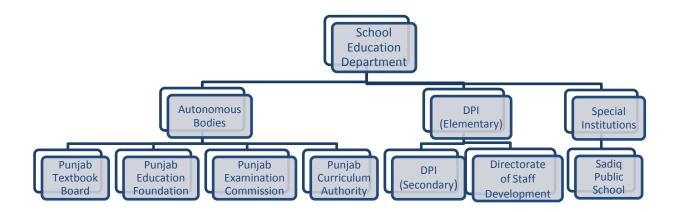


Figure 3.2: Organogram of School Education Department and Attached Departments

There are three types of organizations functioning under the School Education Department:

- i. Attached Departments
- ii. Autonomous Bodies
- iii. Special Institutions

3.1.1.1 Attached Departments

(a) Directorate of Public Instruction (Primary)

Directorate of Public Instruction (Primary) is responsible for administrative and establishment matters; seniority and promotions of teaching and ministerial staff (male &female) of BS-17 & above; coordination among the districts; budget and planning.

(b) Director Public Instruction (Elementary Education)

Directorate of Public Instruction (Elementary Education) is responsible for administrative and establishment matters; teaching & ministerial staff of BS-1 to 16 (male &female); coordination among the districts; budget and planning

(c) Directorate of Staff Development

Directorate of Staff Development (DSD) is responsible for the in-service teacher-training program as well as training of education managers. It has developed a continuous professional development program that it implements and monitors. The Directorate is also responsible for the administrative affairs of 33 Government Colleges of Teacher Education (GCETs) which hold pre-service teacher education courses.

(d) Punjab Education Assessment System

Punjab Education Assessment System has the mandate for diagnostic assessment of the system. It conducts sample-based tests for grades 4th and 8th for General Science, Mathematics, Pakistan studies and Urdu.

3.1.1.2 Autonomous Bodies

(a) Punjab Textbook Board

The Punjab Textbook Board has the mandate for production and publication of:

- i. Textbooks for Class I to XII
- ii. Supplementary reading material relating to textbooks
- iii. Guidebooks for teachers

It also has a mandate to conduct research in the field of curricula, textbooks and other reading material. Under the National Textbooks Policy 2007 the Board has undertaken a regulatory role wherein it evaluates manuscripts of books submitted by private publishers through a competitive bidding process.

(b) Punjab Curriculum Authority

The Punjab Curriculum Authority has been set up as an autonomous body through a law enacted in 2012. The body replaces the role of the Curriculum Wing of the erstwhile Ministry of Education of the Federal government. The new authority has the role of giving 'No Objection Certificate' to textbooks, review of curriculum and standards of education in Punjab.

(c) Punjab Examination Commission

The Punjab Examination Commission (PEC) has the mandate to design, develop, implement and evaluate a system of examinations for elementary education. It also has the mandate for formulation of policies, dissemination of the findings for improvement of teaching and promotion of public discussions on issues relating to elementary education.

PEC annually conducts examinations for grades 5and 8throughout the province. It has recently added private schools to its coverage.

(d) Punjab Education Foundation

The Punjab Education Foundation was set up as a public-private partnership initiative to increase opportunities for poor children to obtain education in private institutions. It manages this through direct support to low-income private schools or by providing vouchers to poor children to attend private schools.

(e) Directorate of Community and Public Participation

The Directorate of Community & Public Participation functions as an attached department of SED and manages evening schools in government buildings with community assistance, under terms and conditions notified by the SED.

3.1.1.3 Other Institutions

Other institutions functioning under the SED are Sadiq Public School Bahawalpur and the Children Library Complex, Lahore. The former has the status of a special institution of the SED.

3.1.2 Higher Education

The higher education sector consists of colleges managed by the provincial Higher Education Department and autonomous universities. At the time of independence, the province had only one general university - University of the Punjab. Presently, it has nine general public universities and nine public specialized universities. There are 14 private general universities and six private specialized universities.

The colleges under the administrative control of the Higher Education Department normally run undergraduate classes but many also offer postgraduate courses. The University of the Punjab determines the curriculum for these courses. It also holds the examinations for these degrees. Currently, a two-year undergraduate degree program is being pursued in these colleges, although, the Higher Education Commission (HEC) has developed a four-year degree program.

The Higher Education Department is headed by a Secretary. In addition to the colleges, the Higher Education Department has the following organisations under it as either attached departments or as autonomous bodies.

- i. 9 Boards of Intermediate and Secondary Education (BISEs)
- ii. University of Education
- iii. Directorate of Public Instruction (Colleges)

At the district level, Director Colleges manages the institutions under the Higher Education Department. As has already been stated, all colleges also run the intermediate level classes, i.e., grades 11 and 12.

3.1.2.1 BISE(s)

There are nine BISEs in the province at Lahore, Multan, Gujranwala, Rawalpindi, Sargodha, Dera Ghazi Khan, Faisalabad and Bahawalpur. A ninth board has been sanctioned for Sahiwal. These Boards conduct public examinations for grades 9,10, 11 and 12.

3.1.2.2 University of Education

The University of Education was established in 2002 as an exclusive higher education institution for education. It has 45 affiliated colleges.

3.1.3 Technical and Vocational Education

Technical and vocational education institutions in the public sector are managed by the Punjab Technical Education and Vocational Training Authority (PTEVTA). The Authority, headed by a chairman, is an autonomous body with its own Board of Directorate. There are 366 TVET institutions across Punjab⁹. The vocational stream offers one and two year diplomas and certificates while the technical stream offers DAE (in 24 disciplines), diplomas, post-diploma (2 disciplines), B.Tech. (in 4 disciplines), and B. Tech (Hons) degrees (5 disciplines).

The Punjab Board of Technical Education (PBTE) came into existence under the Punjab Ordinance No. II of 1971. It is a corporate body to control, develop and regulate technical, commercial and vocational education as well as Trade and Skill courses up to diploma level in the Province of Punjab. Punjab Vocational Training Council (PVTC) is another autonomous corporate body established by the Punjab Government through the PVTC Act of 1998. Its mission is to alleviate poverty through Muslim charity (Zakat) and private sector participation by imparting demand driven skill training and enhancing employability for disadvantaged youth.

_

⁹http://www.tevta.gop.pk/Statistics.html

Other than institutions under PTEVTA, there is the SDC (Skill Development Council), Lahore which functions under the Ministry of Labour, Manpower and Overseas Pakistanis, Government of Pakistan. SDC operates as a public-private partnership.

3.1.4 Adult Literacy and Non Formal Basic Education

Adult Literacy and Non-Formal Education (Lit and NFE) Department is also headed by a Secretary. Literacy Officers function at the district level to perform the tasks of the Department.

3.1.5 Department of Special Education

The Department for Special Education was established in 2003. Earlier, it existed as the Directorate of Special Education within the School Education Department. The Department has the mandate for formulation of policies for special education in the Punjab including development of curriculum. It administers 101 special education centres in 18 districts of Punjab.¹⁰

3.2 RECENT HISTORIC DEVELOPMENTS: EXPERIENCE, CHALLENGES, OPPORTUNITIES

The last few years have seen education in Punjab rise to the highest priority level with direct support and participation of the Chief Minister. A number of reforms have resultantly been undertaken. The most crosscutting reform has been captured in the 'Chief Minister's School Reforms Road Map'. The 'Road Map' focuses on quality education, increased enrolment, provision of free and compulsory education, meritocratic governance and a performance-based accountability system.

Other initiatives include establishment of <u>Danish Schools</u> as centres of excellence, providing high quality education to poor students on the basis of merit. Also, recently, the Chief Minister undertook an initiative to distribute 125,000 laptops to students on the basis of merit. As part of the drive to improve IT education in the province, computer laboratories have been set up in all secondary schools in the province.

A <u>Punjab Education Endowment Fund</u> has been set up to provide scholarships to poor students with the main focus on 16 least developed districts. Scholarships are provided to deserving students at secondary, higher secondary levels and to those in higher education.

At systemic levels, Punjab has been the first province to develop and implement a comprehensive <u>professional development framework</u> for in-service teachers. The framework not only ensures coverage of all teachers but also evaluates the impact through assessing student learning outcomes and providing feedback to teachers.

_

¹⁰ Government of Punjab, *Punjab Portal*, http://punjab.gov.pk/services_locator_special_education

The province has also been the first to <u>develop textbooks under the new SLO based curriculum</u> developed in 2006. It has managed to prepare the maximum number of textbooks under the new curriculum and the new textbooks policy 2007. The latter has transferred the textbook publishing function from the textbook board to private publishers.

Under the <u>Punjab Education Sector Reform Programme (PESRP)</u>, a number of reforms were initiated and continue to be implemented. These include replenishment of missing facilities in schools, provision of stipends for girls in middle schools in the poorest districts, an effective monitoring program to check teacher absenteeism and delivery of free textbooks. It was also under PESRP that the public-private partnership process resulting in the Punjab Education Foundation was initiated.

Recently, the government has set up a <u>Punjab Education Commission</u> headed by a retired Chief Justice of the Punjab High Court. The commission has the following terms of reference:

- 1. "Development of an enforcement mechanism for provision of free and compulsory education to children in terms of Article 25A. The task may include the following¹¹:
- 2. Ensure 100% enrolment and 100% retention in schools and measures against drop out.
- 3. Issues of pre-school stage/early childhood education
- 4. Universal and compulsory birth registration and reporting to the concerned education authority
- 5. Role of private sector schools in the performance of this state responsibility for compulsory education"

The decisions of the Punjab Education Commission are expected to have a long-term impact on the approach to education service delivery in the province as it addresses some fundamental issues. The scope encompasses quality, enrolment and governance issues. The commission has submitted its recommendations (Draft Law) to the Provincial Government.

3.3 KEY EDUCATION INDICATORS

Punjab has stronger indicators than those for other provinces but it has its own set of problems in terms of achieving results in access and quality. Figure 3.3 shows the situation of net enrolment ratio (NER) for primary, middle and secondary levels over the time period 2004-5 to 2010-11. The age groups used have been 6-10, 11-13 and 14-15 for primary, middle and secondary, respectively.

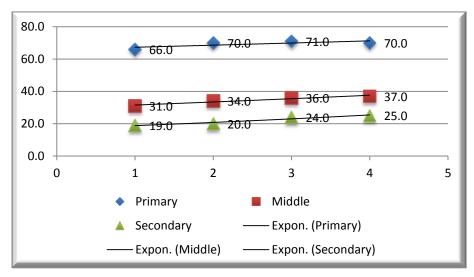
Two trends are clear from the data:

- 1. The rate of increase of NERs is low for all levels
- 2. The NERs drop sharply upon transition from one level to the next

_

¹¹ The Punjab Gazette, Notification No.SO(A-II)8-39/2012 dated 31st July 20

The drop in NERs reveals major transition issues from primary to middle (where the drop is highest) but also for middle to secondary. The final NER of 25 for the secondary level reveals internal inefficiencies in progress from primary towards secondary levels. Some of the causes of the dropout have been discussed in Chapter 5.



Source: Various PSLMs

Figure 3.3: NER Trends 2004-5 to 2010-11

Table 3.1 reveals a 'favourable' picture of gender parity improving over the years. Conversely, it reveals almost equal rates of dropout for girls and boys. The table aggregates for the province but there are variations across districts.

Table 3.1: GPI (NER) 2004-5 to 2010-11						
Year	Primary	Middle	Secondary			
2004-05	0.9	0.9	0.9			
2006-07	1.0	0.9	0.9			
2008-09	0.9	0.9	0.9			
2010-11	0.9	1.0	1.0			

Source: Various PSLMs

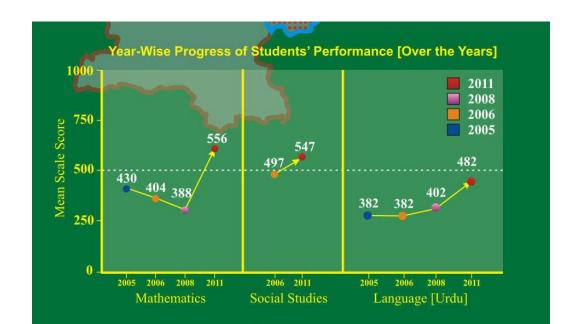
Some of the indicators 2010-11 highlighted below:

Indicator	Current 2011-2012	Target
NER Primary (6-10)	70	≈100
NER Middle (11-13)	37	≈100
NER Secondary (14-15)	25	≈100
Survival Rate Primary	57	≈100
Survival Rate Middle	86	≈100
Survival Rate Secondary	59	≈100
Transition Rate Katchi to Primary	62	≈100
Transition Rate Primary to Middle	91	≈100
Transition Rate Middle to Secondary	106	≈100

other key for the year have been in the table

Source: PSLM 2010-11 and PEMIS 2010-11

The table reveals (apart from a declining NER) low survival and transition rates indicative of low quality. Figure 3.5 further explains the situation of quality. PEAS results reveal an improving trend but the scores exceed the par value of 500 only marginally in mathematics and social studies and remain below it in Urdu language. Quality remains a critical concern.



Source: Student Learning Outcomes Comparison of PEAS results 2005-2011

3.4 DISTRICT ANALYSIS OF EDUCATION INDICATORS

3.4.1 Comparison of NER in Districts

While the overall educational statistics of Punjab fare far better than the other provinces, the disaggregated district-wise data seems to tell another story i.e. the provincial indicators do not seem to wholly reflect the situation of the various districts.

Fifteen districts lie below the provincial average NER of 70 at the primary level (Figure 2.3). Districts such as Bahawalpur, Rahim Yar Khan, Rajanpur and Muzaffargarh have an NER of 50, 52, 53, and 55 respectively. In contrast districts such as Chakwal, Jhelum, and Rawalpindi have very high NERs (90, 85, and 85 respectively). Despite the high NER in some districts, a similar deviation exists at the tehsil level where NERs will vary between rural and urban areas.

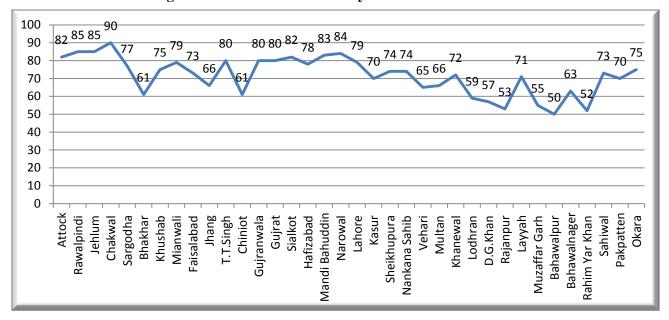


Figure 3.4: District-Wise Primary Education NER-2011

At the middle school level there is a sharp decrease in NERs in all districts. Eighteen districts have an NER below the provincial middle school NER (i.e. 36). Jhelum, Chakwal and Rawalpindi are the only districts with NERs higher than 50. The remaining districts depict a harrowing representation of poor NERs, which drop as low as 13 (in Rajanpur). There is difference of upto 40-60% in primary and middle NER rates.

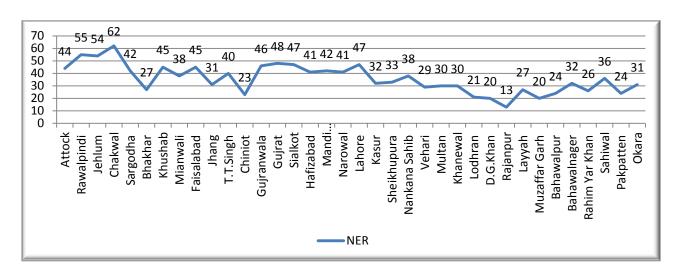


Figure 3.5: District-Wise Middle School Education NER-2011

The NER in the districts at the secondary level drops by 25-40% further. NER rates are as low as 9 (Rajanpur) while 23 districts have an NER of 25 and below at the secondary school level.

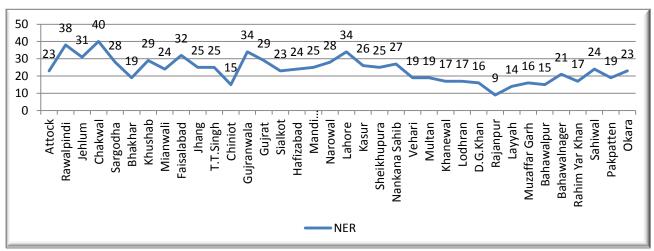


Figure 3.6: District-wise Secondary Education NER-2011

In terms of regions within the province, the districts with lowest NER across all three educational school levels are in the far south of Punjab. Districts closer to the provincial and federal capital are seen to have relatively higher NERs.

3.4.2 Comparison of GPI¹² Districts

Reflecting access of education for girls, the GPI indicator at the provincial level indicates that the ratio is in favour of males at the primary of level (0.9) and that there is gender parity at the middle and secondary school levels.

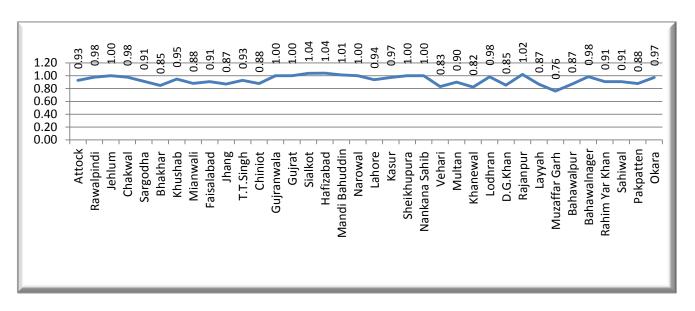


Figure 3.7: GPI for Primary Education Districts (NER)-2011

Trends of gender parity in enrolment vary greatly when GPIs are studied across the districts. In contrast to the overall provincial GPI, twenty-six out of thirty-six districts indicate a GPI of less than 1 i.e. a disparity in favour of males with the GPI going as low as 0.76 (Muzaffargarh). Four districts indicate gender parity in favour of females while only six districts appear to have to gender parity.

GPI<1	Muzaffargarh, Khanewal, Vehari, Bhakkar, D.G. Khan, Bahawalpur, Layyah,
	Jhang, Chiniot, Pakpattan, Mianwali, Multan, Sahiwal, Faisalabad, Rahim
	Yar Khan, Sargodha, Attock, T.T. Singh, Lahore, Khushab, Kasur, Okara,
	Rawalpindi, Chakwal. Lodhran, Bahawalnagar
GPI=1	Jehlum, Gujranwala, Gujrat, Narowal, Sheikhupura, Nankana sahib
GPI>1	MandiBahauddin, Rajanpur ,Sialkot, Hafizabad

(Districts listed in increasing value of ratio)

29

¹² A GPI of 1 indicates parity between the sexes; a GPI that varies between 0 and 1 typically means a disparity in favour of males; whereas a GPI greater than 1 indicates a disparity in favour of females. (www.un.stats.org)

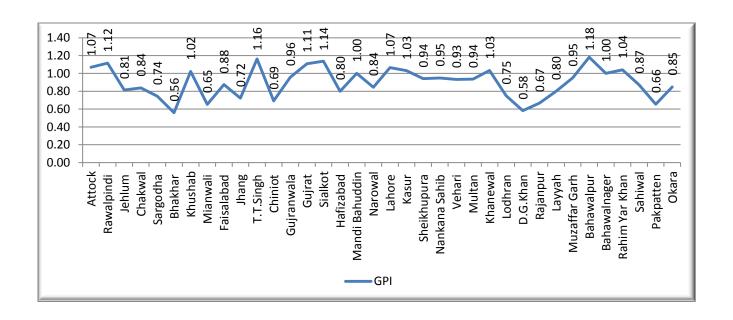


Figure 3.8: GPI for Middle School Education Districts (NER)-2011

At the middle school level the GPI trends vary from primary education. The provincial GPI at the middle school level indicates gender parity however, 23 districts have a higher ratio of male students (ranging from 0.5 to 0.9), 11 districts with a higher ratio of female students and 2 districts with gender parity.

GPI<1	Bhakkar, D.G. Khan, Mianwali, Pakpattan, Rajanpur, Chiniot, Jhang,
	Sargodha, Lodhran, Hafizabad , Layyah, Jhelum, Chakwal, Narowal, Okara,
	Sahiwal, Faisalabad, Vehari, Multan, Sheikhupura, Nanakana sahib,
	Muzaffargarh, Guranwala
GPI=1	MandiBahauddin, Bahawalnagar
GPI>1	Khushab, Kasur, Khanewal, RY Khan, Lahore, Attock, Gujrat, Rawalpindi,
	Sialkot, T.T. Singh, Bahawalpur

(Districts listed in increasing value of ratio)

The number of districts with greater ratio of female students increases at the middle school level.

Gender parity ratios vary greatly at the secondary school level as 17 districts have GPI ratios that indicate a higher ratio of female students (between 1.03 in Sargodha and 1.7 in Sialkot), while the remaining 19 districts reflect GPIs with a higher ratio of male students (between 0.46).

in Khushab and 0.9 in Multan at the other end). This is contrary to the provincial GPI at the secondary school level that indicates gender parity in NER.

GPI<1	Khushab, D.G. Khan, Mianwali, Vehari, Layyah, Chiniot, Jhang, Bhakkar,
	Lodhran. Khanewal, Rajanpur, Muzaffargarh, Faisalabad, R.Y. Khan,
	Bahawalnagar, Okara, Chakwal. Gujrat, Multan
GPI=1	
GPI>1	Sargodha, Narowal, MandiBahauddin, Sheikhupura, Sahiwal, Pakpattan,
	TT Singh, Attock, Kasur, Hafizabad, Rawalpindi. Nankana sahib,
	Bahawalpur, Gujranwala, Lahore, Jehlum. Sialkot

(Districts listed in increasing value of ratio)

3.5 MODALITIES OF SERVICE DELIVERY AND STRUCTURAL DIVIDE

Multiple service providers for education function in the province. The three largest sets are public sector schools under the SED, private schools and madrassas. In addition to the public sector schools run by the provincial government, a number of other categories also exist. Table 3.3 shows the various types and the fraction each forms of the total number of non-SED administered schools.

Table 3.3: Non-SED School by	y Types	
	No.	Per cent
Private	37,418	84.91%
Other; like NFE, Community schools etc.	3,109	7.05%
NGOs	1,911	4.34%
Missionary	431	0.98%
Local bodies/District/City Government	339	0.77%
Federal Government	330	0.75%
Fauji Foundation	53	0.12%
Divisional Public School (DPS)	49	0.11%
Army schools	26	0.06%
Pak Baitul Mal	25	0.06%
Cantonment Board	20	0.05%
Overseas Pakistanis Foundation (OPF)	12	0.03%
P.A.F. schools	12	0.03%
Pakistan Railways schools	9	0.02%
Lahore Development Authority (LDA)	6	0.01%
Police schools	6	0.01%
Private Public Partnership (Evening shifts)	172	0.39%

Social Welfare department schools	53	0.12%
Telecom Foundation schools	2	0.00%
University Schools	6	0.01%
WAPDA schools	32	0.07%
Workers Welfare Board/Labour Department schools	48	0.11%
Total	44,069	100.00%

Source: Private Schools Census, EMIS/PMIU Punjab

The table includes schools run by the Federal Government in Punjab (330) as well as those run by other provincial government departments, autonomous public sector corporations and semi-government institutions. A subset of the private sector are the schools run/managed through public private partner ships by PEF.

In the last few years, the private sector in the province has continued to grow. As table 3.2 shows, nearly 85% of the non-SED schools are run by the private sector. Despite the growth in the sector, the provincial EMIS did not capture its size in the annual education census. This year's census has been completed and reveals the size of the sector as well as some of its significant features. Some of the key trends revealed from the data are:

- 1. For levels beyond primary, private schools outnumber public sector schools.
- 2. Enrolment in private schools matches that in the public sector.
- 3. Basic facilities in public sector schools are marginally better than those in private schools (in case of playground availability and space the former is far ahead).
- 4. The medium of instruction in private schools is not uniformly English. Urdu dominates at the primary level.
- 5. Majority of the private schools are co-education up to higher secondary level.
- 6. The male-female gaps in enrolment are small (similar to the public sector).
- 7. Elite schools offering O' and A' levels are 1% per cent of the total private school set.

Table 3.4 shows the percentage share of the private and public sectors across primary, middle, secondary and higher secondary levels. At the primary level, the public sector accounts for 78% of the schools as against 22% in the private sector. Beyond primary the trend reverses with the private sector running 71%, 68% and 70% of schools at the middle, secondary and higher secondary levels. These results appear to be in line with figure 3.1, which shows a massive reduction in public sector schools after primary school level.

Table 3.4: Comparison of School Types							
Level	Private as per cent of both	Public as per cent of both	Per cent of the Grand Total				
Primary	22%	78%	53%				
Middle	71%	29%	27%				
High	68%	32%	18%				

Higher Secondary	70%	30%	2%
Total	44%	56%	100%

Source: Private Schools Census, EMIS/PMIU Punjab

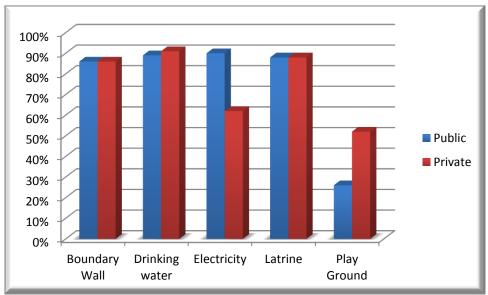
Table 3.5 shows, as a percentage, enrolment of children in private schools. The trend appears to reverse in this case. The private sector has lower enrolment than the public sector for all levels but it is significantly high in all cases. The overall percentages are 57% and 43 % for public and private sectors, respectively.

Table 3.5 Comparison of Enrolment of Public and Private Sectors							
Level/Portion	Total enrolment						
	Number Percentage						
	Public	Private	Public	Private			
Primary	7,273,890	6,186,315	54%	46%			
Middle	2,105,503	1,296,902	62%	38%			
High	1,017,011	506,555	67%	33%			
Total (Primary-High)	10,396,404	7,989,772	57%	43%			

Source: Private Schools Census, EMIS/PMIU Punjab

The second critical trend is the drop in enrolments beyond primary for both public and private sectors. This reinforces the trend of NERs for primary, middle and secondary presented earlier (see fig 3.1).

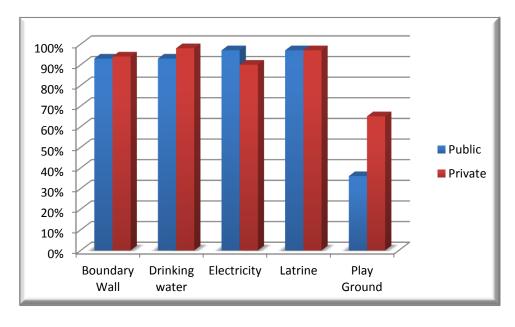
In addition to the above trends, three generally held beliefs have been challenged by the data. The first concerns the situation of facilities in public schools and their impact on dropout rates. Figures 3.9, 3.10, 3.11 show a comparison of private and public schools in terms of facilities at primary, middle and secondary levels. At each of these levels, the public sector noses ahead on the overall facilities situation.



Source: Private Schools Census, EMIS/PMIU Punjab

Figure 3.9: Facilities Comparison at Primary Level

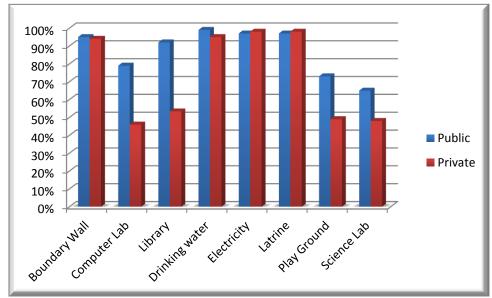
At the primary level (see fig 3.9) the public sector only marginally (and insignificantly) lags behind in drinking water availability but is clearly better than the private sector when it comes to presence of electricity and playgrounds. The situation for boundary walls and latrines remains similar.



Source: Private School Census 2012 (PMIU Punjab)

Figure 3.10: Facilities Comparison at Middle Level

At the middle level (fig 3.10) the private sector has a significant edge regards playgrounds and a marginal edge regards drinking water and boundary walls but lags in relation to electricity. The relative gap in playground availability is sizeable.



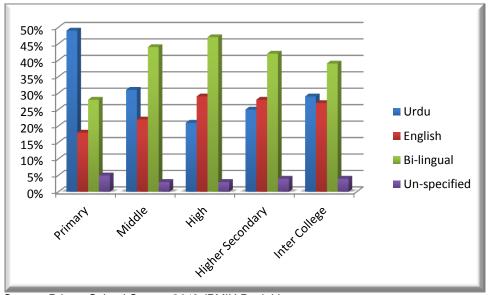
Source: Private School Census 2012 (PMIU Punjab)

Figure 3.11 Facilities Comparison at High Level

At the high school level (fig 3.11) the public sector clearly surpasses the private sector in terms of four facilities: computer labs, libraries, playgrounds and science labs. The recent initiative by the government to provide computer labs in all high schools has resulted in the public sector being ahead even in this non-traditional component of the public sector school infrastructure.

Reduced gaps in relative facilities can be partially explained by the success of the Punjab Education Sector Reform Programme (PESRP) which includes a component on replenishment of missing facilities. The second reason may be the low-cost school options used by the private sector wherein smaller landholdings (explained by lack of playgrounds) and buildings may be used. Smaller premises may also explain the apparent contradiction in the data wherein the sector has a lower share in enrolment at the middle and secondary levels despite significantly greater number of schools. At the primary level, school size appears to be small for both public and private sectors.

The second misperception eliminated by the private school census concerns the medium of instruction. Most private schools are either Urdu medium or bilingual (fig 3.12). At the primary level almost 50% of the schools have Urdu as the medium of instruction. About 26% are categorized as bilingual and only about 15% have English as the medium of instruction.



Source: Private School Census 2012 (PMIU Punjab)

Figure 3.12: Medium of Instruction in Private Schools

Only at high school and higher secondary (including inter-college) levels the percentage of English medium schools is higher than Urdu medium. Bilingual institutions remain the highest in numbers (or percentage) for all categories beyond primary.

The third 'counter intuitive' information in the data concerns co-education (Table 3.6). Over 86% of private institutions are co-educational. Majority of institutions up to higher secondary (inclusive of higher secondary) are co-ed. Even at the college level 40% of the institutions have children from both genders.

Table 3.6: Public Private Comparison by Level and Gender							
Level of	Ratio		Ratio by gender				
institution	by	Boys	Girls	Co-	Unidentifie	Total	
	level			Education	d		
Primary	26%	4.02%	5.40%	89.91%	0.67%	100	
						%	
Middle	43%	2.64%	4.66%	92.68%	0.02%	100	
						%	
High	27%	11.45	11.68	76.86%	0.01%	100	
		%	%			%	
Higher Secondary	3%	17.57	23.60	58.68%	0.15%	100	
		%	%			%	

College	1%	25.94 %	33.26 %	40.35%	0.44%	100 %
Total	100%	6.05%	7.61%	86.14%	0.20%	100 %

Source: Private School Census 2012 (PMIU Punjab)

The gender ratios in enrolment for private schools do not deviate from the general situation in the province. Out of a total enrolment of about 8 million students in the private sector, 53.68% are boys and 46.32% girls.

Only about 1 % of the private schools offer O/A levels. These can be considered elite schools that provide best opportunities for the choicest jobs and reinforce social elitism.

Table 3.7: Schools offering O/A level course					
School Gender	Offering O/A level				
Boys	45				
Girls	48				
Co-education	169				
Total	262				

Source: Private School Census 2012 (PMIU Punjab)

3.6 GOVERNANCE (FEDERAL, PROVINCE, DISTRICT)

Education sector governance has seen two major changes in the last few years. Firstly, in 2001 the subject was devolved to the districts. The Local Government Ordinance (LGO) 2001 under which the sector had been transferred lapsed in 2009. Currently, the provincial government has regained 'control'. Secondly, the role of the federal government in education has been nearly eliminated after the 18th Constitutional Amendment. This has called for a review of the education policy, planning and service delivery processes at the provincial level. The introduction of Article 25A has created a potential to review the entire education setup. Public policy priorities for federal and provincial governments have been altered and the latter, as a result, will need a greater share in the NFC for implementation, even as they review their own domestic resource mobilization capacities.

Table 3.8: Inter-Tier Distribution of Functions							
Functions	Levels	Comments					
Policy	Provincial	Traditionally the federal government					

		performed the function.
Planning	Provincial + District	Depending on the level of funds and their sources involved the plans are approved at the relevant level.
Data Collection	Provincial + District	
Standards	Provincial	
Curriculum	Provincial	
Textbooks	Provincial	
Teacher Education	Provincial	
Professional Development	Provincial	
HRM 1: Recruitment	Provincial + District	
HRM 2: Transfer Posting	Provincial + District	
HRM 3: Performance Appraisal	Provincial + District	
HRM 4: Promotions	Provincial + District	
Development Expenditure	Provincial + District	
Recurrent Expenditure	Province through districts and attached departments	
Teacher Monitoring (absenteeism)	Provincial +District	
Teacher Monitoring (quality)	Provincial+ District	
School Maintenance	District	
Community Engagement (SMCs)	Districts through HTs	

The provincial government controls key quality factors of education (teacher training, textbooks, curriculum, examinations and standards) along with enjoying the policy and planning functions. The district authorities are responsible for service delivery using the quality inputs developed at the provincial level. School management, teacher monitoring, management of recurrent expenditures and engagement with community are some of the key issues dealt by the district authorities and their lower tiers.

The draft law has already been proposed to setup empowered "District Education Authorities" that will be given a more holistic mandate on various aspects of education, including quality.

This will make districts performance monitoring by the provincial level a more meaningful exercise.

3.7 KEY FINDINGS OF SITUATIONAL ANALYSIS

The situational analysis attempted to assess gaps within the education system, and also indicate strengths of the current system. Factors that support a conducive and favourable environment for pro-active reform included foremost political will and ownership. The current provincial political leadership has remained focused on introducing policies not just to increase access and enrolment, but it has been a pioneering province in shifting its policy focus towards 'quality and standards' in various inputs, processes and outputs across the sector. Education indicators of Punjab are significantly better in comparison to other provinces. Results from the National Education Assessment System (NEAS) reveal that Punjab has a better score sheet than the rest of the country. The province is also the first to start work on rationalization of teaching staff in schools. Another area where the province has been successful is ensuring greater accountability at the district-level.

3.7.1 Cross-cutting Issues

Overall in challenges cross-cutting issues traversing the sector includes the lack of inputfocused interventions especially with regards to the quality of curriculum (implementation), textbooks, teachers, school environment and infrastructure in question. Another major gap highlighted is with reference to lack of integrated information systems and research-based policy planning and implementation. Corrective feedback mechanisms are absent within the system. There is subsequently a dearth of capacity in terms of technical expertise within the sector to engage in relevant policy-making and implementation of reforms. Last but not least there is lack of coordination between provincial departments and relevant stakeholders.

3.7.2 Challenges & intrinsic gaps identified in specific focal areas

(a) Absence of Quality Standards

There are no definitions or benchmarks for quality education specified by the School Education Department (SED). Lack of relevant indicators and data does not allow for an accurate and comprehensive assessment of quality of education provided in schools.

The quality of teachers is perceived as poor, mainly as a result of past policies of low qualification requirement or recruitment influenced by political pressure. Teacher absenteeism is high and there is a lack of interest in improving qualifications due to poor social standing of teaching as a profession (especially for males) and extremely slow career growth. Teaching methods are non-participatory, use lecture-mode and do not encourage development of critical thinking skills. There is non-standardized, pre-service training while the Government continuously strives to rectify the CPD program, its impact cannot be assessed as there is no linkage of training with outputs.

Curriculum dissemination was limited with most teachers and education managers never having even seen one during their careers. Textbooks, developed at the provincial level, are criticized

for not catering to the requisite age level, lack of consistency across class levels and within each class level and errors of printing. Due to absence of standards, non-testing in the field and shortage of qualified authors, the textbooks are written in a dull narrative and the content is focused on knowledge only with no effort to develop critical analytic thinking. The new textbook policy has shifted the function to the private sector to introduce competition and also field-testing concept has been introduced. Training of authors has also been undertaken. Libraries are not present in many schools especially at primary level. There is no standardization of books procurement etc. and usage remains low. Similarly laboratories in a number of high schools are dysfunctional due to non-replenishment of material and/or non-availability of requisite teacher.

In terms of assessment, external agencies like Punjab Examination Commission (PEC) and Punjab Education Assessment System (PEAS) are part of recent reforms and considered to be qualitatively superior. PEC needs to improve its dissemination strategy to ensure feedback to the teachers and teacher training. It also needs to improve its credibility against frequent allegations of cheating. Boards of intermediate and secondary education, were considered to suffer several weaknesses: there are no standards for examination; lack of trained examiners; poor conditions of examination centres; lack of analysis of the examination papers and results.

(b) Lack of Relevance of Education

No data or study exists on evaluation of outcomes of education for school students. However there is a general perception that children of public schools fail to improve their social and economic status through their education alone. Many stakeholders considered it an important factor for out-of-school children as parents have low faith in the education system's ability to allow their children economic growth and social mobility. There is no assessment of whether and how relevant education content and skills imparted are attuning to the current job market demands.

(c) Access & Enrolment

Despite efforts there has been a declining trend of enrolment in the public sector though the complete picture cannot be ascertained in the absence of data trends of the private sector. According to the PSLM, Gross and Net Enrolment Rates decline as higher classes are reached. This shows a trend for high drop outs and a large number of out of school children. In terms of gender disparities the trend is mixed. While enrolments in public schools across boys and girls are comparable, the literacy rate for men is higher although girls' situation has improved partly owes to improved government initiatives. In the absence of quantitative data it is difficult to ascertain the exact situation.

(d) Challenges of fulfilling the requirements of the 18th Amendment

The enactment of the 18th constitutional amendment Act 2010 has brought forth significant changes affecting the education sector in Pakistan at federal as well as provincial tiers. Implementation requires attention on the following aspects:

- Framing of new laws and regulations with revision of existing laws
- Strengthening of Textbook Boards
- The challenge for the provinces would be of the implementation of the provision of free and compulsory education to children aged 5-16
- Transfer of new functions will call for reconfiguration of the provincial education departments. Especially new sections/wings for at least policy and planning have to be established. New responsibilities of the provincial education department's and supporting departments will also be redefined.
- The human resource employed by the ministries to be devolved presents another important challenge for the provinces. Provinces can either absorb or refuse to accept former federal employees. It will be a tedious process for the provinces to redesign their provincial service structure and absorption of the federal employees.
- The provincial education departments need to think of taking a strategic position for engaging with private sector.
- The education departments will require revision in the light of new focus, objectives and goals. Proposed amendments in the rules of business will require the approval of the provincial cabinet.

(e) Governance Issues

There are no cross-linkages or coordination mechanisms for learning between school education, college education, technical and vocational and literacy and non-formal education. The current reform process has some excellent initiatives however its impact will not be cumulative with the absence of linkages between departments and sectors. After the devolution plan clarity across the roles and responsibilities of the various tiers i.e. provincial and district has become less clear and there has, ironically, been centralization of decision making at the district level.

Absence of a standards regime has resulted in poor management and accountability of the core education issues like learning outcomes, teaching, assessments, political interference and corruption. Capacity of the School Education Department is another challenge as its responsibilities and number of student increase. The traditional structures at the provincial and district levels need to be revised in lieu of new reforms and responsibilities.

(f) Education Financing

Education financing data is limited since expenditure on private schooling is not known. The public sector expenditure data reveals that the province is dependent on the revenues from the National Finance Commission (NFC) and the international development partners. The latter pays for the bulk of the development budget in addition to providing technical assistance. The district level spends 90% of the money in school education but the data from PIFRA is not centralized constraining analysis.

Key issues identified have been low utilization of development fund due to slow releases, lack of capacity of financial managers at the decentralized levels, funds embezzlement due to

ineffective monitoring and non-sustainability of the reform funds as the bulk is coming from international donors. In order to ensure sustainability, the province needs to generate its own revenues which apparently seem elusive at this point of time.

4. STRATEGIC FRAMEWORK

The National Education Policy of 2009 is the latest in a long series of education policy papers that stipulates the overall aim and direction of national education provision. None of the previous policies, however, have been fully implemented. This non-implementation has partly been attributed to the fact that none of the plans were ever translated into strategic plans and action plans.

The higher-level purpose of the education system is often expressed in the form of a Vision Statement. The 2007 Whiter Paper on education in Pakistan offers the following vision statement:

"Recognizing education as a right of the citizens, it is the aim of the State of Pakistan to provide equal and ample opportunity to all its citizens to realize their full potential as individuals and citizens through an education that enriches the individual with values/skills preparing him/her for life, livelihood and nation building."

Such a statement, however, is of little operational value. It is like a dream of what one would like to see in the future, but it does not provide any guidance on <u>how</u> to actually provide all these opportunities. For this purpose, a strategic plan or a sector plan is needed.

A strategic plan is an instrument intended to translate an abstract policy vision and overall policy objectives into an operational framework. It identifies the thematic areas where intervention is required in order to achieve policy goals. It formulates these areas into major policy programmes and it designates the operational structures and institutions that will be responsible for carrying out the diverse functions assigned to them.

The current document, the Punjab School Education Sector Plan (PSESP), is such a strategic plan. It sets out to specify how the School Education Department will respond to the issues and challenges related to access, equity, quality, management and governance.

It is guided by the "School Reforms Road Map" (Govt. of Punjab year 2011), which has identified the following initiatives:

- 100 % enrolment of all children of school-going age
- 100 % retention of all enrolled students up to the age of 16
- Free, compulsory and internationally competitive education for all

- Merit-based recruitment and management of staff
- Targets for officers and ranking of districts on targets
- Transparent selection of officers and their retention linked with targets; and
- Incentives for good performance

The following sections offer a conceptual clarification of each of the concepts: access, equity, quality, management and governance. They summarise the programmes and policy interventions that are meant to address the issues.

4. 1 ACCESS

Access is the concept most commonly used to express the relative coverage of the education system to its beneficiaries. It can be expressed in absolute numbers or as a percentage (a "rate"). The latter indicates relative coverage of a particular group of students against a reference group (e.g. the number of children in school in a given community as a percentage of all children in that community). Access is often disaggregated by level (e.g. primary, secondary), gender and type of educational provision (e.g. public vs. private) or geographical location (rural vs. urban, district, etc.). Where large discrepancies in access exist, they are typically dealt with under the heading equity (see below).

Education has always featured prominently within the constitutional framework of Pakistan. Article 25-A of the Constitution states, as a result of the 18th Amendment to the Constitution of 2010, that "[t]he State shall provide free and compulsory education to all children of the age of five to sixteen years in such a manner as may be determined by law." Although the requisite statute has not yet been enacted by the Punjab legislature, education has now become an enforceable right and is the prior responsibility of the State¹³.

Despite some progress in access since 2001-02 at all levels, enrolment rates in 2005-06 and 2007-08 were disappointingly low: almost one-third of primary children and three-quarters of secondary school children remained out of school. (See Figure 3.1)

4.1.1 Data

In order to reach the target of 100 % enrolment of all children of school age, it is important to know what factors prevent the non-enrolled children from coming to school. A critical factor in our knowledge is the lack of data or the inadequacy of existing data sets. So far, the SED EMIS has only captured the provision of education in public schools. The provision of education through private schools and madrassahs, for example, has not been captured at all. Further, the absence of a National Census since 1998 has made it extremely difficult to calculate reliable data sets on NER and GER. We know the numerator, i.e. the actual number of children in

¹³The government has set up the Punjab Education Commission to deliberate the details of the law to be enacted under Article 25A

school, but we do not know the denominator - the number of children in a particular age group or "cohort". This figure, in the absence of recent comprehensive data, has to be constructed based on projections.

So, one of the immediate actions to ensure 100 % enrolment is to improve the EMIS. This concerns all aspects of the system, from data collection, validation, compilation, and data access and dissemination to its actual use for management, decision making and planning purposes at all levels.

4.1.2 Evidence-Based Research

In order to increase our knowledge of factors preventing children from coming to school or causing them to drop out, we need to undertake evidence-based research. Such research can potentially explain the correlation between variable factors and suggest policy interventions to address the problems.

Punjab is fortunate to have a world class educational research institute, the PEAS, which since 2003 has published provincial assessment tests of student performance in a number of subjects and analysed the significance of a number of variables like rural/urban, gender, home language, corporal punishment etc.

Similarly, there is need for research aimed at exploring factors affecting the <u>access and attendance</u> of children in school. In order to reach the 100% enrolment target, it is critical that Head Teachers, School Management Committees (SMCs) and district and provincial Education Officers have a clear understanding of factors impeding enrolment and attendance. It is important that they are supported in identifying appropriate responses to the problems. One way of doing the latter could be by developing a catalogue of ideas on managerial interventions. This could be distributed to schools and district education administrations.

4.1.3 Intervention Strategies to Increase Access and Reduce Dropout

Common factors known to affect student access are distance from home to school (particularly for girls), poverty, absence of female teachers, lack of water and sanitation facilities, language of instruction and corporal punishment.

The policy and managerial responses to addressing such problems range from school mapping and construction of new schools, provision of scholarships, recruitment of female teachers and/or the provision of secondary education for girls to awareness campaigns and disciplinary action by the head teacher or district authorities. Local interventions, for example, assisted or led by SMCs, could play an important role in the identification of out-of school children and various supportive measures to bring them (back) into school.

4.2 EQUITY

The concept of equity is frequently used in settings where there is variation in access, small or large, between sub-groups of a larger population. Examples of inequity comprise of differences in access to education between rural and urban students, between boys and girls and between geographical locations. Inequity is also reflected in the exclusion of vulnerable children, e.g. poor or physically disabled children, children with special needs, religious minorities, ethnic and linguistic groups etc.

The first and most important instrument in addressing inequity is to have a well functioning EMIS with disaggregated data, which could potentially capture the variation in access and performance among particular beneficiary groups. Such data should ideally be combined with a geographical information system (GIS), which could provide a fairly accurate mapping of the prevalence of inequity in order to inform managerial decisions on possible interventions and remedial actions.

The nature of such interventions should be based on careful inquiry and/or evidence-based research in order to tailor responses to the actual <u>causes</u> of inequity.

4.2.1 Disaster Risk Reduction

Education is critical for all children but it is especially urgent for the thousands of children affected by emergencies, be they man-made or natural disasters. Yet, for children affected by disaster and crises, their right to education remains an unfulfilled promise.

In emergencies, increased assistance and innovative programmes offer opportunities to build back better education systems and improve the quality of and access to education. Emergencies can provide opportunities to work with communities for social transformation by creating programmes which allow previously excluded groups, like girls, women and disabled children, to access an education. Crises make it possible to teach all members of a community new skills and values, as well as peace, tolerance, conflict resolution, human rights, and environmental conservation. These windows of opportunity can be used to promote more equitable educational systems, en route to more equitable societies.

Besides natural disasters occurring in Pakistan there are also conflict-affected areas where schools, teachers and children face discontinuity in their education.

Approximately 25 million children are currently out of school in Pakistan, while seven million of them have yet to receive some form of primary schooling¹⁴; more than half of these children are living in conflict-affected areas, or forced into temporary migration and/or displacement. Hundreds of thousands are living in similar situations as a result of being affected by natural disasters. Girls are out of school in conflict zones, and account for only 30% of refugees enrolled in secondary schools. Out of 640 completely destroyed schools in Malakand, the worst affected area in Khyber Pakhtunkhwa, 164 were girls' schools. 15 A total of 710 schools have been destroyed or damaged by the militants in Khyber Pakhtunkhwa¹⁶.

In Punjab, districts which are highly flood vulnerable include Attock, Dera Ghazi Khan, Rahim Yar Khan, Rajanpur, Layyah and Muzzafargarh. Low flood vulnerable districts are Jhang, Hafizabad, Multan, Khanewal and Narowal. The flood vulnerable districts have a large number of school buildings that get affected during the monsoon season.

	Table 4.1: No. of Schools affected by Floods in 2010								
#	Districts	Primary Boys	Primary Girls	Middle Boys	Middle Girls	Secondary Boys	Secondary Girls	Total Schools Boys	Total Schools Girls
1	Dera Ghazi Khan	137	69	2	10	9	5	148	84
2	Muzaffargar h	280	249	26	17	14	2	320	268
3	Rajanpur	220	139	16	10	16	4	252	153
4	Mianwali	10	8	5	2	0	0	15	10
5	Layyah	24	38	6	6	6	2	36	46
6	Rahim yar Khan	42	21	2	2	0	0	44	23
7	Multan	6	15	3	3	2	1	11	19
	Total							826	603

Source: PMIU data 2010

4.2.2 Inclusive Education

Inclusive education as a concept, capability and service feature has been increasingly integrated into education systems around the world. Children at margins due to various barriers,

¹⁴ Society for the Protection of the Rights of the Child, 'The State of Pakistan's Children Report 2011', 2012 quoted in Daily Dawn, '25m children out of school in Pakistan', Sept 7 2012

¹⁵Daily Dawn, *In the doldrums,* October 21st 2012

¹⁶Society for the Protection of the Rights of the Child, 'The State of Pakistan's Children Report 2011', 2012 quoted in Daily Dawn, '25m children out of school in Pakistan', Sept 7 2012

including disability, need to be mainstreamed into regular schools. At present a bifurcation of schools between 'special' and regular schools exists. More children need to be included into regular systems and exclusion must be reduced as far as possible.

Inclusive education is the approach to educate students with special educational needs. This does not mean developing specialized classrooms and separating students with disabilities or to help prepare students to 'mainstream' into regular schools. "By contrast, inclusion is about the child's right to participate and the school's duty to accept the child" by making the current, i.e. regular, education system more adaptable. UNESCO's definition of 'inclusion' refers to not just students with special educational needs but also include marginalized groups "such as religious, racial, ethnic, and linguistic minorities, immigrants, girls, the under-privileged, students with disabilities, HIV/AIDS patients, remote populations, and more." While there has always been focus on girls' education and providing access to quality education for children in remote areas and those from under-privileged socioeconomic strata, it has been observed that most of the discourse on 'inclusive education' in Pakistan is often limited to students with disabilities.

4.3 QUALITY AND STANDARDS

The concept of quality has in recent years attracted increased attention, particularly in the wake of the Education for All movement and the Millennium Development Goals. Both these sets of goals have emphasised the quantitative expansion of schooling and educational provision. While impressive gains have been made in terms of increased access to education during the last decade, it has become clear that increased access does not necessarily lead to the desired results for students in terms of their ability to progress through the education system. High repetition and dropout rates as well as poor completion rates all bear evidence to the fact that something has gone wrong with the education system's ability to do what it is expected to do. Such failures in performing expected functions would be analogous to an unexpectedly high incidence of quality failure in, say, the manufacturing industry. An investigation as to the causes of such failure would need to look at every process the product has been through, every input, procedure and control applied to any process from design to production.

But what is quality in the context of an education system? An instinctive notion might be that it is something to do with student learning outcomes. From this notion it is often inferred that in order to improve learning, one has to ensure that the required inputs are available to support the learning processes. But, regrettably, this is far from enough. One has to pay attention to the whole process of transforming educational inputs into the desired objectives. Further, it is important that each and every step in the process of the quality cycle gets adequate attention. A simple conceptual model might look like this:



Figure 4.1 Conceptual model of Quality Inputs, Process and outputs in Education Sector

The concept of quality is relevant for each and every aspect or step in this process. In order to make it operational, it has to be translated into standards, which are meant to specify what is an acceptable/desired level of quality for each dimension. Equally important is the identification of who is responsible for the implementation of quality standards. Quality standards have to be 1) defined, 2) applied, and 3) controlled.

4.3.1 Quality of Inputs

If the ambition of the education system is to transform its students into citizens able to realise their full potential as individuals through a process that enriches the individual with values/skills and preparing him/her for life, livelihood and nation building, then such goals cannot be achieved by allowing inferior quality inputs into the process.

There are at least five major quality inputs to education at school level. These are: the curriculum, textbooks, teachers, school infrastructure and the school environment.

(a) Curriculum

The curriculum embodies, in suitable form and appropriate techniques at each level of education, the overall purpose of the education, as arrived at through objective reflection and clear decisions. It specifies its content and volume, the logic of knowledge acquisition and the timing and sequence of the pedagogical interventions. Ideally, the curriculum provides answers to the why, the what, how much, when and how educational content should be transmitted in school. An obvious consequence of objective reflection upon the overall purpose of education would be to be awake to the need for revising and updating the curriculum, from time to time, as required by advances in human knowledge, especially the knowledge of education and adapting to changing local and/or student needs and conditions, and of course in response to findings from monitoring and assessing outcomes.

In Pakistan, from 1976 development of the National Curriculum was the responsibility of the Curriculum Wing of the Federal Government. The last curriculum revision at that level took place in 2006. From 2010, with the 18th Amendment to the Constitution, curriculum development has been a provincial dispensation. Punjab at present has adopted Curriculum 2006 as the operational curriculum for the province. The Curriculum is learning-centred and competency-based i.e. specifying the outcomes of student learning and developing benchmarks and standards for SLOs. So far, guidelines in 82 subjects from *Kachi* to grade 12 have been developed. These guidelines provide the overall framework and specifications to the publishers, who are to develop the textbooks based on the new curriculum.

In 2012, a law establishing a Curriculum Authority was enacted by the province. The purpose of this authority is to make provisions for the supervision of curricula, textbooks and maintenance of standards of education in the Punjab, to regulate the supplementary materials and to deal with ancillary matters and supplant the work of the Curriculum Wing of the erstwhile Ministry of Education.

(b) Textbooks

The quality and relevance of textbooks has been a matter of concern in Pakistan for many years. A new national textbook policy from 2007, which envisaged a gradual liberalisation of the textbook production from public to private, started off slowly as a number of implementation issues had to be negotiated among stakeholders i.e. publishers, textbook boards and the education departments

However, in the wake of the 18th Amendment and the devolution of curriculum development to the provinces, a very dynamic process took place in Punjab. The Punjab Textbook Board took the initiative in preparing textbooks through the private sector and developed a regulatory mechanism to review manuscripts for approval. The management and effectiveness of the PTB has been impressive. In less than two years a rigorous and professional quality assurance system has been put in place providing guidance to the publishers and ensuring the new textbooks are of high quality. If the current expert evaluation of the textbooks were supplemented by a system of field-testing of the books, the relevance of the books to students' needs might be even further enhanced.

(c) Teachers

Which factor is the most decisive in contributing to student learning? The relative importance of factors like school management, textbooks, quality of infrastructure and teachers is debated, but few would dispute that the quality of teachers matters. One of the key factors in teacher quality is their preparation and subsequent professional development.

"Despite longstanding criticisms of teacher education, the weight of substantial evidence indicates that teachers who have had more preparation for teaching are more confident and successful with students than those who have had little or none. Recent evidence also indicates

that reforms of teacher education creating more tightly integrated programs with extended clinical preparation interwoven with coursework on learning and teaching produce teachers who are both more effective and more likely to enter and stay in teaching. An important contribution of teacher education is its development of teachers' abilities to examine teaching from the perspective of learners who bring diverse experiences and frames of reference to the classroom."¹⁷

In Pakistan the quality of teachers is a serious concern. The 2007 White Paper¹⁸ states that "Poor quality of teachers in the system in such large numbers is owed to the mutations in governance, an obsolete pre-service training structure and a less than adequate in-service training regime."

The current cadre of teachers suffer from the legacy of past policies, where the requisite qualification for teachers was the Primary Teacher Certificate (PTC) in combination with secondary or higher secondary level schooling. "Currently, a variety of unregulated teacher education programmes exist throughout the country. These programmes are characterized by out-dated pedagogy, inadequate teaching of subject matter, lack of instruction in communication, critical thinking and creative thinking skills" 19.

Compounding these problems is the existence of large numbers of unqualified and non-committed teachers, who were selected on the basis of nepotism, corruption and political quota systems. Rationalising this mess remains a serious challenge to any authority tasked with the regulation and provision of educational quality service. While the government of Punjab has elevated the qualifications required for selection of new teachers it has to, nonetheless, mitigate the shortcomings of the inherited legacy and also ensure standardised pre-service education.

Three major strategic actions emerge from this analysis:

- 1. Rationalisation of Pre-Service and In-Service Teacher Development Programmes based on Standards, in order to ensure uniform teacher quality
- 2. Development of a Teacher Qualification Framework and the evaluation of qualifications of all teachers in Punjab province based on a taxonomy of these qualifications in a systematic classification of competencies. This would rank the current cadre of teachers according to qualifications and guide the continuous professional development of the teaching force.
- 3. The development of a Performance Appraisal System and the gradual attrition (subject to existing civil service rules and employment regulations) of under-performing or non-performing teachers.

¹⁷Darling-Hammond, L., Journal of Teacher Education, Vol. 51, No. 3, May/June 2000 166-173

¹⁸HasanAly, J.: *Education in Pakistan: A White Paper*, 2007

¹⁹ Rationalisation of Pre-Service Teacher Education Programmes in Pakistan, USAID, 2010

(d) Infrastructure

The location of school buildings is uneven across the province and does not always ensure that an appropriate structure is available within reasonable reach of the students' home. Furthermore, the design of current public schools is based on a standard pattern that does not take into consideration the local topographic, geological and climatic requirements. While facilities' situation has been improved greatly in the province, over the last few years, issues of standards remain unaddressed. In addition, there are concerns that the functional design of many schools is not always conducive to learning, let alone answering the needs of children with special educational needs, some of whom may require ramps for access of wheel chairs and similar adjustments to the design of school buildings and facilities.

The following strategic actions will be initiated in order to ensure an adequate provision of School infrastructure of a reasonable quality:

- 1. A mapping of all schools, public and private, in the whole province based on a typological classification of schools on basis of the standards below under 2.
- 2. The Development of School Infrastructure Standards: These should take into consideration the specific geographical conditions (topography, geology (earth quake resistant), climate, availability of building materials etc.), the functional requirements of a particular school based on the age, gender and needs of its students, as well as the pedagogical design requirements aimed at facilitating student learning and interaction.
- 3. The development of Guidelines for The Maintenance of Schools, and
- 4. The allocation of Budget Provisions for School Maintenance.

(e) Environment

An attractive school environment is an important quality input as it is positively correlated with student satisfaction and overall school performance. It is also closely associated with the quality of school management. Good head teachers and well functioning School Management Councils can do a lot for the development of a positive and conducive school environment.

It has partly to do with the <u>physical appearance</u> of the school: is it clean and tidy? Are there flowers, plants, bushes and trees? Are the walls inside the school corridors and classrooms decorated with stimulating messages, posters and pictures? Are there facilities for games and sports?

Equally important, however, is the <u>psychological climate</u> of the school. Is it considered to be a safe place? Free from threats, abuse, and corporal punishment? Is it inclusive, welcoming all students irrespective of their gender, age, faith, language, economic status and physical or mental abilities? Is it a place for opportunities for growth and learning, for making friendships, for fun and enjoyment?

In order to attract attention to the importance of the school environment the following interventions could be considered:

- 1. Schools of Excellence. An annual prize or award is given to one or more schools, which have shown excellent performance in the previous year.
- 2. Inter-school competition or subject fairs aimed at encouraging schools to perform well in sports, in mathematics, science, arts etc. and competing with their peers.
- 3. The development of guidelines for head teachers and school management councils on how to promote a positive school environment.

4.3.2 Quality of Processes

The concept of quality processes seeks to capture how the various quality inputs are transformed into outputs and results. The quality of processes does not easily lend themselves to any clear definition of good or bad. Nevertheless, quality matters and has huge consequences for the achievement of subsequent results.

(a) Teaching and instruction

The professional preparation of the teacher and his/her qualifications has huge implications for his/her behaviour and classroom instruction. A critical aspect of this has to do with what the teacher focuses on. Central to this is student learning. The processes must be learner-centred and directed at the achievement of objectives and student learning outcomes.

(b) Learning

Learning is the process that ideally should go on in the head of the student. Without getting involved in a sophisticated epistemological discussion, it may suffice to say that the process should be orchestrated in such a way as to allow for gradual progression from concrete to abstract, from simple to complex, from known to unknown, for experimentation, for questioning, for collaboration and exchange of experience. And it has to take place in a safe and inclusive environment.

(c) Management

School management should be providing direction and guidance to all staff and students, with a view to making the best possible use of the available resources towards the attainment of clearly stated objectives. Management should be based on high ethical standards, and transparent rules of behaviour and administration. The participation of parents and the local community is potentially associated with the mobilisation of additional resources for the school, with increased accountability and ultimately with improved overall performance of the school.

Possible strategic interventions aimed at improving school management include:

- 1. Training of Head Teachers and School Management Committees
- 2. Development of Guidelines for School Management Committees

(d) Assessment and examination

One of the strongest influences on what goes on in the school is the nature of the examination and assessment system. The saying goes: "what is tested is what is taught". It follows that if teachers and books are focused on producing the right answers to a sample of questions demanding just that, then the most likely result is going to be rote learning of content with no deeper understanding, let alone ability to apply or synthesise knowledge. There are consistent complaints that the current examination practices are plagued by the existence of rote learning.

In the case of Punjab there are currently two major systems, the Punjab Examination Commission (PEC) and the Punjab Education Assessment System (PEAS). PEC assesses learning outcomes of students through the administration of tests to <u>all</u> students in grades 5 and 8, while PEAS assesses performance of the system via testing of students in Mathematics, Social Sciences and Language through a sample of students in grades 4 and 8, and correlating the results to a number of variables, the analysis of which could potentially inform the development of policy options and alternatives at various levels.

PEC has been criticised for alienating teachers by not effectively disseminating its results back to them. Another criticism is the consistent claim among many stakeholders that malpractices and cheating regularly occur in PEC examinations.

PEAS grew out of the national assessment system as part of a provincial based priority programme to institutionalize student assessment as a permanent feature of the education system. It provides evidence-based research on a number of parameters and has a huge potential in assessing institutional performance. This potential, however, does not seem to be fully recognised or acknowledged at the School Education Department level.

The professional level of its staff and the quality of products emerging from PEAS are deemed to be of international standard.

4.3.3 Quality of Outputs

In the analysis of the <u>Inputs- Process-Results Cycle</u>, a distinction is often made between the immediate Outputs/Results and what are labelled Outcomes, which denotes a somewhat higher order and a more conscious consequence of the process. Outcome is an indication of a type of result that may involve a productive activity beyond the initially planned process. Finally, the concept Impact may be applied to reflect a synergy between the immediate results and a set of interacting influences of a more long-term nature.

When we talk of <u>outcomes as the result of learning</u>, it is precisely because they tend to imply a level of intellectual activity on part of the student that goes beyond the immediate process of the teacher-student interaction. It implies a degree of <u>independent intellectual processing</u> of the learning inputs and of the immediate learning result.

(a) Test scores

An increasingly popular way of assessing student performance and learning outcomes is through the application of standardised tests. International test schemes like TIMMS²⁰ and PISA²¹ are a reflection of this trend, which seeks to compare the performance of national systems of education against each other. In Pakistan, NEAS and PEAS use student test scores in assessing the performance of education systems: the former functions at the national level and latter in the provinces. NEAS data is collated from PEAS.

(b) SLOs

Student Learning Outcome (SLO) is an indicator of the desired level of competency by the student in a given subject at a given level. SLOs have developed from a practice in the late 1970s of defining <u>objective-based education</u> as a means to differentiate classroom instruction and learning. In order to achieve such means, the results of student learning were specified in behavioural terms. With the advent of the SOLO taxonomy (see below), it became possible to specify the various levels of learning outcomes in a fairly precise language.

In Punjab, the official Curriculum and the Punjab Examination Commission use two different taxonomies for the specification of the level of learning outcomes in parallel. The difference between the two is briefly described below.

Bloom's Taxonomy

Bloom's Taxonomy is a classification of <u>learning objectives</u> within education. It refers to a classification of the different objectives that <u>educators</u> set for students (learning objectives). Bloom's Taxonomy divides educational objectives into three "domains": <u>Cognitive</u>, <u>Affective</u>, and <u>Psychomotor</u>.

Within the domains, learning at the higher levels is dependent on having attained prerequisite knowledge and skills at lower levels. In the cognitive domain Bloom's taxonomy specifies six levels: 1. Knowledge, 2. Comprehension, 3. Application, 4. Analysis, 5. Synthesis, and 6. Evaluation.

For more than 40 years Bloom's taxonomy served as a widely acknowledged frame of reference for specifying learning outcomes. In the late 1990s and the early 2000s, it had serious

²⁰Trends in International Mathematics and Science Study (TIMSS)

²¹The **Programme for International Student Assessment (PISA)** is a worldwide study by the <u>Organisation for Economic Co-operation and Development</u> (OECD) in member and non-member nations of 15-year-old school pupils' scholastic performance on mathematics, science, and reading. It was first performed in 2000 and then repeated every three years.

competition from the so-called SOLO taxonomy, which made it possible to specify learning levels at an even more sophisticated degree of differentiation.

The SOLO Taxonomy

The Structure of Observed Learning Outcome (SOLO) taxonomy is a model that describes levels of increasing complexity in student's understanding of subjects.

The model consists of 5 levels of understanding

- Pre-structural The task is not attacked appropriately; the student hasn't really understood the point and uses too simple a way of going about it.
- Uni-structural The student's response only focuses on one relevant aspect.
- Multi-structural The student's response focuses on several relevant aspects but they
 are treated independently and additively. Assessment of this level is primarily
 quantitative.
- Relational The different aspects have become integrated into a coherent whole. This
 level specifies an adequate understanding of some topic.
- Extended abstract The previous integrated whole may be conceptualised at a higher level of abstraction and generalised to a new topic or area.

(c) Completion and Pass rates

Common indicators for the quality of outputs are the completion rate, which specifies the proportion of a given cohort (age group) of students, who make it to the end of the secondary cycle. A corresponding indicator is the pass rate, which specifies the proportion of a cohort, who successfully passes the final examination of a given grade or cycle.

4.4 MANAGEMENT AND GOVERNANCE

An education system exists within the realities of its socio-political environment. Improvements in the sector cannot be sustained (and even initiated) without triggering a change in the thought process of the key stakeholders.

The Punjab education sector also functions within a socio-political environment that strongly influences policy and practice. Over the last few years the sector has been placed at the highest priority and receives support directly from the provincial Chief Executive. As the vision of improved education gets implemented, it faces a number of hurdles at the management level. These include traditional issues of the organisations functioning in the system and external and internal attitudes towards the subject.

Organisationally, the sector has a mix of new reform organisations working, sometimes in parallel, with the traditional structures. The Programme Management Information Unit (PMIU), PEC, PEF and PEAS have emerged as new structures focused on a forward looking, improved

functioning of the education sector. The Directorate of Staff Development (DSD) is an older nomenclature that has completely revamped its approach to professional development under the new reform process. Similarly, the textbook board faces (and has adopted) the new textbook policy. In contrast, the Secretariat and the district set-ups have a more traditional outlook (devolution of 2002 notwithstanding). Personnel management continues to be hostage to older civil services rules and even the accountability systems follow an anachronistic input-based approach.

Changes brought in by the influence of Punjab Education Sector Reform Programme (PESRP) and "Roadmap on Education" has shifted the accountability towards outputs (especially the latter in the district indicators focuses on outputs). Sustainability of these efforts will require systemic changes to the management approach. Three major, overarching strategies are required:

- 1. A strategy to engage and influence key stakeholders for a change process.
- 2. Coordination across the new and the old systems and a gradual replacement of the older systems with new ones built on the vision of the reforms.
- 3. A sustainable output-based accountability mechanism.

A prerequisite to an effective accountability mechanism is a culture of data use supported by high quality data collection and analysis. Emergence of the private sector has drastically changed the landscape of education sector delivery in the province. The recent Private School Census of the PMIU has revealed a 43% enrolment in private schools. The significance of private sector cannot be overstated.

"Rapid expansion of the private sector has been the result of lowered confidence in public sector schools. The rise provides opportunities as well as challenges. It increases the potential for public-private partnership to achieve the targets identified by Article 25A. Punjab Education Foundation (PEF) has harnessed this potential to some extent in its 3000 partner schools. Irrespective of the potential the private sector cannot expand in a laissez-faire manner and at the cost of the state's abrogation of its core constitutional responsibility of providing quality education to all students of school going age. The current Public Private partnership has been based on the greater market demand for private schools (as determined by the LEAPs study) and not an evaluation of absolute standards and outcomes of the current private sector education. Control of the state on education standards and values of the next generation of citizens of the province, as determined by the Constitution and through a political process, cannot be abridged. Therefore, at a strategic level, the state will have to determine the education priorities and standards, and regulate their enforcement across all school types".

4.4.1 Stakeholder Analysis

A stakeholder is anybody who can affect or is affected by an organisation, strategy, project or programme. They can be internal or external to the organisation or project and they can be at

various levels. Some definitions suggest that stakeholders are those who have the power to impact an organisation or a project in some way. A simple classification could include:

- Users/beneficiaries (direct and indirect);
- Governance (legislative, ministries, steering groups/boards, management units);
- Influencers (treasury, donors, political groupings, religious groups, AOGs, ACCI, the media) and
- Providers (suppliers, NGOs, partners).

The direct beneficiaries of the education system are the students, and their families and communities are indirectly benefited. Employers and others who demand the skills an educated labour force can supply are also beneficiaries. Ultimately, the whole society is a beneficiary as an educated population is critical for economic growth and harmonious development of the country.

Governance of the education system involves the legislative, regulatory and executive functions of the system. It includes parliament, the government with its ministries and their administrative levels, various coordinating bodies and project management units.

Influencers are those who exercise certain leverage on the functions of the system without being directly involved. They may influence the size of the resource envelope, attitudes and actions of staff, as well as the behaviour of students, parents and teachers.

Providers are those who deliver specific services to the users. They may be government or privately run institutions, NGOs or specific projects.

Stakeholder Mapping

A simple way to map the stakeholders is to situate them in a four-field table depicting their level of interest and their degree of power. Focus of attention should be on those who have a high interest in and/or a high power to influence the outcome of a given activity. A <u>tentative</u> mapping could look like the one below.



Figure 4.2: Stakeholder Mapping Matrix

Fields 1 and 2 represent high-powered stakeholders. As far as quadrant 1 players are concerned, one should try and meet their needs i.e. engage and consult them on their interest area, try to increase their level of interest, and aim to move them into the right hand box no. 2. Quadrant 2 stakeholders are the Key players. Efforts should focus on this group. One should try

and involve them in governance and decision-making bodies, and they should be engaged and consulted regularly.

Stakeholder Analysis

There are three tiers of stakeholders that can be mapped in terms of level of influence i.e. agents of change and levels of motivation/interest to address and resolve issues in the education sector.

The first group has been classified as stakeholders with a very high level of influence as being directly responsible or affected by quality and challenges of education, with much more at stake and hence high level of interest in propelling change. This includes:

- Teachers
- Political stakeholders: Chief Minister, ruling political party, religious political parties
- School Education Department and supporting organizations/departments: Secretary, SED Planning Wing, P & D Board, Punjab Examination Commission, PMIU, Teacher Education departments, UoE

External stakeholders include madrassas and religious institutions, private sector schools and other public sector departments such as health and social welfare.

The second group of stakeholders includes those who are working closely to the education sector or are affected by quality of education system, are in position of being agents of change, however they have adapted to the status quo due to convenience, lack of interest and in some cases for their sustainability. This list would include:

- Standing Committees on Education are dependent on political will.
- Teachers' Associations focus more on their own management-related issues rather than issues pertaining to teaching and instruction.
- Employers that require skilled labour that are either illiterate or lack awareness, or employers that are not able to find skilled labour with relevant qualifications.
- Finance Department
- Donors & Contractors
- Printers and Publishers' Associations
- Punjab Public Service Commission (PPSC) has limited powers and no direct linkages to education sector
- Media
- NGOs working in education sector have comparatively lesser power of influence but their own sustainability is dependent on combating the challenges and hurdles of development of education sector.

The third group of stakeholders includes individuals/institutions who have very high stakes in the education sector but are powerless in terms bringing change or impacting policy and decision-making. This includes:

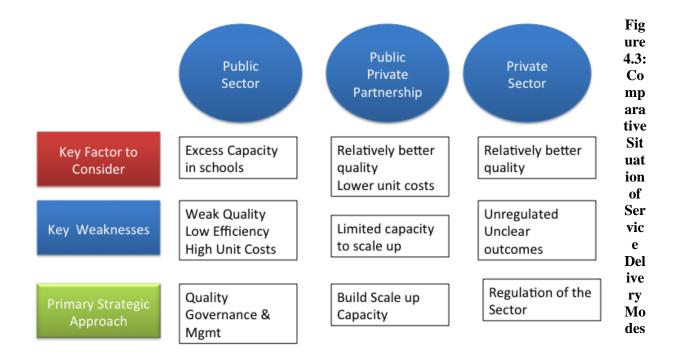
- Parents and Students
- Education managers at the district and grass-root level: i.e. DCO, EDO (Education), Dy. DEO, AEO, Head teachers
- Non-registered private schools

For successful implementation of the sector plan, engagement strategies will require to partner the powerful and empower those who have a strong interest.

4.4.2 The Sector Strategies

As already discussed Punjab has three main delivery systems: public sector, public private partnership (PPP) and the private sector. While service in delivery in the latter remains with private schools the PPP approach managed by the Punjab Education Foundation (PEF) falls within the framework of the official policy, including curriculum and standards (as modified by the government for the special situation of PEF model). The private sector, outside PEF management, is regulated by the Punjab Private Schools Ordinance 1984 which does not consider issues of education imparted within the private schools and possibilities of deviation from the state determined outcomes of education for students in these schools.

While all these sectors have significance as potential contributors to achievement of the constitutional target of Article 25A each has a different set of comparative advantages and shortcomings as seen in Figure 4.2.



In case of <u>public sector schools</u> excess capacity exists, depicting low efficiency resulting from weak quality. The situation leads to high unit costs in terms of expenditure per student. Strategically the public sector can absorb more children without significantly adding to the total expenditure (and while reducing per unit cost) by <u>focusing on quality and governance</u> more than expansion.

As quality and governance interventions have a slightly longer gestation period for improvements on ground the <u>interregnum requires an increased role for the PPP</u> approach as these schools have demonstrated qualitatively better results than the government run public sector. The main weakness faced by PEF is the ability to scale up its operations. It currently manages around 3000 schools as against 58,000 in the public sector. In parallel to PEF around 300 schools are managed by the Directorate of Community Public Participation (DPP). To become an effective supporter of the public system, PEF (and DPP) will need to <u>enhance its capacity to scale up</u> its operations.

In case of private schools again, a perception of relatively better quality exists (also demonstrated in the LEAPs study) but the situation of classroom practices and potential outcomes for students remain unclear. Uncontrolled expansion of the sector has increased the risk of 'hidden curricula' finding their way into the classrooms while also raising the loss of private investment into this education. As the quality is only relatively better the eventual outcomes for these students may not be very different from their public school peers. A case for a more comprehensive state regulation remains strong. The latter should focus mainly on outputs and outcomes of the private sector and not inputs and even processes.

A set of minimum standards to be followed by all three sets will have to developed and implemented over a realistic timeframe.

5. STRUCTURE AND FUNCTIONS OF THE EDUCATION SECTOR

As already discussed in Chapter 3, the service delivery in the School Education Department has been divided across a number of organisations. Each organisation provides a specific service used directly or indirectly in schools. The SED is responsible for school management through its field formations and the teachers and head teachers employed. Other organisations like the Punjab Textbook Board, the nine Boards of Intermediate and Secondary Education, the Punjab Examination Commission and the newly formed Punjab Curriculum Authority provide specific specialised services. The Punjab Education Foundation (PEF) has a unique mandate of management of public-private partnerships in making education accessible to poor children.

This chapter focuses primarily on the functions required to deliver education within the frameworks of quality, enrolments and governance. The subsets have been structured on the priorities of the Punjab Education Roadmap.

5.1 QUALITY

Quality has primarily been focused on an input and process approach. Outputs and outcomes have not driven policies. While useful PEAS data exists, it has never been utilised in system improvement. An outcomes-based understanding and targeting of quality, as a concept, has been a critical missing element in education policy and planning. Resultantly, the product of quality inputs has been rote learning in the classrooms. Key quality inputs focused for PSESP are:

- 1. Standards
- 2. Curriculum
- 3. Teachers
- 4. Textbooks
- 5. Examinations
- 6. School Environment

Standards for output, and a number of quality inputs, have not been officially determined and notified. These include teacher quality (specifically pre-service) and examinations. Substantive improvements have been made in textbook development and review processes as well as in inservice teacher training but major improvements are required in all aspects of quality inputs.

PSESP targets improvement of quality of education for all students through improvements in the ability of the key quality factors and making it a priority area in education service delivery. The main strategic objective is to:

Improve the teaching-learning process in the classroom in order to allow a shift from rote learning to cognitive development and conceptual understanding.

5.1.1 Standards

Education, like other service delivery systems, must pursue benchmarks for each input, process and output. In Punjab, standards for output, and a number of quality inputs, have not been officially determined and notified. These include teacher quality (specifically pre-service) and examinations.

The Federal government had the mandate for national standards for education under the law promulgated in 1976 under which curriculum and NOC for textbooks were also moved from the provinces to the Federal Ministry of Education. The latter never pursued this part of the mandate, and standards have never been developed as a comprehensive set as benchmarks for education service delivery. While provinces could develop their own standards during this period (as long as they were not below the national standards) a standards approach was never developed.

The new Provincial Curriculum Authority has the mandate for development of education standards across the sector; review, develop and implement curriculum; and approval of textbooks in Punjab. It provides an opportunity to develop a set of standards to improve delivery and outcomes of education.

(i) Strategic Objective(s)

The PSESP targets a standards based approach to education management, service delivery and accountability. The main strategic objective being: Standards based education management, planning, service delivery and accountability

(ii) Key Strategies

Standards have to be introduced *ab initio* starting with an understanding of the concepts involved and then development of standards for all inputs, processes and outputs. Moreover, there would be a need to develop local capacity in standards-based education approach. The newly formed Provincial Curriculum Authority has the mandate to develop and implement standards and has to be capacitated to undertake the task.

- 1. Develop and notify standards for all education inputs, processes and outputs.
- 2. SLOs are to be used as the main, overarching indicators for quality at a systemic level (Functional and effective PEAS).
- 3. Capacity development of Curriculum Authority to develop and manage standards of education.

5.1.2 Curriculum

Curriculum review has been devolved to the provinces only recently. Punjab lacks capacity for review and has adopted the last curriculum (2006) prepared by the federal government for implementation. A Provincial Curriculum Authority has been set up through legislation to replace the mandate of the Curriculum Wing of the MoE. It will need time to develop capacity to review curriculum.

A more endemic issue in relation to curriculum has been the lack of a structured implementation framework wherein all quality inputs including teaching and assessments are based on curriculum. In fact, most teachers and education managers have never seen a curriculum document. Historically, the only area that used a curriculum was textbook development. Recently, the DSD has prepared teachers' guides on curricular concepts not directly taken from textbooks.

(i) Strategic Objective(s)

The PSESP touches two facets of the domain. First is the development of a Curriculum Implementation Framework (CIF) to increase the possibilities of achievement of the objectives of the curriculum. The second facet is development of a process (and capacity) for review of the curriculum. The former is based on a more immediate need while the latter may not be required till the next curriculum review becomes due. The following strategic objectives have been targeted by the PSESP:

- 1. Effective implementation of curriculum 2006 to ensure maximum possible achievement of the objectives of the curriculum.
- 2. Capacity development of the School Education Department, Provincial Curriculum Authority and related organizations to review, implement and monitor the implementation of the curriculum.
- 3. Enhance expertise in curriculum review and development in the province

(ii) Key Strategies

- Implement the curriculum through a comprehensive implementation framework that includes textbooks, teacher training (pre-service & in-service) assessments, a plan to disseminate the curriculum to all stakeholders and a process for receiving feedback.
- 2. Development and implementation of standards for curriculum review.
- 3. Assessment of the capacity needs of the newly formed Provincial Curriculum

Authority and preparation and implementation of a capacity development plan.

4. Introduction of assessment as a mandatory subject in pre-service teacher education

5.1.3 Textbooks and Learning Materials

The PTBB continues to work within the framework of the National TLM Policy 2007. Although a new policy more suited to Punjab has been drafted it has not yet been approved. The Pakistan Education Task Force rated the quality of textbooks prepared under the new Curriculum and TLM policy by Punjab as best among the provinces. A rigorous process for review of textbooks has been invoked by the PTBB to develop quality textbooks with inclusion of schoolteachers and subject experts. The key issues that still need to be addressed are institutionalisation of the TLM Policy processes through development of PTBB's capacity as a regulator, and development of standards for textbook preparation and evaluation including a process of field-testing. A process for capacity development of publishers and authors has been initiated but more needs to done.

Recently, DSD has prepared teachers' guides but TLM beyond the guides is either unavailable or not used. All middle schools and most high schools have libraries but they remain largely unused and there is no monitoring of the material maintained. Usage of science labs is low due to non-availability of technicians and low ability to replenish materials. In some cases laboratories are not available.

(i) Strategic Objectives

Fundamental changes in the textbook development and review processes are required. Similarly, supplementary learning material and processes need to be made available and used effectively. Three main strategic objectives for preparing quality textbooks are:

- 1. Prepare quality textbooks that cater to learning needs of the students and assist in their cognitive development and conceptual understanding.
- 2. Enhancement of provincial expertise and capacity to review and develop quality textbooks and supplementary learning material.

Develop, implement and monitor implementation of standards for learning support units in schools like libraries and laboratories.

(ii) Key Strategies

- 1. Standards need to be developed for textbook development and evaluation.
- 2. Capacity development of textbook publishers, authors and editors in development of student-centred activity based TLM and standards.
- 3. Capacity assessment &development of the PTBB to function as a regulator and facilitator for development of textbooks and TLM.
- 4. Capacity development of PCA to review and approve textbooks.
- 5. Mandatory courses on textbooks and TLM in the pre-service teacher education programmes. (To also be addressed in in-service teacher training by DSD)
- 6. Revise standards for science laboratories in Secondary and Higher Secondary Schools
- 7. Ensure implementation of standards, utilization and maintenance of standardized science labs in all Secondary and Higher Secondary Schools.
- 8. Develop standards for school libraries (primary, middle, secondary and higher secondary levels).
- 9. Establish standardized libraries in all schools and ensure utilization of libraries.

5.1.4 Teacher Development

Teaching learning process continues in the traditional non-participatory lecture mode. In-service teacher training processes have been greatly improved through the work of the DSD in preparation of a continuous professional development programme.

Pre-service teacher training forms the weakest link in the quality management cycle. Low quality and malpractices, especially, in private institutions and distant learning courses have damaged teacher quality. Standards for pre-service teacher education were developed by the HEC but the provincial government has not adopted them. No accreditation system exists though the DSD is currently trying to work on the concept. A draft 'Strategy for Teacher Education' has been prepared by the DSD that covers the issues comprehensively.

(i) Strategic Objectives

Teaching forms the central link in the quality chain. Effective output is not possible without changing the teaching-learning process in the classrooms. The ability to bring about the change depends on the quality of both pre-service education and in-service professional development of teachers. A regulatory body needs to be established to assess and monitor teacher education standards and quality of teachers. In-service teacher education needs to be devolved to the district level as teachers are accountable to and evaluated by the district education management. Pre-service and in-service teacher training content must be holistic in its approach i.e. encompass all educational inputs, processes and contexts. For example not just include pedagogical instruction but also areas of curriculum development, assessment, developing teaching learning material, ECE, multi-grade teaching, inclusive teaching practices, and DRR preparedness.

E-learning and use of technology is a new concept for teachers to improve their teaching skills and quality of teachingin Public schools of Punjab. The present era depends on new studies carried Internationally and to reach such studies one has to rely on the internet. Our teachers need to be aware and trained on the effective usage of e-technology.

- 1. Prepare a high quality teaching force that can help children develop higher order thinking processes.
- 2. Capacity development of DSD to undertake regulation of in-service and pre-service teacher education standards, implementation of PSTE and induction trainings.
- 3. Sustainability of CPD programme under the DSD.
- 4. Introduction of e-learning/ use of technology in teaching practices under CPD programme

Key Strategies (ii)

- 1. Finalise, approve and implement the draft 'Punjab Strategy for Teacher Education (PSTE)' to raise the status of teacher education and improve quality of teacher education and teaching practice.
- 2. Align pre-service and in-service teachers' education curriculum & training content with school curriculum based on SLOs.
- 3. Develop and implement standards for pre-service²² and in-service teacher education.

²² Standards for pre-service teacher education are to be adapted from work already completed by NACTE and STEP in consultation with HEC and Higher Education Department.

- 4. Design and implement an induction training programme for new teachers.
- 5. Train teachers in e-learning/use of technology in teaching practices and multigrade teaching.
- 6. Design and prepare material on Health, Hygiene and Nutrition for teachers, head teachers and school councils
- 7. Review capacity and development of the DSD to regulate and monitor teacher education standards.
- 8. Strategy for devolving of in-service teacher training from DSD to districts.

5.1.5 Examinations/Assessments

Four different assessment situations prevail in the province: PEC, internal school assessment, BISE and PEAS. PEC conducts exams for grades 5 and 8 through annual high quality testing across the entire province. The main problem appears to be a perception of prevalence of cheating and absence of an effective dissemination process of the analysis of PEC's findings. The internal school assessments conducted by teachers continue to be on the more routine style that encourages rote learning. The secondary and higher secondary examinations conducted by the BISEs also follow a similar pattern and, in fact, drive the teaching-learning process in the classroom. Both need to change. With 9 BISEs in the province, standardisation continues to be a concern despite reforms to the exam paper development process.

PEAS conducts systemic diagnostic assessments but has recently produced a report for SLOs in 2011. Its work, however, has not been used in review and reform of the system.

(i) Strategic Objective(s)

- 1. Ensure quality assessments in schools as well as in public examinations to encourage a move towards testing of higher order thinking skills.
- 2. Assessment for system diagnosis is made more effective.

Enhance expertise and capacity in assessment and evaluation in the province.

(ii) Key Strategies

1. Review standards for examinations conducted by the BISEs to prepare and implement

curriculum based assessment tools.

- 2. Review standards for PEC examinations.
- 3. Review dissemination processes of PEC and include a feedback mechanism to evaluate impact of its work on the teaching learning process.
- 4. Review dissemination processes of PEAS and include a feedback mechanism to evaluate impact of PEAS's work at the systemic level.
- 5. Capacity assessment and development of BISEs, PEC and PEAS.
- 6. Effective coordination on assessment processes needs to be institutionalized amongst examination-related bodies (PEC, PEAS, BISEs, DSD, SED, HED, PEF).
- 7. Third Party evaluation of school assessment system is required to identify gaps in quality and management.
- 8. DSD should include training on assessments in its professional development programmes to enable teachers to test students in higher order thinking skills as per curriculum needs.
- 9. Introduction of assessment as a mandatory subject in pre-service teacher education.
- 10. Monitoring and mentoring for assessments is required at the school level.

5.1.6 School Environment

The situation of physical facilities has vastly improved over the last few years through support of the PESRP. The main deficit appears to be the lack of standards of infrastructure that suit educational needs and local climatic and geographic conditions. Issues of corporal punishment, hierarchical cultures in schools and classroom practices that discourage critical thinking continue. The third critical issue is of health and nutrition of students, which impact the child's ability to learn. A programme is being designed by the Department of Health (DOH) for improving health and Hygiene situation of students in schools. The project is being developed under the supervision of the Additional Chief Secretary(ACS) Punjab. Co-curricular activities had receded in schools but recently an initiative has been undertaken to revive sports in schools and a speech competition across Punjab has also been initiated.

(i) Strategic Objective(s)

Development of a physical and social environment in schools that help children enjoy the learning process.

(ii) Key Strategies

- 1. Review standards for school infrastructure as per educational and local environmental needs.
- 2. Awareness campaign against corporal punishment.
- 3. Teacher and head teacher training on child-friendly approaches in school and class management.
- 4. Health/hygiene and nutrition programmes for students introduced in schools

5.2 EARLY CHILDHOOD EDUCATION

In 2003, the National Curriculum on Early Childhood Education was prepared but no provincial government was able to implement it beyond a select set of schools. Punjab's situation is similar. The traditional 'Kachi class' is the prevalent pre-primary ECE which fails to match the parameters of the ECE concept of the national curriculum. Currently, DSD has developed training modules and initiated training on ECE. The University of Education offers a degree in the subject and ECE forms a part of the TORs for the powerful Punjab Education Commission. At present, no institutionalised policy on ECE exists and most education managers have limited understanding of ECE concepts. Moreover, most primary schools have no space, material and/or trained teachers for ECE.

(i) Strategic Objective(s)

Establish quality early childhood programmes in all primary schools in the province.

(ii) Key Strategies

- 1. Institutionalize pre-primary ECE through development and notification of a policy.
- 2. Create awareness and train education managers, head teachers and teachers on ECE.

3. Prepare plan and implement expansion of pre-primary ECE programs to 5000 primary schools.

5.3 SCHOOL LANGUAGE POLICY

The current school language policy is based on a set of assumptions that are not derived from empirical evidence procured through a research process. Resultantly, despite the desire, children fail to achieve significant proficiency in both Urdu and English while their cognitive development remains poor due to, among other things, the language deficiency. In practice, teaching in classrooms, especially in basic education, takes place in the mother tongue irrespective of the prescribed medium of instruction, in the bulk of public schools.

(i) Strategic Objective (s)

Prepare a school language policy that helps improve cognitive development and enhances proficiency of the graduates in English and Urdu languages.

(ii) Key Strategies

1. A research study on school language with a view to developing a policy that ensures a balance between proficiency in the English and Urdu languages and cognitive development.

5.4 ENROLMENTS

While Punjab has better access figures than other provinces, it loses students as it moves from Primary to Middle and onwards (reflected in the NERs of 70, 38 and 26 respectively (PSLM2010-11)). The less than optimal access figures are due to both demand and supply side issues. On the demand side, opportunity cost appears as one of the causes of dropouts. This is caused by 'low expectations' from education in terms of employment based on returns from public sector education and also low capacity to pay. Those who can pay remove their children to private schools as parents have more confidence in these schools. Data collected in the latest private school census by the Punjab government as well as studies conducted by ASER and the World Bank support the parents' perception in this regard. To approach 100% NER at each level, the government will need to introduce strategies that address both demand and supply side issues. The government faces three major structural challenges in achieving higher targets: improvement of quality and relevance, raising confidence of the community in public sector education and meeting budgetary needs.

5.4.1 Relevance

Feedback from the situation analysis revealed low expectations on part of most parents. They considered public sector education as inadequate to meet the needs of the market. The increased focus on private schools emerges from, among other issues, parents having higher confidence in them to provide better employment opportunities for their children. The problem of employability cannot be isolated to a single level as the child's ability as developed right from early childhood education impacts its capacity and skills and therefore productivity, and consequently employability. However, most systems take specific cognisance of the issue when children enter secondary schools. In Punjab (Pakistan), historically a technical stream in education has been an answer. These schemes have failed all over the country for a number of reasons, the key ones being: supply-driven programmes developed without consideration for market demand, inability to employ trained teachers on scale and financial implications which made the programmes unsustainable.

(i) Strategic Objective(s)

Improve returns on education for all graduating children.

(ii) Key Strategies

- 1. Undertake a tracer study to evaluate educational outcomes for graduates of various streams i.e. public, private etc.
- 2. Review curriculum/syllabi for secondary education to enhance relevance to the world of work (i.e. enhance employability).
- 3. Undertake a study to evaluate the causes for failure of the technical stream in schools.
- 4. Linkages between TVE and general education need to be developed.
- 5. Linkages between Higher Education and School Education need to be developed.

5.4.2 Cost Reduction (Free Education)

High opportunity cost reduces NERs at post-primary levels. However, costs also factor into dropouts at primary level. Therefore, reduction of costs, especially for the poorest, willincentivise more schooling by their children. Already, Article 25A has mandated free and compulsory education for children 5 to 16. Punjab has seen successful implementation of the girls' stipend programme for the poorest 16 districts. Similar interventions will be needed. Increasing

confidence in public schooling will have to be supplemented with providing support to the poorest to continue education in either public or private sector institutions.

(i) Strategic Objective(s)

Minimise the direct and indirect costs of education for the poorest.

- (ii) Key Strategies
- 1. Provision of incentives/stipends for children of poor families.

5.4.3 Community Involvement

Community involvement in the education sector has seen mixed results in the province. Overall, most stakeholders met during the Situation Analysis exercise considered it a low success area. The causes include low-level community interest as well as inability of the head teachers to interact with the community effectively. In the few instances of successful community involvement, strong leadership from school was seen as a factor. Community involvement can assist in improving accountability of the school system and consequently develop greater confidence in schools. Communities also have the potential to ensure reduction in dropouts and an increase in enrolment.

(i) Strategic Objective(s)

Effective community involvement to improve enrolments and retention in schools.

- (ii) Key Strategies
- 1. Review the current functionality and capacity of School Councils (SC)s to identify key weaknesses and strengths to develop a strategy for SC revitalization.
- 2. Develop a mobilization strategy to increase effective community participation in SCs
- 3. Training of head teachers for effectively engaging community.

5.4.4 Improved Confidence in Education System

The government has undertaken major reforms in textbooks, teacher training, reduction of teacher absenteeism and other issues. There is a lag between changes internal to the system and perceptions of the community based on historical record. An awareness campaign to help citizens understand the improvements introduced will increase confidence, and consequently, enrolments, in the system.

(i) Strategic Objective(s)

Enhance confidence of the community in the education system.

(ii) Key Strategies

- 1. An awareness campaign to educate parents about school reforms to increase parents' confidence in public sector education.
- 2. Functional PTAs need to be formed in all schools to encourage regular parentteacher meetings.

5.4.5 Effective Non-Formal Education

Given the high levels of dropouts, a strong NFE programme linked to mainstream schooling needs to be developed. At present, the mandate is divided between the provincial department for Adult Literacy and Non-Formal Education and the National Education Foundation. Both work in parallel and also no formal linkages exist with the regular school education system. Even PEMIS does not collect data on NFE enrolments.

(i) Strategic Objective(s)

Provide a second chance to drop out children to enter mainstream education.

(ii) Key Strategies

1. Formal linkages between the NFE and regular schools through agreement between Adult Literacy, NFE and the SED.

Students enrolled in NFE and Adult Literacy programsneed to be registered and tracked. EMIS is to collect data on NFE students and award unique ID if one has not been provided already.

5.4.6 Disaster Risk Reduction

Severely affected schools in seven districts of Punjab have been shown in Table 4.1.

Districts	Table 4.1 No of Schools affected by Floods in 2010						Total Schools	
DISTRICTS	Primary	Primary	Middle	Middle	Secondary	Secondary	Boys	Girls
	Boys	Girls	Boys	Girls	Boys	Girls		
Dera Ghazi	137	69	2	10	9	5	148	84
Khan								
Muzaffargarh	280	249	26	17	14	2	320	268
Rajanpur	220	139	16	10	16	4	252	153
Mianwali	10	8	5	2	0	0	15	10
Layyah	24	38	6	6	6	2	36	46
Rahim Yar	42	21	2	2	0	0	44	23
Khan								
Multan	6	15	3	3	2	1	11	19

Source: PMIU-Punjab

The floods have impacted schools' buildings to varying degrees. Schools have remained closed, textbooks and other material destroyed. In more severe cases, school buildings have been destroyed.

(i) Strategic Objective(s)

Develop and implement policy on DRR to mitigate impact of possible future disasters.

(ii) Key Strategies

- 1. Conduct an education system diagnosis (ESD) of the impacts of disasters (in case of Punjab focusing on floods) and its effects on the performance of the system.
- 2. The results of the ESD will establish the basis for identification of relevant policy objectives and strategies, and selection of appropriate DRR priority programmes and accompanying activities (involving all stakeholders).

- 3. School building designs need to be reviewed in light of DRR diagnosis and policy.
- 4. TLM development for teachers and students for DRR preparedness.
- 5. Training of head-teachers and teachers in DRR preparedness.
- 6. Ensure that the capacity of district unit is developed sufficiently to integrate DRR principles and practice into education policy, planning, and implementation processes.
- 7. Community's understanding of DRR enhanced through an awareness strategy.

5.4.7 Inclusive Education

According to the National Policy for the Persons with Disabilities, 2002 (Directorate General of Special Education, Government of Pakistan), "full realization of the potential of persons with disabilities through their inclusive mainstreaming" is required and there is a need for "ensuring greater access of children with mild and moderate disabilities to mainstream and local education is central to achieve determined goals."

The policy was followed up by the National Plan of Action for the Persons with Disabilities, 2006 (Directorate General of Special Education, Government of Pakistan) which further specifies the need for "rehabilitation services; promoting inclusive education; expanding and reinforcing vocational training; employment including self-employment; legislative support to persons with disabilities; and boosting up public opinion and increasing support to NGOs." The NPA is based on the philosophy that access, inclusion and equalisation of opportunities for persons with disabilities are not possible by isolated interventions. These services should therefore be designed in an integrated way, by pooling and mobilising all resources.

Special education institutions and the Directorate of Special Education, Punjab (established in 1983-84), were primarily functioning under the Education department. In 2003, the Directorate was established as a separate department. The Directorate's functions (as listed in Punjab Rules of business 1974) include formation of policies for special education in the province, matters relating to education and vocational training, teacher training, printing of Braille books, development of curriculum, sports for special children and development schemes.

Under the PLGO 2001, Special Education is a devolved subject up to the district level government and annual and development budgets for "special education institutions" are provided to the respective district government. Services to special students provided at the Special Education institutions are free.

It has only been recently, in July 2012²³, that the Punjab government has approved a policy framework for an inclusive education system for special children suffering from mild and moderate disabilities. A select number of public schools with good infrastructure will be used for a pilot. Special needs students will be admitted to primary and middle classes and teachers of these schools will be trained by master trainers of the department of Special Education, Puniab. According to the department, there are currently 600,000 special needs children of school going age in Punjab and the government plans to initiate a drive to identify these children at the grassroot level in order to improve planning.

In September 2012, Punjab Education Foundation announced it has launched a pilot project of inclusive education for special children in 10 partner schools in Lahore in its first phase²⁴.

Most disabled children never go to school, and those who do, eventually, drop out due to inaccessible school infrastructure and an unfriendly school environment²⁵. The enrolment ratio of special needs children cannot be increased unless primary schools are welcoming enough with an inclusive approach as it is not possible to open special schools at all locations for 600,000 special needs children evenly dispersed across the province. Schools need to be flexible too in order to cater to the diverse needs of children instead of focusing on reinforcing a rigid, uniform system.

While the National Policy of 2002 makes a commitment to inclusive education, implementation requires proper support and facilitation at the national and provincial levels.

A majority of the administrators lack awareness and proper training for identifying and dealing with children with special needs. They cite various hurdles to mainstream classrooms being able to meet the special needs of children with disabilities e.g. their own lack of knowledge, lack of resources and typical class size does not allow teachers to give children with special needs the required extra attention. Parents of special children from lower socioeconomic levels may also come across as non-cooperative. Private schools are more willing to give children admissions with physical disabilities than those with slower mental capabilities. There is a general lack of awareness and acceptance of special children in the community.

(i) Strategic Objective

The strategic objective is to increase enrolment of special needs children by providing them 'participatory' and 'accessible' quality education within the normal school environment so that they integrate into society as self-sufficient, confident and productive citizens. While the costs of setting up special institutions everywhere would be too high, the alternative is to make the regular school system more 'inclusive' and hereby increasing tolerance and integration of special needs children.

²³Daily Business Recorder, August 1st 2012. Secretary Special Education, Punjab, has confirmed and shared the policy with the Situation Analysis team. ²⁴Daily The Dawn, September 25th 2012

²⁵ UNICEF, Examples of Inclusive Education, 2003, http://unesco.org.pk/education/icfe/resources/res26.pdf

(ii) Key Strategies

- 1. Teachers require training in pedagogy of inclusive education. Sensitivity towards children with special needs or belonging to marginalized groups, needs to be built into and reinforced through classroom teaching content and curriculum.
- 2. Revision of standards of physical infrastructure of schools for children with special needs. Modifications may be introduced in current infrastructure.
- 3. Advocacy and communication campaigns for community acceptance of marginalized children and groups.
- 4. Sensitization of students in regular schools towards children with special needs and marginalized groups.
- 5. Formal coordination mechanism required between special education and school education departments as both seem to be working in isolation.
- 6. Conduct a research and also institionalize a research process to highlight equity issues in education across the province.

5.5 GOVERNANCE AND MANAGEMENT OF PUBLIC EDUCATION SECTOR

For implementation of the CM's Roadmap and the strategies to improve the quality of inputs, processes and outputs, the efficiency and capacity of the public sector education management needs to be enhanced and strengthened. While there is excess capacity in public schools in terms of resources, the quality of education offered is poor, there is low efficiency and hence high cost expenditure for little value.

In 2010, a Capacity Gap Analysis was undertaken to identify and assess shortcomings in the capacity of public education sector to be able to efficiently implement its mandate in the context of both its current and future needs. The exercise included over 109 focus group discussions, supported by interviews with decision makers at the provincial education administration centre²⁶ and with education management across six districts of Punjab²⁷. It aimed to involve stakeholders' voice at all management levels of the education sector including that of teachers, school management, district education management, teacher training colleges and supporting provincial administrative departments. An attempt was made to cover all organisations of the education sector.

The Analysis identified key issues. The analysis and the prioritisation documents provide an important basis for capacity development work in the sector. However, these may need review and modification due to the continued provincial reform process that has already undertaken some of the steps identified in the CGA report. The sector plan provides a framework for capacity assessment that was missing at the time of the original CGA. Some of the crosscutting issues identified in the CGA are:

- Merit-based HRM required
- 2. Need for improved managerial efficiency
- 3. Lack of Utilization of Data
- 4. Absence of Integrated and Research-based Planning Process
- 5. Implementation of Monitoring and Evaluation System
- 6. Lack of Coordination & Weak Synergy of Reform Process
- 7. Paucity of Education Experts

²⁶School Education Department, Directorate of Staff Development, Provincial Institute of Teachers Education, Government Colleges for Elementary Teachers, District and Cluster Training Centres, Directorates of Public Education, Programme Management and Implementation Unit, Punjab Textbook Board

²⁷Bahawalpur, Faisalabad, Lahore, Muzaffargarh, Rawalpindi, Sahiwal

5.5.1 Merit Based HRM

The Punjab Education Roadmap has highlighted merit in recruitment and management of human resource as a key area.

5.5.1.1 Recruitment

Recruitment in the education department has been on merit in the last few years. Teacher selection has been on the basis of marks obtained in academic career with a small fraction (5%) being awarded through interviews by a panel. This has left insignificantly low discretion with selection committees. While this has raised credibility of the government and the recruitment procedure, the system does not discriminate between the various pre-service education programmes where differentials nevertheless exist in quality and credibility of examinations. In the absence of standardisation, scores obtained by candidates from different institutions are not directly comparable.

(i) Strategic Objective(s)

Recruitment of the best possible teaching and management force with merit.

(ii) Key Strategies

 Conduct specialized recruitment tests for teachers and managers on the pattern of independent testing services

5.4.1.2 Performance Appraisal and Promotions

Two types of performance appraisal systems exist in practice: the traditional annual confidential report at the personal level and the new district level performance introduced by the Punjab Education Roadmap. The traditional appraisal operates at a personal and not systemic level. Over the years, credibility of the Annual Confidential Reports (ACRs) has been reduced as many officers succumb to undue pressure and write positive ACRs for all. Moreover, ACRs are limited to general ability and professionalism as it is used as a crosscutting instrument for all services. Education-specific performance appraisal indicators linked to the specialised job requirements and challenges do not exist.

The Punjab Education Roadmap focuses on systemic education-related performance indicators. Its main gap appears to be the relative ranking of districts on the basis of overall indicators. This places districts with weaker endowments at a disadvantage. A better option would be to review the baseline for each district and evaluate actual improvements rather than comparing performance against average scores.

(i) Strategic Objective(s)

A performance appraisal system that evaluates outputs transparently and objectively and forms the basis for accountability.

(ii) Strategies

- 1. Review current performance appraisal procedures to link them with educational outputs.
- 2. Review District performance evaluation criteria and notify.
- 3. Assess and develop SED's capacity in performance evaluation of HR.

5.4.1.3 Retention of Quality Managers and Educationists

Transfers and postings of officers are known to be impacted by political pressure in the districts. Qualified teachers and managers do not wish to work in under-developed rural areas and push for postings and transfers in bigger cities. There is no security of tenure for managers, nor any clearly identifiable indicators for performance that are capable of taking into consideration the relative positions of districts and compare relative improvements based on original baseline situation in each district.

(i) Strategic Objective(s)

A standardised and objective transfer and posting policy that allows managers freedom of decision-making and retention of quality managers.

(ii) Strategies

- 1. Provide security of tenure to key positions in the district.
- 2. Provide incentives for key managerial position in rural areas.
- 3. Provide incentives to subject specialists for postings in rural areas.

5.5.2 Improve Managerial Efficiency and Development of Expertise

Sustaining the reform process initiated under the Punjab Road Map and other changes envisaged in the current sector plan require enhancements in the current capacity of the organisations involved in service delivery.

The sector needs two types of professionals: education experts and managers. It suffers from inherent weaknesses in both.

Skill deficiencies exist in specialised areas of education like textbook development, curriculum, examinations and education planning. As these subjects are not taught in most pre-service programmes, expertise in these areas remains weak and mostly dependent on on-the-job learning.²⁸

Beyond the managers from the generalist federal and provincial cadres, management training and understanding remains weak. Most managers at the district level are picked from the teaching cadre. They have no training in management. Although DSD has started training of education managers, the absence of a cadre leads to potential redundancy in the training.

(i) Strategic Objective(s)

- 1. Improve managerial efficiency through capacity development of provincial education sector management.
- 2. Develop capacity of district education departments to implement and monitor all aspects of education (access, relevance, quality and equity) is enhanced.

(ii) Key Strategies

1. Separate cadre created for educational managers.

2. Conduct training for current education managers based on TNA

3. Conduct training for newly inducted managers.

4. Capacity assessment and development of district education department for effective education service delivery.

²⁸ Capacity development strategies for educational experts have been addressed as a cross-cutting strategy under all aspects of "quality".

5.5.3 Utilization of Data

The main problem in EMIS has been the limited use of data. Low demand has curtailed the possibilities of EMIS and only in the current year has it collected data on private schools. It still does not collate qualitative data nor does it generate output-level indicators. Absence of user-friendly analytical documents has also been a factor in discouraging usage.

(i) Strategic Objective(s)

- 1. Introduce culture of data-based decision making
- 2. Increase EMIS's scope to include all education data (including qualitative indicators)

(ii) Key Strategies

- 1. Training of managers in sector on utilization of data.
- Conduct Data (User) Need assessment to develop decision support system for managers.
- 3. Develop decision-making support system as per user need.
- 4. Capacity assessment and development of EMIS as a decision support system.
- 5. Build consolidated database for all education related information including quality related data and indicators.

5.5.4 Integrated and Research-based Planning Process

Lack of coordination also results in parallel and disjointed planning processes. Needs analysis based on relevant research is lacking in planning processes. For planning purposes, the SED requires a Research and Policy wing at SED with qualified and experienced expertise for development of policies, plans and assessment of impact. There is no effective monitoring and evaluation system in place. Planning is based on discrete programmes or projects and despite a lot of reform work key linkages and synergies are missing. The main driving force behind most decisions are inputs, and outputs are not clearly demarcated e.g. SLOs, completion rates etc.

(i) Strategic Objective(s)

Enhance efficiency of planning processes.

(ii) Key Strategies

- 1. Introduce integrated and research-based planning.
- 2. Capacity assessment and development of planning units at different levels.

5.5.5 Improved Monitoring and Evaluation Processes

Monitoring is currently taking place under the PESRP and by the PMIU at the district level. There are gaps in monitoring of out-based indicators as district level monitoring is mainly based on observation of inputs and limited to teacher absenteeism and infrastructure. There is no monitoring of teaching processes. Monitoring of teaching practice does take place by DSD's CPD tiers, but the data is not used at the systemic level by the overall provincial and district education management. Indicators are also not linked to current accountability framework.

There is lack of clarity in roles and responsibility with reference to monitoring and in some cases duplication of work by different departments then leads to wastage of resources. The need for better coordination between departments is a cross-cutting issue across the sector.

- (i) Strategic Objective(s)
- 1. Improve monitoring and evaluation processes.
 - (ii) Key Strategies
- 1. Identify and use both input and out-put based monitoring indicators for various tiers of management.
- 2. Develop oversight mechanism for sector plan implementation.
- 3. Capacity development of PMIU, SED and DEDs for monitoring.

5.5.6 Coordination Mechanism to Strengthen Reform Process

Meeting with stakeholders of various education-related departments indicated that there was lack of coordination between the departments and duplication of work taking place that wasted resources and time.

The absence of coordination has also resulted in minimising benefits of the reform processes, as important synergies have not been optimised. The work of PEC is not utilised in teacher training reforms and PEAS data has not been utilised for system improvements. PEF, PEAS, PEC and DSD reforms function in parallel.

(i) Strategic Objective(s)

- 1. Establish a mechanism to improve coordination between various departments and tiers of the education sector.
- 2. Improve coordination of education sector with private sector, technical streams and higher education sector.

(ii) Key Strategies

1. Strategies for improvement for coordination have been addressed in earlier strategies as a cross-cutting theme

5.5.7 Gender Sensitized Management

A gender sensitized management will not only prove to be a more friendly work environment, but ensure gender equity in both policies and practices. Teaching and working in the education sector are generally considered acceptable for professional careers for women and there has been an increasing number of women in district and provincial management. However gender equity for both men and women must also translate in terms of practice i.e. gender sensitivity in textbook content development, teaching practices, logistical planning, management decisions.

(i) Strategic Objective(s)

Gender awareness and friendly work environment

(ii) Key Strategies

1. Gender balanced managerial approach introduced in work places

5.5.8 Public-Private Partnership

In addition to improving quality of governance in the Education Department, the productivity of public-private partnership and private schools can also be harnessed, under the ambit of Article 25A. Public-private partnerships such as under the Punjab Education Foundation have shown better quality results and theoretically may prove to be an additional asset but practically the partnerships have limited capacity to scale up. There is also the need to evaluate the capacity and engage community schools run by the Directorate of Community Public Participation (CPP) under the Directorate of Public Instruction.

The standards for schools functioning under public-private partnerships and the public education sector vary. Benchmark standards need to be applicable to all sectors.

(i) Strategic Objective(s)

Capitalize PEF 's capacity to effectively support SED in achievement of targets of Article 25-A of the constitution

Ensure that PEF and SED follow common set of standards

Utilize the capacity of 300 community schools of the Directorate of Community Public Participation (CPP)

(ii) Key Strategies

- 1. PEF's capacity assessed and enhanced to accommodate large scale enrolment and retention
- 2. Third party evaluation of impact of PEF's program
- 3. PEF to adopt revised standards of SED
- 4. Evaluate the capacity and scale up the community schools of the CPP to support government in achievement of targets

5.5.9 Private Sector Schools

A census conducted by PMIU indicates there are over 37,000 private schools (84.91% of Non-SED Schools) in Punjab. There is no data available regarding SLOs of students in private sector schools. It is the State's responsibility to ensure the implementation of the curriculum

across the board but no parameters have been laid out for private schools. Currently the private sector is regulated by an archaic anachronistic ordinance i.e. the Punjab Private Educational Institutions Ordinance, 1984. The private sector requires a regulatory framework so that the direction of educational process is on same lines of the public sector. The standards of private schools also need to be in uniformity with quality standards developed by the School Education Department and PCA. There is a need to engage private school managements as stakeholders.

(i) Strategic Objective(s)

Integrate private sector into the government's policy framework.

(ii) Key Strategies

1. Policy framework prepared for inclusion of private sector in Government education objectives and standards

5.5.10 Awareness and Involvement of Key Stakeholders

There is a very broad range of stakeholders but two ends of the spectrum that have an important role to play in achieving education targets are the community at the grass-root level and secondly political representatives.

Engaging the community is a crosscutting intervention throughout the sector plan as it the community that can create a demand for quality education, support school administrations and assist in monitoring the quality of schools. Ownership needs to be developed amongst each community for its schools.

Political representatives, both provincial and local, have limited systemic level understanding of issues plaguing the education sector. Traditionally the focus of policymaking and educational support provided has been restricted to 'access' and not on 'quality'.

- (i) Strategic Objective(s)
- 1. Effective community involvement in the education sector
- 2. Supportive political intervention in the education sector
- (ii) Key Strategies

Strategies for community involvement have been covered under "Access". Strategies for supportive political intervention are below:

- 1. Standing committee on education is made the highest over sight body for the education sector plan
- 2. Sensitization of Political representatives on educational issues

6. FINANCING THE SECTOR PLAN

A sector plan is a living document whose contours shape costing of a sector plan and the latter, like the plan itself, continues to evolve over the process of implementation and review. The latter being and intrinsic part of process of implementation of a sector plan. Essentially the initial plan only gets the ball rolling and is not an immutable document.

The costing of the current PSESP, therefore, provides a starting level outlay estimated on the basis of the various strategies recommended in the plan at this stage. As shown in Figure 7.1 the strategies have four possible implications: immediate implementation on the basis of operationalization of strategies, process designing which would lead to development of an implementation plan, studies that would explore specific strategies and capacity development plans that would create their own costed strategies. These will take different shapes in the next phase of the sector plan called as Sector Plan II in Figure 6.1.

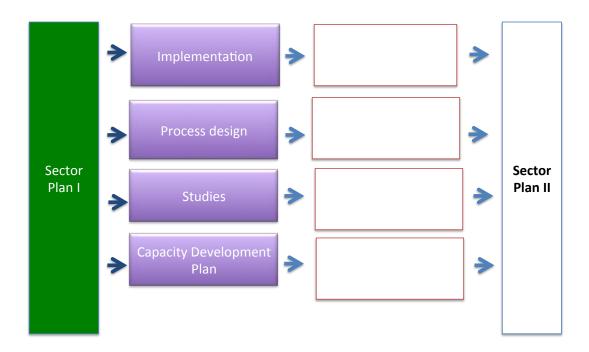


Figure 6.1 How Costing Pans Out?

The PSESP costing has been undertaken broadly in two categories: 'scale' and 'non scale' factors. The 'scale' factors are linked directly to enrolment changes while the costing of 'non scale' factors does not depend, directly, on number of students in schools. The latter includes issues like standards development, capacity assessment and research studies. The former addresses issues like intake and retention.

6.1 DATA LIMITATIONS

The main limitation has been absence of a census since 1998. The projections made by NIPS are at best an estimate. The second issue of data has been contradictions in different sources. The Pakistan Social and Living Measurement Surveys have been published every year since 2003-4 and provide the most authentic time series data in the country. The second critical data set is the Multi-clusters Indicator Survey (MICS) conducted by UNICEF every four years since 2004.

The other data set is the provincial Education Management Information System (EMIS) of the School Education Department. Although the oldest annual data base it suffers from one deficiency: until the current year EMIS only collected data for public sector. It therefore lacks a time series trend for all school types.

PSLM conducted at the household level is, theoretically, the most comprehensive data as it covers all school types. The most recent survey conducted by AC Nielsen has also targeted the household for data collection.

An apparent contradiction exists between the PSLM and the Nielsen survey. The PSLM results show lower enrolment than the latter, as shown in the table below:

Table 6.1: Comparative NER figures of PSLM and Nielsen Survey						
	PSLM 2010-11 (NER) ²⁹	Nielsen Survey				
		(Participation Rate)				
Primary	62	85				
Middle	70	88				
Secondary	62 [*]	75				

Source: PSLM 2010-11 and Punjab Education Survey 2011 (Wave 1): AC Nielsen

These gaps in findings of the two documents can be explained in terms of the response to the 'enrolment drive' of the government. This has resulted in increased enrolment in schools but the real test will be in ensuring retention. The Nielsen Survey envisages this challenge and has included a total of 6 waves to capture a more dynamic picture of the situation. The PSLM already provides a trend from 2004-5 to 2010-11. The Nielsen results appear to deviate even from the trend but as the latter measure participation rates as against NER the deviation cannot be interpreted as being different from PSLM data without additional information.

²⁹ Age groups used for NER are 6-10, 11-13 and 14-15 for primary middle and secondary respectively.

^{*}The figure is a combination of NER 11-13 and NER 14-15 hence a close estimate

The private school census, conducted by the PMIU has helped avoid a choice between the surveys. The costing model uses actual enrolment, as collected by Punjab EMIS. Population projections used have been provided by the National Institute of Population Studies (NIPS).

Two reasons support the use of EMIS data: census is always a better option than a survey and secondly the AC Nielsen survey also presents similar findings.

6.2 COSTING FACTORS

Two costing factors have been used: the 'scale' and the 'non scale'. The costs of the former shifts with changes in enrolment while the latter are not linked to enrolment. These include areas like capacity development, research studies, standards etc.

6.2.1 'Scale' Factors

6.2.1.1 Enrolment Targets:

The 'scale factors' are linked to targets of increased enrolment. Enrolment increases have been based on three factors: population projections, ratio of various inputs to student numbers and other indicators and the cost of increased enrolment. These are strategies that can be directly implemented on ground (i.e. having an immediate impact in schools). The costing for these areas has been calculated as follows:

- 1. <u>Projection of increase in school population over the plan period</u> (based on overall population projection and targeted indicators for access like net intake rates, transition rates and survival rates etc.)
- 2. <u>Ratio of student population to various inputs</u> like infrastructure, teachers, textbooks etc. These ratios have to be agreed within the local context while taking guidance from international practice.
- 3. <u>Financial implications of the additions</u> as per point 2 above: these are based on unit costs of each of the inputs discussed above (or any other input like examinations that might be added). These unit costs are often pre-determined within governmental systems or they can be reviewed with expert input. In case of the government of Punjab these unit costs are clearly provided.

(a) Population Projections

Population projections have been based on estimates made by the National Institute of Population Studies (NIPS).

NIPS projections for the following age groups 3-5, 6-10, 11-13 and 14-15 is depicted in Table 6.2. NIPS has made projections till 2023 with those for 2017 as follows:

Table 6.2: Population Projections										
2013 2014 2015 2016 2017										
ECE (3-5)	6,793,824	6,832,472	6,868,930	6,911,853	6,958,082					
Primary(6-10)	10,847,521	10,947,304	11,049,380	11,148,106	11,242,955					
Middle(11-13)	6,294,235	6,342,841	6,387,959	6,429,917	6,475,212					
Secondary(14-16)	6,501,083	6,356,850	6,225,551	6,282,086	6,330,976					

Source: National Institute of Population Studies

(b) Costing Factors

Three types of costing factors have been used for the 'scale' component. Firstly the ratios of key inputs to enrolment, secondly the education indicators targeted and thirdly the unit costs.

(i) Ratios

The following ratios have been considered for costing. These have been reached through a discussion in the various workshops with professionals in the School Education Department (SED) including senior management of the department and finally in discussions with Chief Education of the Punjab Planning and Development Department and his team.

Table 6.3 Teacher Student & Classroom Student Ratio					
Student-Teacher Ratio Classroom-Student Ratio					
Primary	40:1	40:1			
Middle	40:2	40:1			
Secondary	40:3	40:1			

Calculations of teacher requirements have been made on the basis of the current gap as prescribed by the above ratios and then adding as enrolment projections increase.

The formula is as follows:

For Primary

{(Current enrolment/40) x1} – {number of current teachers)

For Middle

{(Current enrolment/40) x3} – {number of current teachers)

For Secondary

{(Current enrolment/40) x4} – {number of current teachers)

A negative value indicates surplus teachers and in that case new teachers are not added despite increase in enrolment till the relevant ratio is met.

(ii) Education Indicators:

In addition to the above assumptions have been made for the following indicators:

- Net Intake Ratio
- Retention Rates
- Transition Rates

Table 6.4: Key Indicators						
	Public	Overall	Target			
	2012	2012	laiget			
NIR						
ECE		76%				
Primary	93%	96%	100%			
Middle	72%	61%	75%			
Secondary	38%	44%	40%			
Survival Rate						
Primary	57%	75%	100%			
Middle	86%	91%	100%			
Secondary	59%	73%	85%			
Transition Rate						
K-Primary	68%	82%	90%			
Middle	92%	95%	95%			
Secondary	100%	100%	100%			

(iii) Unit Costs

Unit costs used have been the actual calculated by the SED for its various inputs. These are as follows:

Teachers

Beginning Teachers' salaries have been calculated for each of the starting levels for primary, middle and secondary as each is recruited in different pay scales. Also salaries of head teachers have been included as middle level schools get upgraded to secondary.

Table 6.5: Teachers Salary							
Unit Cost Times Yearly Salary							
ESE BS-9	15652	12	187,824				
SESE BS-14	20112	12	241,344				
SSE BS-16	25646	12	307,752				
PPSC Head Teacher High	20744						
BS-17	39714	12	476,568				

Textbooks

Since the government provides free textbooks these have been added to the costs and the current cost per child per level (per annum) have been used for each additional child in the respective levels.

Table 6.6: Text I	Books (Average Cost)
Primary	150
Middle	220
High	370

Other unit costs used in the model are expenditure on PEC examinations for grades 5 and 8 and the costs of teacher training.

Establishment

The cost of establishment and up gradation has also been taken from the current standard SNE used by the SED for up gradation.

Table 6.7: Cost of Establishment and L	Jpgradation:
	Cost in Million
Establishing new Primary School	4.000

Up gradation Primary to Middle	4.000
Up gradation Middle to Secondary	4.500
Average per room cost in Punjab	0.680

Infrastructure ECE

The unit costs for Pre-primary ECE have been calculated as per the table below.

Table 6.8: Costs for Establishing ECE centres						
		Unit	Times	Yearly		
		Cost		Salary		
Teachers Salary		15652	12	187,824		
Aya Salary		10000	12	120,000		
Material		100000	1	100,000		
Total Cost						
				407,824		

Punjab Examination Commission

Finally the unit cost for Punjab Examination Commission (PEC) have also been factored into the model. The Commission conducts examinations for grades 5 and 8.

PEC (Cost per child)	450
----------------------	-----

Inflation

The inflation factor has been based on the past trend of the key cost inputs like teachers and infrastructure.

Inflation %age				
10.00	Teacher Salary			
14.00	Others			

Service Delivery

Three service delivery options have been considered: the private sector, public private partnership (PPP) and the regular government schools. The last two mentioned have been used for calculations of costs. The following principles have been used:

- i. Excess capacity in public schools and upgradation where necessary.
- ii. Expanding the PPP model of the Punjab Education Foundation (PEF) keeping in view current capacity.
- iii. Expansion of PPP to reduce the size of the unregulated private sector.

Costing has been based on enrolment changes in the private sector, the Punjab Education Foundation and the schools owned by the School Education Department. Schools managed by the Punjab Education Foundation can be considered to be a subset of the Public sector as these schools have to follow standards set by PEF which include national-official curriculum and textbooks. The costing has been done in a manner where the PEF share in enrolment increases while that of the unregulated private sector has been reduced. This originates from the PEF concept of using private sector assets for the benefit of the poorest sections of society. Share of the non-PPP public sector also increases but by a lesser percentage given that it already carries huge numbers.

The following table shows the varying proportions of enrolment across each over the plan period. The first column shows the current situation and from thereon the assumptions of the Plan are displayed. There is a secular decrease in the share of the unregulated private sector and corresponding expansion of the PEF enrolments and the private sector.

	Table (6.9: Enrolmen	t Shares ir	n Private, P	PPP and Pu	ıblic	
Level	Category	Base Year	Planned Years				
		2011-12	Y 1	Y2	Y3	Y4	Y5
		%ages					
Primary	Public	56%	57%	58%	59%	60%	61%
	PPP	11%	15%	18%	23%	25%	28%
	Private	33%	28%	24%	18%	15%	11%
	Enrol:	100%	100%	100%	100%	100%	100%
Middle	Public	62%	64%	66%	68%	70%	72%
	PPP	7%	9%	11%	13%	15%	17%
	Private	31%	27%	23%	19%	13%	11%
	Enrol:	100%	100%	100%	100%	98%	100%
Secondary	Public	67%	75%	76%	77%	79%	80%
	PPP	4%	6%	8%	9%	11%	13%
	Private	30%	19%	16%	14%	10%	7%
	Enrol:	100%	100%	100%	100%	100%	100%

Table 6.10 shows the costs per unit incurred by PEF for each of the levels of primary, middle (elementary), and secondary. These have been used for costing the enrolment in PEF schools along with a 10 per cent inflation.

Table 6.10: PEF Unit Cost						
Child per Cos	st:	Pak Rs.				
Level	Monthly Fee	Admin Cost	Total	Annual	Inflation	
Primary	400.00	75.00	475.00	5700.00	10	
Elementary	400.00	75.00	475.00	5700.00	10	
Secondary	450.00	75.00	525.00	6300.00	10	

Source: Punjab Education Foundation

Standards Limitations: Public and PPP

The costing differentials across public schools and PEF are, among other factors, a result of different standards pursued in various schools. These specifically include standards for inputs like teachers, physical environment including facilities. At present the key standard to focus for both the public and PPP models is learning outcome. Once the latter begins to equalise the government can begin to enforce input based standards as well. At that point he unit costs may become close or even equal for both options. This will eventually also be applied to private schools which may market out. However, it is not advisable to focus on these at this point or during the current plan period.

6.2.1.2 Calculating Scale Costs

The table below provides summary of total costs. The total overlay for the 5 year period comes to Rs. 223.17 billion. The plan has lower outlays in the initial years which, continue to rise over the plan period. Main expense is in the form of current teacher gap given in the

Table 6.11: Budget Outlays: Scale Costs								
Public Schools 16.09 34.99 49.22 58.10 64.60 223.0								
PEF	0.17	0.00	0.00	0.00	0.00	0.17		
Total								

Teachers Impact

The main impact on the budget is of additional teachers. These include three components:

i. Additional teachers in current schools as per present enrolment

- ii. Additional Teachers in current schools as per increased enrolment.
- iii. Teachers for new or upgraded schools

The numbers have been added due to the gap between the ratio given in Table 6.3 and the actual ratios on ground. Table 6.12 gives the total requirement which includes head teachers and ayas for Early Childhood Education expansion.

Table 6.12: Teacher Requirement Over Plan Period									
2013-14 2014-15 2015-16 2016-17 2017-18 Total									
Teachers in New Schools	Teachers in New Schools 1000 6000 8500 8500 6000 300								
Additional Teachers	45523	21525	9526	9719	11851	98144			
Head Teachers 0 1000 1500 1500 500									
New Ayas 1000 1000 1000 1000 500									

Table 6.13 shows the additional teachers in current schools. These include, as stated above, the current teacher gap as well as additional teachers required as per increased enrolment.

Additional Teachers in Current Schools							
Years	2013-14	2014-15	2015-16	2016-17	2017-18	Total	
Primary 0 0 0 0 0							
Middle	13614	9963	5424	5584	6463	41048	
Secondary	31908	11562	4102	4136	5388	57096	

The issue of teacher increase appears more difficult as the total increase in teacher requirement over the plan period is which ranges from the low of 46523 in year 1 to 17,851 in year 5. Total requirement over the plan period is 128,144.

Given that the bulk of requirement is beyond the primary school level the constraint becomes even more serious and achievement of the target will either require more flexibility in the teacher student ratios at the middle and secondary levels or expansion in the current teacher production.

6.2.1.3 Projected Additional Children

The total number of additional children in schools at the end of the Plan period is projected in Table 6.9 below

Table 6.10: Additional Children in Schools							
2013-14 2014-15 2015-16 2016-17 2017-18 Total							
ECE	230472	252197	276086	302356	331246	1392357	

Primary	-671719	499673	1627006	711070	922942	3760691
Middle	233129	341901	219533	219533	219533	1233628
Secondary	139548	242838	131025	129801	129801	773014
Total	-68570	1336609	2253650	1362760	1603521	7159690

Maximum addition is at the primary level and the addition in 2015 and 2016 actually reduces in secondary. This is due to the impact of drop outs at primary in the initial years. The strategy is strongly predicated on two assumptions: firstly the improvement in quality of education and secondly existence of an effective Non Formal Education System functioning for primary and middle age children. (The latter will have to developed in pursuance of the strategies given in the Sector Plan as the current plan does not cover NFE in detail).

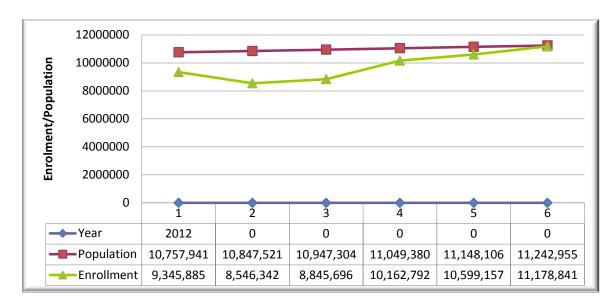


Figure 6.2 Population vs Enrolment (Primary Level)

Figure 6.2 shows the narrowing gap between enrolment and population for children of primary age (6-10 yrs). This shows a trend towards UPE and UPC critical targets of the Education for All (EFA) programme.

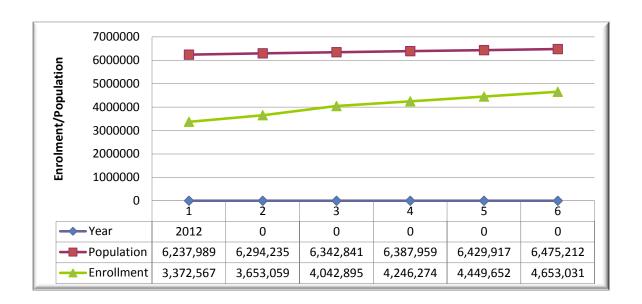


Figure 6.3: Population Vs Enrollment (Middle Level)

Figure 6.3 shows the gap between population and enrolment at the middle level. It is decreasing without actually covering the gap. This emanates from the historical situation of middle schooling of low enrolments induced by high dropouts at the transition points from primary to secondary. Resultantly the current infrastructure (physical and human) has a low base with limitations to absorptive capacity as well.

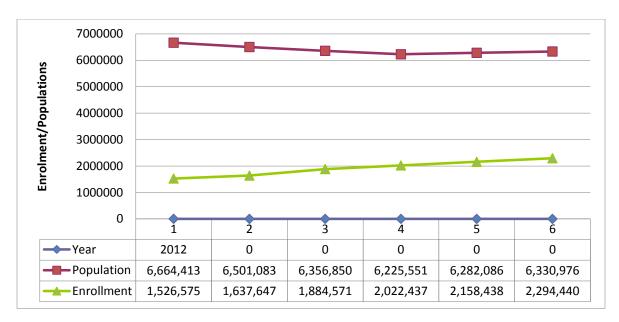


Figure 6.4: Population vs Enrolment (Secondary Level)

The gap also narrows at the secondary level without elimination of out of school children completely. The reasons are similar to the middle level though the gaps are wider at this level, again due to higher drop out levels at this level.

Table 6.10 and 6.11 reveal the challenge remaining after the completion of the Plan period. This leaves only 1% in primary and a high of 64% at the secondary level.

Table 6.11: Level Wise Out of School as %age of Population								
	2011	2012	2013	2014	2015	2016	2017	
ECE	27%	35%	33%	29%	26%	22%	18%	
Primary	6%	13%	21%	19%	8%	5%	1%	
Middle	45%	46%	42%	36%	34%	31%	28%	
Secondary	64%	77%	75%	71%	68%	66%	64%	
Total	29%	39%	40%	36%	30%	27%	23%	

6.2.2 'Non Scale' Factors

Non scale costing has been made in the areas of standards development (or review). Capacity assessment and development plan, Curriculum Implementation Framework and studies included in the plan. Many of the governance and management reforms with minimal costs that mainly require change in operational approach of the government have not been costed. These are as follows:

Standards

Standards emerge as a recurrent theme of the sector plan. As most standards for educational inputs, processes already exist either it will not be a high cost function. Most of the standards will need to be identified and collated into o policy instrument or document of the government. The purpose is to institutionalise the usage of standards rather than re-invent the wheel.

	Table 6.12: Standar	ds Input and	Activitie	s Requireme	nt
S.No.	Area	Person Days Cost per day (Pak Rs.)	No. of Days	Total Estimated Cost (Pak Rs.)	Total Estimated Cost (in Millions)
1.	Standards for all Education Inputs, Processes and Outputs	Regular Cost	-	-	-
2.	Standards for Text Books	150,000	45	6,750,000	6.750
3.	Revise Standards for Science Laboratories in Secondary and Higher Secondary Schools	Regular Cost	-	-	-
4.	Standards for Libraries in schools are revised	Regular Cost	-	-	-
5.	Standards for In-service teachers education	Regular Cost	-	-	-
6.	Standards for pre- service teachers education	Regular Cost	-	-	-
7.	Standards reviewed for examinations	Regular Cost	-	-	-
8.	Physical Infrastructure reviewed	Regular Cost	-	-	-
	Total		1	6,750,000	6.75

Capacity Development

As part of the implementation process of the PSESP, capacity of relevant organisations of the SED will need to be reviewed and enhanced. A number of organisations have been identified for capacity development. The costing for each is described in Table 6.13.

	Table 6.13: Cost of	f Institutions (Capacity	Developmer	nt
S.No.	Area	Consultancy Cost per day (Pak Rs.)	No. of Days	Total Estimated Cost (Pak Rs.)	Total Estimated Cost (in Millions)
1.	PCA	150,000	60	9,000,000	9.000
2.	PTBB	150,000	30	4,500,000	4.500
3.	DSD	150,000	45	6,750,000	6.750
4.	BISE	150,000	30	4,500,000	4.500
5.	PEAS	150,000	20	3,000,000	3.000
6.	SED	150,000	90	13,500,000	13.500
7.	Districts as effective education service delivery unit	150,000	45	6,750,000	6.750
8.	EMIS	75,000	50	3,750,000	3.750
	Planning Units	125,000	45	5,625,000	5.625
	PEF	150,000	120	18,000,000	18.000
	Total			75,375,000	75.375

Studies

A total of 9 studies have also been recommended in the Sector Plan for which the following table has been used as the costing framework for these studies

	Table 6.14: Cost of Proposed Studies							
S.No.	Area	Person Days Cost per day (Pak Rs.)	No. of Days	Total Estimated Cost (Pak Rs.)	Total Estimated Cost (in Millions)			
1.	Phasing out study	150,000	20	3,000,000	3.000			
2.	Community attitudes towards corporal	100,000	45	4,500,000	4.500			

	punishment				
3.	School language policy	125,000	60	7,500,000	7.500
	and practice				
4.	Tracer study to map	125,000	75	9,375,000	9.375
	educational outcomes				
5.	Causes for Failure of	125,000	125	15,625,000	15.625
	technical streams in				
	schools				
6.	Children of low income	125,000	60	7,500,000	7.500
	families				
7.	Status, capacity and	100,000	60	6,000,000	6.000
	functionality of school				
	councils				
8.	Baseline study to	50,000	30	1,500,000	1.500
	develop community				
	education and				
	awareness strategy			1.500.000	
9.	An education system	50,000	30	1,500,000	1.500
	diagnosis (ESD) of the				
	impacts of disasters and				
	its effects on the				
	performance of the				
	system		<u> </u>	50 500 000	
			Total	56,500,000	56.5

Curriculum Implementation Framework

The Curriculum Implementation Framework has also been identified in the strategies. The following table describes the costing for preparation of the CIF. Implementation of CIF has been cascaded into the various other activities in the sector plan while CIF will develop its own set of actions and activities.

Table 6.15: Curriculum Implementation Framework Cost								
Consultancy Cost per No. of Days Total Estimated Cost Total Estimated day (Pak Rs.) (Pak Rs.) Cost (in Millions)								
,	day (Pak Rs.) (Pak Rs.) Cost (in Millions)							
127,500	120	15,300,000	15.300					

6.3 TOTAL EXPENDITURE

The projected costs over the plan period have been summarised in the table below. The total outlay comes out to about Rs. 224.6 billion over a period of 5 years. The outlays for the initial years are lower keeping in view the capacity limitations at the outset. These would largely be addressed through the 'Non Scale' actions, the outlays for which are completely exhausted in the first two years.

	Budge	Budget Outlays for the Plan Period					
Public Schools	16.09	33.02	46.25	54.24	59.42	209.03	
PEF	0.17	0.85	2.96	3.86	5.18	13.03	
Non-Scale	1.38	1.11	0.00	0.00	0.00	2.49	
Total	17.64	34.99	49.22	58.10	64.60	224.55	

Table 6.18 Projected Budget (2103-14 to 2017-18)						
	2012-	2013-	2104-	2015-	2016-	2017-
	13	14	15	16	17	18
Routine Addition		205.15	245.07	308.06	393.01	496.22
Plan Component	0	17.64	34.99	49.22	58.10	64.60
Total Budget	186.50	222.79	280.06	357.28	451.11	560.82
%age change		16%	20%	22%	21%	20%

Exhaustion of outlays does not mean end of the activities as a number of activities in the last three years may be generated through completing the strategies envisaged in the current plan.

The outlays on the 'Non Scale' factors are only 7.8% of the total outlay they provide the critical basis for quality, governance and capacity improvements without which the targets of the 'scale' factors cannot be achieved.

Recurrent and Development Outlays						
Recurrent	14.49	23.55	32.86	41.74	53.09	165.73
Development	3.14	11.44	16.36	16.36	11.51	58.82
	17.64	34.99	49.22	58.10	64.60	224.55

Table 6.19 shows the recurrent and development components where recurrent includes payments for PEF and Development includes the 'non-scale' factors. The recurrent budget includes a 10 per cent non salary component.

6.4 RESOURCE ANALYSIS

The costing-plan process faces two major resource constraints: finances and teacher availability. Table 6.17 and 6.19 show the budgetary comparison of the last 5 years and the increases projected over the plan period.

Table 6.17: Budget (2008-09 to 2012-13)						
	2008-09	2009-10	2010-11	2011-12	2012-13	
	81.1	97.7	134.1	134.1	186.5	
Additional Budget	0	0	0	0	0	
Total Budget	81.1	97.7	134.1	134.1	186.5	
%age change		20%	37%	0%	39%	

Over the last 4 years annual changes in the budget have ranged from 0% in 2011-12 to 39% in 2012-13. Over the entire period average change has been 24%.

In the projected plan period the annual increase ranges between 16% and 22%. The annual average increase is 20%.

Table 6.18 Projected Budget (2103-14 to 2017-18)						
	2012-	2013-	2104-	2015-	2016-	2017-
	13	14	15	16	17	18
Routine Addition		205.15	245.07	308.06	393.01	496.22
Plan Component	0	17.64	34.99	49.22	58.10	64.60
Total Budget	186.50	222.79	280.06	357.28	451.11	560.82
%age change		16%	20%	22%	21%	20%

The increase projected appears to be well within the Government of Punjab's fiscal capacity to increase its education budget.

Impact of Projected Outlays				
Average Budget Increase (2008-9 to 2012-13)	24%			
Average Budget Increase (2013-14 to 2017-18)	20%			

6.5 NFE: THE MISSING LINK

Increased intake rate at the middle and secondary levels cannot be undertaken without an effective Non Formal Education (NFE) programme. As the Department for Literacy and NFE was not a direct partner, although a stakeholder in the process, the interventions of the latter have not been demarcated in the plan. The first step on institutionalisation of the sector plan has to be a joint evaluation of the needs of the PSESP with respect to NFE, development of a plan for Literacy and NFE that can be co-opted into the main PSESP.

A sector plan is a living document whose contours shape costing of a sector plan and the latter, like the plan itself, continues to evolve over the process of implementation and review. The latter being and intrinsic part of process of implementation of a sector plan. Essentially the initial plan only gets the ball rolling and is not an immutable document.

The costing of the current PSESP, therefore, provides a starting level outlay estimated on the basis of the various strategies recommended in the plan at this stage. As shown in Figure 7.1 the strategies have four possible implications: immediate implementation on the basis of operationalization of strategies, process designing which would lead to development of an implementation plan, studies that would explore specific strategies and capacity development plans that would create their own costed strategies. These will take different shapes in the next phase of the sector plan called as Sector Plan II in Figure 6.1.

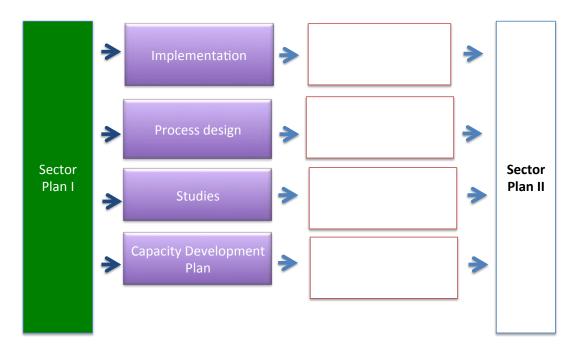


Figure 6.1 How Costing Pans Out?

The PSESP costing has been undertaken broadly in two categories: 'scale' and 'non scale' factors. The 'scale' factors are linked directly to enrolment changes while the costing of 'non scale' factors does not depend, directly, on number of students in schools. The latter includes issues like standards development, capacity assessment and research studies. The former addresses issues like intake and retention.

6.1 DATA LIMITATIONS

The main limitation has been absence of a census since 1998. The projections made by NIPS are at best an estimate. The second issue of data has been contradictions in different sources. The Pakistan Social and Living Measurement Surveys have been published every year since 2003-4 and provide the most authentic time series data in the country. The second critical data set is the Multi-clusters Indicator Survey (MICS) conducted by UNICEF every four years since 2004.

The other data set is the provincial Education Management Information System (EMIS) of the School Education Department. Although the oldest annual data base it suffers from one deficiency: until the current year EMIS only collected data for public sector. It therefore lacks a time series trend for all school types.

PSLM conducted at the household level is, theoretically, the most comprehensive data as it covers all school types. The most recent survey conducted by AC Nielsen has also targeted the household for data collection.

An apparent contradiction exists between the PSLM and the Nielsen survey. The PSLM results show lower enrolment than the latter, as shown in the table below:

Table 6.1: Comparative NER figures of PSLM and Nielsen Survey					
	PSLM 2010-11	Nielsen Survey			
NER 5-9	62	85			
NER 6-10	70	88			
NER 10-16	62 [*]	75			

Source: PSLM 2010-11 and Punjab Education Survey 2011 (Wave 1): AC Nielsen

These gaps in findings of the two documents can be explained in terms of the response to the 'enrolment drive' of the government. This has resulted in increased enrolment in schools but the real test will be in ensuring retention. The Nielsen Survey envisages this challenge and has included a total of 6 waves to capture a more dynamic picture of the situation. The PSLM already provides a trend from 2004-5 to 2010-11. The Nielsen results appear to deviate even from the trend.

Fortunately, the private school census, conducted by the PMIU has helped avoid a choice between the surveys. The costing model uses actual enrolment, as collected by Punjab EMIS. Population projections used have been provided by the National Institute of Population Studies (NIPS).

Two reasons support the use of EMIS data: census is always a better option than a survey and secondly the AC Nielsen survey also presents similar findings.

6.2 COSTING FACTORS

Two costing factors have been used: the 'scale' and the 'non scale'. The costs of the former shifts with changes in enrolment while the latter are not linked to enrolment. These include areas like capacity development, research studies, standards etc.

6.2.1 'Scale' Factors

6.2.1.1 Enrolment Targets:

The 'scale factors' are linked to targets of increased enrolment. Enrolment increases have been based on three factors: population projections, ratio of various inputs to student numbers and other indicators and the cost of increased enrolment. These are strategies that can be directly

^{*}The figure is a combination of NER 11-13 and NER 14-15 hence a close estimate

implemented on ground (i.e. having an immediate impact in schools). The costing for these areas has been calculated as follows:

- 4. <u>Projection of increase in school population over the plan period</u> (based on overall population projection and targeted indicators for access like net intake rates, transition rates and survival rates etc.)
- 5. <u>Ratio of student population to various inputs</u> like infrastructure, teachers, textbooks etc. These ratios have to be agreed within the local context while taking guidance from international practice.
- 6. <u>Financial implications of the additions</u> as per point 2 above: these are based on unit costs of each of the inputs discussed above (or any other input like examinations that might be added). These unit costs are often pre-determined within governmental systems or they can be reviewed with expert input. In case of the government of Punjab these unit costs are clearly provided.

(c) Population Projections

Population projections have been based on estimates made by the National Institute of Population Studies (NIPS).

NIPS projections for the following age groups 3-5, 6-10, 11-11-13 and 14-15 is depicted in Table 6.2. NIPS has made projections till 2023 with those for 2017 as follows:

Table 6.2: Population Projections						
	2013	2014	2015	2016	2017	
ECE (3-5)	6,793,824	6,832,472	6,868,930	6,911,853	6,958,082	
Primary(6-10)	10,847,521	10,947,304	11,049,380	11,148,106	11,242,955	
Middle(11-13)	6,294,235	6,342,841	6,387,959	6,429,917	6,475,212	
Secondary(14-16)	6,501,083	6,356,850	6,225,551	6,282,086	6,330,976	

Source: National Institute of Population Studies

(d) Costing Factors

Three types of costing factors have been used for the 'scale' component. Firstly the ratios of key inputs to enrolment, secondly the education indicators targeted and thirdly the unit costs.

(iv) Ratios

The following ratios have been considered for costing. These have been reached through a discussion in the various workshops with professionals in the School Education Department (SED) including senior management of the department.

Table 6.3 Teacher Student & Classroom Student Ratio					
	Student-Teacher Ratio	Classroom-Student Ratio			
Primary	40:1	40:1			
Middle	40:3	40:1			
Secondary	40:4	40:1			

Calculations of teacher requirements have been made on the basis of the current gap as prescribed by the above ratios and then adding as enrolment projections increase.

The formula is as follows:

For Primary

{(Current enrolment/40) x1} – {number of current teachers)

For Middle

{(Current enrolment/40) x3} – {number of current teachers)

For Secondary

{(Current enrolment/40) x4} – {number of current teachers)

A negative value indicates surplus teachers and in that case new teachers are not added despite increase in enrolment till the relevant ratio is met.

(v) Education Indicators:

In addition to the above assumptions have been made for the following indicators:

- Net Intake Ratio
- Retention Rates
- Transition Rates

Table 6.4: Key Indicators					
	Public	Overall	Target		
	2012	2012	rarget		
NIR					
ECE		76%			
Primary	93%	96%	100%		
Middle	72%	61%	75%		
Secondary	38%	44%	40%		
Survival Rate					
Primary	57%	75%	100%		
Middle	86%	91%	100%		
Secondary	59%	73%	85%		
Transition Rate					
K-Primary	68%	82%	90%		
Middle	92%	95%	95%		
Secondary	100%	100%	100%		

(vi) Unit Costs

Unit costs used have been the actual calculated by the SED for its various inputs. These are as follows:

Teachers

Beginning Teachers' salaries have been calculated for each of the starting levels for primary, middle and secondary as each is recruited in different pay scales. Also salaries of head teachers have been included as middle level schools get upgraded to secondary.

Table 6.5: Teachers Salary					
	Unit Cost	Times	Yearly Salary		
ESE BS-9	15652	12	187,824		
SESE BS-14	20112	12	241,344		
SSE BS-16	25646	12	307,752		
PPSC Head Teacher High	20744				
BS-17	39714	12	476,568		

Textbooks

Since the government provides free textbooks these have been added to the costs and the current cost per child per level (per annum) have been used for each additional child in the respective levels.

Table 6.6: Text Books (Average Cost)				
Primary	150			
Middle	220			
High	370			

Other unit costs used in the model are expenditure on PEC examinations for grades 5 and 8 and the costs of teacher training.

Establishment

The cost of establishment and up gradation has also been taken from the current standard SNE used by the SED for up gradation.

Table 6.7: Cost of Establishment and Up	gradation:
	Cost in Million
Establishing new Primary School	4.000
Up gradation Primary to Middle	4.000
Up gradation Middle to Secondary	4.500
Average per room cost in Punjab	0.680

Infrastructure ECE

The unit costs for Pre-primary ECE have been calculated as per the table below.

Table 6.8: Costs for Establishing ECE centres							
	U		Times	Yearly			
		Cost		Salary			
Teachers Salary		15652	12	187,824			
Aya Salary		10000	12	120,000			
Material		100000	1	100,000			
Total Cost							
				407,824			

Punjab Examination Commission

Finally the unit cost for Punjab Examination Commission (PEC) have also been factored into the model. The Commission conducts examinations for grades 5 and 8.

PEC (Cost per child)	450
PEC (Cost per child)	45

Inflation

The inflation factor has been based on the past trend of the key cost inputs like teachers and infrastructure.

Inflation %age					
10.00	Teacher Salary				
14.00	Others				

6.2.1.2 Calculating Scale Costs

The table below provides summary of total costs. The total overlay for the 5 year period comes to Rs. 423. 62 billion. The plan has lower outlays in the initial years which continue to rise over the plan period

Table 6.9: Scale Factor Cost Outlays									
	2013-14	2014-15	2015-16	2016-17	2017-18	Total			
Recurrent Cost	38091.03	56845.75	70845.84	89095.15	112416.23	367294.00			
Development									
Cost	1767.82	10324.92	16359.92	16359.92	11514.92	56327.50			
Total (million									
Rs.)	39858.86	67170.67	87205.76	105455.07	123931.14	423621.51			
Total in Billion									
Rs.	39.86	67.17	87.21	105.46	123.93	423.62			

6.2.1.3 Projected Additional Children

The total number of additional children in schools at the end of the Plan period is projected in Table 6.9 below

Table 6.10: Additional Children in Schools								
	2013-14	2014-15	2015-16	2016-17	2017-18	Total		
ECE	230472	252197	276086	302356	331246	1392357		
Primary	-671719	499673	1627006	711070	922942	3760691		
Middle	233129	341901	219533	219533	219533	1233628		
Secondary	139548	242838	131025	129801	129801	773014		
Total	-68570	1336609	2253650	1362760	1603521	7159690		

Maximum addition is at the primary level and the addition in 2015 and 2016 actually reduces in secondary. This is due to the impact of drop outs at primary in the initial years. The strategy is strongly predicated on two assumptions: firstly the improvement in quality of education and secondly existence of an effective Non Formal Education System functioning for primary and middle age children. (The latter will have to developed in pursuance of the strategies given in the Sector Plan as the current plan does not cover NFE in detail).

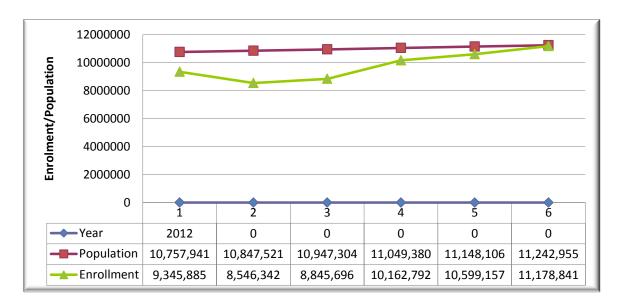


Figure 6.2 Population vs Enrolment (Primary Level)

Figure 6.2 shows the narrowing gap between enrolment and population for children of primary age (6-10 yrs). This shows a trend towards UPE and UPC critical targets of the Education for All (EFA) programme.

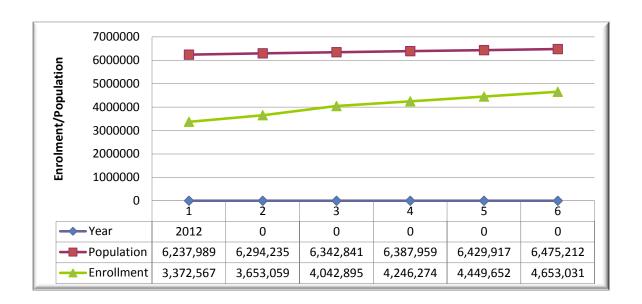


Figure 6.3: Population Vs Enrollment (Middle Level)

Figure 6.3 shows the gap between population and enrolment at the middle level. It is decreasing without actually covering the gap. This emanates from the historical situation of middle schooling of low enrolments induced by high dropouts at the transition points from primary to secondary. Resultantly the current infrastructure (physical and human) has a low base with limitations to absorptive capacity as well.

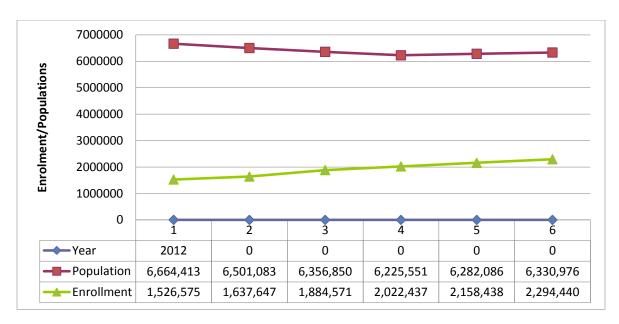


Figure 6.4: Population Vs Enrolment (Secondary Level)

The gap also narrows at the secondary level without elimination of out of school children completely. The reasons are similar to the middle level though the gaps are wider at this level, again due to higher drop out levels at this level.

Table 6.10 and 6.11 reveal the challenge remaining after the completion of the Plan period. This leaves only 1% in primary and a high of 64% at the secondary level.

Table C	44-	I William Or	of Color	1 0/ -	and of Do	andation			
Table 6.11: Level Wise Out of School as %age of Population									
	2011	2012	2013	2014	2015	2016	2017		
ECE	27%	35%	33%	29%	26%	22%	18%		
Primary	6%	13%	21%	19%	8%	5%	1%		
Middle	45%	46%	42%	36%	34%	31%	28%		
Secondary	64%	77%	75%	71%	68%	66%	64%		
Total	29%	39%	40%	36%	30%	27%	23%		

6.2.2 'Non Scale' Factors

Non scale costing has been made in the areas of standards development (or review). Capacity assessment and development plan, Curriculum Implementation Framework and studies included in the plan. Many of the governance and management reforms with minimal costs that mainly require change in operational approach of the government have not been costed. These are as follows:

Standards

Standards emerge as a recurrent theme of the sector plan. As most standards for educational inputs, processes already exist either it will not be a high cost function. Most of the standards will need to be identified and collated into o policy instrument or document of the government. The purpose is to institutionalise the usage of standards rather than re-invent the wheel.

	Table 6.12: Standards Input and Activities Requirement						
S.No.	Area	Person Days Cost per day (Pak Rs.)	No. of Days	Total Estimated Cost (Pak Rs.)	Total Estimated Cost (in Millions)		
1.	Standards for all Education Inputs, Processes and Outputs	Regular Cost	-	-	-		
2.	Standards for Text Books	150,000	45	6,750,000	6.750		
3.	Revise Standards for Science Laboratories in Secondary and Higher Secondary Schools	Regular Cost	-	-	-		
4.	Standards for Libraries in schools are revised	Regular Cost	-	-	-		
5.	Standards for In-service teachers education	Regular Cost	-	-	-		
6.	Standards for pre- service teachers education	Regular Cost	-	-	-		
7.	Standards reviewed for examinations	Regular Cost	-	-	-		
8.	Physical Infrastructure reviewed	Regular Cost	-	-	-		
	Total		•	6,750,000	6.75		

Capacity Development

As part of the implementation process of the PSESP, capacity of relevant organisations of the SED will need to be reviewed and enhanced. A number of organisations have been identified for capacity development. The costing for each is described in Table 6.13.

	Table 6.13: Cost of Institutions Capacity Development							
S.No.	Area	Consultancy Cost per day (Pak Rs.)	No. of Days	Total Estimated Cost (Pak Rs.)	Total Estimated Cost (in Millions)			
1.	PCA	150,000	60	9,000,000	9.000			
2.	PTBB	150,000	30	4,500,000	4.500			
3.	DSD	150,000	45	6,750,000	6.750			
4.	BISE	150,000	30	4,500,000	4.500			
5.	PEAS	150,000	20	3,000,000	3.000			
6.	SED	150,000	90	13,500,000	13.500			
7.	Districts as effective education service delivery unit	150,000	45	6,750,000	6.750			
8.	EMIS	75,000	50	3,750,000	3.750			
	Planning Units	125,000	45	5,625,000	5.625			
	PEF	150,000	120	18,000,000	18.000			
	Total			75,375,000	75.375			

Studies

A total of 9 studies have also been recommended in the Sector Plan for which the following table has been used as the costing framework for these studies

	Table 6.14: Cost of Proposed Studies							
S.No.	Area	Person Days Cost per day (Pak Rs.)	No. of Days	Total Estimated Cost (Pak Rs.)	Total Estimated Cost (in Millions)			
1.	Phasing out study	150,000	20	3,000,000	3.000			
2.	Community attitudes towards corporal	100,000	45	4,500,000	4.500			

	punishment				
3.	School language policy	125,000	60	7,500,000	7.500
	and practice				
4.	Tracer study to map	125,000	75	9,375,000	9.375
	educational outcomes				
5.	Causes for Failure of	125,000	125	15,625,000	15.625
	technical streams in				
	schools				
6.	Children of low income	125,000	60	7,500,000	7.500
	families				
7.	Status, capacity and	100,000	60	6,000,000	6.000
	functionality of school				
	councils				
8.	Baseline study to	50,000	30	1,500,000	1.500
	develop community				
	education and				
	awareness strategy				
9.	An education system	50,000	30	1,500,000	1.500
	diagnosis (ESD) of the				
	impacts of disasters and				
	its effects on the				
	performance of the				
	system				
			Total	56,500,000	56.5

Curriculum Implementation Framework

The Curriculum Implementation Framework has also been identified in the strategies. The following table describes the costing for preparation of the CIF. Implementation of CIF has been cascaded into the various other activities in the sector plan while CIF will develop its own set of actions and activities.

Table 6.15: Curriculum Implementation Framework Cost							
Consultancy Cost per No. of Days Total Estimated Cost Total Estimated day (Pak Rs.) Cost (in Millions)							
,		,	,				
127,500	120	15,300,000	15.300				

6.3 TOTAL EXPENDITURE

The projected costs over the plan period have been summarised in the table below. The total outlay comes out to about Rs. 426 billion over a period of 5 years. The outlays for the initial years are lower keeping in view the capacity limitations at the outset. These would largely be addressed through the 'Non Scale' actions, the outlays for which are completely exhausted in the first two years.

Table 6.16: Summary of PSESP Budget (Additional Resources)								
					in M	illion Pak Rs.		
	2013-14	2014-15	2015-16	2016-17	2017-18	Total		
A) Scale Factors								
Recurrent Cost	38091.033	56845.755	70845.844	89095.146	112416.225	367294.004		
Development Cost	1767.824	10324.919	16359.919	16359.919	11514.919	56327.501		
Sub Total (A)	39858.857	67170.674	87205.764	105455.066	123931.145	423621.506		
B) Non-Scale Factors								
Non-Scale Factors	1376.969	1113.492	0.000	0.000	0.000	2490.461		
Sub Total (B)	1376.969	1113.492	0.000	0.000	0.000	2490.461		
Grand Total (A+B) in Million	41235.826	68284.166	87205.764	105455.066	123931.145	426111.966		
Grand Total (A+B) in Billion	41.236	68.284	87.206	105.455	123.931	426.112		

Exhaustion of outlays does not mean end of the activities as a number of activities in the last three years may be generated through completing the strategies envisaged in the current plan.

The outlays on the 'Non Scale' factors are only 2.4% of the total outlay they provide the critical basis for quality, governance and capacity improvements without which the targets of the 'scale' factors cannot be achieved.

6.4 RESOURCE ANALYSIS

The costing-plan process faces two major resource constraints: finances and teacher availability. Table 6.17 and 6.19 show the budgetary comparison of the last 5 years and the increases projected over the plan period.

Table 6.17: Budget (2008-09 to 2012-13)								
	2008-09 2009-10 2010-11 2011-12 2012-13							
81.1 97.7 134.1 134.1 18								
Additional Budget	0	0	0	0	0			
Total Budget	81.1	97.7	134.1	134.1	186.5			
%age change		20%	37%	0%	39%			

Over the last 4 years annual changes in the budget have ranged from 0% in 2011-12 to 39% in 2012-13. Over the entire period average change has been 24%.

In the projected plan period the annual increase ranges between 22% and 30%. The annual average increase is 27%.

Table 6.18 Projected Budget (2103-14 to 2017-18)						
	2013-14	2104-15	2015-16	2016-17	2017-18	
Additional Budget	41.236	68.284	87.206	105.455	123.931	
Total Budget	227.8	296.0	383.2	488.7	612.6	
%age change	22%	30%	29%	28%	25%	

The increase projected appears to be well within the Government of Punjab's fiscal capacity to increase its education budget.

Impact of Projected Outlays	
Average Budget Increase (2008-9 to 2012-13)	24%
Average Budget Increase (2013-14 to 2017-18)	27%

The issue of teacher increase appears more difficult as the total increase in teacher requirement over the plan period is 320,714 which ranges from the low of 47222 in 2016-17 to 139,715.

Table 6.19: Teacher Requirement Over Plan Period						
	2013-14	2014-15	2015-16	2016-17	2017-18	Total
Primary	0	0	1764	17777	23074	42614
Middle	76276	25643	16465	16465	16465	151314
Secondary	63439	24284	13102	12980	12980	126785
Total	139715	49926	31332	47222	52519	320714

Given that the bulk of requirement is beyond the primary school level the constraint becomes even more serious and achievement of the target will either require more flexibility in the teacher student ratios at the middle and secondary levels or expansion in the current teacher production.

6.5 NFE: THE MISSING LINK

Increased intake rate at the middle and secondary levels cannot be undertaken without an effective Non Formal Education (NFE) programme. As the Department for Literacy and NFE was not a direct partner, although a stakeholder in the process, the interventions of the latter have not been demarcated in the plan. The first step on institutionalisation of the sector plan has to be a joint evaluation of the needs of the PSESP with respect to NFE, development of a plan for Literacy and NFE that can be co-opted into the main PSESP.

7. IMPLEMENTING THE SECTOR PLAN

Implementation of the sector plan will require political support and capacity development. The implementation process includes strategies that will co-opt political and community oversight. The Plan also provides for capacity assessment and development processes for the various organisations. The Implementation Strategy for PSESP has three main strands:

- 1. Oversight and Monitoring
- 2. Dissemination
- 3. Decentralisation

7.1 OVERSIGHT MECHANISM

A multi-layered oversight mechanism will be developed. The highest oversight mechanism will involve senior education management and political leadership. At the second tier, there will be a technical level committee at the provincial level involving heads of various education related organisations i.e. Punjab Textbook Board (PTBB), PEF, DSD, Curriculum Authority, PEC and BISEs.

The highest oversight body will be the Provincial Standing Committee on Education of the Provincial Assembly.

An important concomitant of the monitoring process will be capacity development of PMIU on a fast track basis. Initially, co-opted support from the market may be provided by a donor partner, but eventually internal capacity will have to be developed. PMIU will ensure implementation of the Sector Plan in the districts and the specialised agencies at the provincial headquarters. It will develop capacity to disseminate targets and review progress on the basis of identified indicators.

7.2 DECENTRALISATION

PSESP will be implemented in districts and by specialised organisations like the PTBB, BISE etc. Specific implementation strategies and oversight mechanisms will be developed at the decentralised levels as well as by the specialised agencies. It might need further elaboration or modification of the current district indicators model followed in the 'Chief Ministers' Education Task Force'.

7.3 DISSEMINATION

PSESP will need support from internal stakeholders of the department, the community and political forces. A multi-tool awareness and education campaign will be designed to target teachers, education managers, parents, media and political leadership.

7.4 PERFORMANCE ASSESSMENT FRAMEWORK

The Performance Assessment Framework provides a set of indicators for monitoring of outcomes of the sector plan implementation. These are the overarching indicators as there are a number of strategy and activity level indicators within the Sector Plan. The base values will be the initial values and a target value will be determined for the five years. Each target value will then be staggered into annual targets for each year. The following set of indicators has been suggested for inclusion in the PAF:

Table 7.1: Performance Assessment Framework Template & Indicators									
Level	Level Indicator Reason for		Source	Base Value					
ACCESS	ACCESS								
i. ECE	NER (3-5)	Net Enrolment ratio will provide a good approximation of the expansion.	EMIS	As determined by EMIS enrolment figures/population cohort provided by NIPS					
ii. Primary	NER 6-10	This is the age group agreed to in the National Education Policy.	EMIS data be used provided the private school census is an annual feature of the data collection. Alternately PSLM can be used	As determined by EMIS enrolment figures/population cohort provided by NIPS					
iii. Middle	NER 11-13	Age group for middle agreed to in the National Education Policy	EMIS data	As determined by EMIS enrolment figures/population cohort provided by NIPS					

iv. High	NER 14-15	Age group for secondary agreed in the National Education Policy	EMIS data	As determined by EMIS enrolment figures/population cohort provided by NIPS
All levels	Out of school children	While it is a converse indicator of enrolment, it needs to be captured in view of requirements of Article 25 A which is the overarching guide of the PSESP	Periodic survey	As determined by the Nielsen survey. The first 6 surveys will provide the initial set for the indicator
QUALITY O	F EDUCATION			
Primary, Middle and Secondary	Survival Rates	Survival rate is used as a proxy indicator for quality	EMIS data	Initially only public sector survival rates can be determined, the private school values can be calculated only after 5 years of census'.
Primary	SLOs (Mathematics and Languages score)	These subjects provide a good insight into the student learning and are already being capture by	PEC results for annual change and PEAC for end of sector plan	2013 PEC results 2011 PEAC report
Middle	SLO (Science, Mathematics and Languages scores)	Punjab Examination Commission(PEC) and Punjab Education Assessment Centre (PEAC)		
High School	SLOs (Science,	These subjects would	Results of various BISEs	BISE results 2013

	Mathematics and Languages scores) Pass percentage Percentage of students passing in the 1 st Division	cover the science and arts students adequately while the final outcome of pass percentage and first divisions will determine the cost efficiency		
GOVERNA	NCE AND MANA	GEMENT		
All levels	Teacher absenteeism	Eliminating teacher absenteeism is the most fundamental outcome of improved management in education.	A baseline sample based study will have to be conducted using proxies like syllabus covered, community feedback etc.	As per baseline study
Equity				
All levels	GPI (Access)	To determine the gender gap (other equity factor indicators are available at the strategy level)	Composite of relevant level NERs and enrolment	To be determined as per the overall NER used
	GPI (Quality)		PEC examination PEAC report BISE results	

REFERENCES

Books, Articles, Reports

Barber, M. (2010, October). An Explanation for the Performance of Punjab Schools.

Directorate of Staff Development, GIZ. (2012). Punjab Strategy for Teacher Education 2012-2022.

Directorate of Staff Development, Punjab Education Department. (2007). *Continous Professional Development Framework*. Lahore: DSD.

Finance Department, Government of Punjab. (2010). *Mid Term Budgetory Framework (MTDF) 2010-13 Vol.1.* Government of Punjab.

Finance Department, Government of Punjab. (2011). White Paper: Budget 2011-2012. Lahore: Finance Department, Government of Punjab.

Finance Department, Government of Punjab. (2012). White Paper: Budget 2012-13. Lahore: Finance Department, Government of Punjab.

GIZ. (April 2010). Capacity Assessment of Punjab's Education System: District Education Department.

GIZ. (July 2011). Costed Capacity Development Strategy.

GIZ Punjab. (April 2010). Capacity Assesment of Punjab's Education System: Punjab Textbook Board.

GIZ Punjab. (April 2010). Situation Analysis of School Education Department, Punjab.

GIZ Punjab. (April 2012). Situtation Analysis of Punjab Education Sector Plan: Prioritized Issues.

GIZ. (Sep 2011). Tracer Study (final draft).

GIZ, Punjab. (April 2010). Capacity Assessment of Punjab's Education System: School Education Department and Attached Departments.

Government of Punjab & School Education Department. (August 2011). *Chief Minister's School Reforms Roadmap.* Lahore.

Government of Punjab. (1994). The Punjab Compulsory Primary Education Act, 1994 (Pb.Act IX of 1994). Government of Punjab.

Government of Punjab. (2010). The Punjab Examination Commission Act 2010 (Act XI of 2010). Government of Punjab.

Government of the Punjab. (n.d.). *Service Locator*. From Punjab Portal: http://punjab.gov.pk/services_locator_special_education

GTZ, Punjab. (2010). Status of EMIS and Data Usage in Districts of Punjab (Education Deptt.). GTZ, Punjab.

I-SAPS. (June 2011). 18th Constitutional Ammendment: Challenges and Opportunities for Education Sector. Government of Punjab, GIZ.

I-SAPS. (October 2010). Public Financing of Education in Pakistan.

LEAPS Team, et al. (2007). The Learning and Educational Achievement in Punjab Schools: Insight to inform the Education Policy Debate. The LEAPS Project.

Lord, F. (1980). Applications of item response theory to practical testing problems. NJ: Lawrence Erbaum Associates.

Ministry of Education, Government of Pakistan. (2006). *National Assessment Testing (Mathematics, Urdu, Science & Social Studies)*. Islamabad: NEAS.

Ministry of Education, Government of Pakistan. (2008). *National Assessment Testing (Mathemativs, Urdu, Science & S. Studies)*. Islamabad: NEAS.

Ministry of Education, Pakistan. (2007). White Paper on National Education Policy. Islamabad: MoE, Pakistan.

Ministry of Education, Rwanda. Education Sector Strategic Plan 2006-10.

Mirza, M. (1995-96). *Teacher Competency, Curriculum and Student's Achievements in Punjab.* Lahore: Institute of Educational Research (IER), University of Punjab.

Otoo, S., Agapitova, N., & Behrens, J. (June 2009). The Capacity Development Results Framework: A strategic and results-oriented approach to learning for capacity development. World Bank Institute.

PMIU. (2005-2011). Annual School Census Reports.

Punjab Bureau of Statistics. (2007-08). *Multiple Indicator Cluster Survey (MICS)*, *VOL-1*. Lahore: Punjab Bureau of Statistics.

Punjab Economic Research Institute. (2007). Punjab Econimic Report.

Punjab Monitoring and Implementation Unit (PMIU), S. E. (2010). State of School Councils in Punjab - A baseline study of community participation in School Management. PMIU.

Punjab Textbook Board, GIZ Punjab. *Cuuriculum Implementation Framework.* Punjab Textbook Board, GIZ Punjab.

Rahman, T. Denizens of Alien Worlds: A survey of the Education System of Pakistan. Tariq Rehman.

School Education Department. (2012). The Punjab Gazette (for PEC) NO.SO. (A-II) 8-39/2012. Lahore.

School Education Department, Govt. of Punjab. (2008-2012). Annual Budget.

School Education Department, Punjab. (2009). Advice for Teachers - A data based approach to improve teaching and learning (Mathematics &Urdu) Grade -5. Punjab Examination Commission (PEC)

School Education Department, Punjab. (2008-09). Survey of Water Quality in Schools of Punjab. PMIU, Punjab under PESRP.

Tirmizi, S. (Nov 2011). Punjab Education Sector Plan: Costed Strategies and Resource Mobilization.

Tirmizi, S. (Nov 2011). Punjab Schools Education Sector Plan Strategic Interventions.

UNESCO. (2006). EFA - Global Monitoring Report - Literacy for Life. UNESCO.

UNESCO. (2008). EFA Global Monitoring Report - Education for Al I by 2015 I: Will we make it? Paris: UNESCO.

UNESCO. (2009). *EFA Global Monitoring Report - Overcoming Inequality: Why Governance Matters?* Paris: UNESCO.

UNESCO. (2007). EFA Global Monitoring Report - Strong Foundations; Early Childhood Care and Education. Paris: UNESCO.

UNESCO. (2005). EFA Global Monitoring Report - The Quality Imperative. Paris: UNESCO.

UNICEF. (2003). Examples of Inclusive Education: Pakistan. UNICEF South Asia.

UNICEF Pakistan. (2008). Child friendly Schools in Punjab Province (Pakistan). Islamabad: UNICEF.

World Bank. (2009). Project Appraisal Document- Punjab Education Sector Project. World Bank.

Websites

Directorate of Staff Development (DSD): www.dsd.edu.pk/

Punjab Education Assessment System (PEAS): http://www.peas.gop.pk/

Punjab Education Department: http://pportal.punjab.gov.pk/portal/

Punjab Education Foundation (PEF):www.pef.edu.pk

Punjab Examination Commission (PEF):www.pec.edu.pk

Annex A Results Matrix

Improving Quality Education

Objectives	Key Targets	Indicators	Responsibility	Assumptions/Risks
Quality Standards				
Standards based education management, planning, service delivery and accountability	Standards for all education inputs, processes and outputs developed	OVI Standards notified MOV Official notification	Provincial Curriculum Authority (PCA)	Benchmark Standards for each sub-sector will be prepared in consultation with the relevant organizations and in view of international practices and national needs, applicable to both public and private sector.
Curriculum Implementat	ion		1	
Effective implementation of Curriculum (2006) to ensure maximum possible achievement of the objectives of the curriculum.	Comprehensive Curriculum Implementation Framework (CIF) prepared	OVI CIF prepared MOV CIF report	PCA	CIF already prepared and shall be finalized and approved in coordination with PTBB, BISEs, PEC, PEAS and DSD.
	Curriculum disseminated to school level (public & private) and communities.	OVI Curriculum dissemination plan prepared MOV	PCA/SED/PEF	Specific teachers' and head teachers' orientation plans and multiple options for dissemination to community including direct contact and use of media

Objectives	Key Targets	Indicators	Responsibility	Assumptions/Risks
		Notification on dissemination plan.		
Curriculum review process standardized	Standards for curriculum review prepared	OVI Review standards developed MOV Notification for review standards	PCA	Standards for review consider transparency, feedback(including field testing) and qualifications of personnel involved
PCA capacitated to develop and manage education standards; review, develop and implement curriculum; and approval of textbooks.	Capacity assessment plan of PCA prepared	OVI Capacity assessment of PCA MOV Capacity Assessment Report	PCA/SED	Standards will be developed and implemented in coordination with PTBB, BISEs, PEC, PEAS and DSD.
	Capacity development Plan for PCA prepared	OVI Capacity Development Plan prepared. MOV Capacity Development reports	SED/PCA	

Objectives	Key Targets	Indicators	Responsibility	Assumptions/Risks
Enhance expertise in curriculum review and development in the Province	Plan to introduce curriculum as a mandatory subject in pre-service teacher education prepared	OVI As per indicators developed in CD plan MOV As per indicators developed in CD Plan OVI Mandatory curriculum courses developed & in preservice teacher education MOV Official notification	DSD/PCA/HED/ HEC/SED	Initially the capacity of preservice institutions is strengthened through external linkages with other university and/or visiting faculties. CPD already is undertaking this mandate for in-service teacher education.
Quality of Textbooks & I	⊥ Learning Support Units			
Prepare quality textbooks that cater to learning needs of the students and assist in their cognitive development, conceptual understanding & critical	Standards for textbooks prepared	OVI Standards for textbooks development prepared MOV	PTBB/PCA/SED	Standards are prepared for inputs (authors, illustrators), processes (review, field testing etc.) and outputs (learning value of the textbooks)

Objectives	Key Targets	Indicators	Responsibility	Assumptions/Risks
thinking.		Standards notified		
	Orientation and training plan for textbook authors, publishers, illustrators and editors on standards prepared	OVI Orientation and Training Plan prepared MOV Orientation plan notified Number of trainings /orientation sessions held.	PTBB/PCA/SED	PCA includes publishers (public & private) in orientation process
	Capacity plan for PTBB as facilitator and regulator for development of books as per Textbooks Policy prepared	OVI Capacity assessment of PTBB MOV Capacity assessment report of PTBB	PTBB/PCA/SED	Private publishers undertake the task under the Textbook Policy 2007 (as adapted for Punjab). PTBB will continue to function as developer of text books for subjects where private sector does not bid due to low economic return

Objectives	Key Targets	Indicators	Responsibility	Assumptions/Risks
	Capacity development plan for PTBB prepared	OVI Capacity development plan for PTBB prepared MOV Approved CD Plan report	PTBB/PCA/SED	
	CD plan for PTBB implemented	OVI As per indicators developed in CD plan MOV As per indicators developed in CD Plan	PTBB/PCA/SED	
Enhance expertise in Textbook & TLMs review and development in the Province	Plan to introduce Textbooks& TLMs as mandatory subject in pre-service teacher education prepared	OVI Mandatory Textbook & TLM courses developed & introduced in preservice teacher education	DSD/PTBB/HED/ HEC/SED/	Initially the capacity of preservice institutions is strengthened through external linkages with other university and/or visiting faculties. CPD already is undertaking this mandate for in-service teacher education.

Objectives	Key Targets	Indicators	Responsibility	Assumptions/Risks
		Official notification		
Preparation and use of learning support units i.e. libraries and laboratories	Revised standards for laboratories in Secondary and Higher Secondary schools	OVI Standards for existing & new labs. Developed	PMIU /SED	Standards include indicators for infrastructure, equipment and usage
		MOV Notification of standards		
	Ensured implementation of standards, utilization and maintenance of standardized science laboratories in all high and higher secondary schools	OVI Plan for school Laboratories developed MOV Monitoring reports of field staff	PMIU/SED	
	Standards for libraries in schools revised	OVI Standards for existing & new Libraries developed	PMIU/SED	Separate standards are to be developed for primary, middle, Secondary and Higher Secondary levels

Objectives	Key Targets	Indicators	Responsibility	Assumptions/Risks
	Standardized libraries established in all schools and monitor usage of libraries	MOV Notification of standards OVI Plan for school libraries developed	PMIU/SED	
		MOV Monitoring reports of field staff		
Prepare a plan for use of technology in education/e-learning	Conduct a study to evaluate the possibilities of technology in improving the teaching learning process	OVI Study conducted MOV Study document	SED/DSD/IT Deptt.	

Objectives	Key Targets	Indicators	Responsibility	Assumptions/Risks
	Prepare a plan based on the findings of	OVI	SED/DSD/IT Deptt.	
	study	Plan prepared	'	
		MOV		
		Plan approved		
Quality of Teachers	·			
Prepare a high quality teaching force that can	Punjab Strategy for Teachers Education	<u>OVI</u>	SED/HED/DSD/ PMIU/HEC	
help children develop higher order thinking,	(PSTE) for improved quality of teachers	Approved PSTE		
including social & life skills.	education is finalized and implemented	Implementation plan for PSTE		
		MOV		
		Approved PSTE document		
		Notification of		
		Implementation plan for PSTE		
	Pre-service and in- service teachers	<u>OVI</u>	DSD/PCA/SED/ HEC/HED	
	education curriculum	TLMs for pre-service		
	& training content	and in-service teachers		
	aligned with school curriculum based on	training aligned with National Curriculum.		
	SLOs	rianonai Guinculum.		

Objectives	Key Targets	Indicators	Responsibility	Assumptions/Risks
		MOV		
		TLMs (based on SLOs) available		
	Standards for pre- service teachers	<u>OVI</u>	HEC/HED/SED/ DSD	Standards are adapted from work already completed by NACTE
	education developed	Pre-service teacher education standards developed		and STEP in consultation with Higher Education Commission (HEC) & Higher Education Deptt. (HED)
		MOV		
		Notification of standards		
	Standards for in- service teacher	<u>OVI</u>	SED/DSD	
	education developed	In-service teacher education standards developed		
		MOV		
		Notification of standards		
	Induction training program for new	OVI	DSD/SED	The induction training program of teacher is part of an overall
	teachers designed & implemented	Induction training program		induction training scheme which includes education managers along with teachers.

Objectives	Key Targets	Indicators	Responsibility	Assumptions/Risks
		MOV Notification of induction training program Implementation report		
	Training of teachers in multi-grade teaching	of training program OVI Training conducted in multi-grade teaching prepared MOV	DSD/SED/DED	
		Training assessment reports Field monitoring reports		
DSD capacitated to undertake regulation of in-service and pre- service teacher education standards, implementation of PSTE and induction trainings	DSD functioning as Regulatory body for monitoring of teacher education standards	OVI TORs developed & Regulatory Body constituted MOV Notification of	SED/DSD/PMIU	DSD divests its role in direct teacher training to district. Regulation includes licensing/certification/accreditation
		Regulatory Body		

Objectives	Key Targets	Indicators	Responsibility	Assumptions/Risks
	Capacity of DSD to function as regulatory body assessed	OVI Capacity assessment MOV Capacity assessment	DSD/SED	
	Capacity development plan for DSD to function as regulatory body prepared	report OVI CD plan MOV	DSD/SED	
	CD plan for DSD implemented	CD plan report OVI As per indicators developed in CD plan MOV As per indicators	DSD/SED	DSD's capacity to monitor and coordinate PSTE and function as regulatory body is assessed as a composite exercise and the CD plan also covers both functions
	Strategy for transition of in service teacher training from DSD to districts developed	OVI Phasing out strategy	SED/DSD/Distric ts	Strategy for transition of in service teacher training from DSD to districts developed

Objectives	Key Targets	Indicators	Responsibility	Assumptions/Risks
	Strategy for transition of in service teacher training from DSD to districts implemented	MOV Notification of phasing out strategy OVI Implementation plan for transition strategy MOV As per indicators identified in implementation plan	SED/DSD/Distric ts	Strategy for transition of in service teacher training from DSD to districts implemented
Assessment & Examinat	tions			
Ensure quality assessments in public examinations to move towards testing of higher order thinking skills.	Standards are reviewed for examinations conducted by BISEs to prepare and implement curriculum based assessment tools.	OVI Standards for external examinations conducted by BISEs revised MOV Notification on revised standards	PCA/BISEs/PEC/ PEAS/PEF	Higher education dept. and SED agree to cooperate and coordinate in revising standards for BISEs Standards for inputs, processes and outputs are reviewed Output level standards will be based on <i>Item Response Theory (IRT)</i> .
	Standards are reviewed for examinations conducted by PEC	OVI Standards for external examinations	PCA/PEC/PEAS/ PEF	

Targets	Indicators	Responsibility	Assumptions/Risks
semination ade more	conducted by PEC revised MOV Notification on revised standards OVI Dissemination plan developed MOV Dissemination plan	PEC/SED	PEC results / analysis of the results are used for improvement in classroom teaching-learning through direct dissemination to teachers and through utilization by DSD in revision of its CPD framework
of BISEs on the basis standards development	Assessment exercise completed MOV Capacity assessment report OVI	BISEs/HED/SED BISE/HED/SED	Higher education deptt and SED agree to cooperate and coordinate in improving capacity of BISEs Higher education dept. and SED agreed to cooperate and coordinate in improving capacity
		Capacity assessment report elopment OVI	Capacity assessment report Blopment OVI S Capacity development

Objectives	Key Targets	Indicators	Responsibility	Assumptions/Risks
		MOV		
		CD Plan report		
	Capacity development plan for BISEs implemented	OVI As per indicators developed in CD plan	BISE/HED/SED	Higher education dept. and SED agree to cooperate and coordinate in improving capacity of BISEs
		MOV		
		As per indicators developed in CD plan		
	Effective coordination on assessment	<u>OVI</u>	PEC/PEAS/BISE s/DSD/SED/HED	In addition to over all coordination mechanism PEC &
	processes institutionalized	Coordination mechanism agreed	/ PEF	PEAS are made members of PBCC.
	among relevant organizations	MOV		
	(PEC/PEAS/BISEs/D SD/SED/HED/PEF)	Coordination mechanism notified		Coordination mechanism to improve data sharing.
Assessment for system diagnosis is made more	Capacity of PEAS assessed on the basis	<u>OVI</u>	PEAS/SED	
effective	of revised standards	Assessment exercise completed		
		MOV		
		Capacity assessment		

Objectives	Key Targets	Indicators	Responsibility	Assumptions/Risks
		report		
	Capacity development plan for PEAS prepared	OVI Capacity development plan completed MOV CD Plan report	PEAS/SED	
	Capacity development plan for PEAS implemented	OVI As per indicators developed in CD plan MOV As per indicators developed in CD plan	PEAS/SED	

Objectives	Key Targets	Indicators	Responsibility	Assumptions/Risks
	PEAS dissemination system made more effective	OVI Dissemination plan developed MOV Dissemination plan approved and notified Impact assessment survey	PEAS/SED	PEAS results / analysis of the results are used for improvement in classroom teaching-learning, effective management of schools, internal and external assessments and over all education policy
Ensure quality assessments in schools to encourage a move towards testing of higher order thinking skills.	Third party evaluation of school assessment system conducted	OVI School assessment system evaluated MOV Evaluation report	DSD/PEC	
	DSD conducted training of teachers on assessment of higher order thinking skills as per curriculum needs	OVI Revised training modules developed MOV Notification of training plan	DSD/PEC/ PEAS	Training on assessments is already being conducted by DSD under its CPD framework. The program is strengthened/ revised on the basis of the new standards for assessments and expanded to include secondary level teachers. Trainings modules targets both

Objectives	Key Targets	Indicators	Responsibility	Assumptions/Risks
				formative and summative assessments
	Monitoring and mentoring at school level included curriculum based assessment as a focus area	OVI Periodic assessment at class level is feeding into annual assessment of students(% weight age of periodic assessment) MOV DSD periodic reports	DSD/SED	
Enhance expertise in assessment and evaluation in the province	Introduced assessment as a mandatory subject in pre-service teacher education	OVI Mandatory assessment courses developed & introduced in preservice teacher education MOV Official notification	DSD/PCA/HED/ HEC	Initially the capacity of preservice institutions is strengthened through external linkages with other university and/or visiting faculties

Objectives	Key Targets	Indicators	Responsibility	Assumptions/Risks			
Improving School Enviro	Improving School Environment						
improvement of physical and social environment to help children enjoy the learning process in "child friendly schools"	Physical Infrastructure standards reviewed as per educational and local environmental needs	OVI Standards for physical infrastructure revised MOV Notification on revised standards	SED/PMIU/C&W	C&W rules and regulations pertaining to schools infrastructure are revised on advice of SED. The standards also apply to private sector schools and are implemented in a phased approach. Unicef's standards of child friendly schools are adopted/adapted			
	Teachers and head teachers trained on child friendly (Effective Schools) approaches on school and class management	OVI Teacher & Head teachers training modules and plan developed MOV Training plan approved and notified	DSD/SED	"Mar NahiPiyar Policy" is reviewed and revitalized after addition of training and awareness components.			
	Community attitudes towards corporal punishment targeted through an awareness campaign	OVI Community Awareness plan prepared increased awareness of community on	PMIU/SED	A baseline survey is designed and conducted before development and implementation of community awareness plan. Periodic perception surveys will			

Objectives	Key Targets	Indicators	Responsibility	Assumptions/Risks
		negative impact of corporal punishment MOV Awareness Plan report Community perception		be benchmark on the baseline. School councils are included as conduits of the awareness campaign
	Health and nutrition programme for children at primary level	Survey report OVI Health and nutrition programme prepared MOV Health and nutrition programme approved.	SED/District Education department/Dep artment of health	Relevant programmes of the Department of health have been linked to schools and a coordination mechanism developed.
	School health and hygiene education included in CPD	OVI Teachers training manuals developed Teachers training conducted MOV Training material	SED/Health Deptt/DSD	

Objectives	Key Targets	Indicators	Responsibility	Assumptions/Risks				
		Records of training conducted						
Early Childhood Educati	Early Childhood Education							
Establish quality (pre- primary) Early Childhood	Pre primary ECE institutionalized	OVI	PMIU/SED/DSD	The policy considers : phase- wise implementation, all schools				
Education programs as per approved national	through a notified policy	Policy prepared		in Punjab are included, all components are included, age of				
curriculum in all primary schools in the province.	. ,	MOV		child is defined, teaching material is locally contextualized				
		Policy notification		and available.				
	Awareness and training of teachers ,head teachers and education managers on Pre-primary ECE	OVI Awareness and training plan for managers prepared	PMIU/SED/DSD					
		Increased awareness of Edu. Managers on ECE						
		MOV						
		Awareness Plan report						
		Feedback report						

Objectives	Key Targets	Indicators	Responsibility	Assumptions/Risks
	Expanded pre-primary ECE program to 5000 primary schools	OVI Functional ECE classrooms Pre-primary ECE budget provision in recurrent expenditures MOV MEAs report Provincial education budget	PMIU/SED	Program is established as per National curriculum on ECE and provincial policy prepared. Eventually ECE is expanded to all schools in a phased manner.
School Language Policy	1	<u> </u>	<u> </u>	
Prepare a school language policy that	Research study on school language	OVI	PMIU	Study is outsourced
helps improve cognitive development and	policy and practices	Study conducted		The purpose of the study is to inform policy on creating a
enhances proficiency of the graduates in English		MOV		balance between proficiency in languages and cognitive

Objectives	Key Targets	Indicators	Responsibility	Assumptions/Risks
and Urdu languages.		Study Report		development, especially, transition to a second language

Relevance

Objectives	Key Targets	Indicators	Responsibility	Assumptions/Risks
Improve returns on	Tracer study to map	<u>OVI</u>	PMIU/SED	Study evaluates outcomes for
education for all graduating	educational			various streams (public, private,
children.	outcomes of school	Study completed		madrasas etc.) and also
	types conducted			identifies causes for differences
		MOV		in outcomes for different streams,
		0		geographic areas, communities,
	0	Study Report	DMILL/OFD	families etc.
	Causes for failure of	<u>OVI</u>	PMIU/SED	
	technical streams in	Evaluation completed		
	schools evaluated	Evaluation completed		
		MOV		
		IVIO V		
		Evaluation report		
	Curriculum/syllabi of	OVI	PCA/PTB/SED/T	Employers/market professionals
	secondary		EVTA	are included in the revision
	education reviewed	Review of		process.
	to enhance	curriculum/syllabi		
	relevance with the	completed		
	world of work			
	(employability)	MOV		
		Review report		
	Linkages between	0\/I	SED/TEVTA	TEVTA agrees to the need for
	TVE and general	OVI	JLD/TEVIA	coordination with SED.
	education	Official coordination		Coordination with OLD.
	Education	Official Coordination		

Objectives	Key Targets	Indicators	Responsibility	Assumptions/Risks
	developed	process developed		
		MOV		
		Notification of coordination mechanism		
	Linkages between Higher Education	OVI	SED/HED/HEC	HED and HEC agree to the need for coordination with SED
	and School	Official coordination		
	Education developed	process developed		
	,	MOV		
		Notification of		
		coordination mechanism		

Access

Objectives	Key Targets	Indicators	Responsibility	Assumptions/Risks		
Cost Reduction	Cost Reduction					
Minimize the direct and indirect costs of education for children from lower-income families.	Children of low income families incentivized through stipend.	OVI Designed and developed program for children of poor families Conducted baseline study MOV Stipend program report/document Impact survey	SED/PMIU/Distr icts/NFBED	Coordination between SED and BISP avoids overlapping and ensures effective implementation		
Community Involvement						
Effective community involvement to improve enrolments and retention in schools.	Status, capacity and functionality of School Councils reviewed for revitalization of SCs.	OVI Reviewed status, capacity and functionality of SMCs MOV	PMIU/SED/Distr icts	SCs are involved in enrolment and retention (access, quality and equity aspects of education)of students in schools through continuous mobilization. Capacity review is undertaken within this holistic framework for SCs.		

Objectives	Key Targets	Indicators	Responsibility	Assumptions/Risks
		Review report		
	Head teachers trained for effective	OVI	DSD/SED/Distri cts	SCs are involved in enrolment and retention of students in
	engagement with community.	Training Module developed		schools.
		MOV		
		Training Monitoring Report		
	Mobilization strategy for increased and	<u>OVI</u>	SED/PMIU/Distr icts	SCs are involved in enrolment and retention of students in
	effective community participation in School Councils (SCs).	Mobilization Strategy prepared		schools.
	Councils (GCs).	Mobilization strategy implemented		
		Increased enrolment in schools		
		MOV		
		Mobilization Strategy Document		
		EMIS data		
Enhance confidence of the community in the education	Community educated on ongoing school	OVI	SED/PMIU/Distt s	A baseline survey is conducted before initiating awareness

Objectives	Key Targets	Indicators	Responsibility	Assumptions/Risks
system.	reforms	Increased understanding of community on school reforms		campaign
		MOV		
		Survey on community comprehension		
	Functional PTAs formed in all schools	OVI List of members		EMIS records status of functionality of PTAs in schools
		MOV		
		Minutes of meeting, attendance sheet		
		EMIS data		
	Regular Parent - teacher meetings held	OVI Parent teachers meetings held		EMIS records status of functionality of PTMs in schools
		MOV		
		EMIS data		
Non-Formal Education Li		T -	T	
Strengthen and support NFE in order to enrol the	Formal linkages established between	OVI	SED/Dept. Lit. & NFBE	Department for Adult literacy and NFBE is already conducting
children without access to	Adult Literacy & Non-	Formal rules for		effective NFE programs

Objectives	Key Targets	Indicators	Responsibility	Assumptions/Risks
schools or drop-outs to	formal Basic	coordination and		
enter mainstream	Education Department	linkages agreed and		
education.	and the School	approved		
	Education Department.	MOV		
		Notification of rules for coordination and linkages		
	Students enrolled in NFE programs are	OVI	SED/Dept.Lit. & NFBE	Students enrolled in NFE programs are included in EMIS
	registered and	EMIS mandate		data base through a unique ID
	tracked.	expanded		
		_		
		MOV		
		EMIS data		
DisasterRisk Reduction			1	
Develop and implement	An education system	<u>OVI</u>	SED/PDMA	Punjab vulnerable to floods
policy on DRR to mitigate	diagnosis (ESD) of			
impact of possible future disasters	the impacts of disasters and its	Diagnosis conducted		
disasters	effects on the	MOV		
	performance of the			
	system conducted	Diagnosis report		
	Disaster policy	OVI	SED/PDMA	
	objectives and			
	strategies developed	Disaster policy		
		prepared		

Objectives	Key Targets	Indicators	Responsibility	Assumptions/Risks
_		MOV		
		Policy document	OFD/DDMA	
	Appropriate DRR	<u>OVI</u>	SED/PDMA	
	priority programmes selected	DDD prioritized policy		
	Selected	DRR prioritized policy actions		
		MOV		
		Notification of		
		prioritized policy		
		actions		
	School building	OVI	SED/PDMA/W&	Review of school building design
	designs reviewed in		S of district	to accommodate DRR
	light of DRR diagnosis	Revised building	government	recommendations will be a part of
	and policy	design		the overall revision of physical infrastructure standards
		MOV		Illiastructure standards
		<u> 1010 V</u>		
		Notification of revised		
		design		
	Material developed	OVI	SED/PDMA/DS	DRR prevention
	and training conducted for	Matarial dayaları ad	D/District	strategies/Content has been part
	teachers and students	Material developed	education departments	of regular textbooks
	in the light of DRR	Training conducted	departificitis	
	diagnosis and policy	Training contactou		
		MOV		
		DRR training		

Objectives	Key Targets	Indicators	Responsibility	Assumptions/Risks
		documents		
		_ ,		
		Training reports	050/00044/00	
	Capacity assessment of District units on	<u>OVI</u>	SED/PDMA/DS D/District	Boys scouts and girls guides
	DRR preparedness	Capacity assessment	education	units/associations are part of capacity assessment
	Diviv prepareuriess	Capacity assessment	departments	capacity assessment
		MOV	aoparamonto	
		<u></u>		
		Capacity assessment		
		report		
	Capacity development	<u>OVI</u>	SED/PDMA/DS	Boys scouts and girls guides
	plan developed for	0	D/District	units/associations are part of
	district units on DRR preparedness	Capacity development	education departments	capacity development
	prepareuriess	plan	departments	
		MOV		
		Capacity development		
		report	055 (55144 (50	
	Community's	<u>OVI</u>	SED/PDMA/DS	Awareness campaign to target
	understanding of DRR enhanced through	Awareness strategy	D/District education	pre-disaster preventive, as well as post disaster response to address
	awareness strategy	plan	departments	educational and psycho-socio
	and one of our drogy	him.		needs of children and
		MOV		rehabilitation of schools.
		Notified awareness		
		strategy document		
Inclusive Education				

Objectives		Key Targets	Indicators	Responsibility	Assumptions/Risks
Mainstream	children	Teachers trained in	<u>OVI</u>	DSD/SED/Speci	Inclusive education targets all
excluded from	regular	pedagogy of inclusive		al Education	children marginalized including
school system		education	Teachers training	Dept.	those with special needs,
			manuals developed		belonging to religious, racial, ethnic, and linguistic minorities,
			Teachers training		immigrants, females, other under-
			conducted		privileged, students with
					disabilities, HIV/AIDS patients,
			MOV		remote populations, etc.)for 'participatory' and 'accessible'
			Training material		quality education within the
					regular school environment.
			Records of training conducted		
		Revision of standards	OVI	DSD/SED/	Review of school building design
		for physical		Special	to accommodate "inclusive
		infrastructure of	Revised physical	Education	education" recommendations will
		schools in the light of	infrastructure	Dept./Building	be a part of the overall revision of
		children with special	standards	department	physical infrastructure standards
		needs	NAOV /	Provincial	
			MOV	&district level	
			Notification of		
			standards		
		Community	OVI	DSD/SED/	Baseline survey is conducted to
		acceptance of		Special	capture community attitude before
		marginalized children	Awareness campaign	Education Dept.	designing the awareness program
		& groups increased	plan		
		through an awareness			
		campaign	Community perception		

Objectives	Key Targets	Indicators	Responsibility	Assumptions/Risks
	Sensitization of students in regular schools towards children excluded from mainstream education due to special needs and other marginalizing factors,	Survey MOV Awareness campaign report Survey report OVI Students sensitization program developed Students perception survey MOV Student sensitization program document Survey report	DSD/SED/ Special Education Dept.	Baseline survey is conducted to capture student attitude before designing the sensitization program
	Formal coordination mechanism developed between Special Education Department and SED	OVI Formal coordination mechanism in place MOV	DSD/SED/ Special Education Dept.	For coordination mechanism human as well as financial resources are allocated

Objectives	Key Targets	Indicators	Responsibility	Assumptions/Risks
		Notification of the formal coordination mechanism		
Research based focus on equity issues in education	conducted to evaluate	<u>OVI</u>		Policy on equity is fed through the research
	and highlight critical issues	Study on equity		
		MOV		
		Research report		
	Research based	OVI		
	decisions on equity issues institutionalised	PMIU designated as		
	through assignment of	the research point		
	responsibility to PMIU	MOV		
		Official notification		

Governance

Objectives	Key Targets	Indicators	Responsibility	Assumptions/Risks
Public Education Sect	tor			
Merit Based HRM				
Recruitment of the best possible teaching and management force with merit	Specialized examinations for teachers and managers recruitment developed and conducted on the pattern of independent testing services	OVI Specialized exams for recruitment MOV Recruitment report for teachers and managers	SED	Initially services of an independent testing service are hired pending capacity of the department and establishment of a teacher certification and licensing system
A performance appraisal system that evaluates outputs transparently and objectively and forms the basis for accountability	Current performance appraisal procedures reviewed and linked to educational outputs.	OVI Review report MOV Notified appraisal system	SED/DEDs	The function includes appraisal of the performance of the private sector
	Districts performance evaluation criteria reviewed as per requirements of PSESP.	OVI Revised evaluation criteria	SED/DEDs	PSESP requires operationalization of strategies and activities at the district level which entail districts specific indicators for monitoring and evaluations

Objectives	Key Targets	Indicators	Responsibility	Assumptions/Risks
_		MOV		
		Nie CC and an action in the		
		Notification of revised criteria		
	SED's capacity is	OVI	SED	Capacity assessment includes all
	assessed	<u> </u>	025	aspects of SED as an
		Capacity assessment		organization but with a special
		MOV		focus on HRM
		MOV		
		Capacity assessment		
		report		
	CD plan for strengthening	<u>OVI</u>	SED	
	SED	OD also		
		CD plan		
		MOV		
		CD report		
	CD plan is implemented	<u>OVI</u>	SED	
		As per indicators		
		developed in CD plan		
		MOV		
		A - maninalizatana		
		As per indicators developed in CD plan		
Retention of quality	Security of tenure ensured	OVI	SED	
managers and	for key managerial			
	positions.	Average posting period		

Objectives	Key Targets	Indicators	Responsibility	Assumptions/Risks
educationists		Approved tenure policy		
		MOV		
		Notification of approved policy		
		Evaluation report of average tenure		
	Incentives provided for key managerial positions	OVI	SED	
	in rural areas.	Incentives framework developed		
		MOV		
		Notified framework of incentives		
	Incentives provided to subject specialists for posting in rural areas	OVI Incentives framework developed	SED	Separation of manager cadre ensures subject specialist are not shifted to administrative positions and continue to teach in schools
		MOV		
		Notified framework of incentives		

Objectives	Key Targets	Indicators	Responsibility	Assumptions/Risks
Improve Managerial Ef	ficiency			
Improve managerial	Separate cadre created	<u>OVI</u>	SED	Managerial capacity includes the
capacity	for educational managers			traditional public sector
		Separate managerial		management as well as capacity
		cadre		required for regulating the private sector. Selection process and
		MOV		career paths identified and
				notified. Selection of managers
		Notification for separate		will be (initially) from within the
		managerial cadre		department
	TNA conducted for	<u>OVI</u>	SED/DSD	DSD has the mandate for training
	education managers			of all educational professionals
		TNA conducted		
		MOV		
		TNA report		
	Training material and	OVI	SED/DSD	
	process designed	Training material and		
		Training material and		
		plan prepared		
		MOV		
		Notification of training		
		Notification of training plan		

Objectives	Key Targets	Indicators	Responsibility	Assumptions/Risks
	Training of newly inducted managers conducted	OVI Induction Training completed MOV Training report	SED/DSD	•
Capacity of district education departments to implement and monitor all aspects of education (access, relevance, quality, equity) is enhanced	Capacity of districts as education service delivery units is assessed	OVI Capacity Assessment conducted MOV Capacity assessment report	SED/DEDs/PMI U	CD assessment and plan for districts include capacity for DRR, inclusive education and teacher training in addition to other functions identified in the CD exercise
	Capacity development plan of districts as effective education service delivery units is prepared	OVI Capacity development Plan developed MOV CD report	SED/DEDs/PMI U	CD assessment and plan for districts include capacity for DRR, inclusive education and teacher training in addition to other functions identified in the CD exercise

Objectives	Key Targets	Indicators	Responsibility	Assumptions/Risks
	CD plan is implemented	OVI As per indicators developed in CD plan	SED/DEDs/PMI U	
		MOV As per indicators developed CD plan		
Effective Utilization of L	Data			
Introduce a culture of data based decision making	use	OVI TNA conducted MOV TNA report	PMIU/EMIS/DS D	Low data use is a function of weak understanding of data and data analysis on the demand side as well as user unfriendly presentation by the supply side
	Training material and process designed	OVI Training material and plan MOV Notification training plan	PMIU/EMIS/DS D	

Objectives	Key Targets	Indicators	Responsibility	Assumptions/Risks
	Training of managers on data use is conducted	OVI Training on data usage and analysis MOV Training report	PMIŪ/EMIS/DS D	•
	Data(user) need assessment to develop decision support system for managers	OVI Data Need Assessment MOV Data Need Assessment Report	PMIU/EMIS	Data need assessment includes SED, its attached departments, HED, BISEs, private sector, universities and research institutions
	Decision making support system developed as per user need	OVI Decision making support system MOV Notification of decision making support system	PMIU/EMIS	
	Capacity assessment of EMIS conducted for developing decision support system	OVI Capacity Assessment	PMIU/EMIS	

Objectives	Key Targets	Indicators	Responsibility	Assumptions/Risks
		MOV		-
		Capacity Assessment Report		
	Capacity development plan for EMIS prepared	OVI	PMIU/EMIS	
		Capacity development plan developed		
		MOV		
	CD plan is implemented	CD report	PMIU/EMIS	
	CD plan is Implemented	<u>OVI</u>	PIVIIU/EIVIIS	
		As per indicators developed in CD plan		
		MOV		
		As per indicators developed in CD plan		
Single consolidated data base for all education related information including	EMIS's scope is expanded to include all education data	OVI Revised scope of EMIS	SED/PMIU	Education data includes information generated by other organizations like DSD, BISE's, PEF, PEC, PTB and others
quality related data and indicators		MOV		FEF, FEG, F1B and others
		Notification of revised scope		
		PMIU website		

Objectives	Key Targets	Indicators	Responsibility	Assumptions/Risks
Efficient Planning				
Enhance efficiency of planning processes	Integrated and coordinated planning	OVI	SED/PMIU	
	introduced	Integrated sector plan		
		MOV		
		Sector plan document		
	Capacity assessment conducted of planning	OVI	SED/PMIU/DED s	Planning units include PMIU,B&P wing of SED and District
	units at different levels	Capacity Assessment conducted	3	Education Department
		MOV		
		Capacity Assessment report		
	Capacity development plan for different planning	<u>OVI</u>		
	units	CD plan developed		
		MOV		
		CD report		
	CD plan for planning units is implemented	<u>OVI</u>		
		As per indicators developed in CD plan		
		MOV		

Objectives	Key Targets	Indicators	Responsibility	Assumptions/Risks
		As per indicators developed in CD plan		
Improved Monitoring ar				
Improved Monitoring and Evaluation processes	Monitoring indicators identified and used for various levels	OVI Oversight mechanism for monitoring in place Indicators for monitoring MOV Sector plan document Performance Assessment Framework (PAF)	SED/PMIU/EMI S	Monitoring includes indicators at input, process and output levels and a separate setoff indicators for oversight and managerial levels
	Oversight mechanism for sector plan implementation in place	OVI Oversight mechanism developed MOV Notification of oversight mechanism for sector plan	SED/PMIU	

Objectives	Key Targets	Indicators	Responsibility	Assumptions/Risks
	Capacity of PMIU, SED and districts in monitoring	OVI	SED/PMIU	The overall capacity development plans of SED, PMIU and districts
	assessed	Capacity Assessment conducted		target the monitoring function
		MOV		
		Capacity Assessment report		
	Capacity development of PMIU, SED and districts prepared	OVI CD Plan	SED/PMIU	The overall capacity development plans of SED, PMIU and districts target the monitoring function
	prepared	MOV		target the monitoring function
		CD plan report		
	CD plan for PMIU, SED and districts implemented	OVI		
		As per indicators developed in CD plan		
		MOV		
		As per indicators developed in CD plan		
Gender-Sensitive Mar		T ==	T = ==	
Gender awareness and friendly work	Gender balanced managerial approach	OVI	SED/PMIU/DED s	
environment	introduced in work places	Gender assessment of		

Objectives	Key Targets	Indicators	Responsibility	Assumptions/Risks
		SED and attached		
		departments, and		
		DED's		
		MOV		
		Gender Assessment		
		report		
Public-Private Partner	rshin	Героп		
PEF and SED follow	Revised standards of SED	OVI	SED/PEF	PEF is included in review and
common set of	adopted by PEF	001	SED/FEF	development of standards
standards	daopted by 1 E1	Revised standards		development of standards
otal radi do		Trovidos etarrasis		
		MOV		
		Notification for adoption		
		by PEF		
PEF has the capacity	PEF's capacity assessed	<u>OVI</u>	SED/PEF	
to effectively support	to accommodate large			
SED in achievement	scale enrolment and	Capacity assessment		
of targets of Article 25-A of the	retention	MOV		
constitution		<u>IVIO V</u>		
CONSTITUTION		Capacity Assessment		
		report		
	Capacity development	OVI	SED/PEF	
	plan for PEF to			
	accommodate large scale	Capacity Development		
	enrolment and retention	Plan		

Objectives	Key Targets	Indicators	Responsibility	Assumptions/Risks
		MOV		
		CD report		
	CD plan is implemented	<u>OVI</u>	SED/PEF	
		as per indicators developed in CD plan		
		MOV		
		as per indicators developed in CD plan		
	Third party evaluation of impact of PEF's program	OVI	SED/PEF	
	impact of 1 Er o program	Evaluation report		
		MOV		
		Approved Evaluation Report		
Private School				
Integrate private	Policy framework	OVI	SED/PMIU/DED	
sector into the	prepared for inclusion of		S	
government's policy framework	private sector in Government education	Policy framework		
ITAITIEWUIK	objectives and standards	developed		
		MOV		

Objectives	Key Targets	Indicators	Responsibility	Assumptions/Risks
		Notification of policy framework		
Awareness & Involve	ement of Stakeholders			
Effective community involvement in the education sector	Already covered under access		SED/PMIU/ DEDs	Community and parents involvement for monitoring of schools and system through SMCs and individually.
Supportive political intervention in the education sector	Standing committee on education made the highest over sight body for the education sector plan	OVI Implementation framework of sector plan developed MOV	SED/PMIU	
	Sensitization of Political representatives on educational issues	Sector plan document OVI Sensitization plan prepared MOV Sensitization plan approved	SED/PMIU	

Annex B Implementation Matrix

QUALITY								
Purpose	Results	Activities	Timeframe					Responsible
			2013- 2014	2014- 2015	2015- 2016	2016- 2017	2017- 2018	
Standards based education management, planning,	Standards for all education inputs, processes and	Identify key inputs, processes and out puts for the standards framework	х					PCA
service delivery and accountability	outputs developed	Agree on the institutional roles and responsibilities for standards development, review, implementation and monitoring		х				PCA
Effective implementation of curriculum 2006 to ensure maximum	Comprehensive Curriculum Implementation Framework (CIF)	CIF related organization (PCA, PTB, DSD, PEC, PEAS, BISEs, SED, Districts) agree on outline of CIF	x					PCA
possible achievement of the objectives of the	prepared	CIF document prepared	х					PCA
curriculum.		CIF document approved with agreement of related organization	х					PCA
	Curriculum disseminated to	Dissemination strategies prepared	х					PCA
	school level	Dissemination strategies approved	х					PCA
	(public & private) and communities	Dissemination strategies implemented	х	х	х	х	х	PCA
Curriculum review process standardized	Standards for curriculum review	Scope and TORs to review curriculum processes developed	х					PCA/SED

		Reviewed Standards approved and notified	X					PCA/SED
		Reviewed standards implemented	х	х	Х	Х	Х	PCA/SED
PCA capacitated to	Capacity	Scope and TORs of assessment	Х					PCA/SED
manage education	assessment of	developed and agreed						
standards and review,	PCA	Assessment undertaken/completed	Х					PCA/SED
develop and implement		Assessment report prepared	х					PCA/SED
curriculum (including		Assessment report approved	х					PCA/SED
review and approval of	Capacity	CD plan prepared		Х				SED/PCA
textbooks)	development Plan	CD plan costed		Х				PCA/SED
	for PCA	CD plan approved		Х				PCA/SED
	Capacity	Prioritization of activities		Х				PCA
	Development Plan for PCA is	Implementation plan developed and approved		Х				PCA
	implemented	implementation of approved plan		Х	Х	Х	Х	PCA
Enhance expertise in curriculum review and	Plan to introduce curriculum as a	Agreement between HEC and provincial government	Х					DSD/PCA/HE D/HEC/SED
development in the	mandatory	Support to pre-service institutions		X	X			DSD/PCA/HE
province	subject in pre-	through provision of visiting faculty		^	^			D/HEC/SED
	service teacher	Curriculum expertise included in	Х	Х	Х	Х	Х	DSD/PCA/HE
	education	faculty development programs of institutions						D/HEC/SED
Textbooks & TLMs					,	,	,	
Prepare quality	Standards	Standards reviewed for Textbooks	х					PTBB/PCA/S
textbooks that cater to	development for	as a product(content, language,						ED
learning needs of the students and assist in	textbooks	layout, methodology, print quality etc)						

their cognitive development, conceptual		Standards for textbooks development process (writing, editing, designing, field testing etc)	х					PTBB/PCA/S ED
understanding & critical thinking.		Standards for review and approval processes	х					PTBB/PCA/S ED
		Standards for product ,development process ,review and approval process notified	X					PTBB/PCA/S ED
		Standards for product ,development process ,review and approval process applied	х	Х	Х	Х	х	PTBB/PCA/S ED
	Orientation of textbook authors,	Orientation plan developed		х				PTBB/PCA/S ED
	publishers, illustrators and	Orientation plan approved		X				PTBB/PCA/S ED
	editors on standards	Orientation plan implemented		Х	Х	х	Х	PTBB/PCA/S ED
Capacity of PTBB as regulator-facilitator of	Capacity of PTBB as regulator and	Scope and TORs of assessment developed and agreed	Х					PTBB/PCA/S ED
textbooks enhanced	developer of books assessed	Assessment undertaken/completed	Х					PTBB/PCA/S ED
	as per Textbooks Policy	Assessment report prepared	Х					PTBB/PCA/S ED
		Assessment report approved	Х					PTBB/PCA/S ED
	Capacity development plan	CD plan prepared		Х				PTBB/PCA/S ED
	for PTBB	CD plan costed		Х				PTBB/PCA/S ED
		CD plan approved		Х				PTBB/PCA/S

								ED
	Capacity	Prioritization of activities		Х				PCA/ SED
	development plan	Implementation plan developed		Х				PCA/ SED
	implemented	and approved						
		implementation of approved plan		Х	Х	Х	х	PCA/ SED
Enhance expertise in	Plan to introduce	Agreement between HEC and	Х					DSD/PTBB/H
Text books and TLMs	text books and	provincial government						ED/HEC/SED
review and	TLMs as a	Support to pre-service institutions	х					DSD/PTBB/H
development in the	mandatory	through provision of visiting faculty						ED/HEC/SED
province	subject in pre-	Text books and TLMs expertise	Х	Х	Х	Х	Х	DSD/PTBB/H
	service teacher	included in faculty development						ED/HEC/SED
	education	programs of institutions						
Preparation of a plan	Evaluate the	Study conducted in pilot districts	х					SED/DSD/IT
for using Technology in	possibilities of							deptt
education/e-learning	technology in	Plan designed and approved	Х					SED/DSD/IT
	improving the							deptt
	teaching learning	Training conducted and Plan		X	Х	X	Х	SED/DSD/IT
	process	implemented in pilot districts		^	^	^	^	deptt
		·						•
Preparation and use of	Revise standards	Committee formed for review of	Х					PMIU /SED
quality learning	for laboratories in	standards						
materials and learning	Secondary and	Revised standards approved	Х					PMIU /SED
support units i.e.	Higher Secondary	Revised standard implemented	Х	X	Х	X	Х	PMIU /SED
libraries and	Schools	Trevised standard implemented	^	^	^	^	^	T WIIO /SLD
laboratories	Standardized	State of laboratories in high &	Х					PMIU/SED
	science	higher secondary level assessed						
	laboratories in all	Plan for standardized laboratories	х					PMIU /SED
	high and higher	prepared						
	secondary	Plan implemented	Х	Х	Х	Х	х	PMIU /SED
	schools							

	Standards for libraries in	Committee formed for review of standards	Х					PMIU /SED
	schools are	Revised standards approved	Х					PMIU /SED
	revised	Revised standard implemented	<u>^</u>	X	Х	X	Х	PMIU/SED
	Standardized	State of laboratories in high &		^	^	^	^	PMIU /SED
	libraries are	higher secondary level assessed	Х					FIVIIO /SED
	established in all	Plan for standardized laboratories	Х					PMIU /SED
	schools and	prepared	X					FIVIIO /SED
	usage ensured	Plan implemented	Х	Х	Х	Х	Х	PMIU /SED
	acago cricarca	Tian implemented		^	_ ^	^	^	T WIIG /GEB
Teacher Education								
Prepare a high quality	Punjab Strategy	Approval of PSTE	Х					SED/HED/
teaching force that can	for Teachers							DSD/PMIU/
help children develop	Education (PSTE)							HEC
higher order thinking,	for improve d	Preparation of implementation (and	Х					
including social & life	quality of	monitoring) plan of PSTE						
skills.	teachers	Implementation of PSTE	Х	X	Х	X	Х	SED/HED/
	education is	Impromormation of 1 C12	Α	,				DSD/PMIU/
	Finalized and							HEC
	implemented							
	Curriculum and	TORs for Curriculum review	X					SED/HED/
	training material	committee developed						DSD/PMIU/
	of pre-service and							HEC
	in-service	Review committee formed	X					SED/HED/
	teachers							DSD/PMIU/
	reviewed as per							HEC
	National	Review committee notified	Х					SED/HED/
	Curriculum							DSD/PMIU/
								HEC
		Curriculum reviewed & findings	Х					SED/HED/

	submitted						DSD/PMIU/ HEC
	Findings approved	х					SED/HED/ DSD/PMIU/ HEC
	Findings adopted	х	х	х	х	х	SED/HED/ DSD/PMIU/ HEC
Training program for new teachers(inductio	Designing of training program	Х					SED/HED/ DSD/PMIU/ HEC
n training) and inservice teachers is designed as	Approval of training program	Х					SED/HED/ DSD/PMIU/ HEC
per curriculum	Implementation of training program	X	X	X	X	X	SED/HED/ DSD/PMIU/ HEC
Training program on multi-grade	Designing of training program	Х					DSD/SED
teaching is	Approval of training program	х					DSD/SED
developed	Implementation of training program	х	Х	Х	Х	Х	DSD/SED
Standards for in- service teachers education	Scope and TORs to develop standards in-service teachers education developed	х					SED/HED/ DSD/ HEC
developed	Standards developed	Х	Х				SED/HED/ DSDHEC
	Standards approved & notified		Х	Х	Х	X	SED/HED/ DSD/ HEC
Standards for pre-service	Scope and TORs to develop standards pre-service teachers	Х					SED/HED/ DSD/ HEC

	teachers	education developed						
	education	Standards developed	Х	Х				SED/HED/
	developed							DSD/HEC
		Standards approved & notified		Х	Х	Х	х	SED/HED/
								DSD/ HEC
DSD capacitated to	Capacity of DSD	Scope and TORs of assessment	Х					SED/HED/
undertake regulation of	to function as	developed and agreed						DSD/PMIU/
in-service and pre-	regulatory body is							HEC
service teacher	assessed	Assessment undertaken/completed		Х				SED/HED/
education standards,								DSD/PMIU/
implementation of								HEC
PSTE and induction		Assessment report prepared		Х				SED/HED/
trainings								DSD/PMIU/
								HEC
		Assessment report approved		Х				SED/HED/
								DSD/PMIU
								/HEC
	Capacity	CD plan prepared	Х					DSD/SED
	development plan	CD plan spated						DSD/SED
	for DSD to	CD plan costed	X					D2D/2ED
	function as	CD plan approved	х					DSD/SED
	regulatory body is	or promopping						
	prepared							
	CD plan for DSD	Prioritization of activities	Х					DSD/SED
	implemented	Implementation plan developed	Х					DSD/SED
		and approved						
		implementation of approved plan	Х	X	Х	Х	Х	DSD/SED
Sustainability of	Phasing out	TORs and scope for study on	x					DSD/SED
Continuous	strategy	phasing out strategy prepared						
Professional	developed and	Phasing out Study carried out	Х					DSD/SED

Development (CPD)	implemented	Study finding approved	Х					DSD/SED
program of DSD		Phasing out strategy prepared & submitted	Х					DSD/SED
		Phasing out strategy approved& disseminated	х					DSD/SED
		Phasing out strategy implemented	Х	х	х	Х	х	DSD/SED
Examination & Ass	essment							
Ensure quality assessments in public examinations to encourage a move	Standards are reviewed for examinations conducted by	Standards of examination papers reviewed in line with curriculum requirements	х					BISE/SED/ HED
towards testing of higher order thinking skills.	BISEs to prepare and implement curriculum based assessment tools.	Standards for examination process(conduction, evaluation, tabulation of results etc) reviewed	х					
		Standards for examiners(Paper setters and paper markers) reviewed	х					
		Certification process for examiners established	Х	Х				
		Standards for examination papers, process and examiners approved	х	Х				
		Approved Standards for BISE examinations applied	х	Х	Х	Х	Х	
	Standards are reviewed for	Committee formed for review of standards	Х	Х				
	examinations	Revised standards approved	Х					

conducted by PEC	Revised standard implemented	Х	Х	Х	Х	Х	
PEC's	Dissemination system reviewed						PEC/SED
dissemination	Revised dissemination system	Х					
system is made	prepared						
more effective	Revised dissemination system approved	Х					
	Revised dissemination system implemented	Х	Х	Х			
Capacity of	Scope and TORs of assessment	Х					BISEs/HED/
BISEs assessed	developed and agreed						SED
on the basis of	Assessment undertaken/completed	Х					
revised standards	Assessment report prepared	Х	Х				
	Assessment report approved		Х				
Capacity	CD plan prepared		Х				BISEs/HED/
development plan							SED
for BISEs	CD plan costed		Х				
prepared	CD plan approved		Х				
Capacity development plan	Prioritization of activities		X				BISEs/HED/ SED
for BISEs implemented	Implementation plan developed and approved		Х				
	implementation of approved plan		х	х	х	х	
Effective	Coordination mechanism	Х					PEC/PEAS/
coordination on	developed and agreed						BISEs/DSD/
assessment	, j						SED/HED/
processes is							PEF

	institutionalized among relevant organizations	Coordination mechanism approved	x					
	(PEC/PEAS/BISE s/DSD/SED/HED/ PEF)	Coordination mechanism implemented	X	X	X	X	X	
Assessment for system diagnosis is made	Capacity of PEAS assessed	Scope and TORs of assessment developed and agreed	х					PEAS/SED
more effective		Assessment undertaken/completed	Х					PEAS/SED
		Assessment report prepared	Х					PEAS/SED
		Assessment report approved	Х					PEAS/SED
	Capacity	CD plan prepared	Х					PEAS/SED
	development plan	CD plan costed		Х				PEAS/SED
	for PEAS	CD plan approved		Х				PEAS/SED
	prepared							
	Capacity	Prioritization of activities		Х				PEAS/SED
	development plan for PEAS	Implementation plan developed and approved		X				PEAS/SED
		implementation of approved plan		Х	Х	Х	Х	PEAS/SED
	PEAS	Dissemination system reviewed	Х					PEAS/SED
	dissemination system is made	Revised dissemination system prepared	Х					
	more effective	Revised dissemination system approved	Х					
		Revised dissemination system implemented		Х	Х	х	Х	
Ensure quality assessments in	Third party evaluation of	ToRs for evaluation prepared	Х					SED/PMIU
schools to encourage a move towards testing	school assessment	Evaluation conducted	х					

of higher order thinking skills.	system	Evaluation report prepared and approved		х				
	DSD conducts training of teachers on	Training Needs Assessment (TNA) conducted	Х					DSD/PEC/ PEAS
	assessment of higher order	Training program and material developed	Х					
	thinking skills as per curriculum needs	Training program implemented	Х	х	X	Х	x	
	Monitoring and mentoring at	mentoring tools revised	х					DSD/SED
	school level includes curriculum based	DTEs trained on revised tools	х					
	assessment as a focus area	Implementation and monitoring of revised tools	х	х	Х	Х	Х	
Enhance expertise in assessment and evaluation in the	Introduction of assessment as a mandatory	Agreement between HEC and provincial government	х					DSD/ PCA/HED/HE C
province	subject in pre- service teacher	Support to pre-service institutions through provision of visiting faculty	Х					
	education	Assessment expertise included in faculty development programs of institutions	х	х	Х	Х	Х	

School Environmen	ıt							
Improvement of physical and social environment to help children enjoy the learning process in "child friendly schools"	Physical Infrastructure standards reviewed as per educational and	Standards of school physical infrastructure (repair & construction) reviewed including DRR & Inclusive Education requirements	X					SED/PMIU/C &W
	local environmental needs	Standards of school physical infrastructure (repair & construction) approved including DRR & Inclusive Education requirements	x					
		Standards of school physical infrastructure (repair &construction) applied	х	х	Х	х	Х	
	Teachers and head teacher trained on child	Designing of training material &program	Х					DSD/SED
	friendly (Effective Schools)	Approval of training material & program	Х					
	approaches on school and classroom management	Implementation of training program	х	х	х	х	х	
	Community attitudes towards	Scope and TORs of Situation Analysis developed	х					PMIU/SED
	corporal punishment	Situation Analysis undertaken/completed	х					
	targeted through an awareness campaign	Situation Analysis Report prepared Designing of Awareness Raising Campaign based on situation	X X	х				

		analysis findings						
		Approval of Awareness Raising Campaign		Х				
		Implementation of Awareness Raising Campaign		Х	Х	Х	x	
	Health and Nutrition programme for	Coordination with department of health	х					SED/District Education Deptt/DOH
	children initiated at primary level	Capacity development of education managers, head teachers and teachers	X	х				
		Implementation of the programme		Х	Х	Х	х	
-	School health and hygiene	Coordination with department of health	Х					SED/Health Deptt/DSD
	education included in CPD	Capacity developing of education managers, head teachers and teachers	Х	х				
		Implementation of the programme		х	х	Х	х	
Establish quality (pre- primary) Early	Pre primary ECE is institutionalized	Existing ECE policy reviewed	Х					PMIU/SED/D SD
Childhood Education programs as per	through a notified policy	Revised ECE policy prepared	Х					
approved national curriculum in all primary schools in the	, say	Revised ECE policy approved	Х					
province.		Revised ECE policy notified & implemented	х	х	Х	х	х	
	Awareness and training of	Designing of awareness &training program & material	х					PMIU/SED/D SD

	teachers, head teacher &	Approval of training material &program	Х					
	education managers on Pre- primary ECE	Implementation of training & awareness program	х	х	х	х	Х	
	Expansion of pre- primary ECE	Operational plan for expansion to 5000 schools	х					PMIU/SED
	program to 5000 primary schools	Approval of plan	х					
		Implementation of plan	x	х	х	х	Х	
Prepare a school language policy that helps improve cognitive	Research study on school language policy	Scope and TORs of Research Study developed	x					PMIU
development and enhances proficiency of the graduates in English and Urdu	and practices	Research Study undertaken/completed	х					
languages.		Research Study Report prepared	Х					

RELEVANCE									
Purpose	Results	Activities	Timeframe Responsible						
			2013	2014	2015	2016	2017		
			-14	-15	-16	-17	-18		

Improve returns on education for all	Tracer study to map educational	Scope and TORs of Tracer Study developed	Х					PMIU/SED
graduating children.	outcomes of school types is	Tracer Study undertaken/completed	Х					
	conducted	Tracer Study Report prepared	Х					
	Causes for failure of	Scope and TORs of Evaluation Study developed	Х					PMIU/SED
	technical streams in	Evaluation Study undertaken/completed	Х					
	schools are evaluated Curriculum/sylla bi of secondary education reviewed to enhance relevance with the world of work (employability)	Evaluation Study Report prepared	Х	Х				
		TORs/criteria to review curriculum/syllabi prepared	Х					PCA/PTB/SED /TEVTA
		Curriculum/syllabi reviewed	Х					
		Reviewed curriculum/syllabi approved and notified	Х					
		Reviewed curriculum/syllabi implemented	Х	Х	Х	Х	Х	
	Linkages between TVE and general	Coordination mechanism developed and agreed Coordination mechanism	Х					SED/TEVTA
	education developed	approved Coordination mechanism implemented						
	Linkages between Higher Education and School education	Coordination mechanism developed and agreed	х					

developed							
	Coordination mechanism approved	Х					
	Coordination mechanism implemented	Х	Х	Х	Х	Х	

ACCESS								
Purpose	Results	Activities		Ti		Responsible		
			2013 -14	2014 -15	2015 -16	2016 -17	2017 -18	
and indirect costs of education for children income families are incentivized	Children of low income families are incentivized	Scope and TORs of baseline Study developed to identify target communities	х					SED/PMIU/ Districts
	through stipend.	Base line Study undertaken/completed	Х					
		Base line Study Report prepared	Х					
		Identify technical group for program development	Х					
		Program developed		Х				
		Program approved and notified		Х	Х	Х	Х	
Effective community involvement to improve enrolments and retention in	Status, capacity and functionality	Scope and TORs of SC's evaluation Study developed	X					PMIU/SED/ Districts
	of School Councils	Evaluation Study undertaken/completed	Х					

schools.	reviewed for revitalization of	Evaluation Study Report prepared	Х					
	SCs.							
	Head teachers trained for	Designing of training material &program	Х					DSD/SED/ Districts
	effective engagement	Approval of training material &program	Х					
	with community.	Implementation of training program	Х	Х	Х	Х	Х	
	Mobilization strategy for increased and	Identify technical group for community mobilization strategy development	Х					SED/PMIU/Dist ricts
	effective community participation in	Community mobilization strategy developed	Х					
	school Councils (SCs).	strategy approved and notified	Х					
		Approved strategy implemented	Х	Х	Х	Х	х	
Enhance confidence of the community in	Community educated on	Scope and TORs of baseline Study developed	Х					SED/PMIU/Dist ricts
the education system.	ongoing school reforms	baseline Study undertaken/completed	Х					
		Baseline Study Report prepared for development of community education and awareness	X					
		Strategy Community Education and	Х					
		awareness plan prepared						
		Community Education and		Х				
		awareness plan approved						
		Community Education and		Х	Х	Х	Х	

		awareness plan implemented						
	Functional PTAs formed in all schools &	Formation of technical group for designing PTAs rules and regulations	Х					SED/PMIU/Dist ricts
	regular PTMs held	PTAs rules and regulations developed and notified	Х					
		PTAs established & notified at school level	Х					
		Monitoring reports of parent teacher meetings	Х	Х	Х	х	Х	
Strengthen and support NFE in order to enrol the children	Formal linkages established between Adult	Coordination mechanism developed and agreed	Х					SED/Dept.Lit. & NFBE
without access to schools or drop-outs to enter mainstream	Literacy & Non- formal Basic Education	Coordination mechanism approved	Х					
education.	Department and the School Education Department.	Coordination mechanism implemented	X					
	Students enrolled in NFE	Registration and tracking of NFE students prepared	Х					SED/Dept.Lit. & NFBE
	programs are registered and	Registration and tracking of NFE students approved	Х					
	tracked.	Registration and tracking of NFE students implemented	Х	Х	Х	Х	Х	
Develop and implement policy on DRR to mitigate	An education system diagnosis (ESD)	Scope and TORs of diagnosis Study developed	Х					SED/PDMA

impact of possible future disasters	of the impacts of disasters and its effects on the	Diagnosis Study undertaken/completed	Х					
	performance of the system conducted	Diagnosis Study Report prepared	Х					
	Disaster policy objectives and	Identify technical group for DRR policy development	Х					SED/PDMA
	strategies developed	DRR policy prepared developed	Χ					
	developed	DRR policy approved and notified	Х					
	Appropriate DRR priority programmes	DRR policy areas identified for implementation in consultations with stakeholders	Х					SED/PDMA
	selected	DRR policy areas prioritized and implementation plan developed	Х					
		Implementation plan notified to implement prioritized areas of DRR policy	Х	Х	х	х	х	
	School building designs reviewed in light of DRR diagnosis and	Identify technical group for school building design review	Х					SED/PDMA/W &S of district government
	policy	School building design reviewed	Х					
		Reviewed school building design notified	Х					
	Material developed and training	Technical expert group identified to develop material on DRR for teachers and students	Х					SED/PDMA/DS D/District education

conducted for teachers and							departments
students in the light of DRR diagnosis and policy	Training material & program for teachers capacity building and students (lesson plans) developed	х	Х				
	Training material for teachers capacity building and students (lesson plans) notified		Х				
	Training of teachers conducted		Х	Х	Х	Х	
Capacity assessment of District units on DRR	Capacity Assessment plan for district units prepared	Х					SED/PDMA/DS D/District education departments
preparedness	Capacity Assessment plan for district units approved	Х					
	Capacity Assessment implementation plan for district units notified	х					
Capacity development plan for district units on DRR	CD plan prepared	х					SED/PDMA/DS D/District education departments
preparedness	CD plan costed& approved	Х					
	CD plan notified	Х	Х				
Community's understanding of DRR enhanced	Identification of technical experts to develop Community awareness strategy plan	Х					SED/PDMA/DS D/District education departments

	through an awareness strategy	Strategy plan developed	Х					
		Strategy implementation plan notified	Х					
Mainstream children excluded from regular school system	Teachers trained in pedagogy of inclusive education	Designing of training material &program	Х					SED/PDMA/DS D/District education departments
		Approval of training material &program	X					
		Implementation of training program	Х					
	Revision of physical infrastructure standards in the light of special needs of	Standards of school physical infrastructure reviewed	x	X				DSD/SED/Spe cial edu.deptt/Buildi ng department Provincial & district level
	marginalized children	Standards of school physical infrastructure approved	х					
		Standards of school physical infrastructure implemented/applied	х	Х	Х	Х	Х	
	Community acceptance of marginalized children & groups increased	Community Education and awareness raising campaign prepared	Х					DSD/SED/Spe cial edu.deptt
		Community Education and awareness raising campaign approved	X					

	through an awareness campaign	Community Education and awareness raising campaign implemented	Х	Х	Х	Х	Х	
	Sensitization of students in regular schools towards children	Scope and TORs of students perception survey developed	Х					DSD/SED/Spe cial edu.deptt/
	excluded from mainstream education due	Perception survey undertaken/completed	Х					
	to special needs and other	Perception survey Report prepared	Х					
	marginalizing factors	Students sensitization strategy document prepared	Х					
		Students sensitization strategy document approved		Х				
		Students sensitization strategy implemented		Х	х	Х	Х	
	Formal coordination mechanism	Formal coordination mechanism developed and agreed	X					DSD/SED/Spe cial edu.deptt/
	developed between Special	Coordination mechanism approved	Х					
	Education Department and SED	Coordination mechanism implemented	Х	Х	Х	х	Х	
Research based focus on equity issues in	Study on equity conducted to	Study solicited	Х					PMIU/SED
education	evaluate and highlight critical	Study conducted	Х					

issues	Report submitted		Х		
Research based decisions on equity issues institutionalised	Official summary submitted to competent authority	х			PMIU/SED
through assignment of responsibility to	Summary approved	х			
PMIU	Notification issued	Х			

GOVERNA	ANCE							
Purpose	Result	Activities		Timeframe				Responsible
			2013 -14	2014 -15	2015 -16	2016 -17	2017- 18	
Public Educa	tion Sector		•					
Merit Based H	'RM							
Recruitment of the best possible teaching and	Specialized examinations for teachers and managers	Criteria for Specialized examination system for teachers and managers prepared	х					SED
management force with merit	recruitment are developed and conducted on the pattern of	Examinations conducted	х	х				
	independent testing services	Recruitment process report with list of successful candidates developed		х				
A performance appraisal	Current performance appraisal	TORs developed to review current performance appraisal procedures	Х					SED/Distt. Edu. Deptts
system that evaluates outputs	procedures reviewed and linked to	performance appraisal procedures reviewed and report prepared	Х					
transparently and objectively	educational outputs.	Reviewed EMIS scope notified to all stakeholders	Х					

and forms the basis for	Districts performance	TORs developed to review district performance evaluation criteria	Х					SED/Distt. Edu. Deptts
accountability	evaluation	'						'
	criteria reviewed and	performance evaluation criteria of districts reviewed and finalized	Х					
	strengthened as							
	per	Reviewed criteria notified	Х	Х				
	requirements of PSESP.							
	SED's capacity	Capacity Assessment tools developed	Х					SED
	is assessed	Capacity Assessment conducted	Х					
		Capacity Assessment report developed & approved	Х					
	CD plan for	CD plan prepared	Х					SED
	strengthening	CD plan costed& approved	Х					
	SED	CD plan notified & implemented	Х	Х	Х	Х	Х	
Retention of	Security of	Tenure policy for key managerial posts	Х					SED
quality	tenure ensured	reviewed						
managers and	for key managerial	Reviewed tenure policy approved	Х					
educationists	positions.	Reviewed tenure policy notified and		v	V	V	X	
educationists	positions.	implemented	Х	Х	Х	X	X	
	Incentives	TOR & criteria to develop Incentive	Х					SED
	provided for key managerial	Framework for key managerial positions prepared						
	positions in rural areas.	Incentive Framework developed	Х					
	Tulai aleas.	Incentive Framework notified and implemented	Х	х	Х	Х	Х	

pro	ovided to	TOR & criteria to develop Incentive Framework for key subject specialists prepared	Х					SED
	ecialists for sting in rural	Incentive Framework developed	х					
are		Incentive Framework notified and implemented	Х	Х	Х	Х	Х	

Purpose	Results	Activities	Timef	rame				Responsible
-			2013 -14	2014 -15	2015 -16	2016- 17	2017- 18	
Improved Ma	nagerial Efficienc	ey .						
Improve managerial capacity	Separate cadre created for educational	Recruitment/promotion policy of education manager to create separate cadre reviewed	Х					SED
	managers	Recruitment/promotion policy of education manager prepared	Х					
		Recruitment/promotion policy of education manager approved and implemented	X	X	X	Х	X	
	TNA conducted for education	Training Needs Assessment (TNA) tools developed	х					SED/DSD
	managers	Training Needs Assessment (TNA) conducted	х					
		Training Needs Assessment (TNA) report developed	Х					
	Training	Training material prepared	Х					SED/DSD
	material and process	Training material approved	Х					

Purpose	Results	Activities	Timef	rame				Responsible
•			2013 -14	2014 -15	2015 -16	2016- 17	2017- 18	-
	designed							
	Training of	Designing of training program	Х					SED/DSD
	newly inducted	Approval of training program	Х					
	managers conducted	Implementation of training program	Х	Х	Х	х		
Capacity of district education	Capacity of districts as education	Capacity Assessment tools developed	Х					SED/Distt. Edu. DEptt/PMIU
departments	service delivery	Capacity Assessment conducted	Х					
to implement and monitor	units is assessed	Capacity Assessment report developed & approved	Х					
all aspects of education (access,	Capacity development plan of districts	CD plan prepared	Х					SED/Distt. Edu. DEptt/PMIU
relevance,	as effective	CD plan costed& approved	Х					
quality, equity) is enhanced	education service delivery units is prepared & implemented	CD plan notified & implemented	Х	X	х	Х	X	
Effective Utili	ization of Data							•
Introduce a culture of	TNA of managers on	Training Needs Assessment (TNA) tools developed	Х					PMIU/EMIS/ DSD
data based decision	data use	Training Needs Assessment (TNA) conducted	Х					PMIU/EMIS/ DSD
making		Training Needs Assessment (TNA) report developed	Х					PMIU/EMIS/ DSD
	Training	Training material prepared	Х					PMIU/EMIS/

Purpose	Results	Activities	Timef	rame	Responsible			
•			2013 -14	2014 -15	2015 -16	2016- 17	2017- 18	-
	material and							DSD
	process designed	Training material approved	х					PMIU/EMIS/ DSD
	Training of managers on	Designing of training program	Х					PMIU/EMIS/ DSD
	data use is conducted	Approval of training program	Х					PMIU/EMIS/ DSD
		Implementation of training program	Х	Х	Х	х	Х	PMIU/EMIS/ DSD
	Data(user) need assessment to	Data need assessment survey tools designed	Х					PMIU/EMIS
	develop decision support	Data need assessment survey conducted	х					
	system for managers	Data need assessment survey report finalized	х					
	Decision making support system	Decision making support system developed	Х					PMIU/EMIS
	developed as per user need	Decision making support system approved	х					
		Decision making support system notified	Х					
	Capacity assessment of	Capacity Assessment survey tools developed	Х					PMIU/EMIS
	EMIS in developing	Capacity Assessment conducted	Х					
	decision support system	Capacity Assessment report developed & approved	Х					
	Capacity	CD plan prepared	Х					PMIU/EMIS

Purpose	Results	Activities	Timef	rame				Responsible
·			2013 -14	2014 -15	2015 -16	2016- 17	2017- 18	-
	development plan for EMIS is	CD plan costed& approved	Х					
	prepared & implemented	CD plan notified & implemented	Х	Х	Х	Х	Х	
Single	EMIS's scope is	TORs developed to review EMIS scope	Х					SED/PMIU
consolidated data base for	expanded to include all	EMIS scope reviewed and report prepared	Х					
all education related information including quality related data and indicators	education data	Reviewed EMIS scope notified to all stakeholders	X	X				
Efficient Plan	ning		1			-		
Enhance efficiency of	Integrated and coordinated	Draft Education Sector Plan document	Х					SED/PMIU
planning	planning	Education Sector Plan prepared	Х					
processes	introduced	Education Sector Plan approved and notified	Х					
planning units	assessment of planning units at	Capacity Assessment tools developed	Х					SED/PMIU/D istrict Edu. Deptts.
	different levels	Capacity Assessment conducted	Х					
		Capacity Assessment report developed& approved	Х					

Purpose	Results	Activities	Timef	rame	Responsible			
			2013	2014	2015	2016-	2017-	
			-14	-15	-16	17	18	
	Capacity	CD plan prepared	Х					SED/PMIU/D
	development							istrict Edu.
	plan for different							Deptts.
	planning units implemented	CD plan costed& approved	Х					
	implemented	CD plan notified & implemented	Х	Х	Х	Х	Х	

Purpose	Result	Activities	Timef	rame	SED/PMIU/E MIS			
			2013 -14	2014 -15	2015 -16	2016- 17	2017- 18	
Improved M	onitoring and Eval	uation	•	•	•		•	
Improved Monitoring	Monitoring indicators are	Performance Assessment Framework (PAF) Draft prepared	Х					
and evaluation	identified and	Performance Assessment Framework (PAF) approved	Х					
processes	levels	Performance Assessment Framework (PAF) notified	Х					
		Performance Assessment Framework (PAF) implemented	Х	х	х	Х	Х	
	Oversight mechanism for	TORs of Sector Plan Steering Committee (oversight mechanism) prepared	Х					SED/PMIU

Result	Activities	Timef	rame		Responsible		
		2013 -14	2014 -15	2015 -16	2016- 17	2017- 18	
sector plan implementation	Sector Plan Steering Committee notified	Х					
is in place	Sector Plan Steering Committee constituted	Х					
Capacity of	Capacity Assessment tools developed	Х					SED/PMIU
districts in	Capacity Assessment conducted	Х					
monitoring is assessed	Capacity Assessment report developed& approved	Х					
Capacity	CD plan prepared	Х					SED/PMIU
PMIU, SED and	CD plan costed& approved	Х					
	CD plan notified & implemented	Х	Х	Х	х	х	
itive Managemen	t						
Gender balanced managerial	Gender Assessment tools developed	Х					SED/PMIU/Di strict Edu. Deptts
approach introduced in	Gender Assessment conducted	Х					
	Gender Assessment report developed &	Х					
	sector plan implementation is in place Capacity of PMIU, SED and districts in monitoring is assessed Capacity development of PMIU, SED and districts is prepared itive Managemen Gender balanced managerial approach introduced in	sector plan implementation is in place Capacity of PMIU, SED and districts in monitoring is assessed Capacity development of PMIU, SED and districts is prepared Capacity Capacity Assessment tools developed Capacity Assessment report developed& approved CD plan prepared CD plan prepared CD plan notified & implemented itive Management Gender balanced managerial approach introduced in Gender Sector Plan Steering Committee notified Sector Plan Steering Committee notified Capacity Assessment tools developed Capacity Assessment report developed& approved CD plan prepared CD plan notified & implemented Gender Assessment tools developed Gender Assessment conducted introducted in	sector plan implementation is in place Capacity of PMIU, SED and districts in monitoring is assessed Capacity development of PMIU, SED and districts is prepared Capacity Capacity Capacity Assessment tools developed Capacity Assessment report developed& x approved CD plan prepared CD plan costed& approved CD plan notified & implemented x Conder balanced managerial approach introduced in Sector Plan Steering Committee x and	sector plan implementation is in place Capacity of PMIU, SED and districts in monitoring is assessed Capacity development of PMIU, SED and districts is prepared Capacity Capacity Capacity Capacity Capacity Capacity Capacity Assessment conducted Capacity Capacity Assessment report developed& x approved CD plan prepared CD plan costed& approved CD plan notified & implemented x Capacity CD plan notified & implemented x Capacity CD plan costed& approved CD plan costed& approved CD plan notified & implemented x x Capacity CD plan costed& approved CD plan costed& approved CD plan notified & implemented x x Capacity CD plan costed& approved CD plan costed& approved CD plan notified & implemented x x Capacity Assessment tools developed x CD plan notified & implemented x x Capacity CD plan costed& approved CD plan costed& approved CD plan notified & implemented x x x	sector plan implementation is in place Capacity of PMIU, SED and districts in monitoring is assessed Capacity development of PMIU, SED and districts is prepared Capacity Ca	sector plan implementation is in place Capacity of PMIU, SED and districts in monitoring is assessed Capacity development of PMIU, SED and districts is prepared CD plan prepared CD plan notified & implemented CD plan notified & implemented	sector plan implementation is in place Sector Plan Steering Committee notified

Purpose	Result	Activities	Timef	rame	Responsible			
			2013 -14	2014 -15	2015 -16	2016- 17	2017- 18	
SED follow common set	Revised standards of SED adopted by PEF	Standards of SED for PEF adaption reviewed	х					SED/PEF
		Standards of SED approved	Х					
		Standards of SED notified and adopted by PEF	Х	Х				SED/PEF
PEF has the capacity to effectively support SED in achievement of targets of Article 25-A of the constitution	PEF's capacity assessed to accommodate large scale enrolment and retention	Capacity Assessment tools developed	Х					
		Capacity Assessment conducted	х					
		Capacity Assessment report developed & approved	Х					
	Capacity development plan for PEF to accommodate large scale enrolment and retention developed and implemented	CD plan prepared	Х					SED/PEF
		CD plan costed& approved	Х					
		CD plan notified & implemented	х	х	х	х	х	
	Third party evaluation of impact of PEF's	Scope & TORs to conduct 3 rd party evaluation developed	Х					SED/PEF
		3 rd party evaluation carried out	Х					

Purpose	Result	Activities	Timef	rame	Responsible			
			2013 -14	2014 -15	2015 -16	2016- 17	2017- 18	
	program	3 rd party evaluation report developed	Х					
Private Scho	ols							
Integrate private sector into the government' s policy framework	Policy framework prepared for inclusion of private sector in Government education objectives and standards	Scope & TORs to develop policy framework prepared	х					SED/PMIU/ District Edu. Deptts
		Policy Framework developed	Х					
		Policy Framework approved and notified	Х					
	Regulatory framework for private sector developed in consultation with private schools associations	Scope & TORs to develop regulatory framework prepared	Х					SED
		Standards based Regulatory Framework developed	Х					
		Regulatory Framework approved and notified	х					

Purpose	Result	Activities	Timef	Responsible				
			2013 -14	2014 -15	2015 -16	2016- 17	2017- 18	
Awareness a	and Involvement o	f Stakeholders		ı		1	1	1
Effective community involvement in the education sector	Already covered under access							
Supportive political	Standing committee on	TORs for standing committee on Education to monitor ESP developed	х					SED/PMIU
intervention in the	education is made the highest	TORs for standing committee on Education to monitor ESP approved	Х					
education sector	over sight body for the education sector plan	Period review of ESP progress by standing committee on education – feedback mechanism	Х					
	Sensitization of Political	Sensitization plan developed	Х					SED/PMIU/ DSD
	representatives	Sensitization plan approved	Х					
	on educational issues	Sensitization plan notified and implemented	Х	х	х	Х	Х	