

NATIONAL EDUCATION POLICY 2017



BY

**Ministry of Federal Education and Professional
Training Government of Pakistan**



National Education Policy 2017-2025



**GOVERNMENT OF PAKISTAN
MINISTRY OF FEDERAL EDUCATION AND
PROFESSIONAL TRAINING
ISLAMABAD**

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Message from Minister of State for Federal Education and Professional Training

Education is the only source of human capital formation and producing responsible citizens in the country. Therefore, education has always been the major concern of successive governments in Pakistan since its inception. The progress of a country or a nation depends on the quality education. Education is therefore considered as a prerequisite for combating poverty, raising productivity, improving living conditions, protecting the environment and making enlightened citizen. Further, poverty alleviation and integrated human development, universalizing access and quality education, women empowerment and elimination of all forms of discrimination, community mobilization and strengthening partnership of Public and Private Sector are the priority goals and commitments of the present government. The Vision 2025 provides a balanced educational approach, politically united, economically sound and prosperous, morally and spiritually elevated nation's programs to meet the 21st century challenges.

To step up the efforts the government has started work on preparation of National Education Policy, 2017 to update and relate the policy provisions after the devolution process to the development of good human beings, inculcate moral values, socio-economic development, and national unity as well as transforming our children into good Pakistanis. It will ensure fixing the minimum standards to improve the quality of education. The major effort is to provide access to education to all, reduce the dropout rate in schools and avoid repetition rate. Our key objectives are inter-alia also focus on improvement of teaching learning process.

To cope with these situations, an Advisory Committee has been constituted headed by a National Convener, Mr. Munir Ahmed Chaudhry an eminent educationist of Ministry of Education. The Advisory Committee is comprised of 13 Sub- Committees which is headed by a Convener each and consisting three to four very prominent and experienced educationists. Each Sub Committee is entrusted with the responsibility to prepare and present paper on specific title in education with its objectives, strategies and Way Forward.

This National Education Policy, 2017 has been developed in post 18th Constitutional Amendment Scenario with the consent of IPMC which proves to be a viable, sustainable and competent forum to play effective role in establishing coordination among all Federating units of the country.

I am grateful to Mr. Munir Ahmed Chaudhry and his distinguished team members for the valuable contribution in policy formulation. I am also hopeful that their collective wisdom would step up the efforts in achieving the targets committed at national as well as international forums and make the country globally competitive.

Engineer Muhammad Baleegh-ur-Rehman
Minister of State for
Ministry of Federal Education and Professional Training

Foreword

The era of information technology and globalization has turned the whole scenario of almost every walk of life. Education is now recognized to be the only key to moral, cultural and socio-economic development in any country around the world. The need for innovative approaches and use of e-system in education is increasingly felt in the tasks of educational development.

Pakistan is one of the populous countries. The explosion of population alongside the explosion of knowledge on one hand and the democratic aspiration of the people on the other hand has put the present educational system under great strain. The educational planners and administrators have to strive hard to cope with these challenges. There is a need to develop and prepare plans both short and long term plans with realistic targets. The new National Education Policy 2017 has been designed in the perspective of 18th Amendment in Constitution of Pakistan modern trends in education and emerging requirements of society in terms of national integrity and social cohesion.

The demand for access to education has been continuously increasing and directly proportional to the population growth. This challenge requires opening of new schools. The government, being aware of the gaps and weaknesses in the existing system, is devising strategies for promoting basic education on priority. Thus political commitments at international forums will be fulfilled to achieve the targets of universalization of primary education, raising literacy rate to 90 percent by 2025, narrow down the gender gaps, reduce rural and urban imbalances, improve quality of education, promote Technical and Vocational Education with skill development programs, and ensure good governance.

The existing literacy rate is 60 percent (10 years and above) the real challenge ahead. Similarly net participation rate is 72 percent at primary level of education. Under this situation it has been realized to rationalize and update the curriculum and reform the whole education system making it effective and efficient.

The present government has constitutional an Advisory Committee headed by a National Convener, Mr. Munir Ahmed Chaudhry for policy formulation and to look into the overall functioning of education system and ensure the implementation of strategies and make all possible efforts to achieve the targets of 2025 Vision and place Pakistan in international competitive market in education.

The Ministry highly appreciated the endeavors of the National Advisory Committee and looks forward to further practicable recommendations for betterment, expansion and uplift of education in Pakistan.

Haseeb Athar
Secretary,
Ministry of Federal Education and
Professional Training

Acknowledgements

Education is a social process that enables human beings to develop their quality of life, lead a peaceful social life. It makes the individual to contribute to national development in accordance with contextual changes of the nation. As such, the goals of education emphasize balanced and harmonious development of the individual in respect of wisdom, spiritual development, physical as well as social development.

Since the inception of Pakistan, successive governments have made the education system visible to offer education to substantial numbers of masses. Hence, yet we have not fully succeeded in providing quality of education to all children in the country. This requires that the contents and methods of education must be developed to serve the basic learning needs of the students and empower them to accept the challenges of life. There are major constraints being faced by the principal actors of education for All e.g population explosion, resources constraints, low financial allocation, low participation and high dropouts, low literacy, lack of teacher's motivation, lack of political commitment, disparities in respect of gender and regional, weak quality of education and Good Governance, no Societal based Curriculum and Setting of Standards.

The present Government is fully aware of these constraints that is why an Advisory Committee has been constituted comprising renowned educationists to assist and facilitate the Ministry of Federal Education and Professional Training in preparing National Education Policy 2017 with the consultation of province/regions.

I express my gratitude to the Honorable State Minister for Federal Education and Professional Training Mian Mohammad Baligh-ur-Rehman and Federal Secretary of Education, under whose kind patronage the necessary steps are being taken to make Pakistan literate and better educated.

I am extremely indebted to the honorable distinguished educationists who have profusely contributed to the future edifice of educational development in Pakistan. In this perspective they have prepared their chapter on various areas of education. Thanks are also due to Director General, AEPAM who extended whole hearted cooperation to the Advisory Committee Secretariat, housed in the building.

Munir Ahmed Chaudhry
Convener Advisory Committee
Ministry of Federal Education and Professional Training.
Government of Pakistan

Chapter 1

INTRODUCTION

National and international developments in education have created conditions for revision of National Education Policy 2009. Global competition demands human capital that is creative, constructive and contributing to individual and collective wellbeing. Locally these new developments include devolution of social sector ministries including Ministry of Federal Education and Professional Training under 18th amendment; insertion of article 25(a) in the constitution under which free and compulsory education of all the children aged 5-16 (up to matric) became a fundamental right and the state responsibility; and replacement of Education For All (EFA) and Millennium Development Goals (MDGs) by the UN's Sustainable Development Goals (SDGs) that have been adopted by Pakistan also as its own Agenda for Development. Besides, after 18th amendment implementation of National Education Policy 2009 was virtually stopped as per findings of National Education Policy 2009 Implementation Research study conducted by Academy of Educational Planning and Management. On the other hand none of the provinces or federating units could formulate its own comprehensive policy plans. It resulted in a vacuum and big gap in the very important area of education policy.

2. In order to bridge the gap, Inter-Provincial Education Ministers (IPEMC) Conference, a forum created under NEP 2009, in its meeting held at Muzaffarabad in 2015 unanimously decided to revise the National Education Policy. Ministry of Federal Education and Professional Training was given the role of coordinator and facilitator for the revision of the 2009 policy.

3. The Ministry constituted a team of policy experts comprising of representatives of all the four provinces as well as federating units nominated by the respected province/unit. The said team after series of meetings recommended the framework for policy review which included a list of 18 policy chapters and standardized template/format of each chapter. The said format covered conceptual framework, constitutional/legal provisions, their importance and significance, situation analysis, issues and challenges; goals, objectives and targets; Policy provisions; and implementation strategy. The 7th Inter-Provincial Education Ministers' Conference held at Islamabad in February 2016 approved unanimously the list of policy chapters and template/format of new policy. Meanwhile Ministry of Federal Education and Professional Training (MFE&PT) solicited proposals for new education policy from education departments of provinces and federating units, civil society, NGOs, individuals and others through press/mass media.

4. Advisory Committee of Ministry of Federal Education and Professional Training (MFE&PT) which is comprised of eminently qualified and experienced educationists of the country took up the responsibility of formulating the policy. The policy chapters were distributed amongst some of the members, who were notified by the Ministry, in accordance with their interest and expertise. The zero draft of each chapter was written by the middle of August 2016. Each draft chapter was reviewed by one or two experts in the respective area/domain. Subsequently, first draft of each of the eighteen chapters was prepared by the chapter writer. Then the draft policy was shared and discussed with the team of policy experts

comprised of Provincial/Federating units' representatives constituted by the Ministry in consultation with the provinces. The complete draft policy was shared with the provincial and federating units education departments and civil society representatives. A second draft of the policy was prepared in the light of the views, comments and observations of provinces, federating units and civil society.

5. Chapter two comprehensively lists overall goals, objectives, targets and key policy areas of the education policy. It sets the objectives and highlights the key focus areas of each of the sub-sectors of education and literacy right from early childhood education to higher education. The sub-sector wise objectives and focus areas cover quantity, quality and management.

6. Chapter three is on Islamic Education. The policy focus areas are: the propagation of ideology of Islam; teaching of Quran with translation; teaching of AHADIS and SIRAT-A-TAYYABA; character building (TARBIYYA) and purification of soul (TAZKIYYA-AN-NAFS).

7. Chapter four is on early childhood education. The policy provisions aimed at provision of adequate facilities, services and infrastructure for ECE classes; increasing the access/enrolment; improving the quality through providing separate ECE trained teachers; launching awareness campaign about importance and significance of ECE; use of information and communication technologies for promotion of ECE; and allocation of separate budget for ECE. The holistic personality develop of the child is the main focus of the ECE policy.

8. Chapter five covers literacy and non-formal basic education. The emphasis of the policy is on expanding equitable access; improving the quality of adult literacy and non-formal basic education programmes; strengthening the local and district organizational and management structure; and allocation and mobilization of adequate resources for promotion of literacy. The set targets and dates of their achievement for adult literacy are 75% by 2020 and 86% by 2025. The main focus of literacy programmes will be on basic, functional and skill literacy and priority age group will be 16-25 year. The policy recommends a uniform system for assessment/examination and certification as well as equivalence of various levels of literacy. The policy provisions also provide for launching of country-wide programmes for promotion of literacy and non-formal basic education by utilizing available infrastructure, resources and services both in public and private sectors including DeeniMadaris. The policy also recommends expansion and extension of non-formal basic education programmes to middle and secondary education level especially for out of school children of age group 5-16.

9. Chapter six is on primary education. Universalization of primary education by 2020 in case of boys and 2025 in case of girls is the main policy target to demonstrate compliance with Article 25A of the Constitution of the Islamic Republic of Pakistan. These deadlines have to be strictly observed in light of the Constitutional requirement. The policy provides for number of important provisions/actions for universal access/enrolment especially in the context of enrolment of out of school children as well as universal retention/completion through minimizing the dropout rate. The next highest priority is assigned to universal high student achievement through enhancing the quality of education. The main focus of policy provisions aimed at qualitative improvement is on meeting the learning needs of the child in

terms of learning tools (literacy, numeracy, problem solving and oral expression) and the learning contents (knowledge, skills, values and attitude). The policy also recommends innovative programmes and alternate pathways such as mode of non-formal education for universal primary education. Teacher competency and commitment is another major focus area of primary education policy. Allocation of 45-50% of education budget for promotion of primary education as a whole and 30% of primary education budget for improving the quality of primary education is another major policy provision included in the primary education policy chapter.

10. The targets for development of secondary education (Chapter seven) include upgradation of 50% primary schools to middle; 40% middle school to secondary; and 20% existing secondary school to higher secondary level. Besides, increase the gross participation rate at middle education level to 85% and secondary up to 70%.

11. The selected policy provisions are introduction of technical and vocational stream in selected high schools; separation of administrative and academic cadre; use of ICT; implementation of article 25(A); provision of missing facilities; increase in the budget for quality improvement; extend the non-formal education program up to secondary level; ensure the availability of qualified science and math teachers; and institutionalization of system of accountability and awards.

12. Chapter eight focuses on teacher education. The main policy guidelines are: demand driven teacher education; uniformity in designations, qualifications, salary structure and professional growth; development of professional accreditation standards and linking the curriculum with the standards; quality assurance of teaching personnel; and continuous professional development of teachers.

13. The chapter on Examination and Testing Services recommends review of standards for examinations/assessment; establishment of elementary education examination board; effective coordination amongst examining bodies, curriculum developers and textbook writers; strengthening the monitoring for examination and assessment; internal/continuous) assessment of students by the teachers; training of paper setters; and activation of research cells of BISEs.

14. The main policy provisions for promotion of technical and vocational education are: competency based training and assessment system; involvement of private sector in the planning and management of TVET, opening of new properly equipped TVET institutions; exploration of new trades and technologies to increase women enrolment in TVET institutions; introduction of technical/vocational courses in general school education; operationalize the National Qualification Framework; pre-service training of TVET teachers; capacity building of Technical Teacher Training Institutions; creation of data base of TVET at district, provincial and national level; introduction of vocational and income generating skills training in adult literacy centers and selected non-formal schools.

15. The key strategic priorities of Higher Education include: increasing equitable access; excellence in leadership, governance and management of HEIs; increased faculty with highest academic qualification; preparation of 10,000 Ph.D faculty through US knowledge

corridor; enhanced quality of curricular offerings; research, innovations and commercialization; and significantly enhanced financial investment because quality higher education pays relatively quick multiple dividends through creating a knowledge economy. A major initiative of HEC is to expand technology embedded higher education facilities by upgrading PERN III to provide ultra- fast connectivity and expanded Bandwidth for digital services.

16. The major programs and targets proposed for promotion of higher education include: increase access from the current 8% to 15% of the 17-23 age group; initiatives of establishing community colleges in underserved areas to prepare certified technically competent manpower; establish 15 new public science and technology universities; facilitate the establishment of 50 new private sector universities; set up 70 smart sub-campuses; increase number of sub-campuses of Virtual Universities and AIOU to provide education at the doorsteps of working men and women; and enhance use of high speed connectivity to all degree granting institutions.

17. The main pillars of ICT policy are: providing access to ICT in schools; use of ICT to strengthen quality of teaching and enhance student learning; develop complementary approaches to ICT in education; build on best practices in existing ICT programmes; and develop the capacity of education departments. Integration of Computer and other digital devices like smart phones for teaching and learning is needed to prepare students in early grades to be ready for the digital revolution underway.

18. The Policy provisions proposed for Library and Documentation services are: improve the quality of library services; promote the reading culture; equip the libraries with modern facilities including internet connectivity; extend the network of libraries up to the union council level; introduction of mobile library services; and capacity building of library professionals.

19. The main policy provisions recommended in the chapter on Physical Education, Health and Sports are formulation of curriculum for grade I-V; pre and in-service training of teachers in physical education; annual sports week; establishment of physical education and sports colleges at provincial level as well as a university; and a separate directorate for Health, Physical Education and Sports is recommended..

20. Chapter fourteen “Private Sector in Education” highlights the major issues and challenges confronting private sector education and sets the targets from ECE to Higher Education including Technical and Vocational education. The policy provisions recommended to address the issues and challenges and achieve the objectives and targets inter-alia, include, creation of private sector education data base and its regular updating; grant-in-aid and incentives for low cost schools to be opened in rural areas; implementation of public-private partnership initiated in 2001-02; improved coordination and cooperation between public and private sectors; empowerment and capacity building of regulatory authorities; and strengthening and expansion of role and functions of education foundations.

21. Chapter fifteen: Special Education and Inclusive Education analyses the situation, identifies the issues and challenges, sets the targets and gives policy provisions separately for

Special Education as well as Inclusive Education. The target of participation rate of special children has been fixed as 50% by 2025. Besides, creating inclusive learning environment in 50% existing formal education institutions at all levels. The main policy provisions enunciated include expanding access to special need children; allocation of 5% of education budget for Special Education; provision of modern technologies and teaching learning aids; transport facilities for all the special education institutions; in-service training and staff development of faculty and management of Special Education Institutions; provision of basic facilities and services for inclusive education; and training and sensitization of general education teacher regarding inclusive education.

22. First time in the history of education policy a full-fledged chapter on DeeniMadaris has been included. In this chapter the importance, significance of the role and contributions of DeeniMadaris have been highlighted. Issues, challenges, priority needs and requirements of DeeniMadaris have been identified. The main policy provisions recommended to resolve the issues and challenges and achieve the goals and targets are; revision of the curriculum of DeeniMadaris at all levels to include important formal education subjects; equivalence of certificates and degrees of DeeniMadaris at all levels; grant-in-aid to deserving DeeniMadaris; promotion of adult literacy and non-formal basic education through DeeniMadaris; supporting the DeeniMadaris by the government for capacity building and teacher training; creation and regular updating of DeeniMadaris data base; and introduction and initiation of technical and vocational education in selected DeeniMadaris.

23. A separate chapter on Guidance, Counseling, Character Building and Extra-Curricular Education through Boys Scouts and Girls Guides has been included in the policy. The policy provisions aimed at character building include integration of adequate contents on character building and values in curriculum; teachers training focusing on character building and personality development of child; initiation of special programs for Tarbiyya and Tazkiyya of children; development of code of ethics for teachers and its enforcement; character building through co-curricular and extra-curricular activities are the highlights of the chapter to prepare moral, ethical citizens and scholars.

24. Extra-curricular education and activities have been recommended for physical, spiritual, intellectual, social and emotional development of child. The main focus areas of policy provision for scouting and girls guide are access, quality, training, governance and management, research and data base creation. Some of the main policy provisions are: making scouting compulsory in each school; giving additional marks to bona-fide scouts; integrate contents on scouting and girls guide in curriculum; making scouting as part of teacher training; and allocating adequate budget for scouting and girls guide.

25. The last policy chapter is on Financing of Education. The recommended policy provisions are: equitable and need- based allocation of education budget; making release of funds and utilization procedures and processes simpler and transparent; allocation of adequate budget for quality improvement; capacity building and training of all concerned in financial management; decentralized financial management and control; increase the budget allocations for education and literacy; and creation and sharing of financial data base.

26. Pakistan has a history of developing detailed and well- designed education policies since 1947 but has fallen short of implementing them. We have repeatedly set goals of free, universal basic education, quality higher education to produce innovative knowledge, skills and competencies and scholars committed to doing that in an ethical manner. We are at a point where good plans have to be implemented through a well- defined monitoring and evaluation system of accountability, both at the provincial and federal levels. Without such a system we will continue to postpone rather than achieve our goals to another day and another education policy. It is urgent to break the layers of inertia if we want to successfully compete in the comity of nations and create a place of honour for our nation.

CHAPTER -2

GOALS, OBJECTIVES AND KEY AREAS OF EDUCATION POLICY

GOALS:

Character building

1. Taleem (Seek, Use and Evaluate Knowledge), Tarbiyya (Social, Technical, Moral and Ethical Training) and Tazkyya (Purification of Soul) are three pillars of the policy.
2. Character building on the basis of universal Islamic values integrated with ethical values relevant to all human beings.

Meeting Learning Needs (Knowledge, Skills, & Values)

3. Meeting the learning needs of the child which include learning tools (literacy, numeracy, problem solving and oral expression) and learning contents (knowledge, skills, values and attitude).
4. Literate, knowledgeable and knowledge-based society focusing on holistic development of humans, catering to their educational, social, economic, cultural and spiritual needs.
5. Continuous and lifelong learning programmes.

Pakistani Nationhood and National Integration

6. Promote and foster ideology of Pakistan creating a sense of Pakistani nationhood on the principles of the founder of Pakistan i.e. Unity, Faith and Discipline.
7. Foster the ideals of Muslim Ummah. Cultivate inter-faith harmony and celebrate diversity of faiths.
8. Promote the values of peace, tolerance, respect for human rights, universal brotherhood, understanding and mutual co-existence

Right to Education: Expanding Access

9. Honour national and international commitments in education and literacy.
10. Universalization of Education up to Matric in light of article 25 (A) by 2020 or sooner on an emergency basis.

Quality of Education & Institution Building

11. Quality assurance of academic programmes.
12. Promote culture of research and innovation.
13. Establishment, Expansion, Strengthening and Capacity Building of institutions and organizations related to Education and Literacy.
14. Institutionalize uniform, valid and reliable examination system.

Enhancing Education Budget

15. Increase investment in education to **4 %** of GDP.

Science and Technology

16. Promotion of Science and Technology for economic development.
17. Knowledge economy arriving at production of Quality scientists, technicians and experts to respond to the industrial needs (local, national and global).

Harmonization of Curriculum and Standards

18. Harmonize existing education systems at all levels.
19. Curriculum to be based on consensus based National Curriculum Framework and National Standards adopted by IPEMC in 2016.
20. Provision of standardized facilities and services by removing all kinds of disparities inequities and imbalances including gender disparities and geographical imbalances.

OBJECTIVES:

Promotion of Early Childhood Education

1. To expand, strengthen and promote universal, comprehensive Early Childhood Education with an objective to ensure holistic development of child to prepare for formal schooling.

Achieving Universal Primary Education

2. To achieve universal quality primary education covering all the three dimensions/ aspects of universalization i.e. universal access/enrolment; universal retention; and universal achievement by 2020.

Provision of Free Elementary and Secondary Education

3. To provide free and compulsory education up to Matric in compliance with the provisions of Article 25(A) of the Constitution.
4. To expand and strengthen the facilities and services for middle and secondary level education by upgrading more primary schools to middle and secondary level.
5. To expand and extend the existing non-formal basic education programme to middle level (VI – VIII).
6. To expand the quality distance education programme to cater to the learning needs of more children of secondary education age group.

Non-Formal Education (NFE), Online and Distance Learning (ODL)

7. To launch innovative programmes and new initiatives including alternate learning paths for out of school children especially for disadvantaged and deserving children with an objective to enroll and retain all the out of school children within minimum possible time.
8. To strengthen non-formal basic education through teacher training, use of information and communication technologies, better coordination, condensed curriculum, improved examination and assessment system and strict monitoring and supervision.

Towards A Literate Pakistan

9. To achieve the target of literate Pakistan through launching the country wide campaign of literacy for all and through all.
10. To offer research based innovative programmes in adult literacy relevant to the needs of learner focusing on basic literacy (reading, writing and numeracy); life skills income generating skills and lifelong learning.

Knowledge Economy through Higher Education

11. To increase access to higher education from its current level of 1.4 million students to 5 million in the next five years by opening more universities and degree awarding institutions.
12. To produce highly educated and technically skilled manpower as per demand and requirement at national and international levels to create knowledge economy.
13. To introduce new disciplines, emerging sciences and technologies to equip the students with the latest knowledge, skills and competencies.
14. To increase the access to distance education through expansion of Open university sub-campuses and Virtual university campuses in remote rural and far flung areas.

Advancement of Science, Technical and Vocational Education

15. To increase the enrolment ratio in science, technical and vocational education disciplines.
16. To introduce technical and vocational education in selected formal and non-formal middle schools.
17. To re-introduce the quality technical and vocational education stream in selected schools at secondary and higher secondary school level to comply with national TEVTA standards
18. To establish trade schools at sub-district and district level.

Improving Quality and Efficiency of Education System

19. To take effective measures to improve the completion / survival rate at primary, middle and secondary levels as well as improve transition rate from primary to middle and middle to secondary.

Facilitating Private Sector Education

20. To encourage, facilitate quality private sector education.

Promoting Use of Information and Communication Technologies (ICTs)

21. To promote, expand and strengthen Information Technology (IT) education.
22. To enhance the use of information and communication technologies (ICTs) for expansion of access to and quality of education and literacy.
23. To promote use of education technology through supporting designing, mass production, and dissemination of teaching kits and A.V. aids etc. to all schools.

Achieving Gender Equality in Education

24. To achieve gender parity, gender equality and empower women and girls within shortest possible time.

Reforms for Quality

25. To improve the quality of education by introducing reforms and new initiatives in curriculum formulation, textbook and instructional materials development, teacher training, examination and assessment and monitoring and supervision.

Selection, Recruitment, and Capacity building of Teachers

26. To recruit competent, capable and committed scholar-teachers purely on merit basis at all levels of education.
27. To standardize and institutionalize teacher training arrangements, accreditation and certification procedures and processes in compliance with the National Professional Standards for Teachers.
28. To update and strengthen existing teacher training institutions in terms of staff, logistics and facilities to teach new degree programmes approved by HEC, to prepare 150,000 new teachers with 2-year ADE and 4-year B.Ed. (Hons) programmes offered by all provincial Colleges of Education and University Faculties of Education.
29. To introduce Continuous Professional Development (CPD) programme for both formal and non-formal education teachers at all levels.
30. To adjust the teacher training curriculum to the needs of the students/learners curriculum and scheme of students.

Curriculum and Standards

31. To develop and implement National Curriculum Framework and National Standards for each subject from Grade 1 – 12.
32. To institutionalize new curriculum formulation, textbook development and review process in the light of 18th Amendment in consultation with National Curriculum Council.
33. To revise 2006 National K-12 scheme of studies to make it more relevant and comprehensive, using the most modern principles of Curriculum development and latest learning theories.
34. Strengthen the National Curriculum Council to develop a continuous curriculum formation, revision and refinement process and procedure in the light of research and regular feedback from stakeholders.
35. To include new and emerging concepts in curriculum development and refinement.
36. To initiate effective measures and programmes for education to deal with natural emergencies

Libraries & Instructional Technologies

37. To establish, expand and strengthen the libraries at all levels of education right from primary to tertiary level as well as district to village/grass root level. The strengthening of libraries may also include internet connectivity for online library services and other modern facilities. Each classroom to be provided an internet connected computer to explore new level appropriate reading materials. Teachers to

be trained to effectively use instructional technology to improve the quality of teaching English, Mathematics and Sciences.

Languages and Medium of Instruction

38. To resolve the issue of medium of instructions and teaching of foreign languages in consultation with provinces and Areas.

Religious Education & Reforms in Deeni Madaris

39. To ensure that all Muslim children are provided with opportunities through Taleem, Tarbiyya and Tazkiya to learn, understand, and apply the teachings of Islam in their lives.
40. To introduce contemporary subjects/studies along with the curricula of Deeni Madaris for mainstreaming, recognition and equivalence of Deeni Madaris graduates.
41. To support Deeni Madaris and utilize their services for promotion of adult literacy and non-formal basic education.
42. To ensure teaching of Ethics/Moral Education in lieu of Islamiyat to non-Muslim children.

Mass Mobilization & Community Involvement

43. To mobilize the political will and enhance role of mass media for educational development.
44. To improve and strengthen school community relationship.

Physical Education, Sports and Games

45. To provide the requisite facilities, services and opportunities for physical education, sports and games at all levels of education right from ECE to tertiary level.

Health and Hygiene

46. To improve the health, hygiene and sanitation conditions in schools.

Public Private Partnership

47. To encourage, facilitate and regulate private sector education.
48. To promote regulated and monitored Public-Private Partnership for educational development.
49. To improve coordination amongst public and private sectors organization, NGOs, INGOs, Donors, Madaris and all other concerned to offer uniform standards based curricula and facilities.

Enhancing Coordination for Achieving SDGs

50. To improve coordination at local, district, provincial, national and international levels in education and literacy especially to achieve national and international commitments such as SDGS.

Reforms in Assessment and Examination System

51. To review and reform the assessment and examination system to make it compatible with the national and international needs and standards.
52. To build the capacity of Examination Boards and Bodies for scientific, valid and reliable assessment system.

Expanding Access to Special and Inclusive Education

53. To ensure inclusive and equitable quality education.
54. To introduce the concepts of child friendly schools and inclusive education.
55. To promote, expand and strengthen special education in the light of national and international commitment, pacts and declarations.
56. To provide necessary facilities, services and infrastructure for inclusive education at all levels of education both in Public and Private Sector educational institutions.
57. To universalize the access/enrolment of special education children, both girls and boys by establishing more special education institutions and equipping them with the needed facilities and services.

Boy Scouts, Girl Guides, Guiding and Counseling

58. To organize, expand and activate Boy Scouts and Girls Guide movement throughout the country utilizing their services inter alia for safety, security, education in emergencies, promotion of literacy and disaster management etc.
59. To reinitiate and re-organize the National Cadet Corps in all secondary schools.
60. To provide Guidance and Counseling services to students of secondary education and above.

Increasing Education Budget

61. To increase the investment in education by increasing the allocation, simplifying the procedures of releases and expenditure and improving the absorptive capacity of the system. Professional finance staff to be hired at the district levels to monitor the effective, timely utilization of funds according to the plans for increasing access, upgrading of facilities and hiring of teachers on merit.
62. To enhance the ratio / proportion of development expenditure especially for quality of education inputs and interventions.

Research and Database for Effective Educational Planning

63. To conduct research and create and regularly update data base for each sub-sector of education including quantity/access, quality and financing data/statistics.

Mechanisms for Implementation and Monitoring of Education Policy

64. To suggest effective mechanisms for implementation of education policy provisions. Educational administrators at Federal and Provincial levels to be held accountable for failure in timely implementation of policies and plans.

Key Areas of Education Policy (2017)

The new education policy will focus on the following Key Areas.

1. **Ideology based Vision** and Mission aimed at Unity, Faith and Discipline.
2. **Character building** through Taleem, Tarbiyya and Tazkia.
3. **Holistic development of child** (Physical, Social, Intellectual, Moral, Spiritual and Cognitive etc.)
4. **ECD**: Comprehensive Early Childhood Education and Development (3-5 years age group children) assigning priority to 4 – 5 years age group.
5. **Primary Education: Universalization of Primary Education (Grade 1 – 5)** covering all the three dimensions of universalization. i.e.
 - Universal access/enrolment
 - Universal retention/completion
 - Universal achievement on set standards and competencies.
6. **Elementary Education**: Expansion of Elementary (middle level VI – VIII) Education through both formal and non-formal modes of education.
7. **Non-Formal Education**: Effective short-term non-formal education programs to be developed and used to speedily integrate students in the formal system of education.
8. **NFE and ODL for Secondary Education**: Expansion of Secondary level education through formal and distant learning programme.
9. **TVET**: Introduction of Technical and Vocational education in non-formal middle level schools.
10. **Technical Education Stream**: Reintroduction of Technical Education stream along with Science and Humanities in selected high schools and intermediate colleges to prepare vocationally and technically empowered human capital.
11. **Trade Schools**: Establishment of Trade Schools in each Tehsil for male and female trainees.

Capacity building of Education Personnel

12. Merit based, professionally qualified and competent, dedicated, committed and ideologically sound recruitment of teachers who meet National Professional Standards of Teachers.
13. Rationalize and create a balance between demand and supply of quality teachers.
14. Expansion and Strengthening of teacher training programmes to non-formal education including Deeni Madaris (focusing on multi grade teaching), Higher Education Teachers, educational managers/administrator, planner, policy makers, supervisors, paper setters. Curriculum developers, textbook writers and publishers etc.

Curriculum Reforms and Standard Setting

15. Revision of curriculum and teacher training system both, pre-service and in-service, to make it learner centered and IT based.
16. Development, approval and implementation of a National Curriculum Framework for harmonization of standards and national integration.
17. Setting of minimum National Standards for each subject/discipline and each grade/class preferably the core subjects.
18. Consensus based curriculum in the light of National Curriculum Framework and National Standards.
19. Uniform curriculum for all systems of education (public as well as private).
20. Revision of Natural/Physical Sciences including IT curriculum after every 5 years and other subjects after every 10 years.
21. Main focus of junior grades curricula on learning tools i.e. literacy numeracy, problem solving and oral expression; and learning contents i.e. knowledge, skills, values and attitudes. Whereas, the main focus of higher grades curricula on knowledge, understanding, analysis, synthesis and application.
22. Provision of standardized facilities and services to each school/educational institution throughout the country irrespective of gender, area, cast or creed etc.
23. Revision of Scheme of Studies to make it more comprehensive and need based
24. **Elimination of Disparities:** Gender equity and parity and remove geographical imbalances in provision of education and training.
25. **Interfaith Harmony:** Promoting tolerance, respect for difference of opinion and interfaith harmony
26. **Research and Innovation:** Creating a culture of research and innovation in universities
27. **Success Stories and Good Practices:** Replication of success stories and good practices in education and training at local, national and global levels.

Literacy and Lifelong Learning

28. **Lifelong Learning:** Knowledge based society and continuous and lifelong learning.
29. **Literacy For All:** Country wide Literacy For All and All For Literacy campaign.
30. **Functional Literacy:** Integrated approach in Literacy i.e. Basic Literacy (Reading, Writing and Numeracy) Functional Literacy (Life Skills) and Income Generation skills literacy.
31. **Capacity building of Literacy Personnel:** Establishment of National and Provincial Institutes of Teacher Training for Literacy and non-formal education teachers.
32. **ODL:** Expansion of Online and distance learning (ODL) programmes and provisions.

Financing of Education

33. School/institution based and enrolment based budgeting.
34. Education budget free from all types of cuts, non-lapsable and non-transferable.
35. Financial reforms in education training sectors to relax the rigid rules, regulations and simplify the tedious procedures and processes to ensure on time releases and optimum utilization of education and training budget.
36. Improvement in the absorptive capacity of the system to effectively spend the allocated funds.
37. Allocation of 4% of GDP for education and training effective 2018.
38. Allocation of at least 25% provincial educational budget for quality improvement projects and programmes.
39. Regulation of fee structure of private educational institutions.

Education Governance and Community Involvement

40. Establish, expand and strengthen parent-teacher and school community relationship.
41. Mobilize strong political will and commitment for educational development in the country.
42. Politics free, complete consensus, cooperation and support for social sector development in particular educational development.
43. Expansion and strengthening of standards-based system of pre and in-service teacher training.

Quality Initiatives

44. Setting up Quality Assurance Cells in all public universities.
45. Phasing out all one and two year Bachelor's degrees in all universities and replace them with 4 year degree on semester system that comply with learning outcomes and standards of National Qualifications Framework of Pakistan 2016
46. Introduction of new National Qualifications Framework for all levels of education to ensure achievement of learning outcomes at all levels.

Higher Education

47. Continuous revision and updating of Higher Education Curriculum in the light of new knowledge explosion by National Curriculum Review Committees of HEC and National Accreditation Councils..
48. Establish, expand and strengthen Research Centers in all the Universities to foster innovative and applied research linking it to economic development of the country.
49. Development of low cost split degree graduate indigenous programmes of studies.
50. Development of programmes of Faculty sabbatical exchange to undertake teaching and collaborative research.

Research & Development (R & D) at Tertiary Level

51. Increase the number of collaborative research with the growing industries in the country.
52. Enhance and strengthen the Business Incubation Centers (BICs) in universities.
53. Focus on applied research in scientific study exploration and commercial exploration of natural resources.
54. Establish new Science and Technology Universities and Research Technology Parks.
55. Increase number and amount of Research grants for discovery of new and useful knowledge to solve the critical problems in energy, climate change, food security for the rising population and availability of adequate fresh water resources throughout the year.
56. Set up more Research and Technology Parks with the collaboration of universities, Business enterprises, industries and international partners.
57. Mobilization of resources and generation of additional revenue through various programmes, projects and activities.
58. Shift to knowledge based economy to ensure overall national economic take off as envisioned in GOP Vision 2025.
59. Strong industry-university linkages to ensure effective match between World of Education and World of Work.
60. Equitable and enhanced access to higher education especially for under-represented groups of population.
61. Use and utilization of modern information and communication technologies in all levels of education.
62. Increase enrolment in higher education from the existing 8% to 15% in next 10 years.
63. Initiation of continuous professional development programme with a main focus on teaching methodologies and skills for college and university teachers.
64. Introduction of integrated 4 year Bachelor degree programme.
65. Development of standards and norms by universities for affiliation of colleges.
66. Establishment and strengthening of Accreditation Council.
67. Establishment of Research Excellence Council at federal and provincial levels.
68. Strengthening of libraries and laboratories of colleges and universities to meet the international standards.
69. Research collaboration networks to be developed for all levels of education i.e. ECE to Higher Education.
70. Provision of facilities of Water, Sanitation and Hygiene (WASH) in all schools.

CHAPTER 3

ISLAMIC EDUCATION

3.1 Conceptual Frame work

Education policy provides a framework and pathway to the destination where society wants to take its new generation in the light of its ideology or philosophy of life. The policy has the most vital place in socio-economic milieu and moral frame work of a country. The secular Western countries or the Marxist-oriented countries always try to incorporate and integrate their ideology in their educational system. In case of Pakistan, national ideology or philosophy of life was enunciated earlier than the demarcation of its geographical boundaries. The country came into being on 14th August 1947 in response to the demand of Muslims of subcontinent who wanted to live their lives in accordance with the principles of Islam. These principles and ideals were aptly described in the ‘Objectives Resolution’ adopted by the Constituent Assembly of Pakistan on 12th March 1949 and which was made as part of the Constitution of Islamic Republic of Pakistan 1973. The Objective Resolution states:

- Whereas sovereignty over the entire universe belongs to Almighty Allah alone and the authority to be exercised by the people of Pakistan within the limits prescribed by Him is a sacred trust;
- Wherein the principles of democracy, freedom, equality, tolerance and social justice, as enunciated by Islam shall be fully observed;
- Wherein the Muslims shall be enabled to order their lives in the individual and collective spheres in accordance with the teachings and requirements of Islam as set out in the Holy Quran and Sunnah.

Education is an important element to prepare the nation particularly the younger generation to achieve these ideals. The only justification for our existence is our commitment to Islam to be adopted in our practical life. Therefore, our Education Policy should focus on Islamic Education and to suggest how to translate the Islamic Ideology into our beliefs, worships and actions in daily life. The First Education Conference, which was held in Karachi from 27th November to 1st December 1947, addressed the issue of education in a very candid way. The Conference recommended:

- Education system in Pakistan should be inspired by Islamic ideology;

- Religious instructions should be compulsory for Muslim students in schools and colleges. Similar facility may be provided for other communities should they so desire.

Subsequently the Commission on National Education 1959, known as Sharif Commission, recognizing the value of Islamic teachings, wrote:

“Our educational system must have to play a fundamental part in the preservation of the creation of Pakistan and strengthen the concept of it as a unified nation. The desire for a homeland for Muslims on the sub-continent grew out of their wish to be in a position to govern themselves according to their own special set of values. In other words, our country arose from striving to preserve the Islamic way of life”

3.2 Constitutional and Legal Provisions

In addition to the declaration made in the Objectives Resolution, Article 31 of the 1973 Constitution of Islamic Republic of Pakistan pertaining to Islamic way of life, reiterates:

- Steps shall be taken to enable the Muslims of Pakistan, individually and collectively, to order their lives in accordance with the fundamental principles and basic concepts of Islam and to provide facilities whereby they may be enabled to understand the meaning of life according to the Holy Quran and Sunnah;
- State shall endeavour, as respects the Muslims of Pakistan, to make the teaching of the Holy Quran and Islamiyat compulsory, to encourage and facilitate the learning of Arabic language and to secure correct and exact printing and publishing of the Holy Quran and to promote unity and observance of Islamic moral standards.

The Education Policy 1972-80 decided to continue with the previous theoretical perspectives and declared that the study of Islamiyat will be compulsory for Muslim students up to class X. Steps will be taken to ensure that the curricula and textbooks for all stages do not contain anything repugnant to, or inconsistent with, the cultural and ethical values of Islam.

The National Education Policy and Implementation Program 1979 announced that the aim of education would be “to foster in the hearts and minds of the students a deep and abiding loyalty to Islam” and accordingly undertook to review the entire curricula to ensure adequate content on Islam and ideology of Pakistan, in addition to teaching of Arabic at Middle level and making teaching of Islamiyat and Pakistan studies as compulsory subjects

up to undergraduate level. Mosque schools and Maktab schools were required to teach Nazira Quran while other students were required to complete Nazira Quran before appearing for Secondary School Examination. Education Policies of 1992 and 1998-2010 also continued with the same policy regarding Islamic Religious education. Under Education Policy 1992, teaching of Nazira Quran was retained as compulsory component of school education. However, meaning and the detailed commentary of selected verses of the Holy Quran was emphasized at Secondary and Higher Secondary level. Education Policy 1998-2010 reaffirmed its commitment to the ideological basis of the country in the following words:

- Ideology of Islam forms the genesis of the state of Pakistan. The country cannot survive and advance without placing the entire system of education on a sound Islamic Foundation.
- Teaching of Nazira Quran was continued as compulsory from grade 1 to grade VIII , while translation and explanation of selected verses from the Holy Quran was offered at Secondary and Higher Secondary level.

The Education Policy 2009 also provided as follows:

- The objectives of teaching Islamiyat shall be to ensure that all Muslim children are provided opportunities to learn and apply the fundamental principles of Islam in their lives with the purpose of reformation and development of society on the principles of the Quran and Sunnah.
- Islamiyat shall be taught as a compulsory subject from Grade I to Grade XII, extending up to graduation level in all general and professional institutions.

Now in the spirit of 18th Amendment in the Constitution, it is responsibility of all provinces/areas governments to promote national cohesion and harmony through the development of Islamic Education in our education system with mutual understanding as per practice in the past.

3.3 Importance and Significance /Rationale and Need

Acquiring of knowledge has always been a fundamental and integral part of Islamic traditions. The very first revelation of Al-Quran and about five hundred other verses are clear testimony to this fact. The importance of knowledge both formal and religious education is fully reflected in Quran and Hadith, which is an obligation for all Muslims. It is essentially knowledge and volition which makes the human elevated over the angels. Islamic education

guides the human to learn the basic teachings of Islam, like beliefs (Aqaid), worships, seerat etc to lead the society in economic, political, legal and cultural aspects. The Article 31 of the Constitution has stipulated that the state shall endeavour to make the teachings of the Holy Quran and Islamiyat compulsory, to encourage and facilitate the learning of Arabic language to promote unity and observance of Islamic moral standards. Therefore, we are fully justified to introduce Islamiyat, Arabic and Moral Education in our education system to fulfil our responsibilities.

3.4 Situation analysis (facts and figures, data, latest research)

Islamiyat has been taught as compulsory core subject from Primary to Higher Secondary level extending up to graduation in all general and professional institutions so as to create a tolerant and peace loving society with vision of finding relations to the real life problems through teaching of Al-Quran and Sunnah. Islamiyat is also offered as elective subject at Secondary and Higher Secondary level to enable the students to seek higher education in the relevant fields. The teaching of Al-Quran has been made as integral part of Islamayat (compulsory) at appropriate level. Arabic was offered as compulsory subject in early eighties at Middle level and then as elective subject from Middle to Higher Secondary level. Ethics (Moral Education) in lieu of Islamiyat (Compulsory) is introduced for minorities. The curriculum in all subjects were developed and reviewed from time to time and lastly during 2006. However, the core components of Al-Quran, Hadith etc. were deleted or reduced in the curriculum of 2006.

3.5 issues and challenges

3.5.1 Nazira Quran, translating of Quran and Hadith was not given due weightage as integral part of Islamiyat in the teaching programme

3.5.2 Arabic was not considered as compulsory subject properly as according to its true spirit in the curriculum and text books.

3.5.3 No qualified and trained teachers for teaching Islamiyat, Tajweed-o-Qirat, Arabic and Moral Education have been recruited.

3.5.4 No arrangements for providing opportunities for the teachers in higher studies in the country and abroad in the fields of Islamic Education, Arabic etc.

3.5.5 No facilities are provided for research work in Islamic teachings in the perspective of the new situation.

3.5.6 Tarbiya / Tazkiya is integral part of Education, but there are no proper contents in the curriculum and training to the teachers.

3.6 Goals objectives and Targets

3.6.1 To fulfil the requirements of Objective Resolution and Article 31 of the Constitution in its true spirit saying that education and training be imparted to enable the citizens of Pakistan to lead their lives according to the teachings of Islam as given in Al-Quran and Sunnah.

3.6.2 To educate and train the future generation of Pakistan as a true practicing Muslims to face the challenges of 21st Century with confidence, tolerance and courage.

3.6.3 To teach Islamiyat alongwith the Holy Quran as its integral part, while Ethics in place of Islamiyat to enable the learners to become responsible citizens for the development of the country and to provide them opportunities to adjust themselves in the global changes.

3.6.4 To impart training to the subject authors and teachers to enable them to fulfil their responsibilities in the perspective of modern world.

3.6.5 To provide opportunities to the teachers of Islamic Education and Arabic to make research in the teaching of Islam for the modern world

3.7 Policy provisions

3.7.1. Islamiyat will be introduced as compulsory subject from class III to Intermediate classes extending up to graduation in all general and professional institutions as in the past. For Early Childhood Education (ECE) and classes I to II, it will be integrated in other subjects, including Urdu text book.

3.7.2. Non-Muslim students will be offered Ethics (Moral Education) in lieu of Islamiyat compulsory from Classes III to XII and they will not be required to read lessons on Islam in ECE and I to II classes.

3.7.3. Islamiyat (compulsory) from classes III to XII will comprise Al-Quran (Nazirah of 30 Paras, Hifz of some selected Ayat and short Suras, translation of about 300 Ayat and Masnoon Duae, Hadith, Imaniyat, Ibadat, Seerat, Good (Mumlat) behaviours, Huqooqullah, Huqooqul-Ibad, Day to-day problems and their solution in Islam, Prominent personalities of Islam, etc.

3.7.4 Arabic as compulsory part will be integrated in Islamiyat from Middle to Higher Secondary level to enable the students to understand the Holy Quran.

3.7.5. Advance Islamic Studies shall be offered as elective subject at Secondary and Higher Secondary level with detailed study in Al-Quran, Hadith, Fiqh, etc. in its contents.

3.7.6. Arabic as elective subject shall be offered properly at Secondary and Higher Secondary level with Arabic literature and grammar in its course to enable the learners to have command in the language.

3.7.7. All possible arrangements shall be made to provide opportunities for seeking higher studies in Arabic and Islamiyat through scholarships both at home and abroad.

3.7.8 Practical aspects of Islamic teachings will be the main focus along with theoretical knowledge to ensure development of Muslim student personalities on Islamic lines specially Taleem, Tarbiyya and Tazkiya.

3.7.9 The golden principles of peace, tolerance and human rights etc shall be limelighted in curriculum and teacher training and Islamic learnings will be propagated to the whole world.

3.7.10 The concept of Muslim Ummah and universal brotherhood will be promoted through curriculum and text books.

3.7.11. Well qualified teachers shall be appointed for teaching Arabic, Islamiyat and Tajweed-o-Qirat and pre-service and post service training in the relevant subjects shall be arranged to update their knowledge and teaching experience.

3.7.12 The curriculum in Islamiyat, Arabic and Moral Education of public sector will be adopted by the private institutions to make uniformity in the society.

3.7.13 Supplementary reading material of good quality, charts, and books related to Islamiyat shall be printed and distributed in schools and Madaris.

3.7.14 Matter of teaching Quran shall be placed in front of the Parliament to make it a law which would be applicable all over Pakistan.

3.7.15 Research in Islamic teachings particularly at higher education level shall be provided and shared at national, local and International levels.

CHAPTER 4

EARLY CHILDHOOD CARE AND EDUCATION

Conceptual Framework

Early years of life are catalytic for the physical growth and mental development of children. Experts emphasize the need of special care and attention to children and creating an enabling environment for them during this period, including provision of health care, nutrition, education, and affection. Numerous terms are used to denote care and support for children in their early life. These include; Early Childhood Care and Education (ECCE), Early Childhood Development (ECD) and Early Childhood Care and Development (ECCD). Most of these terms or concepts are comprehensively emphasizing and advocating a holistic approach to pre-school child development. Early Childhood Education or ECE is an integral and common part of all these holistic approaches and their implementation require inter-ministerial coordination, a common strategy and joint action plans. A coordinated approach for child development is followed in most of the developed countries, whereas developing countries, due to financial constraints and lack of awareness, are not able to fully or partly promote ECD or even ECE.

2. Significance of Early Childhood Education

The process of development of personality and nurturing the potential of children commences from the very beginning of their lives. Experts have found out that physical and mental capabilities of children grow more rapidly up to the age of 8 years, and period between 2 to 5 years is highly critical in this respect. The early years are critical and formative for the acquisition of the concepts, and development of skills and attitudes that lay the foundations for lifelong learning. This period is characterized by rapid physical, intellectual, emotional, social and moral development. Provision of quality early childhood care and education makes a positive difference in their future learning, career, and adult life as good citizens. Investment on Early Childhood Education (ECE) brings following benefits to the individual, education system and the society as a whole.

Benefits to children

- Improvement in cognitive (thinking, reasoning) skills or ‘Learning to Know’
- Development of their skills to communicate, question, create and solve new problems
- Reinforcement of their social development (how to nurture and maintain good relations with adults, their other fellows) or ‘Learning to Live Together’
- Set the foundation for enhancement of learning outcomes in next grades which help them achieve success in their career

Benefits for Education System and Society

- Improved attendance and retention rates of the children who have received ECCE prior to enrolment in formal Grade I of the primary school.
- Drop-out rate is reduced and thus wastage of resources is minimized.
- Graduates of the education system become productive and contributing members of the society and law abiding citizens; with reduction in the crime rate and positive contribution to the economic growth.

- Cost-saving in health care as recipients of ECE are better prepared to adopt healthy life style and practices.

3. Situation Analysis of ECE in Pakistan:

In public sector schools of Pakistan, a proper and well planned Early Childhood Education (ECE) has been non-existent. Historically, pre-primary education existed in our schools with varying names like 'Katchi Class' or 'un-admitted' children etc. These categories of children were and are being allowed to come and sit in the school, but there were no standardized facilities for the provision of proper early childhood education to them. Neither a separate class room, nor full time services of an exclusive teacher are provided to these children. Education Departments in many provinces have so far not realized the need of development and dissemination of teaching-learning materials (TLRs) specifically produced for this age group. Pre-service teacher training courses and regular in-service teacher training workshops do not cover learning needs of children of age 3 to 5. Primary school teachers are not trained in interactive methodologies of teaching to foster joyful learning among children of pre-primary level.

The National Education Policy of 1998-2010, was the first official document that envisaged institutionalizing and integrating 'Katchi Class'. ECE was included as one of the three priority areas selected by Pakistan for its 15 year National Plan of Action to achieve Education for All Goals. Later on, funding for ECE was reflected in Education Sector Reform Programme (ESR) launched by the Federal Government and financial resources were provided to provinces and areas for this purpose. The first National Curriculum for ECE was prepared during 2002, which was further refined during 2006 and included in the Pre through 12 scheme of studies. National Education Policy 2009 contained a full section on ECE with five policy actions. Unfortunately, neither National Curriculum for ECE (2006), nor provisions of NEP 2009 could be implemented by the provinces.

Recently, some of the provinces and areas have initiated pilot projects. ECE Centres are being established in Punjab, Khyber Pakhtunkhwa, and Sindh. ECE is also part of Education Sector Plans prepared by provincial Education Departments.

National Education Policy 2009 set age group for ECE as 3 – 4+ years i.e. three years and more but less than five years. According to Pakistan Education Statistics 2015-16, total enrolment of pre-primary education (Katchi class and un-admitted children) was 8.74 million, and Gross Enrolment Ratio (GER) 74%. Majority of these enrolled children are above 5 years age. Out of these; 4.21 million or 48.17 % are in private sector and 51.83 % in public sector educational institutions. Katchi class is a part of primary education. There are neither separate educational institutions (nor classrooms) for ECE, nor specific teachers for ECE in public sector schools. In private sector there are 448 institutions exclusively offering pre-primary education with a total of 2,785 teachers.

Pre-primary education (3 – 4+ year age group) net enrolment rate (NER) in Pakistan is assumed to be around 36%, however, no data about NER at ECE level is available. It indicates that only one third of ECE age group children are in school and remaining two third are out of school (rural 61% : urban 42%).

Research studies and surveys indicate that facilities and services for ECE are grossly inadequate and insufficient in the country. Overall two third Government primary schools do

not have the basic facility of separate class room for 'Katchi' or ECE class. The situation is more dismal in rural schools as compared to urban schools. The data indicates that more than 70% primary schools do not have functional washrooms or toilets. This shows that learning conditions in majority of the primary schools are not conducive, particularly for young children of ECE age group. ECE students need separate class rooms, equipped with teaching learning aids especially designed and produced for this age group. Each ECE classroom need an exclusive teacher, trained in methodologies suitable for young children.

4. Issues and Challenges of ECE:

Introduction of ECE in Pakistan and its institutionalization face following challenges:

- i. Low priority of the governments for ECE.
- ii. Lack of awareness among planners, decision makers, and parents about the need and significance of ECE for the children, education system and society.
- iii. Absence of basic facilities and services for ECE in the government schools.
- iv. Non-availability of trained and qualified teachers for ECE.
- v. No mechanism exists for coordination amongst organizations, institutions and department working for promotion of ECCE.
- vi. Non-availability of adequate teaching – learning and instructional materials for ECE.
- vii. Non-availability of separate class rooms for ECE/Katchi class students.
- viii. Most of public and private sector schools offering pre-primary education or ECE are concentrated in cities, and children from affluent families avail these opportunities. Since government schools in rural areas lack basic facilities, therefore, rural children belonging to poor families are deprived of good quality ECE.
- ix. Nutrition issues for ECE age group children are very serious.
- x. Health and care issues impede ECE.

5. International and National Commitments of Pakistan for ECE

Pakistan has signed following international treaties, conventions, and development frameworks, which oblige governments to take action for protection of rights of children, including their health, education, care, and protection against threats involving physical or emotional harm.

5.1. International Commitments:

- Convention on the Rights of the Child (CRC). Pakistan ratified this convention in 1990. A number of Articles of this Convention relate to child development including their education and health.
- Sustainable Development Goals (SDG 4.2). Pakistan has signed 17 Sustainable Development Goals, resolved by United Nations during Sept 2015. SDG 4 relates to education with 7 sub goals and targets. SDG 4.2 focuses on ECE and it marks its commitment in the following words:

“By 2030, ensure that all girls and boys have access to quality early childhood development, care and pre-primary education so that they are ready for primary education”.

Federal and Provincial Governments are preparing actions plans to achieve education related targets of SDG 4.

5.2. National Commitments: The following policy documents manifest commitments of Pakistan for promotion of ECE.

- Legal Provisions in Acts for Implementation Article 25-A: Sindh, Punjab, and Islamabad Capital Territory (ICT) have passed laws for implementation of Article-25 (A). These Acts contain provisions of pre-primary and Early Childhood Education. For example, Article 9 of Right to Free and Compulsory Education Act 2012 (for ICT) passed by Senate and National Assembly, Article 9 of Sindh Right of Children to Free and Compulsory Education Act 2013 passed by Sindh Assembly, and Article 10 of Punjab Free and Compulsory Education Act 2014 passed by Punjab Assembly make it obligatory for governments to ensure provision of free pre-primary and early childhood education for the children above the age of three years.
- Provincial Education Sector Plans: All the four provinces have developed long term education sector plans in collaboration with international donors. All these Education Sector Plans have included provisions for promotion of ECE in the respective provinces and envisaged quantitative targets.

It is evident from the above references that Federal and Provincial Governments have committed to introduce, promote, and institutionalize early childhood education in the country.

6. Goals, Objective and Targets:

6.1. Goals:

- **Sustainable Development Goal:** By 2030, ensure that all girls and boys have access to quality early childhood development, care and pre-primary education so that they are ready for primary education.
- Incheon Declaration 2030: Provision of at least one year of free and compulsory quality pre-primary education and that all children have access to quality early childhood development, care and education.
- Goal of National Education Policy (2017): Free and compulsory quality pre-primary education for children of age group four to five years and equal access to early childhood education and holistic development for the children of age group three to four years by 2030.

6.2. Objectives:

- i. To meet the learning needs of all children of ECE age group.
- ii. To ensure holistic development of ECE age group children on the basis of early Learning Development Standards (ELDS).
- iii. To provide child friendly, attractive and entertaining school environment to young children.

- iv. To educate and sensitize parents about the significance of ECE.
- v. To sensitize and mobilize the policy makers, planners, administrators, teachers and other concerned about the need and importance ECE and strategies needed for its promotion.

6.3. Policy provisions:

- i. ECE class will be an integral part of primary school. All ECE age group children, both boys and girls, will be provided easy access to quality pre-primary education.
- ii. One year pre-primary education for the children of age group 4 – 5 will be free and compulsory.
- iii. Existing pre-primary education/'Katchi' classes will be transformed, upgraded to quality ECE by providing the required infrastructure, facilities and services including separate classroom, exclusive teacher and playground etc.
- iv. Degree programmes and certificate courses for ECE will be started in universities and teacher education and training institutions.
- v. Research on various aspects of early childhood education will be conducted, disseminated and utilized for promotion of ECE in the country.
- vi. New and innovative programs for promotion of ECE will be launched.
- vii. Information and Communication Technologies (ICTs) will be used for promotion of early childhood education and teacher training.
- viii. Holistic development of child pertaining to Physical Development; Social and Moral Development; Emotional Development; Language Development and Cognitive Development on the basis of ECE Curriculum and Early Learning Development Standards (ELDS) will be ensured.
- ix. Child friendly, inclusive, attractive, friendly and playful school environment will be provided to all ECE children (both urban and rural children).
- x. ECE education will be activity based and through play way method. Text book will not be allowed.
- xi. ECE class rooms will be equipped with teaching-learning and instructional material, teaching kits, and ICT based A.V. aids etc.
- xii. ECE class will be provided with ECE trained teacher. In addition to ECE teacher assistant teacher governess or Ayya may also be provided, if needed.
- xiii. Teacher student ratio for ECE class will be 1: 25.

- xiv. Policy makers, planners, managers/ administrators, teachers, parents and other concerned will be mobilized and sensitized about the importance and significance of early childhood education, care, and development.
- xv. Coordination and linkages amongst service providers and various stakeholders involved in ECCE programmes will be improved.
- xvi. Public sector will persuade, organize and facilitate the local community to open and run Early Childhood Education centers.
- xvii. Private sector will be encouraged and facilitated to expand and initiate ECE quality education programmes for disadvantaged and deserving children free of cost.
- xviii. ECE curricula will be reviewed, updated, and implemented.
- xix. Comprehensive ECE statistical data, covering public, private, DeeniMadaris and all other ECE institutions, on ECE core indicators including quality of education indicators will be regularly collected, analyzed, disseminated and utilized for promotion of ECE.
- xx. Early childhood education will be top priority. However, child health care and nutrition will be assigned served highest. Primary to honour national and international commitments.
- xxi. Federal, Provincial and Area Government will ensure allocation of separate and adequate budget for ECE to meet recurring as well as development expenditure.
- xxii. Joint ECCE plan in collaboration and consultation with all the concerned ministries, departments and others will be prepared, implemented and evaluated.

Literacy and Non-Formal Basic Education

Literacy: The Concept

Literacy, in simplistic terms, is the ability to read, write, and make simple calculations. Till the advent of twentieth century, indispensable functional role of literacy in social, political, and economic spheres of life was not recognized by the states and national governments. Industrialization, use of modern technology in occupations and daily life, and changing needs of polity and economy necessitated the availability of literate human resources in all fields. Literacy has now become an essential skill to communicate, to earn livelihood and live independently in today's world. Literacy skill is considered first step and a pre-requisite to access vast sources of knowledge presently available to humankind, which are mostly in print form. Literacy enables the individuals to acquire, receive, and comprehend information and messages from different sources, as well as express, negotiate, and explore. The following text highlights the conceptual framework of literacy:

“Literacy is about the acquisition and use of reading, writing and numeracy skills, and thereby the development of active citizenship, improved health and livelihood, and gender equality. The goals of literacy programmes should reflect this understanding.”

UNESCO, 2006, Global Benchmarks for Adult Literacy, Global Campaign for Education/Action Aid International, 2005.

2. Definitions and Standards of Literacy: An Evolving Phenomenon

Literacy has multiple dimensions of its need and usage by the individuals and society. Although, literacy starts with the recognition of alphabets and ability to calculate, its ultimate value lies in the application of these skills for communication, lifelong learning, and active participation in social, economic, and political spheres of life. Keeping in view the functional feature of literacy, its definition and standards vary in different countries, depending on the overall educational and development level of the society. The following definition proposed by UNESCO Experts Meeting for assessment of literacy highlights its functional significance:

“Literacy is the ability to identify, understand, interpret, create, communicate, compute and use printed and written materials associated with varying contexts. Literacy involves a continuum of learning in enabling individuals to achieve their goals, to develop their knowledge and potential, and to participate fully in their community and wider society”

(UNESCO 2005, Aspects of Literacy Assessment, Paris, page 21)

A number of countries have adopted conventional or simple definitions of literacy which encompasses 3 Rs i.e. Reading, Writing, and Arithmetic. In China, an urban literate person should have command over a vocabulary of 2000 words. In USA, a literate person is the one who can read news stories, poems and fiction, study and use the maps, tables, and

graphs, can write application, fill daily use forms, and make calculations up to 4 digits etc. In Belize, a minimum of 7 years of primary education is required to be counted as literate. In Bangladesh, a person is considered literate who can read, write, calculate and be socially aware. In India also, a person is considered literate who can read and write in any language. Indian official definition is though simple; however, for assessment of literacy skill, it has set specific and measurable standards for reading and writing. According to Indian standards, literate is a person who can read with accuracy at a speed of approximately 40 words per minute and write or copy at a speed of 10 words per minute, and take dictation at the speed of not less than 7 words per minute in any language. A table containing definitions of literacy in different countries is attached as Appendix.

In Pakistan, definition of literacy has been evolving. Country began with a sketchy definition of literacy and gradually improved it. The definition of literacy used for 1951 Population Census focused on the ability of reading only, and capabilities to comprehend meaning of the text and writing skill were not mentioned. Later on, in 1961, the definition was modified slightly and a person who was able 'to read with understanding a simple letter in any language' was declared literate. Nonetheless, even in 1961, the writing skill was still not taken into account. It was in 1972; when a more refined definition, covering both reading and writing skills was adopted. This definition stated that a person is literate who is "able to read and write in some language with understanding". The definition adopted for 1981 Population Census moved forward from rudimentary abilities of reading and writing and set more specific standards by stating that a person is literate who "can read newspaper and write a simple letter". The same definition was adopted for 1998 Population Census as well. It is evident from the definitions used in Pakistan till latest Census of 1998 that 'numeracy, which is globally considered an essential component of literacy, was not included.

The National Literacy Curriculum (2007), officially approved, published and notified by the Curriculum Wing of Ministry of Education, Government of Pakistan, adopted following definition of literacy:

"The ability to read, write and calculate simple symbols, digits, words, sentences, texts, with understanding at normal speed, and tackle everyday life problems related to citizenship, gender sensitivity, health, ethics and technical know-how to improve life and ultimately the society."

(Ministry of Education, National Literacy Curriculum 2007, Curriculum Wing, Islamabad, Section 2.2, page 15)

Keeping in view the level of literacy and numeracy skills required to qualify for the above definition, the National Literacy Curriculum (2007) introduced three levels of literacy. Level 1 and 2 were considered equivalent to Grade 1 and 2 of formal school education, respectively, whereas Level 3 was declared equivalent to Grade 4+.

During 2008, when next Population Census was being planned by the government, Ministry of Education officially conveyed following definition of literacy to Population Census Organization, Statistics Division, and Government. of Pakistan for inclusion in the survey questionnaires:

“Ability to read and write simple statements in any language and to be able to do simple calculations”

(Ministry of Education Letter No F.1-2/2006SS Dated 12th July 2008 to Population Census Organization- PCO)

It was first time during 2008 that numeracy was officially added to the definition of literacy in Pakistan. Later on, Policy and Planning Wing of the Ministry of Education, on the recommendations of Curriculum Wing, approved following definition of Literacy:

“A person who can read and write a paragraph in any language with understanding and can make simple calculations”

The above definition is more comprehensive and cover 3Rs i.e. Reading, Writing, and Numeracy.

3. Who are the illiterates? World maps of illiteracy and poverty largely coincide. In Pakistan, bulk of the illiterates are those who were born poor, and are living in under developed, and far flung rural areas, and in urban slums. Majority of the illiterates are women. Illiteracy is more pronounced among peasants, labourers, ethnic, linguistic and religious minorities, nomads, persons with disabilities, and prisoners etc. In some pockets of the country, it is not poverty but illiteracy and conservative views of the parents which prevent them to send their daughters to schools. Hence, illiteracy of parents is also a barrier to literacy of new generations.

4. Importance of Literacy

Importance of literacy is not linked merely to economic or occupational needs of the individuals alone. In modern times, literacy has social and political exigencies as well. Social harmony, justice, and free expression of views can prevail and be promoted in the society when its members can communicate and understand each other’s opinions and ideas, overcoming geographical barriers. This is possible when people are literate and can communicate and understand each other’s point of view.

Illiteracy is a barrier, as it isolates individuals and groups from rest of the world. A literate environment not only improves economic indicators in a society, it positively influences systems of governance and polity. Literate citizens are motivated to actively participate in decision making processes at local, provincial, and national levels. Democratic institutions and norms are strengthened when voters are literate, can read newspapers, and acquire ability to make informed choices. Hence, literacy brings political stability, which in

turn sustains and accelerates the process of economic development. It is through literacy that economic and social disparities can be identified and eliminated. The most effective and long term solution for elimination of extremism, intolerance, and armed conflict in Pakistan is to broaden world view of masses through literacy and basic education.

Literacy is an important indicator of human resource development in a society. This fact is evident from the inclusion of ‘Adult Literacy Rate’ in the Human Development Index (HDI), introduced by the United Nations in 1990 for measuring social sector progress and pace of development of human resources in different countries and their ranking at global level. Later on, promotion of literacy was envisaged in various international development frameworks and declarations and rate of literacy was listed as one of the indicator for measuring progress. These included; Dakar Framework of Action for EFA and MDGs for the period of 2000-2015, and now the Sustainable Development Goals (SDGs) for the period of 2016 to 2030. Literacy of people also influences their health, nutrition, their protection against diseases and informed decision making about Planned Parenthood. Infant mortality rate, maternal mortality, and fertility rates are higher in countries where ratio of illiterate population is larger.

5. Non-Formal Education Approach: The Concept and Rationale

Inability of the formal education system to reach out all segments of population has necessitated alternate learning models for those children and youth who were excluded, missed, or dropped out for various reasons. In the Non-formal Education (NFE), learning facilities are organized by using locally available resources. Space for learning activities is provided by the community and an educated person from the vicinity is engaged as a part-time teacher. Time table for the teaching-learning activities and other administrative details are decided to adjust to the economic and social engagements of the learners. These features make NFE flexible and adjustable to the needs of learners and make these programmes cost effective also. Governments and NGOs can plan and offer NFE opportunities to the disadvantaged groups with less financial resources and increased return and efficiency. A number of learning or training programmes around the globe may have different names or nomenclatures but these may be categorized ‘Non-Formal’ in their nature. For example, programmes like Alternate Schooling, Drop-in-Schools, Community Education, Adult Education, Community Learning Centres (CLCs), Correspondence Education, Distance Education, Continuing Education, Lifelong Education, Open Learning etc. are categorized as Non-formal Education or NFE.

The following definition elaborates adaptable and learner friendly features of NFE:

“Non-formal education is characterized by a high degree of flexibility and openness to change and innovation in its organization, pedagogy and delivery modes, non-formal education caters to diverse and context-specific learning needs of children, young people and adults worldwide.The defining characteristic of non-formal education is that it is an addition, alternative and/or complement to formal education within the process of the lifelong learning of individuals. It is often provided to guarantee the right of access to education for all.”

(UNESCO and UNICEF, 2014, “Non-Formal Education As A means to Meet Learning Needs of Out-of-School Children and Adolescents”, UIS, Montreal, Canada, Pages 4 & 7)

NFE approach is particularly recommended for the developing countries as a strategy for accelerated provision of basic education to their disadvantaged groups who were otherwise denied their right to education.

6. Significance of NFE Approach for Pakistan:

At present, about 25 million children of age 5 to 16 years are out of school in Pakistan. Formal school system cannot reach out these millions of children and illiterate youth. They can be offered basic education opportunities more quickly, easily, and economically by using NFE approaches. Hence, NFE approach is more viable strategy for Pakistan for offering basic education opportunities to its millions of out of school children and illiterates. NFE programmes in no way can substitute or replace formal education programmes. Formal education continues to be the main and most reliable system for education and training of next generations, knowledge building, research, and scientific advancement. NFE programmes function to supplement and complement formal education system, with a view to reach out to the unreached children, youth and adults and offer them learning and training opportunities of basic level.

7. National and International Commitments for Promotion of Literacy and NFBE

An overview of national and international commitments of Pakistan with respect to literacy and non-formal basic education is given below:

National Commitments:

- Article 37-b of the Constitution: In accordance with Article 37-b of the Constitution, the state of Pakistan has pledged to remove illiteracy within minimum possible time.
- Literacy Act 1985: This Act was passed by the Parliament to make literacy mandatory for certain privileges including employment, driving and arms licenses, and passports etc. It was foreseen that implementation of this Literacy Act will motivate illiterates to acquire literacy skill. Since 1985 and till 2016, after passage of more than 30 years, the date of enforcement of this Act could not be notified by the Government of Pakistan.
- Article 25-A (Right to Education).: Access to free and compulsory education has been recognized a fundamental right of all children of age 5 to 16 years, and State of Pakistan has been assigned the responsibility to ensure free education to all children. This Article 25-A necessitates formal as well as non-formal educational opportunities to about 25 million out of school children.
- Vision 2025: Recognizing the catalytic role of education and literacy, Vision 2025, approved by the Federal Government and supported by all provincial governments, has declared human resource development as the first pillar. It has set the targets of 100% enrolment and completion rates at primary school level and achieving 90% literacy rate by 2025.

International Commitments:

Pakistan is signatory to various international declarations and conventions, which envisage education related targets for the countries. Few of these are listed below:

- Dakar Framework of Action for Education for All (2000-2015): In April 2000, Pakistan committed to achieve universal primary education and enhance its literacy rate by 50% within next fifteen years. Pakistan planned to achieve 86% literacy rate by 2015.
- MDGs: Pakistan signed Millennium Development Goals Declaration and pledged to achieve 8 MDGs by 2015. MDG 2 and 3 related to education and set the goals of achieving 100% enrolment and completion rate at primary level. Literacy Rate among population of age 15 to .24 years was declared as one of the indicators of MDG 2 by the world community.
Sustainable Development Goals: Recently, during 2015, Pakistan signed Sustainable Development Goals (SDGs), along with other countries. Sustain Development Goal No 4 relates to education and one of its targets (Target No 4.6) is to promote literacy And achieve 100% literacy rate among youth by 2030.

Keeping in view the past trends of literacy efforts in Pakistan and their fate, it is feared that country may again miss this target, if it is not accorded priority by the decision makers and planners in the country.

8. Literacy Scenario in Pakistan: Harsh Facts and Disappointing Trends

The main source for acquisition of literacy in a society is its formal school system. Literacy rates are almost hundred percent in countries where all children has been going to school and completing elementary education. Size of illiterate population grows in societies where formal school system fails to cater to the learning needs of all its children. Resultantly, the children missed out by the formal school system grow as illiterate citizens. In other words, literacy rate is also an indicator of the inclusiveness and effectiveness of formal school system in a country. Since the beginning of 20th century, developing countries have been launching special literacy programmes for out of school youth and illiterate adults with a view to catch up and make their population literate, and mainstream their excluded and disadvantaged groups on priority basis.

Literacy rate in Pakistan has been growing at snail's pace. As per Population Census of 1998, national literacy rate for age 10+ was 43.9%. The most recent Pakistan Social and Living Standards Measurement (PSLM) Survey of 2014-15 has registered literacy rate of 60% in the country for population of age 10+. This means, net addition to the overall literacy rate of Pakistan has been less than 1 percent per annum, on average, during the last 17 years.

Illiteracy is more pronounced in rural areas, especially among women and in under developed regions of the country. According to PSLM Survey 2014-15, compared with 70 % literate males, only 49% females can read and write in Pakistan. Whereas 76% people living in urban areas can read and write, only 51% rural population is literate. In rural Sindh, only 24% females are literate compared with 70% literate women in urban parts of the same

province. In Khyber Pakhtunkhwa, 69% rural women are illiterate. Situation is worst in Balochistan, where 83% rural women cannot read and write.

Whereas on the one side, literacy rate has been inching up at a slow pace, on the other side, the number of illiterates of age 10+ has also swelled from about 19 million in 1951 to 50 million in 1998, and an estimated 57 million by 2015. This is an alarming but a consistent trend since inception of Pakistan. The numbers of illiterates in the country have been growing for two major reasons. Firstly, the higher population growth rate, and secondly, inability of the formal school system to enroll all the new born children when they reach school age. Out of school and dropped out children ultimately grow as illiterate citizens and add up to the horde of illiterates in society.

In Pakistan, since 1948, the governments have been announcing their commitments to impart literacy skills to illiterate adults and youth. Each plan and policy envisaged ambitious targets, but these commitments could not be translated into action. One of the important indicators for commitment to a plan or programme is the provision of financial resources and administrative support. Unfortunately, most of the plans and commitments for adult literacy and non-formal basic education programmes were not supported with release of funds for this purpose.

At present, only few government organizations and NGOs are supporting literacy and non-formal basic education programmes. These include Literacy and NFBE Department of Punjab, NCHD, Allama Iqbal Open University (AIOU), and few national and provincial level NGOs. Their efforts are laudable but these are not enough to over the problem.

The National Education Policy 2009 envisaged that each government will allocate a minimum of 4% of its education budget for literacy and non-formal basic education programmes. Financial data of last five years show that, except Punjab, no other province has been allocating significant funds for this neglected but important sub sector of education. In case of Punjab also, actual expenditure on literacy and NFBE programmes have been less than 1% of the education budget, although bulk of illiterate population of the country is living in this province. Federal Government used to be major financier for literacy and NFBE programmes in the country. Allocations and actual expenditures of Federal Government for literacy and NFBE have also declined in the recent past.

The above facts and figures portray a dismal trend and indicate weak commitment of the governments and stakeholders for the cause of literacy and mass education.

9. Status of Non-formal Basic Education in Pakistan

The first large scale Non-formal basic education programme was launched in the country during 1986 with the name of 'Nai Roshni Schools Project'. Over fifteen thousand schools were opened in the country to offer free primary education opportunities to out of school and dropped out children in different parts of the country. Nai Roshni Schools Project was abruptly closed down during 1989 due to political changes. Later on, a new project titled 'Non-Formal Basic Education Centres' was launched by the Federal Government during 1995 which is still continuing with a changed name of 'Basic Education Community Schools

(BECS)'. National Education Policy 1998-2010 contemplated to expand NFBE opportunities and increase number of NFBE Schools up to 75,000. But this could not be materialized again due to sudden change of the government. Resultantly, the number of NFBE Schools could not be increased.

At present, a non-formal basic education (NFBE) project titled 'Basic Education Community Schools (BECS)' is being implemented by the Federal Government. National Commission for Human Development (NCHD) is also managing Feeder Schools in different parts of the country. Literacy & NFBE Department of Punjab is supporting 10,632 NFBE Centres. In KP, Elementary Education Foundation is sponsoring 1,430 NFBE Centres. Other provinces are not financing any NFBE Schools out of their own exchequer. Scope of on-going NFBE programmes in the country is not wide enough to reach out 22.64 million out of school children of age 5 to 16 years in the country. Even the sustainability of on-going small scale NFBE projects is not certain. A declining trend in financing of NFBE projects is being observed during the last few years. Recently, Sindh and Balochistan have developed policies on NFE with the support of JICA and other donors. This is an encouraging development.

10. Issues and Challenges of Literacy and NBE in Pakistan

The sub sectors of Literacy and NFBE are facing following issues in Pakistan:

Commitment Gap: Most of the decision makers and planners in government set up lack awareness about the need and usefulness of literacy and NFBE approaches for the country. Public representatives and senior bureaucrats do not come forward to provide leadership and mobilize masses for active participation in these programmes, which is a precondition for success of such initiatives.

Organizational Gap: Except Punjab, other provinces and Areas have not created efficient and suitably staffed organizational structures to plan and implement literacy and NFBE programmes. Directorates of Literacy and NFBE have been established in some provinces and Areas but these newly created entities are not being provided development funds and trained human resources to plan and implement large scale literacy and NFBE programmes.

Coordination Gap: Absence of proper organizational structure in the provinces leads to coordination gap as well. No clear mechanisms or regular forums exist for coordination among the provinces, Govt. Organizations, and NGOs on this subject. No statutory platform has been created for inter-provincial coordination between the provinces and federal government institutions on the subject of literacy and non-formal basic education. National Commission for Human Development (NCHD), which was once declared as the lead agency for literacy before 18th Constitutional Amendment, is no more receiving high level administrative and political patronage which it deserves. Most of the national level meetings on literacy and NFBE are financed or convened by the donors or NGOs, and not by the government.

Finance Gap: Limited budgetary allocations and uncertainty about continued funding is another reason for poor performance of the country in the field of literacy and NFBE. Majority of the provinces and Areas do not allocate and release adequate funds for this

neglected sub sector. In most of the cases, actual expenditure on literacy and NFBE programmes remain less than 1% of the education budget, compared with minimum ceiling of 4% committed in the National Education Policy of 2009.

Technical Capacity Gap: Attracting illiterate adults and out of school youth to educational programmes is not an easy task. Successful implementation of Literacy and NFBE programmes require specialized knowledge, distinct skills, and field experience of community mobilization. No system exists in the country for professional development of literacy personnel. More than two hundred institutions and colleges are presently functioning for training of teachers of formal school system. On the other hand, there does not exist any institute for material development, training of literacy personnel, and research in this arduous and complex field of education.

Consistency Gap: Country has not been able to evolve and sustain a firm policy on literacy and NFBE. In many instances, large scale programmes of NFBE launched by one government were abruptly stopped by the new regime. Political changes led to the closure of on-going programmes and caused uncertainty about their future. This has stunted the growth and institutionalization of the literacy and NFBE programmes and affected their quality in Pakistan.

11. Goal, Targets and Policy Interventions

Goal: To strengthen Pakistan by making it a literate country and enhancing participation of masses in decision making at various levels

11.1. Targets:

- To achieve 90% literacy by 2025 in accordance with Pakistan Vision 2025, enabling Pakistan to achieve SDG 4 Target of 100% literacy rate by 2030
- To contribute for provision of non-formal learning opportunities to 22.64 million out of school and dropped out children of age 5 to 16 years.

11.2. Policy Actions

11.2.1 Access

11.2.1.1 Expanding Access to Literacy Programmes

- i. Federal, Provincial and Area governments will develop and approve Plans of Action to achieve 75% literacy by 2020 and 90% by 2025 in their respective regions.
- ii. Federal, Provincial and Area governments will allocate and release financial resources for implementation of Plans of Action for achievement of 90% literacy rate by 2025.

- iii. Priority will be accorded to imparting literacy to girls, women, rural population, under developed areas, and minorities.
- iv. Focus of literacy programmes will be on young population of age 16 to 25 years.
- v. Large scale industrial units will be required to sponsor literacy programmes for their illiterate labour force and communities in their catchment areas.
- vi. Buildings of public sector schools, colleges, training institutes, and agriculture and livestock related offices will be utilized for running literacy classes in the evening

11.2.1.2. Expanding Access to Non-formal Basic Education Programmes

- vii. Non-formal basic education programmes, Alternate Learning Pathways (ALPs), as well as Open and Distance Learning (ODL) opportunities shall be offered to 24 million out of school and dropped out children of age 5 to 16 years.
- viii. Scope of the on-going Non-formal Basic Education programmes will be elevated gradually from primary to elementary (middle) and secondary education level.
- ix. Physical, human, and organizational resources available in the public, private, and NGO sectors and local communities will be utilized fully for the organization of NFBE classes.
- x. Religious education institutions, including Mosques, Madrassas, Churches, and temples will be offered support for organization of NFBE centres. Buildings of formal schools can also be used in the afternoon for NFBE classes.

11.2.2. Quality

- xi. National Literacy Curriculum 2007 developed with active participation of all provinces will be implemented to standardize quality of literacy programmes throughout the country. Nonetheless, provinces will be free to improve upon, modify, or adapt 2007 curriculum according to their emerging needs.
- xii. Literacy and adult education programmes will aim to bring positive social change in the knowledge, attitude and practices of learners, by equipping them with life skills. Information about health, civic education, religious, ethnic, and social harmony, peace, tolerance, and human rights will be inculcated in the basic literacy primers and supplementary readers.
- xiii. All literacy programmes will include post literacy and functional literacy components as well. Linkages of literacy programmes with skill training, income generation and income saving skills and technical and vocational training will be established, enabling the neo-literates to improve their livelihood and employability.
- xiv. Supplementary reading materials will be developed on income generation and life skills, including civic education, gender equality, human rights, peace education and social harmony.

- xv. Institutions or centers of excellence will be established at national and provincial levels for capacity building, material development, Research and Development (R & D) in the field of literacy and non-formal basic education, To begin with, existing training institutes of formal education system may be designated and assigned these professional tasks along with additional financial and human resources.
- xvi. A mechanism for regular training of teachers of literacy centers and Non-formal Basic Education schools, and staff development of managers and field functionaries of these programmes, from both public and NGOs sectors, will be instituted.
- xvii. Universities, Textbook Boards, Language Authorities, and private sector publishing agencies will be invited and selected on competitive basis for development, field testing, and production of exemplary teaching-learning materials, including basic literacy primers, post literacy readers, and manuals on income generation skills.
- xviii. NFBE Learning packages based on Accelerated Learning Approaches will be developed. Materials on Functional and Vocational literacy will be prepared using graded vocabulary.
- xix. Use of Information and Communication Technologies (ICTs) in literacy and NFBE programmes will be promoted, including use of Mobile phones for post literacy.
- xx. Minimum standards for literacy and NFBE will be developed and put in place. A uniform system for assessment, examination, certification and accreditation of literacy programmes will be instituted, which will be applicable both for public as well as NGO sectors.
- xxi. Criteria for minimum qualification shall be developed, notified and followed for selection of teachers of Literacy and NFBE centers. Preference shall be given to the teachers trained in pedagogy and and ragogy.
- xxii. Salaries of teachers of Literacy and NFBE Centers shall be raised and fixed corresponding to their qualification.
- xxiii. Linkages between formal school system examinations and NFE will be further strengthened to facilitate mobility and acceptance of learners on both sides.
- xxiv. A comprehensive system of equivalence for various levels of literacy and Non-formal education will be introduced in consultation with respective curriculum bureaus and examination boards.

11.2.3 Organization, Management, and Governance

- xxv. A National Literacy Council will be created through Council of Common Interests (CCI). This Council is chaired by the Prime Minister and consists Chief Ministers, Education Ministers from Provinces and Areas. Selected educationists and representatives of civil society organizations working for wellbeing of children, women, and minorities may be invited also. This Council will meet at least once a year, review status of literacy efforts in the country and approve plans for corrective measures, where needed.

- xxvi. An Inter Provincial Ministers' Forum on NFE and Literacy will be created for improving coordination and regular monitoring of progress towards achievement of policy goals relating to literacy and NFE. This Forum will convene meetings on quarterly basis.
- xxvii. National Assembly, Senate, and Provincial Assemblies may establish special standing committees to exclusively focus on literacy and non-formal basic education.
- xxviii. Parliamentarians and councillors will lead literacy movement and mobilize masses in their respective constituencies, including illiterate and educated sections of the society, for active participation in this drive.
- xxix. Existing organizational structure for Literacy and NFBE at the national level and in the provinces will be strengthened with the provision of additional financial and human resources. Full scale Departments of Literacy and NFBE at the Provincial level and separate Directorates at the Area level will be established.
- xxx. In the provinces and areas where relevant organizational structure is not available, new bodies will be created on permanent basis; exclusively for planning and implementation of literacy and NFBE programmes.
- xxxi. National Commission for Human Development (NCHD) will play its role of lead agency for literacy. It will provide a platform for inter-provincial coordination, capacity development of provincial directorates of literacy, and matching grants to the provincial and areas Directorates for piloting and replication of innovative literacy programmes.
- xxxii. Directorate of Basic Education Community Schools (BECS), managing over 12,000 non-formal Basic Education Community Schools all over the country, will be assigned the responsibility of providing a national level platform for strengthening coordination between service providers of non-formal basic education programmes in the provinces and areas.
- xxxiii. Local government shall be involved in planning and management of literacy campaigns and NFBE centers at district and grass root levels.
- xxxiv. Qualification and experience required for selection of various categories of staff will be clearly spelled out commensurate with their job requirements. Experts and senior managers of Literacy and NFBE units and projects will be selected on merit, preferably through Public Service Commissions.
- xxxv. With a view to retain talent and ensure continuity of experience, job security will be provided to the staff working in literacy and NFBE programmes.

11.2.4. Resource Mobilization

- xxxvi. Federal, Provincial, and Area Governments will allocate a minimum of 5% of their education budgets for literacy and Non-formal Basic Education programmes.

- xxxvii. Federal Government will release matching grants to the provinces and areas with low literacy level for implementation of literacy programmes for illiterate girls, women, and other disadvantaged groups.
- xxxviii. Directorates of Literacy and NFBE in the provinces shall be granted autonomous status to enhance their share in the annual budget and efficient programming and implementation.
- xxxix. Establishment of Basic Education Endowment Fund, exclusively to finance literacy and NFBE programmes. Federal Government may establish this Fund by transferring a suitable amount to its account. International donors and corporate sector may be formally requested by the Government to contribute certain portion of their assistance to this Fund. Fund may be managed by a Board approved by the Council of Common Interests (CCI) and may consist of public representatives, educationists, media, and representatives of Federation of Pakistan Chambers of Commerce and Industry (FPCCI).

11.2.5. Monitoring and Evaluation (including Database)

- xl. A 'Real Time' monitoring system will be instituted for Literacy and NFBE Programmes in the country. Data relating to literacy and NFBE programmes will be collected and tabulated by the Provincial and National Education Management Information System (NEMIS) and disseminated to all stakeholders as part of their regular annual statistical reports.
- xli. List of literacy and NFBE centers will be uploaded by the organizers 'online' along with their locations and timings of functioning with a view to facilitate monitoring of these centers by local community, civil society, and general public and to improve accountability of teachers and supervisors.
- xlii. A separate and new data base for Non-formal Education programmes, e.g. numbers of NFBE Centers, lists with their addresses, enrolments, teacher's names, and pass outs, will also be established and up dated regularly.

CHAPTER 6

PRIMARY EDUCATION

1. Importance and Significance:

Primary education is the most important and cardinal sub-sector and the very foundation of education edifice. It is the bed rock of the entire education pyramid. The research studies conducted in developing countries including Pakistan and the world over indicate that primary education has the highest rates of return, both social and private, as compared to other sub-sector of education i.e. secondary and tertiary etc. Furthermore, the first years of primary school generally yield the highest returns, additional years of education yield comparatively lower rates of return. The educational and socio-economic indicators of the developed and developing countries of the world provide convincing evidences that education in general and primary education and literacy in particular have deep, direct and determining positive effects on overall development of the country. The countries of this region such as South Korea, Singapore, Malaysia and China which have achieved remarkable progress in primary education have secured and sustained high per capita income GNP and vice versa.

2. Constitutional and Legal Provisions:

Free and compulsory Primary Education is the fundamental right of all the boys and girls, irrespective of gender (including neutral sex), religion, sect, creed or any other denomination in Pakistan under article 25(A) of the Constitution which states “**The state shall provide free and compulsory education to all children of the age of 5 – 16 years in such manner as may be determined by law**”. In order to implement/enforce the said constitutional provision compulsory education acts have been enacted by almost all the provinces as well as Islamabad Capital Territory. Besides, detailed rules, laws and by-laws in the light of the said acts have been/being framed. Prior to that almost all the provinces enacted compulsory (but not free) primary education acts/ordinances but none of the province implemented the same in true letter and spirit.

Article-37 of the Islamic Republic of Pakistan states “the State shall remove illiteracy and provide free and compulsory secondary education within the minimum possible period”.

United Nations Article-26(1) States “Everyone has the right to education and Education shall be free, at least in the elementary and fundamental stages. Elementary education shall be compulsory”. This fundamental right has also been recognized in the Convention on the Rights of the Child (1989) stressing that the child has a right to education and the state’s duty is to ensure that primary education is free and compulsory.

3. Situation Analysis:

Primary Education age group in Pakistan as per all the previous education policies had been 5 – 9+ years i.e. five year and more but less than ten years. However, in Khyber Pakhtunkhwa and FATA, the primary education is 6 year duration including Awal Adna (5 – 6). The Education Policy 2009 states that Primary Education age group will be 6 – 10+ year. However, none of the province and federating unit has implemented this policy provision so far. This is to be pointed out that in more than 80% countries of the world Primary education age group is 6 – 10+ and ECE age group 3 – 5+ year.

The projected population of 5 – 9+ year children in Pakistan is around 23.77 million (male 52%: Female 48%). According to NEMIS Report titled ‘Pakistan Education Statistics (2015-16)’ net enrolment rate (NER) is 77% for the age group 5 – 9. Total number of primary schools across the country were 145,829 in 2015-16, out of which 125,573 (86%) schools are in public sector. The total enrolment of students at primary level was 18.751 million, out of which 11.461 million (61%) students in public sector schools. Out of the total enrolment of 18.751 million at primary level, 10.471 million (56%) were boys and 8.280 million (44%) girls. The total number of teachers was 422,497, of which (77%) teachers were in public sector and 98,236 (23%) teachers were in private sector.

In addition to the above, there are around 30,000 non-formal Basic Education Schools and 45,680 middle schools (public as well as private) with primary section. Besides, we have more than 32,272 Deeni Madaris. Most of these Deeni Madaris teach national primary education curricula in addition to Islamic teachings (Deeni Taleem).

Gender Parity Index (GPI) is 0.86. Survival Rate to grade 5 is around 66%. Pupil teacher Ratio 32 and Pupil Class Room Ratio 44. Overall percentage (Public + Private) of female teachers in primary education is 51%.

More than half (54%) primary schools have electricity. 67% schools have drinking water; 68% have latrines, and 72% have boundary wall. We are spending average 35-40% of Education Budget on primary education.

The research studies and surveys indicate that the quality of education at primary level of education is not satisfactory. Hardly 40% children have minimum required competency in Languages, Mathematics and Science. Health and Nutrition studies of Primary age group children indicate that the status of health and nutrition of the children is not satisfactory. Stunting rate is more than 40% in Pakistan.

4. Issues and Challenges:

The major issues and challenges confronting primary education in Pakistan, inter alia, are as follows:-

- i) High population growth and inadequacy of facilities and services to cater the needs of ever growing primary education age group population.

- ii) Low enrolment/participation rate and large number of out of school children due to poverty, high opportunity cost, child labour, non-availability of schools at access-able distance, security issues, parents illiteracy and social taboos etc.
- iii) High dropouts and low completion/survival rate due to lack of teacher's commitment, teacher's absenteeism, unattractive school environment, harsh treatment of children, missing basic facilities and services in school, natural calamities and disasters etc.
- iv) Low quality of education due to teachers incompetence and lack of commitment, overburdened curriculum, use of foreign language as medium of instructions, archaic and obsolete teaching methodology, non-availability of teaching-learning and instructional materials, low quality textbooks, rote memorization instead of activity based learning for development of innate faculties of child, lax monitoring and supervision, ineffective assessment and evaluation etc.
- v) Governance and management issues include lack of coordination amongst public, private, formal non-formal schools and Deeni Madaris; lack of community involvement and participation; ineffective school leadership; ghost and dysfunctional schools; and human resource development issues etc.
- vi) Financial issues include low allocations as compared to the needs and requirements for universalization of primary education, low allocation/expenditure for quality of education improvement and low absorptive capacity of the system.
- vii) Missing facilities in existing schools is another serious issue which need to be addressed on priority basis.

5. Goal and Objectives:

5.1 Goal: universalization of Primary Education.

5.2 Objectives: The following are the main objectives of primary education policy.

- I) To universalize primary education with all due speed. A detailed plan with a firm deadline is needed to achieve the following objectives on successful implementation of the proposed Early Childhood Education and Care (ECEC) program included in this policy:-
 - a) Universalize access/enrolment by bringing all the primary age group children in school.
 - b) Universalize retention/completion by ensuring 100% completion of primary education.
 - c) Universalize achievement on the basis of minimum standards of learning outcomes.
- II) To provide financial incentives to deserving and disadvantaged children and their families.
- III) To make primary education free and compulsory.

- IV) To meet the basic learning needs of the cognitive growth of children in terms of both learning tools and learning contents.
- V) To make school environment attractive, child friendly and inclusive.
- VI) To improve the governance and management structure of primary education including coordination amongst different stakeholders, modes of education and systems.
- VII) To reform teacher training system in compliance with National Professional Standards of Teachers and structure the program as outlined in the Teacher Education Roadmap approved by the Higher Education Commission of Pakistan for both pre-service for prospective teachers and in service for practicing teachers to make them effective and efficient.
- VIII) To improve through reforms in quality of education related inputs and interventions such as curriculum, textbooks, instructional material, monitoring and supervision and assessment and evaluation.
- IX) To popularize research based planning and management in primary education.
- X) To increase investment / allocations for primary education enhancing the proportion of development expenditure.

6. Policy provisions:

- I) Primary Education age group will be 5 – 9+ year i.e. five years and more but less than ten years.
- II) Primary Education will be universalized in terms of universal access/enrolment; universal retention/completion and universal achievement latest by 2020 in case of boys and by 2025 in case of girls.
- III) Primary Education will be recognized as the fundamental right of all the children irrespective of cast, creed, gender, religion or any other denomination.
- IV) Primary Education shall be free and compulsory.
- V) Meeting the learning needs of child i.e. learning tools (literacy, numeracy, problem solving and oral expression) and learning contents (knowledge, skills, values and attitude) will be the main focus of curriculum and teaching-learning process. Character building and overall personality development of the child will be assigned top priority.
- VI) Curriculum will be formulated and revised in light of National Curriculum Framework (NCF) and National Standards.
- VII) Consensus based uniform curricula both for public and private sector schools shall be ensured.
- VIII) In-service training for existing teachers shall be revamped and made effective and meaningful and over a period of five years all primary school teachers shall be provided with in-service training opportunities. Subsequently in-service teacher training shall be institutionalized on 3-year cycle basis.

- IX) Taking training to the teacher (school levels) rather bringing the teacher to the training site shall be focus of teacher training Policy.
- X) A system of accountability and performance based incentives will be institutionalized through strict monitoring and supervision of schools and teachers.
- XI) School environment shall be made attractive, child friendly and inclusive in the light of Child Friendly School Standards already developed.
- XII) Standardized physical facilities, infrastructure and services will be provided to each school irrespective of gender, area and location.
- XIII) School community relationships shall be strengthened.
- XIV) Private sector shall be encouraged, facilitated, coordinated and regularized.
- XV) Public private partnership schemes, programmes and projects shall be initiated and monitored.
- XVI) Governance and management of primary schools shall be improved. Qualified and competent school leadership shall be ensured.
- XVII) Coordination and linkages at all levels and amongst different stakeholders, institutions, organizations including Civil Society, INGOs and Donors shall be improved.
- XVIII) Medium of Instructions for all subjects at primary level shall be either local language or national language (Urdu).
- XIX) English as compulsory subject shall be started from grade one.
- XX) Alternate pathways of learning and innovative programmes will be launched for education and training of out of school and disadvantaged groups of children such as child labour, dropouts, nomads, house hold workers, tillers of land, national calamities and disaster hit children and street children etc.
- XXI) Cash and food incentives will be given to all disadvantaged and deserving children and linked to their attendance and performance.
- XXII) Regular and continuous research in different areas and aspect of primary education including quantitative expansion, qualitative improvement, governance and financing etc. will be conducted, disseminated and utilized for research based planning, implementation and monitoring and evaluation of primary education.
- XXIII) Comprehensive primary education data/statistics on all the core indicators of primary education covering both public and private sectors shall be regularly collected, updated and disseminated by Primary school administrators at the local and district levels.
- XXIV) School based planning and budgeting shall be ensured.
- XXV) Allocations for primary education shall be minimum 40–45% of overall education budget.
- XXVI) Ratio of recurring and development budget for primary education shall be 70:30.
- XXVII) Existing primary education schools, facilities and services shall be rationalized. Teacher student ration shall be improved to improve the quality of education.

- XXVIII) New primary schools both formal and non-formal shall be opened after proper school mapping through Geographical Positioning System (GPS).
- XXIX) Teachers to schools on the basis of empirical need and reduce transfer rate by recruiting local teachers for local schools.
- XXX) National professional Standard for Teachers in Pakistan developed in year 2009 shall be recognized and given full policy support.
- XXXI) Standardized facilities, services and infrastructure for wash in schools shall be provided in each and public and private schools of the country.
- XXXII) Multi-grade teaching will be assigned top priority both in pre and in-service teacher training.

7. Implementation Strategies

- i) Attendance and leave regulations shall be revised and enforced and strict action shall be taken to check teachers' absenteeism.
- ii) Learner-oriented teaching with the learner, i.e. the child, at the center of the learning process shall be focused.
- iii) The complexity of teaching young children at initial grades shall be researched and reflected in a suitable training program.
- iv) Highly interactive, learner-centered teaching and training materials shall be produced and utilized.
- v) Many forms of teaching and learning e.g. peer group discussion, class observation, distance education, self-study, on-site visits and multi-grade teaching shall be invoked.
- vi) Not only teachers but also heads, supervisors and other critical stakeholders in the system shall be focused.
- vii) Training programs shall take into consideration teachers' on-ground conditions such as motivation, concerns, knowledge, available time and resources, etc.
- viii) A new and more logical, demanding and challenging curricula shall be developed taking into account the provincial reservations involving the stakeholders in the process.
- ix) Emerging key issues, such as, computer literacy, population and environmental education, health education, AIDS education, and values education, etc. shall be increasingly introduced and integrated in curricula.
- x) New schools and classrooms shall be constructed where objective demographic criteria indicate their urgent need. Preference shall be given to female schools.
- xi) The performance of existing schools shall be improved and their full and optimum utilization shall be ensured. New schools shall be constructed only where need is empirical, transparent and validated by independent monitors. Schools shall be located as close as possible to clusters of homes where children live rather than where influential people may prefer to have them.

- xii) Area/district based targets and programs shall be developed for the promotion of elementary education and literacy which may be supervised by District Education Authority.
- xiii) An incentive-oriented approach shall be adopted for the communities, villages and areas proportionate to their degree of accomplishment and success in elementary education.
- xiv) Priorities for building work of schools shall be as follows:-
 - a. Shelter less schools;
 - b. Dilapidated schools;
 - c. New classrooms in overcrowded schools;
 - d. Repair inadequate schools and
 - e. Provide facilities (water supply, boundary walls, toilets, etc.).
- xv) A report shall be prepared assessing implementation issues and potential barriers to the administrative consolidation and a 5 year plan to achieve the integration shall be developed and implemented.
- xvi) Planning, management, monitoring and evaluation capacity Ministry of Federal Education and Professional Training and Provincial Education Departments shall be increased and strengthened.
- xvii) Massive campaign will be launched mainly to associate communities in the establishment, renovation, repair and maintenance as well as supervision of schools.
- xviii) Selected management functions in elementary education shall be decentralized towards the district, the school and the community, while helping communities and local bodies to organize their efforts more effectively.
- xix) Performance review studies shall be conducted on key sectoral institutions and restructuring and development activities as appropriate.
- xx) 10 year Primary Education Policy implementation plan for each province and federating Unit will be prepared to implement the subject policy provisions. The said plan will be divided into three phases. Phase one from 2017 to 2020; phase two from 2021-2025, and phase three from 2026 to 2030. At the end of each phase implementation review will be conducted and corrective measures will be adopted.

SECONDARY EDUCATION

Conceptual Framework

Secondary Education (VI-XII) is one of the most important stages of education system and consists of three phases: Middle (V-VIII), High (IX-X) and Higher Secondary (XI-XII). Secondary Education is important for several reasons: such as it is continuity from the primary to higher level of education; preparation to the world of work; adoption of profession and most importantly the conceptual clearance of basic life skills. Therefore, secondary education is a crossroad, opening avenues of higher education for graduates on one hand and providing skilled manpower for job market on other hand.

The Context/Background

The secondary education had been overlooked and main focus had been expansion of primary education. The reason was the need of bringing the out of schoolchildren in the network. The need of vocational, technical and technology education also previously sidelined the importance of secondary stage. Now Pakistan is at a reasonable level of primary education and improved level of literacy and attention is required to match with required practical steps to improve demand and supply issues of secondary education.

Moreover, there has been considerable increase in public and private sector universities in last decade, which substantially increased pursuit of higher education among higher secondary school graduates. This is the time for offering due expansion in the academic disciplines offered at secondary level synchronized with national priorities, public demand, diversity in higher education opportunities, prioritized streams of technical and vocational education, and global trends.

Importance and Significance

Secondary education has great significance, as it is bridges the basic primary education and higher education. The efforts geared towards improvement in enrollment at primary level compels for expansion in opportunities for secondary (middle, secondary and higher secondary levels) education to benefit from investment in primary education. The expected larger rate of completion at primary level and improved Gross Enrollment Rate (GER) and Net Enrollment Rate (NER) at secondary level needs to be corresponded by proportional increase in opportunities of enrollment in middle, secondary and higher secondary schools. The establishment of new schools and/or up gradation of existing primary schools should be rationally decided on the basis of available school age population, sufficiency of catchment area, gender sensitivities, geographical consideration, and inclusion of marginalized communities.

The importance of secondary stage has been multiplied many folds by two major legislations which have implicit bearings on this stage of education. First is the 18th amendment in the Constitution, hereby redefining the role of provincial and federal governments, in providing access, equity and quality of secondary education. Second is the

inclusion of Article 25-A¹ in the constitution, which obligates government to ensure free and compulsory quality education of children age five to sixteen years.

Insertion of article 25-A has called for even more concerted and consolidated efforts, to increase participation rate as well as to improve the scope and quality of the middle, secondary and higher secondary education in the country. After the promulgation of Article 25-A, government is committed to provide free and quality education till higher secondary school. The government has almost ensured free education in public schools but measures are needed to ensure secondary education in private schools at affordable rates.

Situation Analysis

According to Pakistan Education Statistics Report 2015-16 the latest profile of middle, secondary and higher secondary education is as follows:

I. Middle (Grades VI-VIII)

Middle schools include grades VI-VIII. The official age-group for entry in this level of education is age 10-12 years. In Pakistan there are 45,680 middle schools of which 16,862 (37%) are in public sector and 28,818 (63%) are in private sector. There are 6.445 million students enrolled in middle stage of education i.e., they are studying in grades VI-VIII. Out of these 4.039 million(64%) are in public sector, whereas, 2.403 million (36%) are in private sector. The total boys enrolment at middle stage is 3.647 million, whereas, the girls enrolment is 2.798 million. The total number of teachers at middle level is 394,231 out of which 139,191 teachers are performing their duties in public sector. The remaining 255,040 teachers are providing their services in private schools. The gross and net enrolment rates at middle level are 62% and 27% respectively.

II. High (Grades IX-X)

High schools in Pakistan are for grades IX and X. The education system of Pakistan has 31,740 high schools, which is 11.70% of total institutions of both the public and private sector. Out of these 12,732 schools are in public sector, whereas 19,008 are in private sector. The total enrolment at high stage is 3.437 million of which 2.227 million is in private sector. The total boys enrolment at high stage is 1.961 million (57%), whereas, the girls enrolment is 1.475 million (43%). The total teachers at high school level are 529,520 out of which 232,883 (44%) are in public and 296,637 (57%) are in private sector. The Gross Enrolment Rate (GER) at Secondary level is 58% and Net Enrolment Rate (NER) is 27%. There are 211,528 (40%) male teachers and 317,992 (60%) female teachers at this stage.

III. Higher Secondary (Grades XI-XII)

The Higher Secondary Schools and Inter Colleges, in Pakistan, usually include grades XI and XII. There are 5,470 higher secondary schools/ inter colleges in education system of Pakistan. The share of public sector in higher secondary level of education is 34%, it means

¹ "The state shall provide free and compulsory education to all children of the age of five to sixteen years in such manner as may be determined by law" (Article 25-A, Chapter No 1: Fundamental Rights, Constitution of Pakistan 1973)

that there are 1,865 institutions working under the umbrella of public sector. Whereas, 3,605 (66%) higher secondary institutions are working under private sector. The total enrolment at higher secondary schools/ inter colleges stage is 1.697 million of which 1.325 million (78%) is in public sector, whereas, .372 million (22%) is in private sector. The total boys enrolment at higher secondary schools/ inter colleges stage is 1.022 million (60%), whereas, the girls enrolment is 0.674 million (40%). There are 123,061 teachers working in higher secondary schools/ inter colleges level of education of the country. Out of these 55,342 (45%) are working in the public and 67,791(55%) are in the private sector. There are 56,533 (46%) are male teachers and 66,582 (54%) are female teachers working at higher secondary/inter college level of education in the country.

School Census data over last six years showed an increase of 15 % and 20 % in boys' and girls' enrollment in middle, secondary and higher secondary schools. An even higher percentage increase in enrollment is reported in higher secondary schools.

Only 76 % of middle, 92% of the high schools and 97% of the higher secondary schools have electricity. Drinking water is available in 81 % of middle schools, 90% high schools and 95% higher secondary schools only. Toilets are not available in 10 % of middle schools, 5% secondary and 3% higher secondary schools. There are 13 % middle schools, 9% high schools and 5% higher secondary schools without any boundary wall.²

IV. Overall Indicators and Trends of Secondary Education in Pakistan

A comparative view of secondary education indicators of Pakistan with other countries of the region will be useful to determine our present status and formulate future course of action. Important data about key indicators of Access, Quality, and Public Expenditure is given below:

Access: Total population of secondary level age group (10 to 16 years) is over 29.9 million. Out of these, only 10.95 million or 37.91% are enrolled in various levels of Secondary education (middle or lower secondary schools, high schools, and higher or upper secondary schools). This means, about 18 million or 62% adolescents of age 10 to 18 years, are out of school (OOS) in Pakistan. (Pakistan Education Statistics 2014-15, AEPAM, Islamabad, Table 4.1, page 49). Gross Enrolment Rate of Pakistan for Secondary level was 42% in 2014, as reported in UNESCO Global Education Monitoring Report 2016. This GER is lowest in the sub region of South and West Asia, even lower than GER of Afghanistan (56%), Bangladesh (58%) and India (84%).

Gender and Geographical Disparities: Mostly, adolescents in rural areas and under developed regions considerably lag behind boys in secondary education. Net Enrolment Rate (NER) of girls of age 14-15 in Matric (Grades IX and X) in rural areas of the country is 17% only, whereas two times more or 38% girls are able to enroll in these grades in urban areas of Pakistan. In Punjab 27% adolescents of age 14-15 are enrolled in Matric compared with Balochistan where NER for the same age group and same grades is just 15%. Combined Net Enrolment Rate (NER) of boys and girls at Matric level for age group 14-15 years in Urban Sindh is 36%, and on the other hand only 14% adolescents are enrolled in these grades in

² Pakistan Education Statistics 2015-16, AEPAM

rural parts of the province (PSLM 2014-15, Pakistan Bureau of Statistics, Islamabad, Table 2.13.a). Overall Gender Parity Index at Secondary level is 0.80 in Pakistan. GPI is as low as 0.52 in KP, 0.59 in Balochistan and 0.28 in FATA (Pakistan Education Statistics 2014-15, AEPAM, Figure 4.10, page 55). Pakistan's GPI for Secondary level is one of the lowest in the region, lower than India (1.01), Nepal (1.07) and Bangladesh (1.08). This means more girls than boy are enrolled in these countries at Secondary level (UNESCO Global Education Monitoring Report 2016, Statistical Tables, Table 7, page 43).

Quality: Completion Rate is one of the proxy indicators of quality of education. Global data shows that completion rate in Pakistan at lower secondary level is 46%, lower than Bangladesh (56%), Nepal (61%), and India (76%). Situation is same in the case of Completion Rate of Pakistan at Upper Secondary level. With its 20% Completion Rate at Upper Secondary level, Pakistan is lagging behind Nepal (42%), Maldives (90%) and India (35%). Lower completion rate at secondary level indicates push factors in the schools and also certain out of school dynamics that discourage students to complete their studies.

Public Expenditure: Recent data shows that share of Secondary Education in public sector budgetary expenditure has gradually increased in Pakistan from 34.59% during 2010-11 to 47.41% in 2014-15. (ISAPS 2016 – Public Financing of Education in Pakistan: Analysis of Federal, Provincial and District Budgets (2010-11 to 2015-16), Islamabad). Nonetheless, Pakistan is still spending less than other countries of the region with similar socio-economic conditions. For example, in recent years, Pakistan has been spending US\$ 602 (Constant PPP) per student at Secondary level, compared with India with per student expenditure of US\$ 740, and US\$ 2534 by Iran. In terms of government expenditure on secondary education per student as % of GDP Per Capita, Pakistan spends 13.2%, 14.6% by Nepal, 15.5% by India and Iran, and 36.1% by Bhutan.

Issues and Challenges

Secondary education in Pakistan is facing numerous challenges ranging from insufficient physical facilities to issues of access, gender parity, narrow academic base, and quality of education, authentic assessment and educational cost. All of these factors need attention.

Therefore, creation of new secondary and higher secondary education institutions as well as up gradation of already exiting primary and basic education institutions needs to be rationalized.

The transition rate from primary to middle (81%) indicates dropout at secondary level adding to the challenges regarding universalization of secondary education. Despite interventions to reduce the gender parity, a Gender Parity Index (GPI) of .98 demands continuity of efforts in this direction.

At middle education (VI-VIII) level there is huge gap in number of schools. In public sector we have only 16820 middle against 127829 formal sector and around 35000 non-formal primary/basic education schools. As such the ratio between existing primary to middle schools come out to be 13:1. In order to implement 25-A, according to which education up to grade X (matric) has become the fundamental right we need up-gradation of at-least 50%

existing primary schools to middle level. Besides, opening of non-formal middle level schools throughout the country especially in remote rural areas.

The existing narrow base of academic disciplines offered in schools limits students' choices in higher education. The universities have widened the range of subjects offered in undergraduate programs and students graduating from higher secondary schools find it quite challenging to connect the studied subjects to available choices at undergraduate level.

There has been growing concern over authenticity of the assessment system at secondary and higher secondary level. The assessment system is widely criticized for its inability to assess the higher order learning. The authenticity of the grades/marks awarded is losing the public trust due to lack of compatibility between grades/marks and students demonstrated skills in higher education.

The restructuring of educational system allows students to enroll in four-year undergraduate programs on completion of higher secondary school. An early entry into university/college demands moral, social and emotional maturity in school graduates to maximize academic/professional learning in university/college tenure.

Rationale / Justification and need for Policy interventions

National Commitments: In accordance with Article 37-b of the Constitution (1973) the state of Pakistan has committed to provide free and compulsory secondary education within minimum possible time. Pakistan Vision 2025 envisages to improve Gender Parity Index to 1 by 2025.

International Commitments: Pakistan has signed Agenda 2030 of Sustainable Development and committed to achieve 17 Sustainable Development Goals by 2030. According to Target 4.1 of SDG 4, Pakistan is expected to achieve 100% enrolment at Secondary level by 2030.

It is now the right time to introduce policy interventions to regulate growing participation of private sector in secondary and higher secondary education and coordinate with provincial governments to ensure access and quality of secondary and higher secondary education in post 18th amendment era and in the backdrop of Article 25-A.

Low participation rate and dropout have remained persistent challenges at middle, secondary and higher secondary levels but now it has become obligatory for federal and provincial governments to ascertain legal and administrative measures for ensuring participation and retention. Policy provisions on broadening the base of secondary education beyond the currently popular science and arts groups at secondary and pre-engineering and pre-medical streams of education at higher secondary level to keep middle, secondary and higher secondary education relevant for job market and higher education.

The social degradation experienced in recent past requires immediate focus on providing a school environment conducive for imparting moral values, civic sense, character building, democratic behavior and social responsibility among the students. The policy level reform at secondary school level is inevitable to prepare students in all of the above-mentioned traits to

empower them in becoming open minded, balanced, rationale, and productive citizens of the country.

Goal, Objectives and Targets

The goal of secondary education is to prepare students to be responsible citizens to contribute productively in the job market and pursue higher education of their interest.

The stated goal can be realized by achieving the following objectives;

1. To create a school environment conducive for social, emotional and intellectual development of the children to become responsible citizens ready to contribute towards society.
2. To produce academically sound, appropriately skilled, psychologically all-encompassing and morally resilient students ready to earn for themselves and/ or continue with their higher education in diverse fields.
3. To develop balanced individuals cognizant of their responsibilities as citizen of State, as well as, their obligations to contribute constructively towards the global community.
4. To ensure access and equity in secondary education for all children by providing sufficient number of schools, globally compatible curriculum, teaching-learning materials, qualified teachers and assessment system geared towards measuring higher order learning.

Targets

1. Up-gradation of 50% existing public sector primary schools to middle level by 2025.
2. Up-gradation of 40% existing public sector middle schools to secondary/ high schools level by 2025.
3. Up-gradation of 20% existing high schools to higher secondary school level by 2025.
4. Increase the gross participation rate at middle level from 62% to 85% and net participation rate from 27 to 50% by 2025.
5. Increase the gross participation rate at secondary level from existing 58% to 70% and net participation rate from 27% to 40% by 2025.
6. 50% increase in gross and net enrolment rates at higher secondary education level.

Policy provisions to achieve the goals / targets

1. Existing public sector primary schools will be up-graded to middle level and middle schools to secondary level to provide required infrastructure, facilities and services to implement article 25-A.

2. Non-formal middle level schools will be opened to resolve the issue of access to middle level education especially rural girls.
3. Matric level district education program of Allama Iqbal Open University will be expanded and strengthened to improve the access and quality of education creating a separate but complementary stream of non-formal education from primary to secondary level.
4. Availability of qualified, trained and subject specialists for Science and Mathematics teachers at secondary and higher secondary levels shall be ensured.
5. A system of awards/incentives and accountability for teachers and heads will be institutionalized.
6. Capacity building and training programs for curriculum developers, textbook writers, textbook reviewers and publishers will be launched to ensure production of quality textbooks. Textbooks may be supported by reference books/supplementary readings.
7. Missing facilities shall be provided on priority basis.
8. Teaching learning and instructional material such as charts, maps, teaching kits, audio-visual aids, educational CDs etc. will be produced on massive scale, provided to schools and ensured their effective usage for improvement of the quality of education.
9. Digital libraries and well-equipped science laboratories will be the focus areas for quality improvement.
10. Use of information and communication technologies will be essential mode of delivery mechanism.
11. Research both for quantitative expansion and qualitative improvement at middle and secondary level shall be ensured.
12. Comprehensive data base for middle and secondary education on all the important indicators shall be created, updated and disseminated.
13. Administrative/management cadre and academic cadre at secondary and higher secondary education levels shall be separated.
14. Ensuring the horizontal and vertical alignment of middle, secondary and higher secondary school curriculum with curriculum of primary level. Curriculum revision may be related to cognitive development of the students as well as students' achievement levels. The scheme of studies at middle, secondary and higher secondary schools level may be revised to include more subject options.

Activity based pedagogy to be introduced supported by blended and technology enabled learning.

15. Formative assessment may be made compulsory part of school internal assessment beyond textbook for measuring real learning may be ensured in summative assessment system of schools.
16. BISEs may be transformed into self-learning organizations having capacity to learn from organizational experiences. BISEs should develop item banks, marking rubrics for essay type items, add transparency in marking system, recruit permanent subject experts for development of examination papers and automatize result compilation systems.
17. Merit based and need based financial support should be extended at federal and provincial level to increase participation and retention rate in middle, secondary and higher secondary schools.
18. Girls in marginalized areas be provided financial incentives
19. Student guidance and counseling centers should be established in secondary and higher secondary schools having professionally qualified staff.
20. Physical education and co-curricular activities be made compulsory
21. Technical and vocational education stream shall be started in selected middle, high and higher secondary schools. Introduction of a system-for streams of learning linked to labor market may be introduced.
22. Enactment of 25-A for all provinces and federating units will be enacted and implementation plans will be prepared and implemented in true letter and spirit.

Implementation Strategies for Policy Provisions

1. Rationalization of schools at provincial and federal level should be carried out.
2. Student support shall be increased to prevent students from dropping out of school for financial and other reasons.
3. Instructional activities in schools may be aligned with development of higher order learning of the students.
4. Educational Equipment Centers should be properly staffed and updated to produce relevant, technologically compatible and cost effective AV aids supportive in teaching complex concepts to ensure better learning.
5. Guidance and Counseling services should be made available at schools having large enrollment of students. The surrounding small enrollment schools can benefit by mutual arrangement.

6. Sport related provisions and trained physical education teacher should be provided to all schools.
7. Inter school competitions should be made compulsory part of academic calendar.
8. Engaging students in school counsels for connecting schools with community development may be initiated.
9. School ranking should be introduced based on academic performance; social contribution, community linkage and any other indicators deem suitable to school education departments at federal and provincial levels.
10. All schools should be provided with facilities at par with each other to discourage the burden on some schools leaving other schools underutilized.

Special types of school systems may be introduced on merit and need base. One of the criteria may be achievement levels at primary level. The 20 percent of students with lowest marks may be offered admission in vocational and technical streams as per their choice. Top 20 percent achievers may be offered to study at smart and model schools with world class facilities such as Danish Schools in Punjab. Out of rest of 60 percent students from general stream, 10 percent may be offered to opt for Islamic education school system on the pattern of Imam of Hazar school system already working in Turkey.

CHAPTER 8

Teacher Education

Socio-economic development of a country is based upon the mass and quality of its human resource. The mechanism of providing this basic ingredient for sustainable development of the society rests with the effectiveness of its education system in which teacher is the globally recognized key factor. All education policies of Pakistan have explicitly acknowledged this assumption.

Pakistan has not been able to achieve its educational targets in terms of access and quality of student learning outcomes. The results of NEAS assessments and BISEs' examinations show huge wastage and deficiencies in learning outcomes. It is also a general perception that our youth lacks higher cognitive skills (reflective thinking, creative learning, empathy, contextualizing knowledge, equity, peace, justice, respect for the rights of all etc.) required for successful living in the competitive world of 21st century. The renewed educational commitments to extend quality education to all are in the form of section 25A of the Constitution of Pakistan, commitment to achieve SDG 4 and GOP Vision 2025. The Vision 2025 aims to lay down the foundations of a prosperous, just and harmonious society much before the year 2025. It has rightly recognized human resource development as 'pillar 1' for this purpose. The renewed target of extending quality education to all is a gigantic task and can be realized only in a phased manner. Similar to other sectors of the economy and society the education sector also requires the critically needed human resource for the realization of the set targets. Therefore, intensive and meticulous planning is required to build efficient and effective education system that has teachers and educators in sufficient number who are professionally qualified, adequately recruited, empowered, motivated and supported for educating the children and youth to help them attain the prescribed learning outcomes.

Situation analysis: Issues and problems

- The NEP 2009 has laid down Bachelor degree with B.Ed. for appointment as elementary school teacher and master's degree with B.Ed. for appointment as secondary school teacher. But, the employment policies and practices of the provinces grossly deviate from it and vary across provinces except in public schools of Punjab where this condition was laid down in 2002 and is being followed to a great extent. (Annex 1).
- A great variation in titles/ designations, entry qualification and in the salary structure for various levels of teaching positions is observed from one province to the other. (Annex 1)
- PTC and CT/DIE programs have been mostly discontinued but the employment rules of provinces other than Punjab still retain those in the eligibility criteria for employment.
- Employment rules are not applicable in the private and public-private-partnership schools which are commonly hiring unqualified teachers at extremely low salaries- less than half of the per capita GDP.
- Two types of models are prevalent in the country for the preparation of teachers at various levels- traditional or consecutive and the concurrent. The concurrent models are somewhat recent and are meant to prepare teachers simultaneously in

content and pedagogical skills. The content component in the later type of models is generally considered weaker than the former.

- Most of the teacher education institutions do not have the capacity to offer concurrent Bachelor degree programs, particularly B.Ed.(Hons.) Secondary that requires school subject equivalent to sixteen years schooling. Even the teacher education departments at general universities lack such capacity due to the compartmentalized subject- based departments at universities not allowing students from other departments to enroll in their courses.
- Teacher education is being imparted through various modes i.e. face to face, distance, and virtual. Since teacher education, in addition to knowledge transmission, involves development of skills and dispositions that can be learnt best through face to face modes, the quality of teachers prepared through non-formal and distance modes remains questionable.
- Teacher educators in most of the teacher education institutions, particularly in the affiliated colleges and new universities lack proper qualifications and relevance to their job. Moreover, there is no system for their continuous professional development.
- A number of institutions exist for in-service teacher training in the provinces. The programs offered by these institutions are generally of short duration and are neither threaded in a developmental sequence nor are linked with the promotion/ upward progression of teachers.
- There is no conscientiously developed relationship between pre-service and in-service development programs. After induction continuous professional training has yet not been introduced.
- The National Education Policy 2009 has a policy statement to introduce initial certification of teachers. But, no system has yet been evolved for this purpose. There is even no policy statement for the certification of accomplished teachers.
- Great imbalance exists between the supply and demand of teachers. The system is in-general supply driven.
- No projections have been made about the number of teachers required in the coming years at various levels of teaching and for various subjects in all the provinces.
- The extent to which resources are made available is presumed to be the critical determinant of the quality of programs and their output. At present the Higher Education Commission (HEC) does not give due importance to financing teacher education as it provides funds to the public sector universities using a formula based on factor '1' for arts, humanities and social sciences that includes teacher education; 2 for agriculture and sciences and 3 for Engineering/ Medical and Veterinary.
- A large number of less qualified (PTC, CT, DIE holders) and untrained teachers are in the workforce of all provinces. This pool is growing continuously.
- Teachers lack participation in educational decision making such as curriculum development, textbook selection, and students' performance assessment etc.
- Teaching is not a profession of choice because of low market value.

Policy Objectives

To prepare qualified, competent, committed and quality-conscious teachers, educational managers, leaders and teacher educators who may promote among learners the cognitive skills and dispositions required for developing a sustainably developing society. They are also sensitive and responsive to the social context of education and are committed to inclusive education for disabled and socially and economically disadvantaged.

1. Setting standards and monitoring mechanisms to nationalize and internationalize the types and quality of teacher education programs.
2. Reorient Teacher Education system from supply driven to demand driven ensuring need based supply of teachers at various levels of teaching and subjects/ streams of study in line with the Pakistan Vision-2025.
3. To reorient offering of concurrent teacher education programs by encouraging out of subject compartmentalized approach/ infusion of subject based structure of academic departments at universities.
4. Developing linkages between the pre-service/ initial, induction and in-service teacher education programs and institutions.
5. Make continuous professional development a regular feature linked to the up-gradation and promotion of teachers and other teaching personnel.
6. Set common minimum requirements of academic and pre-service teacher education qualifications for employment of teachers in the public, private and private-public-partnership schools.
7. Set minimum salary/BPS for teachers at various levels both in the public, private and public-private-partnership schools.
8. Establish mechanism for the certification of teachers at various stages and strengthen accreditation of TE programs.
9. Make teaching an attractive profession for the talented youth.

Policy Guidelines

Teacher Qualification

1. To ensure content and pedagogical requirements for a teacher, four years B.Ed. (Hons) Elementary/ equivalent (BA/BSc plus B.Ed) shall be required for teaching in primary and elementary classes while content qualification of sixteen years in a school subject with B.Ed. Secondary/ five years B.Ed. (Hons.) Secondary shall be the requirement for teaching secondary and higher secondary classes in a public or private school. Relaxation in qualification may be allowed only in less developed areas where sufficient number of qualified teachers is not available.

Reorienting Teacher Education System to become Demand Driven

2. In accordance with 25A of the Constitution of Pakistan, the SDG 4, the Pakistan Vision 2025 the attainment of universal primary, elementary and secondary education should be targeted in a phased manner.

3. In line with the school access expansion plan, year wise projections shall be made about the required number of teaching personnel (teachers, administrators, planners etc.) by levels, subjects, gender, and region down to the district level.
4. Specialized teacher education programs in technical and vocational education will be introduced to prepare teachers for the vocational and technical stream at schools to ensure its success and sustainability.
5. Government and teacher education institutions will coordinate to plan programs and number of admissions to prepare teaching personnel in line with the projections. This will ensure supply of required human resource ensuring employment to the graduates of TEIs.

Professionalization of teaching: Uniformity in designations, qualifications, salary structure and professional growth

6. Uniformity shall be ensured in the designations, qualifications and BPS of teaching personnel throughout the country.
7. The private and private-public partnership (PPP) schools shall be regulated with reference to the requisite qualification and terms and conditions of service of teaching personnel. Such measures will ensure professionalization of teaching, ensure quality of teaching at schools and enhance retention/ attraction power of this profession.
8. The social status of teachers shall be improved by establishing a performance based reward system, acknowledging the accomplished teachers, participation of teachers in academic decision making, and providing opportunities for continuous professional development.

Preparation of Teaching Personnel

9. Professional standards shall be developed for various teaching levels (Pre-primary/ECE, primary, elementary, secondary, higher secondary); specialization areas/ subjects' teachers (general, vocational/technical, math, science etc.); and other teaching personnel such as educational administrators.
10. The curriculum of teacher education programs shall be linked to the National Professional Standards for teachers.
11. Teaching requires content knowledge, specialized skills and dispositions that can be learnt better in face-to-face practical modes. Therefore, initial teacher education programs will be offered generally through face-to-face modes providing field based and practical learning opportunities. Other modes (distance and virtual) will ensure extensive use of technology blended with significant proportion of face-to-face teaching-learning, mentoring and monitoring.
12. All equivalent programs of teacher education shall have the same content and pedagogical rigor such as five years BEd Secondary will ensure the contents equivalence to the conventional master/4 years BS plus BEd Secondary. The duration of consecutive B.Ed. Secondary will be three semesters.
13. The universities will be encouraged to offer concurrent degree programs following the Pakistan Vision 2025, that is infusion of the structure of academic departments of the universities enabling students to take content courses in the subject relevant departments and courses of pedagogical and cognitive sciences at the education departments. The Comprehensive/ general postgraduate colleges will also be encouraged to offer such programs.
14. The consecutive models of teacher preparation particularly for the preparation of secondary school teachers and for the training of in-service untrained teachers shall continue as per need.

15. To attract better quality candidates to the concurrent/ programs requiring long term commitment to adopt the teaching profession the titles of these programs should reflect the titles of two degrees such as BA., BEd; BSc.,BEd; MA. ,BEd; BS., B.Ed etc. similar to some other professional degrees such as BA., LLB.

Training/ Education of less qualified in-service teachers

16. Less qualified and untrained in-service teachers in the public and private sector schools shall be provided opportunities for further professional education through face-to-face and virtual/distance technology rich modes. Face to face model may use evening/ week-end/ summer bridging programs.

Continuous Professional Development of Teachers and other Teaching Personnel

17. In-service teacher education shall be developed upon and related to the pre-service teacher education. Strong linkages shall be developed between the pre-service and in-service teacher education programs and institutions. Proper mechanism shall be devised to ensure the participation of relevant stakeholders for designing such linkages.
18. All teachers will have opportunities for professional development in a three-year cyclic manner.
19. In-service training will focus more on capacity building of teachers in identified deficiency areas, educational leadership, contextualizing education, community development and other areas of education for sustainable development etc.

Continuous Professional Development of Teacher Educators

20. Continuous professional development academy/center for Teacher Educators will be set-up in each province to help them acquire up-to-date knowledge and adopt innovative teaching-learning strategies in their classrooms. The academies may be established preferably at the best known university teacher education institution of each province.
21. These academies will prepare rigorous curricula with the participation of leading local and foreign teacher educators.
22. The CPD courses shall be part of the performance appraisal of teacher educators and linked to their progression in the profession.

Quality Assurance of Teaching Personnel

23. Standards for teachers will be developed for various teaching levels and for various subjects.
24. Standard based teacher certification shall be introduced for initial appointment in all types of schools. The provincial departments of education shall conduct the initial certification examination. Advanced certification will be done for recognizing the accomplished teachers.
25. The system of Accreditation of Teacher Education Programs will be further strengthened
26. Promotion and up-gradation of teachers shall be linked to performance assessment against set standards inclusive of in-service training.

Financing of Teacher Education

27. To improve the quality of teacher education programs the government should give it due importance and the funds will be provided using a unit formula of not less than 1.5.

28. To bring out the teaching profession from its present position of last option and to attract young talent to this field at least 25% of the top merit students will be provided scholarships/free education by the public and private institutions.

Provincial Teacher Employment Policies: Since school education is a provincial subject, the employment authority of the teaching personnel lies with the provinces. The following table briefly outlines the school personnel employment policies and practices in the public sector schools of provinces.

Province	Level of teacher	Required Qualification		Grade/ BPS
		Academic	Professional	
Punjab (Recruitment Policy 2013- for Educators)	Elementary School Educator (ESE)	BA/B.Sc/BS(Hons)	BED(one year)/ MED/MA Edu	9
		BSED/ADE/)/ BED (Hons)		
	ESE Math/ Science	BA/B.Sc with two relevant subjects	BED (one year)/ MED/MA Edu	9
	Senior Elem. School Educator (Subject)	Bachelor with two relevant subjects/ Conventional Master in the subject	BEd (one year)/ MED/MA Edu.)	14
	Secondary School Teacher/Educator SSE (Subject)	Conventional Master degree in the subject	B.Ed/M.Ed/M.A.Edu	16
Sindh (Amended Recruitment Rules 2012)	Primary School Teacher	Intermediate	Nil	9
	Junior School Teacher (Science and General)	Graduate (BA/ BSc)	Nil	14
	High School Teacher (Science & General)	Master degree in Science/Arts/Humanities	BEd	15
KPK	Primary School Teacher	Intermediate	PTC/ Diploma in Education/ADE	12
	Elementary School Teacher	Bachelor degree	CT/ Dip. In Education/ ADE	15
	Secondary School Teacher	Master degree in the subject	BEd	16
Baluchistan	Junior Vernacular Teacher (JVT)	Matric	PTC (TadribulMalimeen for Arabic teacher)	7
	Junior English Teacher (JET)/ subject/ technical teacher	Intermediate	CT/ ADE/ One year Agri. diploma For Technical	9
	SST	BA/BSc	BEd	16

Pre-Service Teacher preparation models and Undergraduate Degree Programs

Consecutive/ conventional			Concurrent/Composite		
Title	Entry Qualification	Duration	Title	Entry Qualification	Duration
			Associate Degree in Ed.(ADE)**	Intermediate	2 years
BEd*	BA/BSc/Equiv	one Acad. Year	BEd(Hons) Elem/	Intermediate	4 years
B.Ed. Secondary	16 years education/Master Degree (MA/MSc)/ BS (Hons) in a content	1.5 years/ three semesters			
MEd	BEd/BEd.(Hons)	one Acad. Year			
M.A.Ed (Gen./Specializations Elem/Sec/Sc/Sp Ed etc)	BA/BSc/ Equiv	Two Acad. Years			

*Discontinued from 2017

**Associate Degree in Education has replaced PTC and CT in Sindh and KPK.

CHAPTER 9

TECHNICAL, VOCATIONAL EDUCATION & TRAINING

9.1 Conceptual Framework

Context

9.1.1 Pakistan is 6th most populous country in the world. The total estimated population during the year 2015 was 191.71 million, of which 37% were between 15-34 years of age. This young and dynamic population can be an asset if appropriately trained. Unfortunately, less than 20% youth complete secondary education whereas a meager percentage acquires hand skills³.(Technical, Vocational Education & Training)

9.1.2 Pakistan is confronted with enormous socio-economic challenges. Ranking at 147 on the Human Development Index, 52% of Pakistan's population is facing situations of multidimensional poverty, and 22.3% of the population survives on less than \$1.25 per day⁴. Economy of Pakistan has shown downward trend during the last decade with GDP growth ranging from 8.96% in 2006 to as low as 0.36% in 2010. It has steadily picked up during the last five years and reached 4.24% in 2016. The service sector growth is 53.1 percent, manufacturing 21.6 percent and agricultural in 25.3 percent.

9.1.3 The literacy rate (10+) has gradually increased from 43.92% in 1998 to 58% in 2015. According to the Economic survey of Pakistan (2014-15) the net primary enrollment during this period was 57%. Besides, there is heavy dropout on the line. Provision of quality technical vocational education & training (TVET) is necessary to make the youth useful and economically productive citizens.

Future Needs

9.1.4 The present day rapid socio-economic growth demands a mixture of trained manpower; comprising of skilled workers; tradesmen; technicians; technologists; engineers, and research & development scientists. The composition of the required workforce would depend upon needs of the society, level of skill and technology applied in the system/industry.

9.1.5 An increased demand for the skilled workers in all sectors, both domestically and internationally, is expected in the coming years; particularly in infrastructure & energy sectors and new technologies. Development of China - Pakistan Economic Corridor (CPEC) and better energy supply are expected to play a significant role to improve economic growth of the country in the coming years.

9.2 Current TVET Scenario (Situation Analysis)

9.2.1 The TVET system in Pakistan is highly fragmented and comprises of a formal and informal sectors. In the formal sector, the principle sources of TVET provision are public and

³ Pakistan: New Growth Framework, Planning Commission, Govt. of Pakistan, January, 2011

⁴ United Nations Development Program (UNDP) (2015): Human Development Report

private training providers, enterprise based skill trainers and NGOs. The informal sector is characterized by the *Ustad-Shagird* (Master-Trainee) tradition of vocational training. The informal sector is important for training and it is estimated that it trains twice as many people as formal TVET.⁵

9.2.2 The Ministry of Federal Education and Professional Training plays the lead role in the TVET policy formulation. National Vocational and Technical Training Commission (NAVTTTC), which works under the Ministry, has a regulatory and co-ordination role but after the 18th Constitutional Amendment, major functions of NAVTTTC are devolved to the provinces.

9.2.3 At the provincial and regional levels, Technical Education and Vocational Training Authorities (TEVTAs) and equivalent organisations (Directorates) have key role in planning, coordination and implementation of TVET. In Punjab and Sindh, almost all TVET institutions have been placed under respective TEVTAs; the fragmentation still exists in KPK and Balochistan and AJK with number of departments/organizations providing skill training. Assessment and Certification role lies with provincial Boards of Technical Education (BTEs) and Trade Testing Boards (TTBs).

9.2.4 There is dearth of authentic data on the member of TVET institutions, showing wide variations. According to NAVTTTC website, there are 3581 TVET institutes (1177 in the public and 2404 in the private sector) in the country, whereas, the Pakistan Education Statistics (2014-15) reports a total number of TVET institutes as 3579 with 1073 (30%) in the public and 2506 (70%) in the private sector. According to this report, total enrolment in TVET courses is 0.309 million, of which 0.135 million (44%) is in the public sector institutions. NAVTTTC has also established 130 vocational institutions in 79 Tehsils across the country to provide skill training under President's "Funny Maharat Program", and had trained 37,521 persons. The National Training Bureau is also implementing important interventions for vocational training in collaboration with Skill Development Councils and affiliated institutions (Economic Survey 2014-15).

Issues and Challenges

9.2.5 The TVET system is confronted with plethora of problems and issues relating to: quality and relevance; articulation between different streams of TVET, inadequately trained instructors; mismatch between supply and demand; lack of private sector's involvement, lack of institution-industry linkages & workplace experience during training; gender disparity, access and equity and a poor social image of TVET, etc. Teachers training is the weakest area of TVET delivery systems.

9.2.6 TVET in the public sector institutions is highly subsidized and only a fraction of expenditure is defrayed through small fee charged from the trainees. In many countries, different approaches are employed to finance TVET. The important ones are:

⁵Mahbub-ul-Haq Human Resource Development Centre, (2007): *Education Outcomes and Poverty*

- *Public Financing*, dispensed on the assumption that ultimate responsibility for development of human resource for national development lies with the government;
- *Enterprise Financing*, e.g., single employer financing, pay roll tax, tax rebates & credit schemes and vocational training fund, etc.;
- *Private and Public Sponsored Financing*, which may involve training fee; fellowship; grants and loan; sale of training/non-training service; co-financing agreement; production for profit and apprenticeship and
- *International Donor Assistance*: which plays a very important role in setting up TVET system in developing countries by meeting high capital costs and recurring cost for some period.

9.2.7 Lack of effective involvement of business and industry in planning and implementation of TVET system is one of the major factors for low quality of training and mismatch in supply and demand. Non-existence of Institution- Industry linkages results in depriving trainees from gaining workplace experience during training, and the TVET teachers to gain insight into industrial practices and their requirements necessary to align training with the needs of end users.

9.2.8 Gender disparity in provision of TVET facilities is another serious issue that needs to be addressed for economic empowerment of women. Besides expanding TVET facilities for women, there is a need to introduce new /non-traditional trades suitable for females.

9.2.9 The TVET system has a narrow base. The efforts (establishment of Technical High Schools & Comprehensive High Schools and introduction of Agro-Tech & Matric Technical Stream schemes) aimed at to introduce technical and vocational education in schools and to relate education to the world of work and at the same time to expand base of TVET have not attained the desired success for various reasons. Despite this, the concept of vocationalization of school education has not been discarded. Independent evaluation of Agro-Tech scheme by Allama Iqbal Open University (AIOU), Boards of Technical Education and British Council and studies commissioned by JICA and UNESCO supported continuation of these programs after necessary modifications based on the lessons learned. Nevertheless, Agro-Tech courses and Technical stream were dropped from the school curriculum which was introduced in 2008.

9.2.10 The National Skills Strategy (NSS) 2009-13 defined three objectives: providing relevant skills for industrial and economic development; improving access, equity and employability; and assuring quality to address the major issues confronting the TVET system.

9.2.11 Taking as foundations the NSS and the Pakistan Vision 2025, the Ministry of Federal Education and Professional Training developed a broader National TVET Policy in 2015 (Approved in 2016). The policy lays emphasis on increasing training opportunities for young people as well as on re-skilling the existing workers, implementing the National Vocational Qualification Framework (NVQF) and Competency Based Training and Assessment (CBT&A). The policy also stresses on forging public- private partnership; increasing the private sector role in the governance of TVET and encouraging linkages with the informal sector through Recognition of Prior Learning (RPL). All donors' interventions in TVET sector are expected to be aligned to support its implementation. In fact, a number of donor funded projects addressing these issues are already under implementation in the country.

9.3 Goal:

9.3.1 To provide framework which achieves paradigm shift from supply led, time bound and curriculum based training to demand driven, flexible and competency based training and assessment system through active involvement of business and industry associations in design and delivery.

9.4 Objectives

- 9.4.1 To improve relevance of TVET to industrial and economic development need.
- 9.4.2 To enhance access and equity
- 9.4.3 To assure quality of TVET
- 9.4.4 To improve social image of TVET

9.5 Policy Provisions:

9.5.1 The present curriculum based and time bound TVET system assess the trainees how far they have progressed in covering the curriculum, whereas, certification is done on passing the examination mainly through rote memorization. It is, therefore, difficult to meet the needs and level of skill proficiency required by the industry. This shall be replaced gradually by Competency Based Training and Assessment (CBT &A) system, which focuses on what trainee is able to demonstrate practically (skill component) and must know (knowledge component) to perform in the workplace.

9.5.2 The involvement of private sector (Business & Industry Associations- BIAs) in the planning, management and delivery of TVET shall be enhanced to ensute an active and decisive role rather than ceremonial presence in meetings or on governing boards and committees.

9.5.3 The Apprenticeship program based on Apprenticeship Act 1962 shall be reviewed to remove lacuna and make it more acceptable to enterprises.

9.5.4 Profiles of all districts showing occupations of people, nature of industries and skills required by the industry and service sector shall be prepared to facilitate expansion of training facilities. The new TVET institutions shall be established after need assessment and proper mapping as opposed to the earlier practice of establishing these institutions on the basis of social/political demand without feasibility and need assessment studies.

9.5.5 New TVET institutions shall be established to improve spatial coverage for enhancing access, without compromising on the technical feasibility. Other options will be considered to provide facilities where establishment of a new institution is not feasible.

9.5.6 Distance and virtual modes of learning shall be utilized to enhance access of TVET to people in remote areas or for those who cannot benefit from the institution based training.

- 9.5.7 Training under informal sector shall be promoted/encouraged through recognition of prior learning for award of TVET certificates/diplomas/degrees.
- 9.5.8 Provision of training by the private sector shall be encouraged through various incentives, e.g., tax rebates and public-private partnership to expand participation access and improve quality.
- 9.5.9 The government is encouraging youth to set up their own enterprises through Prime Minister's Small Business and Interest Free loan Schemes. On the training end, however, entrepreneurship education (EE) is lacking in the curricula to train TVET graduates making best use of these opportunities. EE shall be included in TVET curricula.
- 9.5.10 Flexible delivery mechanism through modular courses shall be introduced in the TVET institutions to cater the needs of people who are working, living in remote areas or otherwise unable to benefit from full time rigid time schedules.
- 9.5.11 Skills like tailoring, embroidery, knitting, etc., are traditionally considered women domain, and women enrolment is generally concentrated in these trades. Non-traditional fields and new trades/technologies shall be explored to attract women enrolment in the new and economically more productive trades.
- 9.5.12 Gender disparity in provision of TVET facilities is another serious issue that needs to be addressed for economic empowerment of women. Besides establishing more TVET facilities for women, there is a need to introduce new /non-traditional trades suitable for females.
- 9.5.13 Life skills courses will be introduced in general school education to widen the existing narrow base of TVET with a view to relating school education to the world of work.
- 9.5.14 Not only the illiterate rural population of the country but the educated parents in urban areas are also not well aware of career options available to their children, and employment avenues after graduation. Career counseling and vocational guidance (CCVG) services in schools and TVET institutions will be provided to help parents and children make right decisions based on academic competency of the child, his/her aptitude, and financial status of parents.
- 9.5.15 Steps shall be taken to help disadvantaged groups such as persons with disabilities, people living in remote rural and troubled areas, religious and ethnic minorities, orphans and very poor to benefit from TVET facilities and services.
- 9.5.16 TVET Policy making shall be streamlined and further decentralized for better coordination, avoidance of duplication of efforts and wastage of resources.

- 9.5.17 National Qualification Framework NQF for TVET will be operationalized.
- 9.5.18 Management of TVET institutions and TVET organizations (NAVTTTC/TEVTAs) shall be reformed and strengthened through meaningful involvement of BIAs.
- 9.5.19 Measures shall be taken to promote Industry-Institution linkages and placement of trainees in industry for workplace experience during course of training.
- 9.5.20 Because of relatively low enrolment in TVET courses, private authors and publishers are not tempted and persuaded to develop textual material. Steps shall be taken to encourage TVET teachers/experts to develop books and manuals.
- 9.5.21 There is no pre-service training program for training of TVET teachers and capacity building of TTTIs. A 3-year B. Ed (Technical) program started at National Institute of Science and Technical Education (NISTE), Islamabad under the ADB funded Technical Education Project in early 2000 but abandoned after 2 or 3 cycles. Again recently (2015) programme, Virtual University and Technical University KAISERSLAUTERN, Germany one year B. Ed (Technical) program had been started under EU funded TVET Reform Project in collaboration with Institute of Education and Research (IER), Punjab University Lahore. The TTTIs will also be strengthened for in-service training of teachers in CBT &A and possibly also to start pre-service training.
- 9.5.22 Data base for TVET at each level, i.e., local (district) to national will be created, disseminated and regularly updated.
- 9.5.23 Research based TVET planning, implementation and monitoring and evaluation shall be ensured.
- 9.5.24 Government will encourage and facilitate establishment and promotion of small and cottage industries.
- 9.5.25 Vocational education and training of income – generating skills will be integral part of adult literacy program as per National Literacy Curriculum 2007.
- 9.5.26 Skill training and vocational education will be introduced in selected non-formal educational institutions and Deeni Madaris.
- 9.5.27 Campaigns in the print and electronic media and services of CCVG centers shall be used to improve social image of TVET as a decent education and career option.
- 9.5.28 TVET is cost intensive and government alone cannot provide adequate funds. Different approaches available for financing TVET in the institutions will be adopted.

9.5.29 One of the reasons of non popularity of technical education amongst the students in the country is the almost non-existent vertical and horizontal pathways for this form of education the previous situation is attributed and is due to the absence of any technical university in Pakistan. Thus, a technical university shall be established at the federal level for pre-tech service training of the students.

9. Implementation Strategies

9.6.1 Competency standards in some trades are developed by NAVTTC. While development of competency standards will continue, CBT &A will be implemented in conjunction with NVQF by NAVTTC and TEVTAs in collaboration with TVET provider institutions and TTBs & BTEs.

9.6.2 Industries will offer work place based training; collaborating with government through Public-Private-Partnership (PPP) and through involvement of BIAs in the institute management committees Boards of Governors of NAVTTC/TEVTAS/ BTEs/TTBs. NAVTTC and TEVTAs would work with BIAs to enhance their representation on various bodies for meaningful role in planning, management and delivery of TVET. NAVTTC and TEVTAs would also work for fostering industry-institution linkages and PPP. The NAVTTC/TEVTAs/BTEs/TTBs would ensure that training provided by private sector are recognized by the accreditation bodies and are part of NVQF.

9.6.3 The Apprenticeship system based on 1962 Apprenticeship Act is under review by NAVTTC to improve, and make it more flexible and acceptable to the industry. After the review, NAVTTC will move for amendment in 1962 Apprenticeship Act.

9.6.4 In order to encourage entrepreneurship amongst TVET graduates, Entrepreneurship Education will be introduced in TVET curriculum. NAVTTC and TEVTAs shall take measures to introduce EE in TVET curricula. An expert group would examine whether to integrate EE in the curricula or to introduce as standalone module.

9.6.5 NAVTTC and TEVTAs would commission surveys to prepare profiles of districts showing population, major occupations, types of industry and skill needs, needs of the service sector and recommendations about future expansion.

9.6.6 NAVTTC shall collaborate with AIOU and virtual university for designing and launching of TVET programs to provide access to people living in remote areas with no access to TVET institutions.

9.6.7 NAVTTC and TEVTAs in collaboration with Education Departments would initiate steps for setting up the CCVG services in high schools and TVET institutions in phased manner.

9.6.8 Distance and virtual learning modules will be developed and piloted to provide access to TVET in remote areas without formal TVET facilities, as well as, for those people who cannot benefit from full time rigid time hand schedule TVET. Introduction of part-time and evening shift programs will also be considered for working persons. This would also ensure flexibility which is not possible in the formal programs.

9.6.9 Seats shall be reserved for disadvantaged persons in TVET institutions. NAVTTC would also work with TEVTAs to identify special facilities to be provided and other specific training needs.

9.6.10 In-depth study into concepts, strategies and causes of failure of past efforts of vocationlization of education will be carried out and a model based on lessons learned from Pakistan's efforts, as given in Unesco study, and successful models of other countries shall be developed and piloted in selected schools technical model school at least one in each district.

9.6.11 NAVTTC and TEVTAs would work together to review mandates of different organizations/departments involved in skill training and remove duplication through mutual consultation.

9.6.12 The EU and GTZ funded TVET Reform project has developed NVQF. While further work may continue under the project, NAVTTC, in collaboration with TEVTAs, BTEs and TTBs and the project experts, will work on operationalization of NVQF developed.

9.6.13 National Institute of Science and Technical Education Islamabad (NISTE) and Teachers Training Institutes in the provinces will be strengthened for pre and in-service training of teachers. Possibility of starting pre-service training program shall be explored on the basis of lessons learned from the 3-year B. Ed (Technical) program at NISTE Islamabad, to the end the NISTE shall be transformed into skill university of Pakistan for pre and in-service technical professionals for inclusiry and technical teaching institutions.

9.6.14 Registration and accreditation of TVET institution is basic requirement for quality of training. NAVTTC and TEVTAs would ensure that TVET provider institutions in private sector are periodically assessed for renewal of accreditation to ensure quality of training offered by these institutions.

9.6.15 A combination of approaches, successfully used in other countries, and best suited to the ground realities of Pakistan, will be employed to supplement government funding in TVET institutions.

9.6.16 Not only that a reformed system with positive outcomes for trainees would help enhance status of TVET, but awareness raising campaign through print and electronic media would be launched to raise awareness of masses regarding TVET for employment/self-employment and earning good livelihood. NAVTTC would coordinate with TEVTAs in designing, organizing and executing the awareness raising campaigns.

HIGHER EDUCATION

Significance of Higher Education

Education above or after secondary school level is normally categorized as higher or tertiary education. According to the International Standards Classification of Education- ISCE-2011 (UNESCO Institute of Statistics, 2012, Montreal, Canada), higher education includes short-cycle tertiary education, Bachelors, Masters, and doctoral or equivalent levels. Higher education may comprise of academic education as well as advance vocational and professional education. Tertiary education comprises of higher order, more complex, and advanced academic knowledge. It is usually characterized by research aiming to create and build new knowledge base and open new avenues for exploration, as well as occupation specific skills and competencies for enabling the graduates to enter the job market for employment or entrepreneurship. Catalytic role of higher education is not limited to nurturing potentials of individual students for their career; it provides highly skilled human resources needed for economic development, social transformation, and political enlightenment of whole society. Higher education institutions produce leadership for all sectors of the economy and various spheres of socio-political life. Even successful functioning of all other tiers and levels of education system in a country largely depends on performance and output of higher education institutions. Findings of a number of research studies conducted around the globe indicate that rates of return for graduates of tertiary education are the highest in entire educational system, leading to an average 17% increase in earning. World Bank Group asserts that good quality institutions, diversified options, and equitable access to tertiary education and research contribute significantly towards eradication of poverty and advancing economic growth.

2. Tiers of Higher Education

In Pakistan, higher education starts after intermediate or higher secondary level. Higher Education Institutions (HEIs) can be classified into two categories, Degree Awarding Institutions (DAIs) or chartered universities, and colleges or institutes affiliated with the DAIs. As part of a recent global trend, Higher Education Institutions (HEIs) in developed countries are grouped into following categories or ranking:

Tier I: High quality research universities, which have demonstrated excellence in their programmes, teaching-learning processes, and worth of their products in terms of competence of graduates, eminence of its research work. Tier I HEIs contribute significantly towards creation, validation, and dissemination of new information and knowledge. Over the time, Tier I higher education institutions or universities, based on their academic excellence, repute, and benefits to the society are up graded and transformed into fully autonomous corporate enterprises and attract finances both from the public and private sectors.

Tier II: These are degree awarding institutions that predominantly cater to the learning needs of general masses and provide trained human resources for national economy. Mostly, such middle level universities in Pakistan are financed by the public sector. Tier II universities are

also found in private sector but their fee and service charges are affordable to only middle class or wealthier families of the society.

Tier III: These are the colleges or institutions affiliated with Degree Awarding Institutions (DAIs) and follow curricula of their parent universities. These colleges are large in number and spread across the country.

3. International and National Ranking of HEIs

In Pakistan, Higher Education Commission (HEC) has introduced quality and research based criteria for ranking of public and private sector universities in the country. This initiative of HEC aims to drive HEIs towards improved quality and research and promote a culture and infuse inspiration among university for participation in the World Ranking of universities. At the international level, a number of government supported and private bodies assess quality and performance of universities around the globe, using their own distinct criteria, and annually announce rankings of world universities. A system of Academic Ranking of World Universities (ARWU) has been developed by Shanghai University (China). QS World University Ranking (Quacquarelli Symonds, England) is another private agency which issues ranking of over 700 universities on annual basis. Recently, it has started separate ranking of Asian universities as well.

Ranking system introduced by HEC in Pakistan has infused triggered a healthy competition among the universities to improve their functioning and strive to excel in academics, particularly with respect to quality of their programmes or relevance of curricula, competence of faculty, physical facilities, and research publications etc.

4. Situation Analysis of Higher Education in Pakistan

Access: Total enrollment in higher education institutions in Pakistan has increased from 0.276 million during 2001-02 to 1.298 million by 2014-15, registering 300% surge over a period of about 15 years. However, still Pakistan's Gross Enrolment Ratio (GER) in higher education was just 10% during 2015-16, which is lower than many other developing countries of South Asia. For example, GER of India in higher education is 24%, followed by 21% in Sri Lanka, 16% in Nepal and 13% in Bangladesh (UNESCO, GEM Report 2016). An encouraging development is that Gender Parity or enrolment of females in higher education has increased from 36.8% in 2001 to 47.2% by 2014. Universities get about 40% of their budget through Fees from the students and other sources of income. This has made access to higher education less equitable. Public sector universities are insufficient in number to meet learning needs of all the students from low income families. Since most of the parents are unable to pay exorbitant fees of private sector universities, resultantly participation rate at higher education level remains low.

Quality: A number of dimensions and variables influence quality of higher education. These may include; limited to physical facilities, profile of the faculty, mechanisms for educational assessment, certification, and accountability, quality and usefulness of research produced, linkages of curricula with industry, and absorption of graduates in the job market etc. A number of public sector universities may have spacious campuses and better physical

facilities, but academic excellence of their faculty and quality of assessment systems are debatable. On the other side, a number of private sector universities may have limited physical facilities but these institutions are able to earn repute and demand among clients due to better qualified faculty, functional mechanisms for academic accountability and flexibility to efficiently transform their curricula to market trends.

Unfortunately, none of the Pakistani universities have so far been able to secure a place in the list of top most 100 or even top most 500 universities of the world. This is a serious concern and an indicator of low quality of higher education in the country. Pakistani Universities are gradually inching up their ranks in Asian ranking. In 2015/16 six Pakistani Universities have been ranked above the rank of 170 in the Asian ranking system. With increasing research output and HEC support the number of such universities is expected to grow. An important indicator of this increase in number of ranked Pakistani universities is the dramatic increase in the number of research publications indexed in ISI Web of Knowledge from 977 publications in 2002 to over 10,000 publications in 2014.

Financing of Higher Education: Historically, Federal Government has been main financier of university education in Pakistan and provincial share has remained meager. Predominantly, provincial governments have been bearing expenditure on affiliated colleges. After 2002, some of the provincial governments have come forward to establish and finance new public universities.

For example, during 2014-15, Federal Government, through HEC, provided over Rs. 78 billion for higher education in the country, which forms 60% of the total public sector expenditure on university education in Pakistan. During the same year, Federal Government invested 77% of its total education budget for higher education, whereas provinces have spent only 10 to 13% of their education budget for higher education (I-SAPS, Public Financing of Education in Pakistan, 2016). This shows low priority being accorded by the provinces to the promotion of higher education in their respective areas. Education Sector Plans developed by the provinces of Sindh, Balochistan, and Khyber Pakhtunkhwa lack specific goals, targets, or allocations for university education. In fact, provinces have been according priority to expanding access to school education only, and this approach may be justified. Like other developing countries, Federal Government should continue sponsoring higher education throughout the country realizing its role for national economy, peace, prosperity, and socio-political transformation.

Per student government expenditure as % of GDP per capita is another indicator of the priority accorded by a country to higher education. In case of Pakistan, it is 51.6%, whereas in India this ratio is 53.7%. Per student government expenditure on tertiary education indicates level of investment. During 2013, Pakistan spent US\$ 2,353 (PPP) per student of tertiary education. It was US\$ 2,563 in case of India, 9,851 by Australia, 9,167 by New Zealand, 8,977 by Japan, 13,256 by France, and 22,905 by Denmark, which is highest in the world. At present, Pakistan is spending only 0.28% of its GDP on higher education. Higher Education Commission has estimated that country will have to enhance this ratio up

to 1.40% of GDP for achieving targets set in ‘Pakistan Vision 2025’, i.e. five times boost in the existing budget.

HEC Vision 2025: Higher Education Commission (HEC) was created during 2002 as an independent, autonomous, and constitutionally established institution of primary funding, overseeing, regulating, and accrediting the higher education efforts in Pakistan. HEC is an autonomous, self-governing national institution. Since its inception, HEC has been endeavoring to expand access to tertiary education and improve its quality. As a result of initiatives of HEC, remarkable expansion in higher education opportunities has been registered. Number of universities increased from 59 during 2002 to 178 by 2014-15. Enrolment increased from 276, 274 to 1.3 million by 2014-15. Funding for the universities and scholarships for faculty members of universities and research scholars has also increased considerably. Taking inspiration from Pakistan Vision 2025 and realizing the role of tertiary education in economic development of the country, Commission has developed HEC Vision 2025. In consultation with stakeholders, initiatives and plans for all important areas of higher education have been envisaged and targets have been set in this Vision.

18th Amendment and Role of Higher Education Commission (HEC): In accordance with Article 12, Federal Legislative List, Part II, of the Constitution of Pakistan, Federal Government has the mandate of setting standards of higher education and research, scientific and technical institutions. 18th Amendment to the Constitution of Pakistan has not altered this role of the Federal Government. Higher Education Commission is a national institution and its functions are supported by constitution and law promulgated by the parliament. Legal issues were raised about role and functions of HEC after 18th Amendment. However, Supreme Court of Pakistan through its decision dated 9th April 2011, maintained the status quo and allowed HEC to continue its functions. After 18th Amendment, two of the provinces have created their own Higher Education Commissions. This situation may create confusion, and affect smooth functioning of HEC and flow of substantial federal grants to the universities in the provinces. Secondly, any restriction on the constitutionally mandated functions of HEC may create complications with respect to recognition of higher education degrees of Pakistani universities at the international level. HEC has been performing its academic and regulatory functions with active participation of academicians from the universities and representatives of the provincial governments. Federal grants to the universities are also allocated following an objective criteria blocking politicization of financial management and academic growth of higher education in the country

5. Challenges of Higher Education in Pakistan

The status of higher education in Pakistan is not encouraging, although this sub-sector has registered enormous growth after 2002, when Higher Education Commission was established and Government of Pakistan started according priority to tertiary education. The important sub-sector of higher education is confronted with following broader issues and challenges:-

- Participation rate at higher education level is low; Gross Enrolment Ratio is just 10%. Only 8% of relevant age group of 17-23 years are enrolled in tertiary education.

- Most of the universities and their campuses are concentrated in urban centres and more developed regions of the country, hence restricting accessibility of millions of youth in rural and under developed areas to access higher education opportunities. Out of 120 districts in the country, 65 districts do not have any university or its campus.
- Quality of higher education is not compatible with international standards. None of the Pakistani universities is included in the list of top 500 universities of the world.
- Only 27% faculty members of universities possess higher qualification of Ph. Ds
- Most of the universities lack a culture of research. Ratio of internationally recognized research publications is minimal.
- Budgetary allocations for higher education are not proportionate to the needs of the country. Provinces are spending less than 13% of their education budget on higher education
- HEIs are also facing issues relating to governance. Appointments of senior leadership in universities are sometimes politicized, thus affecting quality of education and research in these institutions.
- Due attention is not paid on Research and Development (R & D). Linkages between universities and industry are weak.

There is a dire need to address these issues through a well thought out policy on higher education.

6. National and International Commitments for Higher Education

Constitution of Pakistan: According to the Constitution of Pakistan, State has the responsibility of making higher education equally accessible to all. Exact wording of this Article is produced below:

“The State shall:-

(c) make technical and professional education generally available and higher education equally accessible to all on the basis of merit;”

(Article 37 (c), Constitution of Pakistan, Chapter II, Principles of Policy)

Pakistan Vision 2025: The Government of Pakistan with the support of all provinces have evolved a vision for socio-economic development of the country by 2015. This Vision is based on six Pillars, and first Pillar is ‘Putting People First: Developing Human and Social Capital’. Recognizing the role of higher education in socio-economic development around the globe, Pakistan Vision 2025 envisages to significantly increasing investment in human resources at the higher education level. It aims to:

“To achieve the objective of developing a knowledge economy, we target a sizeable increase in expenditure on higher education, currently from 0.2% of GDP to 1.4% of GDP, and significant expansion in higher education enrolment from currently 1.5 million to 5 million”

(Government of Pakistan, 2016, ‘Pakistan 2025: One Nation-One Vision’, Page 34)

International Commitment: SDG 4: During 2015, Pakistan signed global declaration and framework of action titled ‘2030 Agenda for Sustainable Development and Sustainable Development Goals’ and committed to achieve 17 Sustainable Development Goals (SDGs). This Agenda was adopted by UN General Assembly on 25th September 2015. SDG 4 focuses on education. SDG 4 aims to achieve 7 targets. Target No 4.3 relates to technical, vocational and higher education. Full text of SDG Target 4.3 is given below:

*“By 2030, ensure equal access for all women and men to affordable and quality technical, vocational and **tertiary education**, including **university**”*

(United Nations, General Assembly, 2015, ‘Transforming our world: the 2030 Agenda for Sustainable Development, page 17, SDG 4, Target No 4.3)

An overview of above national and international commitments of Pakistan towards promotion of higher education obligates the State of Pakistan, including all its federating units and organs to accord priority to ensure equitable access of all Pakistanis to higher education.

7. Goal: To provide skilled and innovative workforce for achieving the objective of developing knowledge economy in accordance with ‘Pakistan 2025: One Nation-One Vision’.

8. Objectives

- i. To increase GER at higher education level from existing 10 % to 30% by 2025
- ii. To expand world class compatible (TIER I and TIER II) universities to 300
- iii. To improve quality and relevance of higher education offered at affiliated colleges or TIER III Higher Education Institutions (HEIs)
- iv. To expand higher education to district level by establishing 150 Community Colleges to be affiliated with Skill Universities for preparing technical and vocational staff to meet the urgent need of skilled manpower.
- v. To enhance the ratio of Ph.D faculty in the universities from existing 28% to 40%
- vi. To develop a model governance framework, supported through legislative backing, for addressing management and administrative issues at the university level

9. Policy Actions

9.1. Expanding Equitable Access and Participation Rate

- i. Number of public sector universities will be increased from existing 99 (2015) to 195 by establishing 96 new universities by 2025. Projected number of private universities is expected to reach from existing 76 to 105 by 2025 with total number of universities touching the figure of 300 in the country.

- ii. Out of these, 72 new public comprehensive universities will be established in less served areas.
- iii. Among these will also include 15 new public Science and Technology Universities/DAIs to develop human resources for indigenous exploration of natural resources.
- iv. Establishment of 100 Private Sector Comprehensive Universities shall be supported to provide quality undergraduate and graduate level education in Social and Natural Sciences, and professional education
- v. At least one public sector general university will be established in each district and an engineering or skill university at the divisional level
- vi. HEC will set up 72 new smart sub-campus of Tier II universities in under -served large districts.
- vii. Existing (2015) enrollment of 1.298 million (in public, private, distance universities and in affiliated colleges) shall be increased to 7.172 million by 2025.
- viii. An elaborate system of merit and need-based financial assistance shall be instituted for provision of grants, low or no interest loans, and merit based scholarships to needy students.
- ix. Technology embedded distance education opportunities shall be increased to provide targeted expansion of educational opportunities for working men and women.

9.2. Improving Quality and Ranking of Universities

- x. A three-tiered differentiated system of public and privately supported tertiary education will be instituted by HEC with a judicious blend of comprehensive universities, special purpose institutes focusing on and catering to the intellectual and professional needs of society, and mass collegiate education, in collaboration with all stakeholders.
- xi. Top five universities ranked by HEC in each of the six areas of specialization (Engineering and Technologies, Medicine, Social Sciences shall be nurtured to become the top TIER I research universities in the country. These 30 Pakistani universities can be the potential leaders to play an important role in producing innovative research and human resource development.
- xii. HEC will strengthen collaboration with QS (Quacquarelli Symonds, England) and other global university ranking systems.

- xiii. Increase the number of QS ranked Pakistani universities from 10 to 15 and improve the rank of top 10 universities.
- xiv. To nurture 30 TIER I universities to secure place for Pakistan in international ranking.
- xv. Shift higher education paradigm from teacher dominated input based initiatives to student centric knowledge, skills and competency based outputs.
- xvi. Aligning programmes, their duration and credit hours, with internationally accepted standards and practices, including transition to four years Bachelor Degree in all universities and their affiliated colleges.
- xvii. Provinces and Area governments shall build capacity of Directorates of Colleges in administrative, financial and academic oversight of institutions under their purview.
- xviii. Balance between social sciences and natural science will be redressed. New programmes of advanced studies in teaching of Languages, Sociology, Anthropology, Arts and Design, History, Economics, Urban Planning and modern business will be supported.
- xix. Low cost Split- degree graduate programs of studies will be developed in collaboration with eminent universities of the world through tuition exchange programs where students pay tuition to their own universities at their rates and study for a semester/year in collaborating universities. Such scholarly exchanges are a powerful instrument for qualitative improvement of curricula based on international standards.
- xx. To Prepare 10,000 Ph.D. Faculty in Ten Years through US-Pakistan Knowledge Corridor

9.3. Faculty Development

- xxi. Substantially increase the investment in indigenous and international programs of Faculty Development to increase the ratio of faculty with advanced qualifications (Ph. D) from existing 27% to 40 %.
- xxii. HEC will increase the number of scholarships for both indigenous Ph.D. scholars and international HEC funded opportunities for earning Ph. Ds.
- xxiii. Steps shall be taken for wider dissemination and implementation of National Qualifications Framework developed by HEC for all 8 levels of higher education.
- xxiv. Tenure Track System shall be expanded, additional resources budgeted and stronger M&E system will be established to ensure strict compliance.

- xxv. HEC will refine and implement the fast track system of employing fresh Ph.Ds in the rapidly growing higher education sector.
- xxvi. Competitive scholarships shall be provided for 500 post doc research projects in humanities, STEM studies including natural sciences and technology, engineering and mathematics.
- xxvii. Subsidized opportunities shall be offered for domestic Ph.D. programs to 3000 lecturers in all disciplines of knowledge, including Social Sciences and Languages
- xxviii. Sector based knowledge exchange programmes among university consortia shall be launched by using Offices of Research, Innovation and Commercialization (ORIC) and Business Incubation Centers (BIC) and in Collaboration with development partners and international donors.

9.4. Promoting Innovative Research

- xxix. A culture of innovative and commercially useful research shall be created and promoted at all public and private HEIs to discover and disseminate new knowledge that is a precursor of developing a vibrant, progressive economy.
- xxx. Numbers of TIER I research universities shall be increased to **30** for Innovative programs complying with international standards in Engineering and Technologies, Medicine and Allied Health professions, and Social Sciences and Humanities
- xxxi. Number and amount of Research grants will be increased and awarded as special support to those leading to international patents.
- xxxii. Creating and supporting Linkages between innovative research being done at HEIs with government policy planners and business and industrial entrepreneurs shall be created and supported.
- xxxiii. University involvement and collaboration in developing applied research programs shall be increased to help the business and industry to design and produce high value commercial products through the Business Incubation Centers and ORICS.
- xxxiv. R&D grants award procedures shall be reformed to promote collaborative research in the new Centers of Advanced Studies to be established in critically needed emerging disciplines of knowledge in partnership with universities in all the provinces.
- xxxv. Offices of Research, Innovation and Commercialization (ORICS) in TIER I and TIER II universities will be expanded to 46 and activated.
- xxxvi. Rewards will be launched for the scholars who publish research papers, supplementary study materials and text and reference books.

9.5. Strengthening Linkages with Industry

- xxxvii. Community colleges at district level will be established to produce growing number of vocationally and technical competent skilled workers in all corners of the country.

- xxxviii. HEIs shall be prepared and reinforced to contribute significantly in China-Pakistan Economic Corridor.
- xxxix. Financial and technical assistance to HEIs shall be increased for enhancement in the number of research publications indexed in ISI Web of Knowledge.
 - xl. Five Science, Technology and Industrial parks shall be established to connect academia with business entrepreneurs and policy planners.
 - xli. Allocation of funds for indigenous Ph.D. development programs that focus on Pakistani research problems and generate effective and efficient solution through discovery of useful knowledge, shall be increased.
 - xlii. Numbers of collaborative research with the growing industries in the country and develop new programs and curricula shall be increased.
 - xliii. HEI faculty shall be encouraged to forge stronger links with the business and industry leaders to add value to their products based on their research

9.6. Governance and Management of Universities

- xliv. Search Committee Process of selection and appointment of VC/Rectors shall be depoliticized and effectively used to identify and recruit eminently qualified and visionary leaders.
- xliv. Administrative structure of public sector modern universities shall be reformed, to streamline the role and contribution of Vice Chancellor, Controller and Registrar to effectively manage the Academic Affairs and Student Services, Graduate Studies and Research, Budget planning/ Finance and Institutional Development.

9.7. Financing of Higher Education

- xlvi. Endowments Funds shall be established for creating financial aid systems to attract better quality students and nurture their talents to become productive scholars, irrespective of their financial background.
- xlvii. Roles of the VC/Rectors shall be redefined to include fund raising and institutional development as their additional primary duty.
- xlviii. Steady annual increase in federal and provincial budgets for Higher Education shall be ensured.

Integration of ICT in Teaching-Learning processing school Education

I: CONCEPTUAL FRAMEWORK

1. Information and communication technologies (ICT) have become commonplace in all aspects of life. Use of ICT has fundamentally changed the practices and procedures of nearly all forms functions within business and governance. In education traditionally “instructions” are given by a teacher in classroom and the student is obliged to memorize what the teacher said. On the other hand, using ICT in teaching implies learning become student centered that provides freedom to students to learn by exploration experimentation and innovations. This is popularly known as the “constructionist” method of education. To implement this approach of learning, UNESCO International Conference on ICT and Post 2015 Education greatly emphasizes the following five points for the member countries to keep in mind while undertaking integration of ICT in education:

- (1) ICT provides access to a variety of learning resources that enhance the teaching skills and learning ability.
- (2) ICT provides immediacy to education because the pace of imparting knowledge is very fast and one can be educated anywhere at any time.
- (3) With ICT, it is anytime for learning. One can study whenever s/he wills, irrespective of whether it is day or night and irrespective of one’s location.
- (4) ICT greatly facilitates collaborative learning due to the availability of online library and distance learning
- (5) ICT is one of the best choices for enabling children with disabilities to have access to information and education.

II: IMPORTANCE AND SIGNIFICANCE

Within this context, the Guangdong Conference on Education 2015 to which Pakistan is a signatory, maintains that ICT have transformed many aspects of our lives and offered unprecedented opportunities and challenges for education. Education institutions, at all levels, need to provide every citizen with the knowledge, skills and competences as well as the lifelong learning opportunities required for living and working in an increasingly technology-rich environment. To this effect, education management information services as well as the teaching and learning process should be reshaped towards the needs of individual fulfilment and sustainable development of knowledge economies. To unleash the potentials of ICT in supporting the achievement of post-2015 education targets, policy makers need to understand ICT’s role in delivering equitable and quality lifelong learning opportunities. They should endeavor to ensure the implementation of these recommendations along with others on this pattern.

III: CONSTITUTIONAL AND LEGAL PROVISION

1. Article 25A of the constitution of the Islamic Republic of Pakistan 1973 binds the State to free education to all children (5-16 years) as a fundamental right... Accordingly, a comprehensive law to provide free and compulsory education is the mandate of the constitution and the need of the time. The National Assembly unanimously passed the Right to free and Compulsory Education Bill 2012 with the purpose of ensuring free and compulsory education to all children of aged five to sixteen years as enshrined in the Constitution.
2. In addition, Pakistan is bound by its International obligations and being signatory to several international organizations to fulfill its responsibilities focusing on providing free compulsory basic education to its citizens. Unfortunately, these goals have never been realized as there are significant numbers of children, of school age, who have no place in schools. Some international organizations that are taking a proactive role in ICT in education include UNESCO, UNICEF, IESCO and international banks etc. Here we point out to two statements, namely the Incheon Declaration on Education 2030, and ICT Strategy Guangdong that emphasizes inclusive and equitable quality education and lifelong learning for all. It focuses on the use and importance of ICT under the EFA goals since 2000 and the education-related Millennium Development Goals (MDGs).

IV: SITUATION ANALYSIS

1. In the late 70s and 80s when computing effect started trickling down from mainframe computers to desktop and PCs, it facilitated the introduction of computers to school management. Though the efforts were confined to management of institution but gradually it reached the classroom for teaching. In these endeavors, the involvement of Prof Samuel Pappert of MIT (1983/4) actually brought in Apple computers to demonstrate its worth for teaching and learning. A series of workshop and conferences were held to demonstrate how computers made learning easy and enjoyable activity. Alongside this, IBM and Linux also did their share of popularizing ICT. In the mid-eighties when PCs made an appearance in the Pakistani market, AEPAM pioneered their introduction with sponsorship of UNDP to develop PC driven EMIS. The focus had been EMIS and not teaching-learning process.
2. Organized efforts to use ICT in teaching-learning process appeared in National Education Policy 1998-2008 when a Chapter on IT was dedicated for this endeavor. It intended to enable the child in three aspects of ICT:
 - a. learning to learn and think with ICT
 - b. learn about ICT and
 - c. Prepare and train teachers to assist students in these adventures and enable the teacher for their new role as teaching with ICT.

3. These policy options could not be materialized due to lack of commitment to the cause and hence funds. Within this context in 2003, Microsoft Corporation extended its global program to Pakistan by signing a Memorandum of Understanding with Federal Ministry of Education. The valuable global program launched by Bill Gates in education is called “Partners in Learning” (PiL) and was launched in 2004. PiL focused on the following areas:
 - 1) Preparing children for the Digital World
 - 2) Integrating ICT in T-L program through MS technologies
 - 3) Equip children with Employable IT Skills
 - 4) Setting up a chain of PC labs in schools and Teacher Training Institutes
4. In 2006 the MoE desired to develop a detailed strategy to help it oversee ICT effort in education. Consequently, in collaboration with ESRA, Microsoft et al, a national ICT (NICT) strategy was devised for the MoE to focus its efforts on the following six actions as summarized below:
 - a. Providing **access** to ICT in schools, by setting up PC labs in secondary schools across the country
 - b. Use ICT to strengthen **teaching quality** by introducing ICT in teacher training institutions
 - c. Use ICT to enhance **student learning**.
 - d. Develop **complementary approaches to ICT** in education.
 - e. Build on **best practices** in existing ICT programs.
 - f. **Develop capacity** at the Fed MoE & Provincial Education Departments
5. Most efforts to introduce ICTs in education focused on provision of computers in schools; conducting courses / trainings in basic IT skills that were less meaningful in the context of teaching and learning in short and long-term. Existing national education and ICT policies do not encourage use of ICT in education let alone its integration in the teaching-learning process. This situation can be judged in a White Paper on Education (2007). It states:

“The present education system in Pakistan offers only minimal curricular resources for students. In most primary schools this is just a textbook. The pedagogical focus is on fairly low-level cognitive skills like memorization of material. Secondary school programs are producing few students in the areas of science and technology and its standards are not internationally competitive.”
6. Nations lagging behind in the use and application of IT will be losers both educationally and economically. National Education Policy 2009 gave minimum importance to this endeavor. The NEP 1998 chapter on ICT in education was reduced merely to lip service and not focused on devising an implementation plan. The NEP 2009 describes the following three bullet points on page 36:

- Use of Information Communication Technologies (ICTs) in Education shall be promoted in line with Ministry of Education’s “National Information and Communication Technology Strategy for Education in Pakistan”.
- ICTs shall be utilized creatively to assist teachers and students with a wide range of abilities and from varied socio-economic backgrounds.
- ICTs shall be used to strengthen the quality of teaching and educational management”

National Education Policy 2009 Page 36

7. A business fact regarding software industry is quite relevant to keep in mind, “Considering one *US dollar that Microsoft earns simultaneously generates 10-14 dollars for other companies using MS technologies.* To undertake the integration of ICT in teaching-learning process we need an Out-of-Box solution to this problem is seriously consider the “Professional Certification” approach. For example, in the IT Industry there are different certifications available for **software tester**, **project manager**, and **developer** etc. It is simple and caters to the need of a student who intends to become an IT professional.
8. Since a lot of water has flowed under the bridge and we cannot afford to waste more decades through status-quo approach by writing and rewriting IT curricula. ICT curriculum development is time consuming process and IT knowledge changes at a very fast speed. By the time curriculum is transformed into teaching learning aids and text books, the knowledge & skills contained therein evaporates, become irrelevant and obsolete. The answer lies in “don’t reinvent the wheel”, deploy what is practically required by the society at large and the market in general a market oriented approach, i.e. professional certification by different IT giants are listed below:

<p>MCSE: Cloud Platform and Infrastructure, MCSE: Mobility, MCSE: Data Management and Analytics, MCSE: Productivity, and MCSD: App Builder Microsoft</p> <ul style="list-style-type: none"> • MCSE: Server Infrastructure • MCSE: Private Cloud • MCSE: Data Platform • MCSE: Business Intelligence • MCSE: Enterprise Devices and Apps • MCSE: SharePoint • MCSE: Communication • MCSE: Messaging • MCSD: Universal Windows Platform • MCSD: Web Applications • MCSD: SharePoint • Applications Microsoft and IC³ certification (Internet and Computing Core). 	<ul style="list-style-type: none"> • Alcatel-Lucent sponsors the Service Routing Certification program • Apple Inc. sponsors the Apple certification program • ARM Holdings sponsors the ARM Accredited Engineer program • Avaya sponsors the Avaya Professional Credential Program • Cisco Systems sponsors the Cisco Career Certifications program • Brocade Communications Systems sponsors the Brocade Certification and Accreditation program • Citrix Systems sponsors the Citrix Certified Administrator program • Cyberoam sponsors the Cyberoam Security certifications program • Hewlett-Packard sponsors the HP Expert ONE certification program • Dell sponsors the Dell Certified Systems Expert program with Associate and Master levels • Google sponsors the Google Apps Certification program 	<ul style="list-style-type: none"> • Certiport sponsors the • The Document Found provides for LibreOffice developers and support providers. • EMC 'Open' type certifications in EMC Proven Professional certification program are vendor-neutral • (ISC)² sponsors the CISSP, SSCP and other security certifications • Linux Professional Institute sponsors LPIC with three levels plus an introductory (Essentials) certification • The Open Group sponsors TOGAF certification and the IT Architect Certification (ITAC) and IT Specialist Certification (ITSC) skills and experience based IT certifications.
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V: ISSUES AND CHALLENGES

1. The major challenge to Pakistan education and development is brought by population explosion. The current population of 180+ million will increase to 350

million young people in a few decades. We need serious contemplations at this point to provide useful and employable education to new entrants and make Pakistan a thriving country of the region. Alternately, the worse would be if we retain status-quo and ignore the warning. It could plunge the country into a failed state. To catch-up with lost time and overtake the speed which we adding ill-educated and illiterate youth in this country, we need to think of innovations so we can undertake integration of ICT from elementary schools and onwards. This will prepare students in ICT skills, and will equip high school graduates with employable skills and confidence.

2. Basic issues that we encounter in our efforts to integrate ICT in school education is whether our teacher and the system as a whole is ready to take 180 degrees shift from the current pedagogy of memorization in schools to a more democratic paradigm of learning to learn and think. The challenge is whether we want to stick to the status quo model of introducing and integrating ICT via the traditional model, i.e., developing curriculum, write books and train teachers and start teaching? Alternately we need to adopt a fast track where we by-pass these stages altogether and get on the train by adopting the well-known ready to work market approach set by IT giants?
3. At present whatever efforts are going on in the country are not synchronized across the nation. Each province is proceeding according to its own choices in developmental fields that have already resulted in creating a vast gap among the provinces. The situation is further aggravated in absence of a common platform for policy dialogue. Education is no exception from this principle: including of national policy on ICT in education: starting from classrooms to educational management.
4. Pakistan is far below the minimum resources required for education as established by international organizations. Historically, we have rarely crossed over the 2% line of GNP for education. Can we commit to increase public spending on education by allocating efficiently at least 4 - 6% of GDP to education?

VI: RATIONALE / JUSTIFICATION AND NEED FOR POLICY INTERVENTION

1. Experts express the need and importance of ICT in the flowing succinct words:
 - 1) Education is a lifelong process therefore anytime anywhere access to it is the need
 - 2) Information explosion is an ever increasing phenomena therefore there is need to get access to this information
 - 3) Education should meet the needs of variety of learners and therefore IT is an important vehicle in meeting these needs

- 4) It is a requirement of the society that the individuals should possess technological literacy
 - 5) We need to increase access and bring down the cost of education to meet the challenges of illiteracy and poverty-IT is the answer
2. ICT has grown into a major industry in the world. Today several developing countries have become major IT producers and sophisticated users. For example, Malaysia and India besides in other developmental projects they are successfully using ICT in their elections. There is great growth potential of ICT industry in Pakistan to take advantage of this opportunity. This sector can bear fruit if we provide a common platform where public and private sectors can collaborate with each other. Let us keep in mind that in this endeavor, there is a silent partner by the name of Pakistan Public Education System that is the main provider of manpower to both GoP and the Private Sector. It will require exceptional attention to ensure a steady supply of highly trained computer scientists and engineers.
 3. With proper education and minimum investment in hardware, usually leads to most effective source of quicker returns. Information technology lowers the time spent on a job, thus lowers labor cost, increases productivity, reduces spoilage, reworks, scrap work, etc. Nations that are lagging behind in the use and application of IT will be losers both educationally and economically

VII: GOALS AND OBJECTIVES AND TARGETS

1. These goals and objectives are based on the concept of non-traditional approach to integrating ICT in T-L process at the soonest, by by-passing the time consuming curriculum development process and following the professional certification route.
2. First thing first: make integration of ICT in school education an integral part along with a shift from memorization paradigm of school education to modern method of learning by exploring, experimenting and innovation. This can be accomplished by re-establishing our lost connections with IT giants such as for example but not limited to Microsoft, Intel, Open Sources and Linux. The aim is to utilize their curricula for their worldwide recognized educational programs thus empowering our high school children with employable certification of IT skills and knowledge.
3. Main objectives of the proposed policy will be to focus on but not limited to the following areas of concerns at each level of education:
 - a. In Elementary Schools:
 - i. To enable children to learn with ICT; to learn about technology; and to provide elementary school children with low cost rugged laptops specially designed for learning at elementary level
 - ii. To prepare teachers for their role as teachers with learning aids

- b. In Secondary Schools:
 - i. To enable children to acquire employable ICT skills
 - ii. To make available to Pakistani students, the ICT courses developed by global IT corporations with their collaboration (Microsoft's Education, Mozilla Corps)
 - iii. To equip schools with required ICT facilities.
- c. Teacher Education: To prepare teachers for their **new role** in teaching with ICT
 - i. Engage students in meaningful and relevant learning;
 - ii. Integrate ICT into the curriculum & devise alternative ways of **assessing student work**;
 - iii. Allow students to **construct knowledge**;
 - iv. Adapt to a variety of student **learning styles** to cater for individual learning differences; and
 - v. Continuously expand and welcome further opportunities for teacher learning. Introducing ICT in schools imply that we need to prepare teachers to facilitate the process in that all teachers need to emphasize content and pedagogy not the level of sophistication with hardware and technical skills

VIII: POLICY PROVISIONS TO ACHIEVE GOALS / TARGETS

1. Pakistan is bound for making the necessary changes in education policies and focusing efforts on using/integrating ICT for quality lifelong learning opportunities for all, in all settings and at all levels of education. ICT must be harnessed to strengthen education systems, knowledge dissemination, information access, quality and effective learning, and more effective service provision.
2. Realizing these goals has financial implications for Pakistan and it is important to increase financial resources because Pakistan is included in the list of those countries farthest away from achieving quality education for all at all levels. Donor countries along with UN organizations stress the member countries to commit to increase public spending on education in accordance with country context, and urge adherence to the international and regional benchmarks of allocating efficiently at least 4 - 6% of Gross Domestic Product and/or at least 15 - 20% of total public expenditure to education.
3. NICT Strategy provides these strategic Objectives listed below for ICT in the Education Sector needs serious review for implementation.
 - 1). ***Strategic Objectives relating to the current challenges of the educational system:*** Use ICT to extend the reach of educational opportunity (providing access). Use ICT to strengthen teaching quality (human resource development).
 - 2). ***Strategic Objectives relating to the needs of the 21st Century:***
 - (1) Use ICT to enhance student learning.

- (2) Develop complementary approaches to ICT in education.
 - (3) Build on current experiences of existing and successful ICT programs.
 - (4) Develop capacity at the Federal Ministry of Education and Provincial Departments of Education level.
4. In doing so, the MoE needs to seek collaboration and assistance from IT giants like Microsoft, Oracle and Cisco. They are fast developing curricula in line with market needs that also set international standards. Since Pakistan signed the PIL MOU with Microsoft in 2004 it may be possible to revive it. The renewal will empower our school system to make use of Microsoft technologies (SW, HW etc.) for “free” use in schools. Besides other useful source is the Intel Corp with whom ministry of education has already signed a MoU.
5. A huge industry of Open Source shall always be kept in mind during these endeavors. because it is not only free but is widely used across the world. Pakistan can greatly benefit from it. There is no doubt that it is only Linux and Open Source that is the backbone of Academia. All universities, colleges and schools in the world thrive on it as the code is free to use and they can be changed and modified by the user. Moreover, it allows the user to create software of his/her choice to address the need. Thus it introduces a culture of creative programming in academic institutions.

CHAPTER 12

LIBRARY AND DOCUMENTATION SERVICES

The knowledge had ever been the fundamental Commodity for better, safer, secure and prosperous society but knowledge based economy and society are inevitable for human progress in the present era. Libraries, being knowledge institutions, are major stack holders in the process of knowledge creation, management, organization, retrieval and dissemination to its end users. Ever growing volume of knowledge with uncontrollable speed has enhanced the importance of libraries and use of technological tools in order to facilitate the students, researchers and curious readers. Libraries, in the present day world, are being visualized as institutions that can support creation of information and knowledge. They act as gateway to distributed knowledge repositories available in database format and gateway to information super highway. Libraries serve as tool for bridging the digital divide both within a nation and among the nations also. Libraries play a vital role in overall development of education and research in any country. Libraries not only provide points of access to the materials available, but they also cater the needs of lifelong learning process. State of the art libraries are essential for inculcating of reading habits at the level of early childhood and elementary education. Libraries promote information literacy and support informal education also.

Framers of the Constitution of Islamic republic of Pakistan, 1973 attached great importance to the establishment of libraries. The subject of libraries has been placed under the entry 15 (Part -1) of the Federal Legislative List next to Defence, Currency and Foreign Affairs etc. Perseveration of National Literary heritage is considered to be one of the prime functions of the libraries around the globe and particularly National Libraries are performing the same function. National Library of Pakistan has also the mandate for preservation of national literary heritage in addition to dissemination of knowledge and national bibliographic control under provisions of Copyright Ordinance 1962. It is mandatory for all publishers to deposit 01 best copies of their published materials to National Library of Pakistan at their own expenses under the same law.

There are various types of libraries in the country including National, Public, Academic and Special Libraries. The National Library of Pakistan is at the top of network of libraries in the country and plays the role of leadership for improvement of human resources and services of libraries. National Library is maintaining more than 300,000 volumes of physical items comprising of books, bound volumes of newspapers and periodicals, electronic publications, theses and manuscripts. The library is fully automated, maintains environment and access to online databases with its own website. The highest tier of libraries at the academic side is the university library. University libraries support the research activities and further the cause of creation of knowledge. There are 175 university / degree awarding institutions' libraries in Pakistan. University libraries maintain about 5 million volumes (i.e. more than a half of all the library collections in Pakistani libraries). University libraries especially in the metropolitan cities are equipped with better human, physical and financial resources. Whereas, university libraries in remote cities are far behind the bench marks. College library is the 2nd tier in the network of academic libraries. Again college libraries in major cities have better resources than the colleges located in rural areas. The

collections of the colleges are not up to the mark and most of the posts of librarians are vacant. The collections of the colleges have not been automated and ICT facilities have not paved their way to the majority of college libraries. Private colleges dominate in number and usually without proper libraries as required under the affiliation regulations of intermediate examination boards. Secondary and primary schools libraries are the most neglected area of academic libraries. There are 36,000 primary schools in the province of Punjab only. These schools are without any library facility. Elementary school education has deep imprints on the personality of a child and habit of reading and initial query can be inculcated at this stage of education. Our courses of study are not research and library based. The connection between library and syllabus should be created. The modern libraries at the level of secondary education are essential in the making phase of personality of a child.

Public libraries are the 2nd important sector in the network of libraries. Public libraries are termed as Open Universities which provide services from child to old ones. The doors of public libraries are open to all segments of society irrespective of age, gender, level of education, creed and cost. Public libraries are very liberal democratic social institutions which are established to fulfill the aim of lifelong learning, support formal and informal education. Public libraries keep the citizens abreast with day to day knowledge needed to dispense with their daily chores. Public libraries connect the citizens with the information super highway and access to the licensed and copyrighted databases. Presently, there are more than 280 public libraries, mostly located in the urban areas of the country with total collection of 4 million volumes. The mobile library service has already been started in Lahore, Islamabad and Gujranwala. The citizens of union councils in Pakistan are deprived of public library facilities. There are 380 special libraries. Such libraries has specialized collections on specific subject areas and usually equipped with ICT facilities.

Issues and Challenges:

The libraries are facing number of challenges in Pakistan. Major issues and challenges are as under:

- i) Non-functional library buildings
- ii) Inappropriate budgetary allocations
- iii) Lack of qualified professional library staff
- iv) Lack of IC infrastructure and equipment
- v) Non implementation of automation systems
- vi) Lack of continuing education and training facilities for librarians
- vii) Non introduction of information literacy courses in the academic libraries
- viii) Preservation of digital literary heritage.

Libraries have become more relevant and essential for formal, informal education and lifelong learning. One of the most significant phenomena of the ICT age is explosion of information, dynamic contents and unauthentic open access resources. Intellectual property rights and licensing limitations have made the services of libraries inevitable for academia, researchers and students. Due to increasing need of timely access to relevant information in education research and training, a well-equipped and full-fledged automated library is essential to supplement the educational research and training activities. Libraries to cater

information needs of other sectors of national development shall also be established. At present research literature produced by various academic and research organizations is scattered and not easily accessible for research activities and does not, therefore, cater to the information needs of researchers, teachers, students, educationists under one roof.

Objectives of Libraries:

- i) Develop reading habits among masses and provide information and research opportunities through libraries which will, in turn, re-enforce literacy movement as libraries are considered part and parcel of educational system and agent of social and economic change.
- ii) Strengthen the existing educational system quantitatively and qualitatively by improving the services and access to the latest information sources both printed and electronic media.
- iii) Establish the multimedia libraries and information resource centers at grass root levels i.e. union council which will encourage and attract the youths and adults to self-learning and similar constructive activities.
- iv) Promote national integration and tolerance among various classes, at regional as well as national level through knowledge based activities. This will also help to discourage sectarianism in the country.
- v) Inculcate reading habits among the people by providing ample opportunities through libraries with better understanding of the democratic values and socialization.

Policy Provisions:

- i. To increase library usage and improve the quality of library services in the country.
- ii. In order to promote a reading culture among youth, libraries equipped with modern facilities including internet connectivity for online library services, shall be established in elementary, secondary and higher secondary schools in a phased manner.
- iii. To ensure improved library services, the current career and professional development structure for librarians shall be reviewed to create a service structure at par with teaching faculty that manages to attract and retain quality human resource in the profession.
- iv. Immediately, the option of librarians working in education institutions to be declared as library teachers and library lecturers respectively shall be explored.
- v. The network of public libraries shall be extended up to the level of union councils.
- vi. Mobile library services for rural areas shall be introduced.
- vii. National Library Foundation shall be established to provide resources for libraries on an ongoing basis.
- viii. Provision for continuing education of library professionals shall be made and national human resource development center for libraries, Department of Libraries will be strengthened.
- ix. Provision of necessary infrastructure and legislation for preservation of digital literary heritage.

9. Physical Targets:

S.No.	Nature of Libraries	No. of Libraries (to be established/strengthened)
1.	School Libraries (only 20% schools have libraries which are at best modest)	Total: (i+ii+iii) 15,25,000 i) Primary: 1,50,000 ii) Middle: 14,000 iii) Secondary: 10,000
2.	College Libraries (Art + Science + Professional Colleges)	975
3.	Special/Departmental Libraries	1500
4.	Public/Rural Libraries (At union council level)	Total union councils (i-iv) 3975 i) Punjab 2393 ii) Sindh: 612 iii) NWFP 655 iv) Baluchistan 315
5.	Mobile Libraries (one each for 50,000 population)	2000
6.	Establishment of "National Documentation Centre in Education"	1 (Library) + (Doc. Centre) = 2 (Coordinate research activities to provide computerized services and educational Documentation across the country, catering information needs to educationists, researchers, teacher, students, etc. under one roof)

9. Implementation Strategy:

- i) National Documentation Centre in Education, with the core collection of 50,000 research reports, will be established.
- ii) University libraries and major research libraries will be linked with the National Library of Pakistan through INTERNET to share national information sources.
- iii) Book Banks will be established in academic libraries for free textbook service to the needy students.
- iv) A comprehensive library and information service policy through an act will be introduced in the country and service conditions of library professionals and staff will be further improved in line with other professional working in different fields/disciplines and to provide adequate financial requirements and legal support to the development of libraries in the country.

- v) In order to promote the library movement in the country, it will be necessary to establish properly trained and professionally competent cadres of librarians, both the educational and public libraries. Federal and provincial government will take necessary steps to create proper service structure for professional librarians.
- vi) To give proper status to the National Library of Pakistan a National Library act will be enacted.
- vii) Scholarships for foreign as well as inland study and training in library and information science will be awarded as is done in the other disciplines/subjects.
- viii) Endowment fund for the development of libraries in collaboration with donor agencies will be created.
- ix) Library period would be encouraged in the school time table.
- x) Pakistan Library Association (PLA) will be involved in formulation of library standards, legislation, and training and its annual grant-in-aid will be increased reasonably.
- xi) Five awards will be instituted for the best librarian as well as the best library of the year.

Libraries in Pakistan generally and Department of Libraries in particular made notable progress and implemented several development projects which improved the libraries and library services in Pakistan. University and special libraries made rapid progress during the last few years. Collections of numbers libraries were automated and they succeeded in getting state of the art hardware and software. Now libraries in Pakistan are generally using VIRTUA ILS, Horizon, Koha and LIMS integrated library systems.

National Library	01
Public Libraries	280
Special Libraries	350
University Libraries	80
University Degree awarding institutes	27
College Libraries	700
School Libraries	500
Religious School Libraries	600
Army Station Libraries	58

5. Volume of Collection:

National Library	200,000 volumes
Public Libraries	2300,000
Universities Libraries	4000,000

Special Libraries	2500,000
College Libraries	3800,000
School Libraries	1500,000
Religious School Libraries	3500,000
Army Station Libraries	500,000

6. Digital Library Programme Initiated by HEC:

10. **Higher Education Commission**

In view of the increasing need of timely access to relevant information in education research and training, a well-equipped and full-fledged automated “National Documentation Centre in Education” is essential to supplement the educational research and training activities. Documentation center’s to cater information needs of other sectors of national development shall also be established. At present research literature produced by various academic and research organizations is scattered and not easily accessible for research activities and does not, therefore, cater to the information needs of researchers, teachers, students, educationists under one roof.

2. The category/area wise status of the libraries in the country is as follows:-
 - i. **School Libraries.** School is the base for formal education. It should be given prime importance to infuse quality education. At school level, due importance has not been given to libraries for enhancing the standard of education. About 80% schools are without any library facility in the country. According to the survey conducted in 1990, there are only 500 school libraries out of 150,000 schools with the meager collection of 150,0000 volumes. In most of these schools, libraries are kept beyond the reach of students due to non-availability of professional staff, proper space and environment. At present only 30 school libraries are being run by qualified librarians.
 - ii. **College Libraries.** The college libraries which are the largest group of libraries in the country have also been facing the problems of poor services, outdated collection of reading materials, financial constraints and inadequate professional staff. There are colleges and institutions which have enrolment of thousands of students and one librarian is managing the library services that cannot organize the collection properly and is unable to provide timely services to all students and teachers single handedly. In view of increasing student’s enrolments and teaching staff, reasonable number of professional staff is needed to be appointed which will definitely improve the standards to library services and quality or education and teaching. Presently, 750 colleges have libraries, holding more the 404,000,0 volumes. Their collection ranges from 500 to 2,00,000 books out of which 60% has become outdated particularly in sciences, medicine and technology disciplines.

- iii. **University / Libraries.** There are 175 libraries in Universities and their affiliated institutions with a total number of 452 service points having almost 450,000,0 libraries are comparatively in a better position, but still lack the latest materials, equipment, viable financial resources, access to information technology electronic media, etc. The university and its affiliated institutes are the higher seats of learning. A well-established library with up-to-date collection, suitable for study and research is a prerequisite for modern quality higher education. In Pakistan, academic libraries are unfortunately in bad shape. For the last many years university libraries are not getting appropriate funds to purchase the latest books and research journals. Sufficient funds will be provided on regular basis for the purchase of books, research journals, and computers, installation of INTERNET facilities and linking of university libraries through electronic media.
- iv. **Special Libraries.** But they are facing the problems of shortage of resources, equipment, proper facilities, budget, expertise, and sustainability in maintaining the standard of services. Efforts shall be made to improve their condition.
- v. **Public Libraries.** Our public libraries, with a few exceptions, are in a very deplorable condition. These are just reading-rooms of newspapers and few magazines. Non-formal or informal education of people is of utmost importance and necessitates serious attention of the government. If public libraries are well-equipped, properly organized and managed by professionals, there will be a great refinement and improvement in the social, cultural, political and religious behaviors of the people. Presently, there are more than 280 public libraries, mostly located in the urban areas of the country. Public libraries not only can play a significant role in promoting literacy through self-education but also provide educational, informational and recreational materials for the community as well as individuals. In the successive policies and plans, this important factor could not invite the attention of the policy-makers and planners. It is, therefore, imperative to strengthen the information resources and increase their number by setting up new public libraries through legislative and other means.
- vi. **Rural Libraries.** Our rural population constitutes 65% of the country whereas proper library services are not available to this community. A part from the significant role of the rural library in promoting the reading habits, the library services to the community have traditionally been board based and multi-dimensional as compared to other agencies serving the community. These could be utilized to create awareness in the community for solving problems and concerns regarding their educational, cultural, informational and recreational programmes and activities by arranging exhibitions, organizing book fairs, inviting speakers, holding seminars/meeting, celebrating special occasions/days, arranging film-shows, and arranging story-hours for children and women-folk, etc. in addition, electronic developments are currently available that can also be used to bring library services to the door-step of people. Consequently, library can play a deeper role towards national integration; promoting local, regional national and international understanding; modifying the behavior of groups and classes; and eliminating conflicts and conformation in a community by providing varied opportunities for

positive and constructive activities to the citizens. Thus, a library can become a very important link in local as well as national cohesion, unity and discipline. The fact that not all the small cities, towns and villages have libraries, points to gross neglect of the past. The Ministry of Local Government will be involved for improving Union Council libraries in rural areas, this area calls for active participation of the local populace who if properly motivated will be only too willing to financially contribute. In view of the limited resources the library services cannot be extended simultaneously to the remote areas and scattered rural population in the country. It is, thus, imperative to introduce the mobile library service for every 50,000 population living in far flung areas. This experiment was practiced successfully in USA and some African countries during early part of this Country. The mobile library service has already been started in Lahore Division in 1990 which visits 7 & 8 places in the sub-urban areas of Lahore.

- vii. **National Library of Pakistan:** The National Library of Pakistan has been established after 45 years of Independence. It was inaugurated in August, 1993, since then more than 250,000 volumes including 580 manuscripts have been collected. Operational library software is in the final stages of development. At present, the Library is inadequately staffed and funding is poor. For sustained development of its growth, programmes, policies, and to function as the leading library of the nation necessary legislative support is needed.

PHYSICAL EDUCATION, HEALTH AND SPORTS IN EDUCATION

1. Conceptual Framework:

Over the span of time the indicators of wellbeing and prosperity have undergone a drastic change. In view of the same, concept of Physical Health, efficiency and efficacy have been embedding into the varied tiers of education in the developed countries in particular and developing countries in general. The fore cited traits can only be developed when the provision of balanced development is made through the processes of education. For the balanced development, we have to consider academics alongside social, physical, emotional and psychological perspectives of education. In academics, we only groom mind and mental capabilities rest remains to be fulfilled through other ways. The positive and tangible way is to switch over to the health and physical education orientation and operationalize right from primary to university level education. It is the only facets of education which may be boasted to be the one going in match with the physical, mental, social and emotional growth which remains in progression in the name of growth we need to convert it into development. For development there is a need to explore the perspectives of growth and synchronize these with the operational development. At the first level the teachers of physical education and at the second level students are required to be groomed to adapt the situations without frustration and fear. Materializing the situation would need the expert manpower and finances from the government end. Financial allocations are required to be made for primary, secondary, higher secondary, college and university levels education. A plan of action for massive participation of staff and teachers may be chalked out which will help to reduce various problems and bottlenecks.

Physical Education has an edge in developing physically and reflecting and revealing its success in terms of socialization and emotional wellbeing, live skills, human skills, management and leadership skills which would enable the participants to celebrate the success and cherish the failure taking as precedents for improvement.

The countries of Asia and especially of SAARC region such as Japan, China, Korea, Malaysia, Thailand, Singapore, Sri Lanka and India have achieved higher standards of health and physical achievement in the recent past which has resulted in higher per capita GDP etc. of these countries.

2. Constitutional and Legal Provisions:

Health Sports and recreation is one of the fundamental rights of all boys/girls irrespective of religion, sect or creed which has been protected in the constitution of other countries of the world. In Pakistan, the national and provincial policy and planning documents have emphasized health, physical education and sports, however, implementation of these policies have been very sluggish in the past. The main reason was lack of financial resources and non-application of the concept of holistic child development approach in education. To bring our country at par with other countries of the world in the area of socio-economic development, there is a dire need to specifically cover the field of physical education; sports and recreation in the constitution of the country and legal provisions are to be made. Legislation to cover the area of sports developments needs to be introduced at National level through the promulgation of necessary laws by the national Assembly and Senate. Child right to play in addition to child's right to primary education is required to be ensured.

3. Situation Analysis:

In the past, a number of national and provincial education planning and policy documents have reviewed the state of affairs of the physical education, health and sports at the school, college and university level in the country. A few important documents which analyzed the situation, have come up with the issues and problems such as National Education Policy 2009, National Education Policy 2005, Vision 2025 and Annual plan 2015-2016 of Planning Commission, Punjab, Sindh, KPK and Balochistan education sector Plans 2011-18, early childhood education on provincial sector plans, teacher's education strategy of KPK and Balochistan 2013-18 and KPK education policy analysis report 2012. It is unfortunate that overall implementation of recommendations of these policy documents remained very slow especially in the field of physical education, health and sports.

The concept of holistic child development could not be applied to early childhood education neither at national nor at provincial level. As a result of non-implementation of recommendations relating to the field of physical education, sports targets fixed in the sports policies could not be achieved. Quality education is the need of the hour which has a direct link with the individual's health, organizational health and work stations health hence the need for health and physical education is required to be met so as to achieve the target of quality education.

Issues and Challenges:

The major issues and challenges confronting the development of physical education and sports in the country are as follows:

- i) Low priority assigned to physical education, health and sports by the federal as well as provincial governments. The situation is given as it can be seen from UNESCO's data on Physical Education Curriculum time allocation (mean minutes per week), Pakistan utilizes shortest time duration for Physical Education in the SAARC region.

Country	Primary		Secondary	
	Minutes/Week	Range	Minutes/Week	Range
Pakistan	35	35	35	35
Nepal	45	45	45	45
Sri Lanka	95	95	40	40
Afghanistan	45	45	45	45
Bangladesh	180	180	180	180
Bhutan	40	40	-	-
India	60	60-100	40	40-80

Source: UNESCO's World-wide Survey of School Physical Education – Final Report 2013

- ii) Lack of safe play areas for the children especially the girls in the government and private schools. This issue needs to be addressed at the national level on priority.
- iii) Physical education, health and sports facilities are virtually non-existent in government/private schools especially in the rural areas. This is a serious issue and should be resolved through our regulatory mechanism.
- iv) The development of physical education has been the victim of low financial allocation in the past. Consequently, non-availability of sports grounds, equipment and services of private coaches could not be procured. Therefore, the standard of health and sports of the country is gradually lowering day by day.
- v) Majority of posts of physical education teachers are lying vacant in schools and colleges. Further, an anomaly also exists in the education system of the

country as there are no posts of physical education teachers at the primary level in all the provinces.

- vi) There is also a tendency to utilize the services of physical education teachers as a subject teacher where ever there is shortage of subject teachers. This is also one of the reasons that allocated time for physical education is not being utilized in schools properly.
- vii) The existing physical education colleges do not have proper facilities to impart training to the students. There is an urgent need to modernize the curriculum of physical education colleges and creation of modern facilities on fast track basis.
- viii) Governance and management issues include lack of coordination between private and public sector, parents and community participation in the sports and recreation facilities and lack of interest shown by the NGOs.

4. Goals, Objectives and Targets

To increase significantly the level of Health, Sports and Physical activity of the nation particularly among the economically/socially disadvantaged groups and to achieve sustained level of success at the regional and international level, the following strategies needs to be implemented through a Plan of Action.

- i) The education departments operating under the federal and provincial education ministries must ensure implementation of the government policies in letter and spirit. They should develop and update curriculum, provide qualified physical education teachers, encourage sports based admission, enforce system of monitoring and evaluation etc. at primary, secondary, college and higher education level.
- ii) Health departments should closely coordinate with the education department to provide health coverage to all students especially promising athletes. Free medical facilities and financial incentives should be ensured for talented students.
- iii) Sports federations should in close coordination with the education department provide sports facilities and coaching to all talented students and promote healthy activities for schools and colleges.
- iv) Both federal and provincial governments should increase job opportunities for outstanding female and male players in order to encourage them to achieve excellence in sports.

- v) Heads of institutions should ensure improvement and building of new sports infrastructure, involvement and participation of available human resources in the Physical education activities. The head of institution should explore sponsors/volunteers and donors to help them in creation of modern infrastructure.
- vi) Public private partnership strategy for promotion of sports is need of the hour. This model has successfully been implemented throughout the world with successful results, similar details need to be worked for devising the models for our country.

5. Policy Provisions and Recommendations:

- National Curriculum for Health and Physical Education covers students from Grade VI-XII whereas students from Grade I-V are ignored. There is a need to prepare Health, Physical Education curriculum for Grade I-V as well on modern lines which should be stretched over life skills, management skills, leadership skills, and individual's personal skills, like tolerance, patience, respect for others, time management etc.
- Physical Education Teachers Pre-Service training curriculum must be upgraded and modernized to meet 21st Century Challenges.
- In order to develop the skills of the Physical Education Teachers and make them more knowledgeable about the latest techniques/coaching of popular games, in service training courses should frequently be organized at all levels.
- An effective monitoring and evaluation system for Physical Education, Health and Sports needs to be established to find out the problems and bottleneck and to find out their solutions.
- Public sector Sports infrastructure should be available free of cost to students of schools, colleges and universities. This will also increase the rate of utilization of these facilities.
- Annual Sports Week and participation in inter-Directorate competition may be made a regular activity at all educational institution throughout the country in a coordinated manner.
- A state of the art Physical Education and Sports University may be established at Islamabad to serve as a model for the provinces.
- Exclusive and modern Physical Education Colleges at Provincial level may be established.

- Human resources development and capacity building of existing Physical Educationists may be taken up on priority basis.
- Higher Education Commission may arrange International Scholarships in the subject of Physical Education to meet the future needs of the country.
- Effective Implementation of recommendations of National Education Policy 2009 pertaining to Physical Education needs to be ensured.
- An expert on Physical Education, Health and Sports needs to be associated to finalize the final education policy.
- A Separate Directorate of Health, Physical Education and Sports headed by a DG (BS-20) as recommended by the needs to be established in the Ministry of Education.
- Playing rights needs to be given to the educational departments (Directorates/Boards etc.) at National/Provincial Sports championships to motivate future promising athletes.

PRIVATE SECTOR EDUCATION

1. Conceptual Framework

Education institutions which are not opened run, managed and financed by the government are considered as private sector institutions. These include varied category institutions such as: low cost, high cost, non-profit, profit based and Deeni Madaris etc. Private Sector institutions are opened run and managed by individuals, civil societies, trusts, non-government organizations and WFAQs etc. These include both registered and non-registered institutions.

Prior to nationalization in 1972 the private sector was growing and flourishing rapidly. Some of the institutions, operated at the school and college level, were administered by voluntary organizations. These institutions were not only generating their own funds through fees, attached property and donations but also received grant-in-aid from the government. Some private educational institutions enjoyed high reputation for the academic standard and quality of education.

As a result of nationalization of private educational institutions policy 19,432 educational institutions were nationalized. These include 18,926 schools, 346 madaris, 155 colleges and 5 technical institutions.

2. Constitutional/Legal Framework

Private Sector Educational Institutions registration and regulatory ordinances, acts, rules, laws and by-laws do exist in almost all the provinces and some of the federating units including Islamabad Capital Territory (ICT). The Punjab Private Educational Institutions Promotion and Regulation Ordinance No. II of 1984 was passed in 1984. Similar ordinances were adopted by the government of NWFP and Sindh. The ordinance provide for the registration of all private institutions with Registration Authority by constituting a managing body for each institution and also spells out the condition for registration.

3. Importance and Significance

Private educational institutions are playing important role for educational development in Pakistan. It is hardly possible for the government alone to shoulder the huge responsibility of education, training and literacy of around 200 million population of the country. The allocations and investment in education by the government is too inadequate and insufficient. Whereas, more than 22 million children of 5-16 year age group are out of school. The quality of education of public sector institutions is also not encouraging. The education system is facing number of other issues and challenges such as inequitable access, gender disparities and high dropouts etc. In such circumstances sizeable presence and effective contribution of private sector is imperative and priority need of the country. Without active, vibrant and flourishing private sector achievement of national and international goals, targets and commitments such as free and compulsory education under article 25(A) and sustainable development goals (SDGs) may not be possible.

4. Situation Analysis

As per Pakistan statistics report 2015-16 the overall educational institutions in Pakistan from pre-primary to university level are 303,446 (Public 191,065: Private 112,381). The total enrolment is 47.5 (Public 27.7: Private 19.8) million both in public and private sectors. Out of these 37% institutions, is 47.5% students and 48% teachers are in the private sector of education.

There are no separate pre-primary institutions in public sector. Private sector, pre-primary education institutions have been reported as 448. Out of total 8.7 million pre-primary education enrolment 4 million (46%) children are in private schools. Total teachers teaching pre-primary education classes in private sector are 2785. In public sector no separate teachers for pre-primary education are made available.

At primary (I-V) level of education we have only 20,256 (14%) educational institutions in private sector against 127,829 (86%) in public sector. Out of total 18.8 million gross enrolment, 7 million (37%) students are in private sector. The private sector primary education teachers are 98,236 (23%). It is interesting to note that at primary education level the private schools are 13%, enrolment is 37% and teachers are 23% of the total.

At middle (VI-VIII) level the number of private schools is more than public schools i.e. 28,818 (63%) against 16,457 (37%) public sector schools. Whereas, enrolment in public schools is 4 million (64%) against 2.4 (36%) million private sector enrolment. Out of total 394,231 middle level education teachers 2/3rd are in private sector and 1/3rd in public sector. The picture emerges at middle level indicates that in private sector the percentage of institutions, enrolment and teachers is 63%, 36% and 66% respectively.

At secondary education level (IX-X) private schools are 66% 31740 (Public 12277 private 19008 public schools); enrolment in private sector is only 31% (1.2 million against 2.2 million public sector); and teachers are 56% (29,6637 against 223,906 public sector teachers).

Private sector higher secondary schools are 3605 (66%), enrolment is .37 million (22%) and teachers are 67,719 (55%). Out of total 1418 degree colleges 159 (11%) are in private sector. The enrolment of private sector colleges is also 11% (0.13 million). Only 11% degree college teachers are in private sector.

At present total number of universities in Pakistan are 163 out of these 91 (56%) are in public sector and 72 (44%) are in private sector. Total enrolment at post-graduate level is 1.35 million out of these only 0.2 (14%) students are in private universities. 16,843 (20%) teachers out of total 83,375 university teachers are teaching in private sector universities.

In Pakistan out of total 3746 technical and vocational institutions 2623 (70%) are in private sector with an enrolment of 0.177 (56%) million. The ratio of private and public sector T&V teachers is almost the same i.e. 50% each. There are total 209 teachers training institutions in Pakistan. Out of these only 53 (25%) are in private sector with an enrolment of only 1% of the total 0.718 million trainee teachers. Private sector teacher trainers/teacher educators are only 8% of the total.

Total number of Deeni Madaris is 32,272. Out of these 31,326 (97%) are run by private sector with an enrolment of 2.2 million and 76,814 teachers.

5. Issues and Challenges

The following are some of the main issues and challenges confronting private sector education which need to be resolved on priority basis:

- i) Private sector education data base is missing. Country wide private education census could not be conducted since last one decade. Education Management Information System (EMIS) reports estimated and projected data since year 2005 (complete private schools census year). Private sector complains that facts and figures and statistics of private education sector are grossly under reported.
- ii) Most of the low cost schools lack basic facilities, services and infrastructure.
- iii) Some of the English medium elite institutions established for profit motive charge high fee which is severely criticized by the parents and society as a whole. Poor and talented students do not have access to these institutions because of the high fees charged by them. Lack of equal opportunities to these institutions has caused societal divide and created class system.
- iv) Lack of uniform curriculum is another serious challenge yet to be addressed.
- v) Lack of coordination and linkages within private sector as well as between public and private sectors is an issue.
- vi) A majority of private educational institutions teachers is not trained.
- vii) Lack of career structure and exploitation of private educational institutions teachers is another big issue.
- viii) Irrational location of private schools is yet another problem. Some of the private sector schools are opened very close to public sector schools which has created an atmosphere of clash and conflict, as well under utilization and wastage of public resources.
- ix) Health and physical education of private education sector students badly suffers because of lack of playgrounds and sports facilities.
- x) Private institutions Regulatory System is not much effective because of lack of capacity and authority. In some federating units no Regulatory System is in place.
- xi) Government support for deserving private schools is almost negligible.
- xii) Private schools where access issue is very serious are minimum.
- xiii) Most of the private schools are for male children. Gender disparity in private sector schools especially in rural areas is prominent.
- xiv) Deeni Madaris despite their valuable services are neglected with many respects especially with respect to facilities, services, recognition, equivalence employment and government support.
- xv) Public – private partnership scheme which has a great potential is not properly planned, executive, monitored and evaluated.

- xvi) In some of the provinces and federating units education foundations are either non-existent or ineffective.
- xvii) There is mistrust and lack of cooperation with in private sector as well as between public and private sector which adversely effects the promotion of education.
- xviii) There is acute shortage of technical and vocational education institutions in Pakistan. Although private sector T&V institutions are more than public sector yet they are negligible and too little in number in view of high demand and priority need of the country. Private sector can play very effective role in this regard.
- xix) The role of private sector educational institutions including Deeni Madaris in promotion of adult literacy and non-formal education had been very limited and negligible.
- xx) Mushroom growth of private schools is also a challenge.

6. Goal, Objectives and Targets

Goal:

Literate Pakistan.

Objective:

- i) To increase access/ enrolment at all levels of education right from early childhood education to university level.
- ii) To improve the quality of education.
- iii) To assist the government in achieving the sustainable development goals and honor other national and international commitments.
- iv) To help and support the state in implementation of compulsory education act(s).
- v) To strengthen coordination, cooperation and linkages within and between public and private sectors.
- vi) To expand technical and vocational education infrastructure, facilities and services.
- vii) To promote adult literacy i.e basic literacy, skill literacy and functional literacy both for male and female.
- viii) To provide incentives and support to deserving private institutions especially those opened in rural and remote rural areas of the country.

Targets:

The following targets for private sector in the areas of institutions and enrolment in next 10 years have been set.

Base year (2015-16)		Increase		
		Target year (2025-26)	In 10 years	Per year
Institutions				
Pre-primary	448	1000	552	55
Primary	20256	30000	9744	974
Middle	28818	35000	61855	6185
Secondary	19008	25000	5992	599
Higher secondary	3605	5000	1308	131
Degree Colleges	159	1500	1341	134
Universities	72	150	78	8
Technical and vocational institutions	2623	10000	7377	737
Deeni Madaris	31326	40000	8674	867
Enrolment				
Pre-primary	4 million	9.2 million	5.2 million	0.52 million
Primary	7 million	10.8 million	3.8 million	0.38 million
Middle	2.4 million	2.87 million	0.57 million	0.057 million
Secondary	1.2 million	1.58 million	0.40 million	0.04 million
Higher secondary	0.37 million	0.67 million	0.30 million	0.03 million
Degree Colleges	0.128 million	0.23 million		
Universities	0.214 million	0.387 million	0.10 million	0.01 million
Technical and vocational institutions	0.177 million	0.69 million	0.52 million	0.05 million
Deeni Madaris	2.2 million	2.18 million	0.52 million	0.05 million

7. Policy Provisions

The policy provisions to address the issues and challenges, meet the future needs and achieve the goal, objectives and targets are recommended as follows:

- i) A country wide complete and comprehensive private institutions census, at each level and sector of education, shall be conducted after every five years.
- ii) Private sector education data base both for quantity and quality indications will be created, updated and shared with all concerned.
- iii) Private education institutions Regulatory Authority will be established where it does not exist and strengthened and activated where already exists.

- iv) National Curriculum Framework (NCF) will be developed and applied both in public and private sector of education.
- v) National Standards for learners (for each subject and grade); teacher standards; textbook standards and assessment standards shall be developed and applied to public and private educational institutions both.
- vi) Private sector will be persuaded and facilitated to adopt public sector curriculum.
- vii) Public private partnership scheme initiated under Education Sector Reforms Programme in (2001-02) shall be implemented in true letter and spirit.
- viii) Innovative programmes such as “Adopt a School” programme shall be continued. New innovative programmes of public private partnership shall be initiated. Success stories and best practices of the past shall be up-scaled.
- ix) Private sector shall be encouraged and facilitated through matching grant by the government to open more quality institutions and expand educational facilities and services especially in rural and disadvantageous areas of the country, especially for out of school children.
- x) Tuition fee and funds charged by the elite private educational institutions shall be rationalized.
- xi) Private educational institutions opened and run by philanthropists, or run on no profit no loss basis or facing financial hardships shall be provided incentives by the government.
- xii) The federal and provincial government shall initiate voucher scheme for education of out of school children.
- xiii) Each profit based private educational institution shall provide 10% (of the total enrolment) deserving children free education as per definition of free education given in Compulsory Education Act(s).
- xiv) The provincial and national education foundations shall be strengthened and activated. Besides, their role shall be extended and scaled up.
- xv) It shall be ensured that pay package and other incentives of private education teachers are commensurate to the services they render.
- xvi) Federal and provincial governments will encourage, facilitate and share their resources with the private sector for pre and in-service training of private sector teachers.
- xvii) Both public and private sector institutions including Deeni Madaris shall launch special programmes for eradication of illiteracy and promotion of adult literacy (Basic literacy, Skill literacy and Functional literacy).
- xviii) Coordination, collaboration and cooperation within the private sector and between public and private sectors will be improved and strengthened.
- xix) Public and private sector institutions shall be encouraged to share their resources, facilities and services for common and noble cause of promotion of adult literacy in the country.
- xx) Water, Sanitation and Hygiene facilities and services will be provided in all private sector schools as per wash standards.

Chapter 15

SPECIAL AND INCLUSIVE EDUCATION

Special Education: Concept and Rationale

Historically, special education includes education, training and rehabilitation of children with disabilities. Special education evolved over centuries and efforts were made to provide best possible educational opportunities for their rehabilitation. Disabled children were traditionally considered a social and economic burden and they did not have access to education, training, and opportunities of employment. But with the passage of time they started gaining respect as human beings. The first batch of institutes for education of children with disabilities started emerging in France and England during 18th century. The rationale behind establishing these special institutes was to help children with disabilities in their physical, mental, social, and emotional development and to equip them with knowledge and skills necessary for becoming productive citizens of the society.

In the beginning, such institutes were specifically designed to the nature of a particular disability, and were named accordingly. For example; institute for blinds or institute for deaf etc. Later on, the terms of ‘Handicapped Children’ or ‘Disabled Children’ were introduced to represent such category of institutes or system of education. However, soon the physicians, educators, psychologists and human rights activists realized that use of these discriminatory terms carry a stigma of deficiency, whereas most of the disabled children are equally gifted with talents and potential like other able body children. This realization led to the use of word ‘Special Education’ or ‘Special Needs Education (SNE)’. In present days, special education aims to educate students with special educational needs in a way that takes into account their individual differences and learning needs. The special education in recent years went through a rapid transition from integration, mainstreaming and inclusion of children with disabilities in regular schools.

2. Definition of Disability

Disability is defined from multiple angles and dimensions. International Classification of Functioning, Disability and Health (ICF) of WHO (2001) considers that “Disability is an umbrella term for impairments, activity limitations, and participation restrictions. “Pakistan’s Disabled Persons (Employment and Rehabilitation) Ordinance 1981 defined disabled persons in following words:

“A person who on account of injury, disease or deformity is handicapped for undertaking any gainful profession or employment, in order to earn his livelihood and includes a person who is blind, deaf, physically handicapped or mentally retarded.”

The above definition was used during 1998 Population Census of Pakistan to count disabled people in the country. The UN Convention on Rights of persons with Disabilities (CRPD) considers disability as an evolving concept as it is a function of handicapping condition and the environment that interacts with the disabled. Any improvement in either

condition has direct and substantial effect on disability. The ICF has mentioned several handicapping conditions that restrict the access of children to education.

3. Situation of Special Needs Education in Pakistan

World Health Organization (2011), based on its Survey during 2004, has estimated that disability ratio among population above 18 years old is 15.6%, ranging from 18% in lower income countries and 11.8% in higher income countries. Population Census of 1998 showed disability ratio of 2.49% in Pakistan. Latest estimates indicate that persons with disabilities constitute about 2.54 % population of Pakistan, and their number was around 5 million during 2012. Out of these, about 1.4 million are children of school going age. At present, it is feared, less than 5% of school aged disabled children are enrolled in special education institutions and remaining more than 95% are out of school. Most of them are likely to live a dependent life. The average distance from home to a special school is about 12km as compared to less than one km for the peers with no disability.

The main reasons for exclusion of disabled children from school education include unfriendly primary schools at the door step, insufficient numbers of special education institutions in the country, limited intake capacity of existing institutions, transportation problems, poverty as well as ignorance of parents and outdated vocational education. The number of government managed special education institutes during 2015-16 was --- only. In addition, about --- special education institutes are being run by the NGOs, philanthropists, and private sector. Most of these special education institutions are located in urban centers. Resultantly, majority of the disabled children living in rural and far flung areas are unable to access these institutions. They are worst victims of a triad 3Ds effect of disability, distance and destitution and need a reciprocal response. Special education is facing following problems in Pakistan:

Policy level Issues

- Ministerial fragmentation restricts Education Departments to respond to the educational needs of special children in spite of having an extended network of schools covering far-flung areas.
- Low priority by the planners to education of children with disabilities
- Insufficient budgetary allocations to modernize the delivery systems
- Lack of awareness among policy makers and other decision makers about the need of education, training and rehabilitation of children with disabilities
- Non-availability of reliable and up-to-date statistics about population of children with disabilities in the country, number of special education institutions, and their enrolment.
- Lack of coordination and linkages between formal education system and special education departments.
- Lack of adoption of technology to address inclusivity in classrooms

Institution Level Bottlenecks

- Lack of capacity of primary schools that fails to reach out in order to include children with special needs.
- Limited access or insufficient number of special education institutions to cater to the learning needs of over 1.5 million children with disabilities.
- Imbalanced spread of special education institutions in terms of geographical coverage and category of disabilities in the country.
- Learning conditions in special education institutions are not conducive for quality education of children with disabilities.
- Special education institutions lack modern technology and equipment for quality teaching-learning environment for children with diverse disabilities.
- Poor arrangements for in-service training of teachers and education managers of special education institutions.
- Limited overseas training for the transfer of latest skills and technology.
- Accreditation council for quality assurance of special teacher education.

Community and Family Level Barriers

- Reluctance of parents to disclose disability of their children and take early steps for their education, training, and rehabilitation, particularly in case of disabled girls.
- Stigma associated with disability and psychological and emotional problems children with disabilities and their families that affect their personality development and self-esteem.
- Poverty and lack of awareness of parents hinder their decision and ability to arrange education and training of their children with disabilities through enrolment in special/general education institutions.

In the provinces of Punjab and Sindh, separate and fully fledged Departments of Special Education are functioning. Whereas in case of Khyber Pakthunkhwa and Balochistan, Special Education is part of Social Welfare Departments.

4. Inclusive Education: Concept and Rationale

Traditionally, there have been separate institutions and curricula for education and training of children with disabilities or special needs. This segregated arrangement is still prevailing in most of the developing countries, including Pakistan. Experts across the globe have now recognized the negative consequences of keeping special children completely separate from other children. This exclusion not only hinders growth of full potential of children with special needs, it also creates complications for their mainstreaming and integration in the

society when they grow up. This realization has given birth to the concept of inclusive education.

The concept of inclusive education started emerging during middle of twentieth century. Scandinavian countries took the lead in this new model of inclusiveness. However, at the international level, it was during 1994, when the concept of inclusive education or the term of inclusive schools was put forth formally and recognized globally through Salamanca Declaration, at the end of a conference organized by UNESCO.

The main idea behind inclusive education is to offer equal opportunities of learning to all children in an inclusive environment and eliminate discrimination based on gender, economic status of parents, and diversity in physical features and mental aptitudes. UNESCO has defined Inclusion Education as under:

“Inclusion is seen as a process of addressing and responding to the diversity of needs of all learners through increasing participation in learning, cultures and communities, and reducing exclusion within and from education. It involves changes and modifications in content, approaches, structures and strategies, with a common vision which covers all children of the appropriate age range and a conviction that it is the responsibility of the regular system to educate all children”.

(UNESCO 2005, Guidelines for Inclusion: Ensuring Access to Education For All, Paris, page 13)

Inclusive Education advocates that instead of establishing totally separate institutions for all children with disabilities, and keeping them there for most of the time, efforts should be made to create an inclusive learning environment where all children should have adequate opportunities to intermingle and learn together. The concept of inclusion is beneficial not merely for children with special needs only; it applies to all children, irrespective of their gender, ethnicity, personality characteristics, or economic status of their parents. Through research, experts have discovered benefits of inclusive education for children with disabilities as well as for the societies as a whole. By studying in same institutions, disabled children are able to establish friendly relationship with other children, their learning outcomes and confidence level increase, and with this, prospects of integration and mainstreaming of disabled children in the society also brightens.

5. National and International Commitments for Special and Inclusive Education

The following provisions of the Constitution and Laws of Pakistan obligates the governments and society in Pakistan to treat all children equally without any discrimination, including children with disabilities, and ensure provision of free education to them:

- Article 25-A of Constitution of Pakistan (Right to Education)
- Article 38 (d). This Article of the Constitution provides that as a principle of policy, basic necessities of life; including education and medical care will be provided by the State to the infirm, sick and unemployed persons.

- Disabled Persons (Employment and Rehabilitation) Ordinance 1981
- Right to Free and Compulsory Education Act 2012 (for Islamabad Capital Territory), Article 2.c, 2.m, and 3.2.f contain provisions for special education.
- Sindh Right of Children to Free and Compulsory Education Act 2013, Chapter 1, Article 2.o enlists special education as well.
- Punjab Free and Compulsory Education Act 2014, Chapter 1, Article 2.d states that term 'education' means special education also, and hence covers education of children with disabilities as well.

Pakistan has signed a number of international conventions and treaties through which country has committed to ensure provision of education to disabled children and promote inclusive education. Few are referred below:

- Convention for the Rights of the Child (CRC) 1989. Pakistan has ratified this Convention. Article 2, 23.3, 28 and 29 of CRC obligates state government to ensure provision of education and training to disabled children for their rehabilitation and self-reliance.
- UN Convention on the Rights of Persons with Disabilities- UNCRPD (2006). Pakistan ratified this Convention on 11th July 2011. Article 24 of UNCRPD not only obligates state governments to ensure provision of educational opportunities to all disabled children, it also emphasizes inclusive environment and inclusive opportunities for their full potential and personality development, and to ensure inclusive and equitable quality education and promote lifelong learning opportunities for all
- Sustainable Development Goals (SDGs) consisting of 17 Goals and 169 Targets were resolved by the world nations during September 2015 and pledged to achieve these Goals by 2030. SDG 4 relates to education and emphasizes “inclusive” and equitable quality education for all. SDG 4 Target No 4.5 mentions ensuring equal access of ‘children with disabilities’ to all levels of education and vocational training.

It is therefore important for Pakistan to promote special and inclusive education simultaneously in the country.

6. Challenges and Prospects of Inclusive Education in Pakistan

A number of factors inhibit rapid transformation from compartmentalized special education to inclusive education approach in the country:

- Infrastructure Requirements: Buildings of schools, colleges, and universities are not disabled friendly. Disabled children face difficulty in their mobility and reaching to the classrooms, libraries, labs etc. independently and without help of others.
- Capacity Needs: Teaching staff in formal education system are not sensitized and trained to handle children with disabilities. They may not be able to diversify their lessons and assessment techniques to meet special needs of disabled children.

- Curricula. The prevailing Curricula and teaching-learning materials in formal education institutions are not aligned and suited to the needs of children with disabilities.
- Insufficient Financial Resources: Financial constraints hamper formal education system to upgrade their infrastructure, and teaching-learning aids to adjust to the diverse learning needs of special children.

Still, there is a ray of hope for promotion of inclusive education in Pakistan. Increasing number of special education experts, education planners, and NGOs are now conscious for the need of inclusive education in the country. In Punjab, School Education and Special Education Departments have joined hands and launched training programmes for orientation and capacity building of formal school system trainers and teachers about the concept, rationale, and approaches of Inclusive Education. However, Pakistan is still lacking a clear policy and road map for promotion of inclusive education. Government of Punjab has launched Punjab Inclusive Education Project to implement inclusive education in two large districts; Muzaffargarh and Bahawalpur. The early signs are very encouraging and 3000 out of school children with disabilities have already been included in regular primary schools.

7. Goal: Ensuring inclusive and equitable access of all children to all levels of education, including technical and vocational training.

8. Targets

- Increase participation rate of disabled children from existing 5% to 100% by 2025.
- Creating inclusive learning environment in 50% formal schools, colleges, and universities to facilitate enrolment, retention, and completion of education by the children with disabilities.

9. Policy Actions

Special Education

- i. Expanding access of children with disabilities to all levels of education through substantially increasing number of special education institutions in the country and transforming all educational institutions disability inclusive.
- ii. Budget for special education will be increased. A minimum of 5% of total education budget will be allocated for Special Education.
- iii. Equipping existing and new special education institutions with modern educational technology and teaching-learning aids for diverse disabilities.

- iv. Increased resources for in-service training and staff development of faculty and management of Special Education institutions.
- v. Academic and intellectual coordination between University Departments of Special Education and Provincial Departments or Directorates of Special Education will be strengthened.
- vi. Permanent forums will be created to provide a platform to stakeholders of special education, especially to academia, practitioners, service providers and representatives of disabled persons. Federal and Provincial Governments will annually allocate financial resources for this purpose.
- vii. Linkages of Special Education Departments in Pakistan with Special Needs Education (SNE) institutions in other countries and international level organizations will be established for exchange of information, experiences, ideas, and for capacity development.
- viii. Transport facilities for special education institutions will be increased, to widen outreach of these institutions.
- ix. Hostel facilities to be added in selected institutions of special education
- x. Incentives and scholarships for disabled children will be increased. Families of Persons with Disabilities (PWDs) may be offered special assistance through social safety nets.
- xi. Higher Education Commission should also be geared up for inclusive higher education

Inclusive Education

- xii. General Education Departments will annually allocate a minimum of 10% of their development budget for creating inclusive learning conditions in the existing schools.
- xiii. Improvement and restructuring of physical facilities in schools, colleges and universities for creating an inclusive environment should be dealt with additional budgetary allocation.
- xiv. Federal and Provincial Governments and Higher Education Commission will issue instructions and notify that architectural plans for buildings of all new educational institutions and construction of new blocks and classrooms in existing institutions will ensure 'inclusion' in their designs, especially ramps for entry to classrooms, libraries, labs, toilets, elevators, health care facilities, disability resource center.

- xv. Inclusive Education approaches and methodologies should be included in all the pre-service teacher education programmes of general education departments.
- xvi. General education institutions will be equipped with modern assistive technology, and adaptive technology, to enable faculty members to diversify delivery of their lessons to the needs of special children and facilitate students with disabilities to participate in learning activities without difficulty and without dependence on others.
- xvii. Sensitization and training of teachers of general education system in inclusive approaches, methodologies, and teaching techniques.
- xviii. School Health Programme to be introduced in all schools.
- xix. Step-up or phased approach will be adopted for Inclusion
- xx. Textbook Boards should prepare or adapt instructional material for children with special needs studying in inclusive schools
- xxi. Education authorities and examination boards will prepare test material for alternative assessment for children with disabilities to be used in the examinations conducted at various grades or levels
- xxii. A disability resource centre will be established in each university to provide all possible support to students with disabilities.
- xxiii. Provincial governments, philanthropists and universities will be encouraged to allocate resources for research on issues and challenges of inclusive education in the society
- xxiv. Inclusion of data about special education institutions in the Provincial and National Education Management Information Systems (NEMIS)
- xxv. Advocacy drives will be launched through mass media to create an enabling environment to promote inclusiveness in all spheres of life, especially in educational institutions and in the work place.

CHAPTER 16

DEENI MADARIS

16.1. CONCEPTUAL FRAMEWORK

Seeking knowledge has always been a fundamental and integral part of Islamic tradition. Since the beginning of Islam, mosque assumed the role as center of knowledge. With the passage of time and as consequence of rapid spread of Islam, specialized institutions for education which were known as Madaris, were established in different parts of the world. Deeni Madaris have a long history of providing education to muslims. This education system produced graduates like Jabir bin Hayyan, IbneKhuldun, IbneSina, AbubakarZakariyya, Imam Ghazali, Shah Waliullah and many others. In addition to religious disciplines of knowledge, subjects like Algebra, Geometry, Logic, social sciences have also been included in the curriculum of Madaris. As such, these institutions played vital role in creating the golden age of Muslim scholarship. The innovative theories and methodologies of education reflected in the masterpieces of classical pioneers mentioned above produced not only new knowledge like science of Hadeeth, Anatomy, Chemistry, Sociology, historic Rise and Fall of Civilizations and scholarly development of Islamic Jurisprudence, Fiqh through detailed interpretations of Scripture and Sunna. The Madaris of Baghdad, Nishpur, Morrocco and Spain fostered enlightenment not only in the Muslim world but sowed the seeds of Renaissance that brought Europe out of its dark ages. This system of education and enlightenment gradually started to decline when Muslim scholars lost the zest for reflective inquiry, Ijtehad, and got stuck in Ijma. The first casualty after the British took over the Indian subcontinent unfortunately was the Madrasa education system which could not continue its autonomy. The British set up in its place a colonial system of education to produce a class of people Indian in blood but British in tastes and morals to serve as abridge between the colonial rulers and the ruled..The Muslims lost their interest in the formal subjects and ultimately they became backward in these areas. In such circumstances the Muslim leaders established purely religious institutions to impart religious education. After the creation of Pakistan, the status-quo was maintained, but consequently two parallel streams of education emerged in the society. There are about 30000 Deeni Madaris in Pakistan (about 26200 are registered) at present which are imparting religious education to about 3 million students (male and female). These are independent institutions and they prescribe their own curriculum in consultation with their scholars and Ulama. The curriculum comprise Quran, Hadith, Fiqh and other relevant religious courses, known as “Darsi-e-Nizami”. The majority

of Madaris are fulltime institutions where free accommodation, books and all basic necessities are provided to the students. Sport and health facilities are also provided in some institutions. Some Madaris have introduced contemporary subjects in their program from primary to intermediate level and this trend is gradually increasing. The examination system of these institutions is well organized and consequently different certificates (Mutawassita, SanawiyaA'ma and SanawiyaKhasa) and degrees (A'liya and A'lamiyya) are issued to their students. Some Madaris have highly qualified teachers like Ph.D, M.Phil. M.A. and Mufti degree holders for teaching religious education including formal education. The Muftis guide the society in Islamic jurisprudence. In some Madaris well equipped computer labs, libraries to help the religious scholars in research and reference studies. The Madaris, therefore, play an important role in imparting education form grass root up to higher level.

16.2 IMPORTANCE AND SIGNIFICANCE

There are two streams of education in the country i.e. formal education and Madrasa Education. There is a dire need to abridge the two so that maximum benefits could be achieved for the society. Deeni Madaris have played an important role in imparting religious education for centuries. In the perspective of the global changes their services will become fruitful in new discoveries if opportunities are provided to them in teaching formal subjects. DeeniMadarisin the world especially in Pakistan have come under intense public scrutiny in recent years. There is a growing perception among some foreign governments and western scholars that these institutions inculcate extremist views in their graduates. These views have been extensively propagated throughout the world. Although Muslims and some non-Muslim researchers have opposed this perception and they have realized that Madaris are providing important social and educational services to the society. It is necessary to bridge the gulf between the two parallel streams of education. The steps taken in the past by the government, need to be continued and extended countrywide in consultation with religious institutions and other stakeholders in light of the 1973 Constitution, and previous Education Policies.

16.3 CONSTITUTIONAL AND LEGAL PROVISIONS

Steps shall be taken to enable the Muslims of Pakistan, individually and collectively, to order their lives in accordance with the fundamental principles and basic concepts of Islam and to provide facilities whereby they may be enabled to understand the meaning of life according to Holy Qur'an and Sunnah; State has made the teaching of the holy Qur'an and Islamiyat compulsory, to encourage and facilitate the learning of Arabic language and to

secure correct and exact printing and publishing of the Holy Qur'an and to promote unity and practice of Islamic moral standards.

Education policies 1972, 1992, 1998 and 2009 have stated that integration of religious education with formal education will be made in a befitting manner.

In compliance with the Constitution and the Education Policies, the Government has tried to integrate Madrasa Education with the contemporary education to regulate and improve their systems. Consequent upon different studies and researches, some formal subjects have been introduced in the curricula of some outstanding Madaris, their teachers were trained and their final degree was equated with MA (Islamic studies and Arabic). It is the dire need of today to review, modify and continue these activities and extend them in all Madaris of Pakistan in consultation with their administrative leaders and managers, eminent scholars and educationists.

16.4 SITUATION ANALYSIS (FACTS & FIGURES, DATA LATEST RESEARCH)

The majority of Deeni Madaris have organized themselves with five different Wafaqs/Tanzeem as Examining Bodies on maslak basis; these are (i) Wafaqul-Madaris (Deobandi) (II) Wafaqul-Madaris Salafia (Ahle-Hadith) (III) Wafaq Shia (iv) Tanzeemul-Madaris (Brelvi) and (v) Rabitat-ul-Madaris Mansoorah. These Boards have jointly organized themselves under the banner of Ittehad Tanzeemat-e-Madaris Pakistan (ITMP). They prescribe their own curricula without consulting any government agency/machinery. The organizations conduct examination at different levels and issue certification/degrees accordingly. The Madaris have no standards-based arrangement for training their teachers. The financial involvement in salaries of teachers, lodging facilities, construction of buildings etc. are almost arranged through donations received from the society, while some funding is provided by the government. NOC is issued to foreign students by the government for seeking admission in the Madaris. Government tried its best in the past to extend its cooperation without any internal interference; some steps are as under:

- Conducted survey and obtained particulars of about 8000 Madaris in early 1980's.
- Equated their final sanad (degree) at par with M.A (Arabic & Islamic studies) in 1982.
- Trained 1500 teachers in formal subjects in 1996-2000.
- Introduced Dars-e-Nizami group at SSC and HSSC levels in the Scheme of Studies in 1996.

- Established Madrasa Education Board and 3 Model Madaris were set up in 2002 under the Ministry of Religious Affairs.
- Allowed their registration process in 2005 which was previously banned in 1996.
- Launched Madrasa Reform Project at a cost of Rs. 5759 million for 5 years(2003-04 onwards)to introduce some formal subjects in 8000 Madaris, but not implemented fully. This project was converted into recurring budget and shifted to Ministry of Religious Affairs in 2011.
- Introduced formal subjects including computer science in 374 outstanding Madaris during 1990 to 2002.

16.5 ISSUES AND CHALLENGES

- Various reform initiatives were undertaken, but due to lack of coordination and confidence among different stakeholders, satisfactory results could not be achieved.
- Non availability of valid, reliable or authentic data of and about Madaris, as different sources give different figures, adversely affected proper policy making.
- Lack of proper implementation of Madrasa Reform Project resulted in nominal achievements (about 5%).
- The final degree is equated at par with MA, but no equivalence at BA and lower level properly, Madaris genuinely demanded for the same.
- Because of difficulties in getting NOCs for seeking admission in Pakistani Madaris, foreign students are turning towards other countries.
- Lack of opportunities for their graduates and teachers for seeking higher studies and research work in home country and abroad.
- Lack of proper employment opportunities for their graduates in formal education institutions.
- Have no proper budget for their recurring and developmental expenditures.
- Complicated procedure of registration of Madaris, badly effect this process.

16.6 RATIONALE /JUSTIFICATION AND NEED FOR POLICY INTERVENTIONS

Deeni Madaris have important and vital role in the social life of the country. It is the need of the hour to establish sound and appropriate policy for them to remove wrong, misleading conception and false image towards religious institutions and their students. These Madaris have remained not only the source of religious knowledge, but also source of

inspiration for the society. It is dire need to improve their system keeping in view the modern trends, issues and technology in the world as a global village. The previous Education Policies, Act under 25-A and the suggestions offered by the Provincial/local Governments, NGOs and experts, have been considered and incorporated in policy interventions.

16.7 GOALS, OBJECTIVES AND TARGETS

- To bridge the gulf between religious education and formal education system to integrate them for strengthening coordination among Madaris, Government and Private institutions.
- To continue and improve the steps already taken by the Government regarding Teaching of formal subjects in their teaching program in consultation with Ittehad Tanzeemat-e-Madaris Pakistan and other stakeholders.
- To provide opportunities to their students and teachers to seek higher studies, research work and acquire training to enable them to absorb themselves in the labor market.
- To implement Madrasa Reform Project under the Ministry of Religious Affairs to achieve requisite targets.
- To allocate appropriate possible budget for the Madaris for improvement of their education.

16.8 POLICY PROVISION TO ACHEIVEMENT

1. Government (Federal, Provincial, Areas) will facilitate Deeni Madaris for improving infrastructure, facilities and services including water, sanitation and health facilities.
2. Contemporary subjects like English, Pakistan Studies, Natural Sciences, Applied Science and Instructional and Information technologies to be introduced in Deeni Madaris at different levels will be jointly decided by the Government and Deeni Madaris. The curriculum of Dars-e-Nizami at SSC and HSSC level removed from the scheme of studies, will be reinstated.
3. The national curriculum framework, standards for learners, curriculum, text books and instructional material of formal subjects for Madaris will be followed and regularly updated jointly by Deeni Madaris, relevant Government Ministries and other stakeholders. Similarly the instructional and supplementary reading material on religious education will be revised and updated with mutual consultation..

4. Government will facilitate Deeni Madaris in financial involvement especially in partial salaries of qualified teachers for teaching formal subjects in their program. The steps which have already been taken in respect of integration of religious education with formal education system in selected Madaris will be continued and extended at large scale without interference in their autonomy.
5. Government will facilitate pre-service and in-service teacher training of Deeni Madaris teachers in religious and formal subjects through specifying quota in training institutions in the country. Similarly special training program (short term and long term) will be arranged through different workshops for their teachers.
6. Public and private institutions in the vicinity will share their facilities and infrastructure such as playgrounds, examination halls etc. with the Madaris to extend cooperation in their curricular and co-curricular activities. Similarly the public and private institutions will arrange joint curricular and co-curricular activities (Sports, debates, seminars etc) with the Madaris students and teachers to promote tolerance and celebration of diversity..
7. Deeni Madaris who implement rules enacted under Article 25-A of the Constitution, will be fully supported and facilitated by the Government including provision of free textbooks etc.
8. Government and Deeni Madaris authorities (IttehadTanzeemat-e-Madaris Pakistan) will settle, within minimum possible time the long standing issues of equivalence and accreditation of Madaris degrees, certificates and asnad at all levels and registration of Madaris and affiliation of Madaris with Examination Boards/Universities for examination purpose.
9. Success stories and best practices of Deeni Madaris and Government/private institutions related to Quranic education, formal education, literacy and social activities will be replicated and upscaled.
10. Deeni Madaris students and teachers will be encouraged and facilitated for higher studies in Madairs, Universities and other educational institutions in the country and abroad. Similarly their teachers and students will be facilitated in research work.
11. Foreign students will be encouraged and facilitated for studies in Deeni Madaris of Pakistan, Universities and other institutions. As such NOC procedure for foreign students will be simplified.

12. Technical and vocational education, life skills education and jobs oriented/income generating skills education will be introduced in Deeni Madaris and supported by the Government with mutual consultation.

13. Adult Literacy Centers, Non- Formal Education Institutions and Primary schools if opened and run by Deeni Madaris, will be supported by Government programs for this purpose.

14. Accurate database for Deeni Madaris will be created, updated and disseminated as a regular feature/part of Education Management Information system.

15. The services and contribution of Madaris will be highlighted in national and international media as well as other relevant forums. Similarly coordination and linkages with the Madaris will be improved at all levels.

16. Model Deeni Madaris following the national and international best models, especially of Turkey, Egypt and Indonesia will be established by the Government phase-wise at each district and sub-district level.

17. Appropriate financial assistance for teachers, students and moral support will be provided to Madaris by the Government and other sectors to encourage them and improve their system.

18. Islamic books and supplementary reading materials, free of bias and promoting interfaith and intra-faith harmony on different topics, will be printed and distributed free of cost in Madaris by the Government.

19. A National Commission/Authority at national level with offices at provincial/area levels comprising representatives from Government, private sector, Deeni Madaris and other stakeholders will be constituted with an objective to identify, evaluate and resolve countrywide matters of Madaris especially pertaining to Quranic Education and Islamic Education with special focus on Taleem, Tarbiyat and Tazkiyah (Character building).

20. A Board as facilitator/consulting body for issues/problems in examination, certificates, medium of instruction as Arabic/English and other relevant matters will be constituted which will comprise the representatives of Government, Deeni Madaris and other Boards/IBCC

CHAPTER 17

Assessment and Examination Systems

Concept and Historical Context

Terms ‘Assessment’ ‘Examination’, ‘Testing’ and ‘Evaluation’ are used interchangeably to connote a process of measuring student learning outcomes during or after completion of a course, at the end of a semester or term, or even after delivery of a lesson by a teacher in the classroom. Technically, assessment, examination, testing and evaluation may have commonalities as well as divergent characteristics. However, for the sake of brevity, this chapter focuses on overall purpose and general meanings of assessment and examinations in education.

The term ‘Assessment’ came into use after World War II. Whereas examinations always aimed to measure learning outcomes of individuals, assessment may focus on individuals, on a class, a school, a group of institutions, or efficiency of an education system as a whole. Examinations are always conducted in a formal way, through written or oral tests or practical exercises, whereas ‘assessment’ can be formal as well as informal. For example, a teacher, at the end of a lesson, or during the semester, can use multiple techniques, in a subtle way or explicitly, to assess as to what extent students have been able to understand and assimilate new information and knowledge. Findings of such assessment can also be helpful for the teacher to know the effectiveness of teaching methodology used in the class.

Rationale and Significance

Assessment and examination are integral part of education and training, as they determine to what extent the objectives of education have been achieved so far. Findings of assessment or examinations affect decisions about grades, placement, advancement, policy, curriculum, instructional needs, and, in some cases, budgeting to an educational institution. Assessment tends to ask these hard questions: "What policy requires and how the education system should be organized to facilitate student learning?" "What is actually taught in classrooms, the characteristics of those teaching it, and, how it is taught?" and "What are we teaching and why are we teaching?" "Are students learning what they are supposed to be learning?" "Is there a way to teach the subject better, thereby promoting better learning?". No institution or department can plan an educational programme or course without spelling out criteria, norms, calendar, and procedure of examinations or assessment. Assessment findings not only provide important feedback to school management about quality of education being delivered, they also drive most of the students to work hard to learn and absorb new information, knowledge, and skills, for securing better marks or grades in the tests.

Assessment in education has a dual role: it is a measuring device as well as a management tool linking a number of educational policies. In its role as a measuring device, assessment can be used to measure educational outcomes and evaluate what a student learns or can do. As a management tool, assessment information can also be a powerful tool for key policymakers and implementers to improve student learning, reduce educational disparities and make reforms aimed at increasing the overall quality of education. Beyond its nominal function of checking and measuring student learning, assessment results often provide the evidence base for making improvements to policies and practices in education.

Types and Forms of Assessment and Examinations

As mentioned earlier, the terms of test, assessment and examination are used interchangeably. Nonetheless, there are certain types of examinations which cannot be called assessment and similarly, there are assessments which do not fulfill the criteria of examination. There exists a silver lining between assessment and examinations. The following are types of assessment and examination with respect to their purpose and target group or category of takers.

- Examinations for Certification and placement in Grades: This category includes examinations for measuring learning achievement of students and their placement in various grades after a semester, term, examinations lead to the decisions about pass or fail, certification, repetition in the existing or transition to the next grade, and also determine opportunities or eligibility for admission into higher studies etc. Examples include mid-term examinations, and terminal or final examinations etc.
- Admission Tests for Higher Studies and Employment: Examinations to screen out and select students for admission in a higher order programme when numbers of candidates are higher than the seats available. Examples include entrance tests for admission in a college or a university etc. and preliminary screening of candidates for government jobs like teachers. National Testing Service (NTS) is one of the institution offering testing services to growing number of educational institutions.
- Classroom-based Assessment: This type of assessment is conducted by the teacher during or after delivery of a lesson or throughout the semester or academic calendar. It is also called continuous assessment. Findings of classroom assessment inform and guide the teacher as how students are learning and effectiveness of his or her teaching methodology.
- Large Scale Assessment Studies for Evaluation of Education System: Large scale assessment studies aim to obtain information as how an education system is performing. These studies are conducted periodically for monitoring and providing policymakers and practitioners relevant information on overall performance levels in the system, changes in those levels, and related or contributing factors. Findings of large scale assessment studies provide insights about strengths and weaknesses of the education system with respect to relevance of curricula to the needs, suitability of textbooks, competencies and performance of teachers, learning conditions in the schools, and other factors which influence quality of education.

Large scale assessments may include national level and international level studies. International level assessment studies compare learning achievement of students from various countries, using common tools and tests. On the national level, a periodic large scale assessment National Achievement Testing (NAT) is conducted by National Education Assessment System (NEAS). At present, most famous large scale assessment mechanisms include ‘Trends in International Mathematics and Science Study (TIMSS)’, ‘Progress in International reading Literacy Study (PIRLS)’ and ‘Programme for International Student Assessment (PISA)’. Though, Pakistan has not yet taken part in the above international studies till date it has planned to participate in TIMSS for the first time in 2019.

Situation Analysis: Mechanisms of Assessment and Examinations in Pakistan

A number of mechanisms for assessment and examination have been used in Pakistan during last two decades. Nevertheless, there are gaps and inconsistencies at different levels. Prevailing situation, with respect to mechanisms of assessment and examination, is summarized below:

- Boards of Intermediate and Secondary Education (BISEs): The number of examination bodies has increased in the country. At present, there are 29 Boards of Intermediate and Secondary Education and 3 Technical Boards. These 32 Boards conduct examinations based on national curriculum. These Boards are also conducting examination of private candidates. In addition, Aga Khan University Examination Board has also been functional since 2004 in the country.
- Inter Board Committee of Chairmen (IBCC): Inter Board Committee of Chairmen (consisting of Chairmen of Boards of Intermediate and Secondary Education) has been established at the national level for coordination and standardization purpose. IBCC has provided a viable platform to all Boards for exchange of information for possible improvement in their examination procedures and certification etc. It also awards equivalence to students coming from different education system.
- Examination Commissions for Elementary Levels: Punjab and Balochistan have recently established new organizational structure for terminal examinations of Grade 5 and Grade 8 (Primary and middle levels). These are called, Punjab Examination Commission (PEC) and Balochistan Examination and Assessment Commission (BEAC). Both Commissions have been mandated to conduct examination of public and private sector schools for Grade V and VIII. Khyber Pakhtunkhwa has also initiated preparatory work for conducting centralized examination of primary and middle level by the existing Boards.
- Tertiary Level Examinations (TLE): Each university has its own scheme of studies and arrangements for conducting final examination of its regular and private students. Higher Education Commission at THE federal level has created forums and guidelines to induce standardization and harmonization among examinations conducted by different universities. The universities which have introduced semester system for their regular students have spelled out broader criteria and principles which are loosely followed by individual teachers of different departments for continuous assessment of their students.
- Large Scale Student Assessment Studies: In the past, a number of large scale student assessment studies were conducted under different project in Pakistan. One of the earliest studies was conducted under the World Bank's Primary Education Project in 1984. Another learning assessment study was conducted under the Basic Research and Implementation in Developing Education Systems (BRIDGES) Project of the Harvard Institute of International Development in 1988-89. During 2002, UNESCO, in collaboration with Curriculum Wing of Ministry of Education, Islamabad supported a large scale assessment study. In all these studies, learning achievement of students were tested with respect to the competencies envisioned in national curricula, instead of using content of the textbooks for test construction. Findings of these

assessment studies pointed out towards alarmingly low learning achievement levels of students. This invited attention of policymakers which led to the establishment of National Education Assessment System (NEAS) at the federal level and Provincial/Area Education Assessment Centres (PEACs/AEACs) in 2003.

- National Education Assessment System (NEAS): The National Education Assessment System, along with Provincial/Area Education Assessment Centre (PEACs/AEACs) were established during 2003 with financial and technical assistance from international donors/lending agencies. Till 2008, NEAS in collaboration with its PEACs conducted four large scale assessment studies. Although the posts of this newly created assessment organizational structure were regularized after external funding exhausted in 2009, both NEAS and PEACs could not receive development funds from their respective governments for continuation of large scale assessment studies. NEAS revived its work in 2013 and it conducted National Achievement Testing (NAT) in 2014. In 2016-17, NEAS has conducted another NAT in 1500 schools over a sample of 30,000 students across the country.

In Punjab, functions of PEAC have been assigned to PEC (Punjab Examination Commission), and in Balochistan, PEAC has been merged with Balochistan Examination and Assessment Commission (BEAC). Provincial Education and Assessment Centers in other provinces and areas still exist.

In addition to the public sector assessment studies, private sector and Non-Governmental Organizations (NGOs) have also been measuring students learning outcomes. An important initiative is Annual Status of Education Report (ASER) which annually tests learning achievement of children through household survey and publish the findings.

Findings of National Achievement Testing (2014), conducted by the NEAS, reveal that 79% students in Science obtained scaled mean score below the mean of 500, and only 21% students could cross the mean score of 500. NAT 2014 also unfolded decline in achievements of students over the years. Students' performance in Science declined between the Mean Score of 467 during 2006 to 433 in 2014 in this subject. Similarly, the results of achievement in English (writing) also present alarming figures that emphasize the need of urgent remedial measures.

Challenges and Issues of Assessment and Examinations

Imparting quality education to all students is a priority of federal and provincial governments. Perceptions and tools for measuring quality of education may vary. Examination and assessment are the main instruments and sources of information about status of quality of education imparted by the education system and acquired by the students. There is a need to review these systems, study good practices successfully experimented by other countries and improve prevailing mechanisms in the country. The following issues and challenges of assessment and examinations need to be addressed.

- Textbooks versus Curricula: Examinations primarily focus on measuring memorization and reproduction of information presented in the school textbooks. Tests are constructed by taking contents from the prescribed textbooks; whereas

competencies envisaged in the curricula are hardly taken into account for setting examination papers. Question paper setters need to be technically trained to prepare tests that have a mix of information acquired, concepts comprehended and applied for solving problems.

- Cognitive Skills: Generally, the internal school assessments conducted by head teachers and teachers continue to be on the more routine style that encourages rote learning. Examination papers of Boards lay emphasis on measuring lower order cognitive levels, whereas higher cognitive abilities such as problem solving and analytical skills are rarely touched. Resultantly, graduates are not able to apply information and knowledge acquired through textbooks in their daily lives. Analysis of question papers set by various BISEs reveal that more than 60 per cent of the questions assess mere students recall or rote memorization, which is one of the main reasons for the poor quality of education.
- Examinations shape Learning in Schools: Examinations are meant to assess mastery of knowledge and skills with respect to curricula. In reality, teachers and students ignore curricula and organize their learning activities around the pattern and requirements of examinations. Attention is shifted from comprehension, application, analysis, synthesis and creation of knowledge to merely securing maximum marks by successfully attempting content or memory based tests. Hence, power of examination prevails over the learning objectives of curriculum. In principle, the process of assessment is subservient to the overall system of education but in practical terms, the assessment system has completely taken over the education processes. Hence, instead of assessing what we teach, we teach what we have to assess. This is the main issue that needs to be addressed through reforms in systems of assessment and examination in the country.
- Lack of Research: Unfortunately, organizations responsible for curriculum development and examination in Pakistan do not conduct field research to collect information about what is happening in the schools. No effort is made to glean up to date information about issues, practices, and trends of teaching and learning in schools and how curricula is implemented at grass root level. In most of the cases, setters of examination papers construct tests in a routine way, shuffling questions from here and there, without any evidence based planning.
- Continuous Professional Development Not a Priority: Examination bodies do not invest on capacity development of their professional staff and experts taken from outside. Similarly, Teachers Training Institutions (TTIs) and schools do not accord due priority to training of teachers in modern approaches and techniques of assessment and examinations.
- Non-existence of Database: At present, there is no centralized mechanism for maintaining record and data of annual examinations conducted in various parts of the country. Neither IBCC nor National Education Management Information System

(NEMIS) compile information about number of students annually appearing in secondary and higher secondary exams, their success and failure rates in various subjects and in different geographical regions of the country. All this information if documented properly and analyzed critically can unfold interesting findings about weak point in the system and can lead us to the viable corrective solutions.

- Absence of Purposeful Coordination: Anxiety among heads of schools and teachers about Board results of their institutions is common, but their concerns are self-centered, linked with their individual performance. On the other side, annual results of Boards do not move professional institutions like Curriculum Bureaus, Textbook Boards and Teacher Training Institutions (TTIs) to ever meet and analyze the examination trends and ponder upon solutions or corrective measures to arrest declining quality of education in the schools. Findings of large scale studies by NEAS are also taken as a routine matter by these relevant professional organizations, and perceptions is that these findings have nothing to do with their work. A purposeful coordination mechanism by recognizing quality of education a shared responsibility of all professional institutions, is totally absent in the education system of Pakistan.

Many good initiatives have also been taken to improve the system, for example the Federal Board of Intermediate and Secondary Education (FBISE) has initiated a reform project on improving examination and assessment system to provide a role model, which will be a landmark for assessment system in Pakistan. Various other efforts have also been made in recent past to introduce innovative multiple-choice question based testing in Pakistan. National Testing Services (NTS), which provided a break through to independent testing option in Pakistan, many new dimensions have now emerged as quality testing service providers. Currently different public and sector educational entities have also started conducting independent testing for different purposes.

At school level, Information Communication Technology (ICT) based testing has been piloted and scaled up. Different Education Foundations have provided a good example of paper based Quality Assurance Test (QAT) for testing of their private sector partner schools. Recently; many of technology-based interventions have been experimented by donor driven initiatives focusing on access to quality education in remote areas. With proper application of psychometric tools and techniques, multiple choice testing and ICT based examination system can improve overall quality of education.

Goal: To improve quality of assessment and examination system at all levels of education in Pakistan.

Objectives: Education Policy 2017 aims to achieve following objectives with respect to assessment and examinations.

- i. To improve the quality of examination at all levels to shift away from testing of memory to assessment of comprehension, application, critical thinking and problem solving skills;
- ii. To shift to curriculum based examinations from textbooks based ones;

- iii. To build capacity of teachers in modern approaches and techniques of assessment and examination
- iv. To develop and strengthen national and provincial capacity to conduct diagnostic assessments to support policy-makers on systemic improvements; and
- v. To develop institutional capacity of assessment and examination bodies.

8. Policy Actions

a) Curriculum:

i) Clear and specific, measurable *Student Learning Outcomes (SLOs)* will be included in the curriculum.

ii) A harmonious assessment methodology will be given in the curriculum. This methodology may include formative assessments (for learning), and summative assessments (of learning) in line with each objective, including standards of student mastery.

b) Textbooks:

iii) The textbooks will be designed with measurable classroom assessments given with each topic.

c) Teacher Training:

iv) Teachers will be given training on various types of internal assessment techniques and strategies especially formative assessment and using the results for improving the teaching and learning processes.

v) In addition to pen and paper assessments, alternative ways of assessments will be included in the teacher training programmes.

vi) Topics, related to assessment, will be included both in pre-service and in service teacher training programmes.

d) Teaching and learning process:

vii) Classroom teaching in the primary schools will be made free from fear of examinations. As much as possible, the grades and marks system will be avoided in the early school years. Instead verbal feedback will be used in the result cards.

viii) Teachers will be asked to keep the learning outcomes in mind while teaching any topic. The assessment will be based on same outcomes.

e) Assessment:

ix) Standards of Operating Procedures (SOPs) will be developed for formative and summative assessments for non-terminal grades of primary and elementary levels (e.g. Grade I to Grade IV and from Grade VI to VII).

x) Steps will be taken for introducing and institutionalizing school report card and maintenance of student portfolios in public sector schools and regular sharing of feedback with students, parents, and school administration.

xi) Promotion of students to next grade will be based on both classroom assessments during the academic year and summative test at the end of the term.

xiii) Review and improve the middle standard examinations and scholarship examinations

xiv) Special scholarship examinations shall be introduced for the students securing above 80% marks in the public examinations of grade 5 and grade 8.

xv) Monitoring and mentoring for examination and assessment should be strengthened.

xvi) Steps will be taken to include affective domain in the formal classroom assessment.

f) Examination Boards

xvii) Institutional capacity of Examination Boards and assessment related organizations shall be developed, enabling these bodies to successfully accomplish following tasks on regular basis:

- a) Establishing or activating Research Cells in each Board
- b) Conducting research studies on regular basis to establish correlations between findings of examinations with various components and support systems of education.
- c) Creating or enriching item bank in each Board.
- d) Introducing standardized procedures for reliable paper setting and judicious marking.
- e) Maintaining database of results of annual examinations and dissemination the same to all stakeholders
- f) Ranking of schools and districts based on results of annual examinations and periodical assessment studies.

xviii) The standards for examinations conducted by the BISEs will be review to implement curriculum competencies, using SLOs based assessment tools, as envisaged in National Curriculum of 2006.

xix) Revitalizing and strengthening Inter Board of Committee of Chairmen (IBCC) for provision of technical assistance to the Boards in professional matters across the country, including capacity development and aligning assessment with the curriculum.

xx) The pattern of Multiple Choice Questions, short answer and essay-type questions will be improved and revisited to include more questions that can assess students'

higher cognitive abilities. Context dependent questions should be set on the pattern of 'O/A' Level examinations and other international standardized exams with emphasis on assessing problem solving, analytical and reasoning abilities.

xxi) BISEs may take into account the results of internal/continuous assessment of the students conducted by their teachers at school/college level along with their achievements in terminal examinations conducted by the BISEs at SSC and HSSC levels.

xxii) Gradually the evaluation practices at board examinations may be changed from marking system to grading system like the practices in the international communities

g) Assessment Organizations (NEAS, PEAC, PEC, BEAC etc.)

xxiii) Capacity development of item writers and test developers will be ensured for quality assessments.

xxiv) Effective co-ordination mechanisms on assessment processes shall be institutionalized amongst examination and assessment related bodies, curriculum and textbook authorities, and teacher training institutions.

xxv) Assessment organizations will gradually shift their manual systems to ICT assisted programmes, i.e. Optical Mark Reader (OMR) based data collection, automated data analysis and reporting.

xxvi) After the experience of TIMSS, necessary steps will be taken for Pakistan's participation in the Programme for International Student Assessment(PISA) 2021.

xxvii) Maintenance of database of grade wise, subject wise, gender wise, and district wise results of all levels of annual examinations by the Boards and Universities in the provinces and Areas and at the national level, and dissemination of analytical reports to all stakeholders.

xxviii) Mechanism will be devised to include the large-scale assessment recommendations in policy formation.

xxix) Assuring regular and efficient funding for transformation of assessment and examination system in the country.

**GUIDANCE, COUNSELING, CHARACTER BUILDING AND
EXTRA CURRICULAR EDUCATION**

A- Guidance, Counseling and Character Building

1. Importance and Significance

The character of an individual as well as a nation is one of the most important highly significant and vital characteristics. A nation is recognized and respected by its high ideals and good character. If character is lost everything is lost. Character building and purification of soul (TAZKIYYA-E-NAFS) is the foundation and corner stone of all religious and moral teachings. The real success, prosperity and salvation of human being depend on keeping the soul pure. Truly he succeeds who purifies it and he fails who corrupts it. (*Sura Ashams verses 9-10*).

2. Situation Analysis

The character building is one of the most neglected area in education, training and literacy programs. Majority of our teachers are not a role model for students and society. Teacher education and training curriculum (both in theory and practice) does not lay adequate emphasis on moral education and character building. The same is the case with the learners' curriculum. The extra and co-curricular activities which were mainly aimed at character building and overall personality development have been reduced to bare minimum. Our media, society as a whole and school environment are not imprinting positive impact on the minds of children with respect to character building. The major responsibility of character building of children falls on the shoulder of parents and teachers who are not properly shouldering this important responsibility.

3. Issues and Challenges

The following are the main issues and challenges which need to be addressed :

- i) Pakistani nation faces challenges of its integrity and credibility among the comity of the nations.
- ii) Objectives of our education need more clarity. Our students acquire education to get white collar jobs. Thus balance between materialism and spiritualism is required. Therefore, spiritualism, morality ethics values and high ideals be focused for character building.
- iii) Parents, teachers and educational institutions need to realize the significance and value of character building, value education and training (TARBYYA) of children.

4. Objectives

- i) To make the parents, teachers and curriculum developers the importance and need of character building.

- ii) To teach the teacher education and teachers the teaching skills and techniques of character building and over all personality development of child.
- iii) To initiate special programs and activities in educational institutions for character building of children.
- iv) To include adequate contents and subject matter on character building in teachers and learner curriculum.
- v) To sensitize the media on need and importance of character building.

5. Policy Provisions

1. It shall be ensured that teachers of all levels of education including non-formal and DeeniMadaris teachers serve as a role model for the students as well as the society.
2. Teacher training institutions shall arrange special training programs for quality education (TALEEM), and understanding, TARBIYYA (training), TAZKIYYA (purification and soul), character building and overall personality development of pupil sand the teachers.
3. Each educational institution, formal or non-formal, public or private shall arrange special programs for character building of students on the above lines.
4. Teacher training courses, pre and in-service both, will also focus on imparting pedagogical skills and teaching and training techniques for character building and comprehensive personality development of children.
5. Adequate contents/subject matter related to character building such as moral and ethical values, attitude and behavior, both in theory and practice, will be ensured in curriculum and textbooks.
6. Code of ethics for teachers shall be developed and enforced to act as a role model failing which there shall be accountability and reward.
7. A set of moral values shall be specified/focused in each grade from Kachi to VIII for practical training and Tarbiyya through various activities such as morning assembly, speeches, declamation contests and other literacy programs, games and sports, compulsory ‘salat’ in school premises, social welfare work, competition in cleanliness etc.
8. It will be ensured that not only the teachers but also educational managers and administrators and school leadership also possess sound moral character and high ideals.
9. The school will act as an agent of change for the local community. By arranging special programs for their uplift, moral transformation and character building.
10. Special programs on character building of children in particular and society in general, shall be initiated on regular basis on electronic and print media.
11. Each educational institution shall design and effectively implement programs and activities for comprehensive personality development of child particularly moral development through curricular, co-curricular and extra-curricular education.

B- Extra-Curricular Education

a) Scouting

1- Conceptual Framework

Mission:

To contribute to the Education of Youth through a value system based on Scout Promise & Law for their Character building to make them responsible members of the society.

Concept:

Scouting is a voluntary non-political educational movement for the young people, open to all without distinction of origin, race or creed, in accordance with the purpose, principles and method conceived by its Founder:

Purpose: - Personality grooming and character building of young children and the youth, through 5-Tier training i.e:-

- Physical Development
- Spiritual Development
- Intellectual Development
- Social Development
- Emotional Development

Tier Principles:-

- * Duty to Allah
- * Duty to Others
- * Duty to Self

Training Method: - A system of progressive training and self-education through:

- * Adherence to Scout Promise & Law
- * Learning by doing in camping/natural environment
- * Working in Small Groups (Patrolling System)
- * Progressive & stimulated collective programs system which includes
Badge System, Fellowship, Adventure and Community Development

2- Importance and Significance

Scouting produces responsible citizens and a healthy society. It educates the young people, through a value system based on the Scout Promise and Law, to help build a better world where people are self-reliant and motivated as individuals and play a constructive role in society.

3- Constitutional and Legal provisions

Pakistan Boy Scouts Association (PBSA) is the National level Association for Scouting in Pakistan, affiliated with the world Scout Bureau. It is a member of the world Organization of the Scout Movement. Government of Pakistan protected it through an Ordinance No. XL III of 1959, and is governed by the Gazette of Pakistan Notification/Act of July 27, 1993.

4- Situation Analysis (facts & figures)

For Youth: Youth join Scouting as volunteer and there is hierarchy through badge system for engaging in positive activities (Booklet on Youth Programme Policy & System is available for guidance to scout management)

For Adults: A proper training system exists for Training of Master Trainers & Scout Leaders (Booklet on Training Policy & System is also available).

Current situation analysis explains following indicators of scouting data, as per recent census:

Provincial BSA	Shaheen Scout	Boy Scout	Rover Scout	Scout Leaders	Professional Staff / others	Total
TOTAL	189240	447555	63026	32684	2231	734736

Details are at Annex-A.

5- Issues and challenges:-

- * Shortage of funds at all levels
- * Practiced in limited educational institutions, warranting expansion.
- * Almost non-existing in elite private urban schools & colleges, where it is equally needed.
- * Due to excessive use of computers, mobile and TV, young children are restricted to indoor activities, away from nature and play grounds. Scouting (**science of outing**), can develop healthy habits, develop personality and build their character.
- * Missing chain of command between Provincial & Federal Education Authorities, needs revival as per past practice, prior to 18th Constitutional Amendment.

6- Goal, Objectives and Targets

The Objectives of the Scouting are to:-

- (a) Develop good citizenship among the youth by their character building;

- (b) Promote their spiritual, intellectual, physical, emotional and social development;
- (c) Train them in habits of observation, obedience and self-reliance;
- (d) Teach them to render useful services to the society with vocational training useful to themselves;
- (e) Make them useful and helpful in community development.
- (f) help them irrespective of race, creed or colour, to become good citizens of Pakistan, reverencing Allah, subordinating their personal interests to the welfare of others and abstaining from violence of thoughts, words and actions.

7- Policy provision to achieve the goals / targets covering the following Areas:-

A) Access (infrastructure, learning places, facilities, services & enrolment)

-Scouting is accessible to all students of different age groups throughout Pakistan.

-Complete hierarchy exists with infrastructure at local, provincial and national levels.

(Annex-‘B’)

- President of Pakistan is the Chief Scout and Governors of each Province are the Provincial Chief Scouts.

- Learning center’s having camping sites are located at Jungle MangalBatrasi, Takya Abbottabad, GhoraGali, NHQ Islamabad, Gulistan-e-Johar Karachi, PIA Training Centre, Karachi, PHQ Balochistan, Quetta.

B) Quality

- Training Standards: National Scouting Standards and Curriculum are ensured by the PBSA HQ, at par with APR / World Scout Bureau. The National Training & Programme Sub-Committee reviews and updates them in accordance with the pace of time.
- Textbooks and reading material: Sufficient reading learning / supplementary material is available for the youth (Scouts) and for Scout Leaders (Adults). Additional reading material and textbooks are also provided. A list of publications is at **Annex-C**.
- Teacher recruitment: Scout Leaders are engaged on the basis of need, assessment and their aptitude to work for Youth.
- Teacher training: PBSA has National Training Policy & System which applies at all levels for Adult Training.
- Learning environment: Learning by Doing” method is applied in scouts camping environment.

- Monitoring, Evaluation and Supervision: From grass-root level to National level, proper system operates in accordance with Policy, Organization & Rules (POR).
- Assessment, Examination, certification, Accreditation and Equivalence: Assessments are made for the Rank Badges, Proficiency badges and High Rank Badges. Certificates are issued accordingly which are accredited at provincial and national level

C) Governance and Management:-

- School leadership: Head of respective Educational Institution.
- Community involvement in school management: Open Scout Groups are formed for out-of-school children / on community basis.
- Decision making (Centralization and Decentralization): Local & next level wise decision-making is smoothly functioning, based on decentralization.
- Organizational Development and Culture: PBSA continuously Identifies ways & means to help make Scouting significant contributions to the society to promotes culture for Socialization,
- Training and consistent scout practices: Workshops & Seminars at Provincial, National & International levels are organized for betterment / improvement of scouts training.
- Coordination and Communication: Proper mechanism / channel of communication exists in the POR (Scouting Rule -48).
- Human Resource Development (Recruitment, Promotion, Pay packages and Capacity Building): In the National & Provincial Scout Headquarters, initial recruitments are made on merit (subject to availability of approved vacancies and budget). Promotions are allowed in accordance with PBSA Service Rules. Government pay scales are applicable, helping smooth management.
- Supervision: Scouting comprises of children Youth & Adult Support. Management Committees at all levels exist for supervision.

D) Mode/Medium of Instructions:-

Urdu and English

E) Public Private partnership

PBSA works in coordination with Pakistan Red Crescent, National Disaster Management Authority, Pakistan Girl Guides Association and other Organizations having similar objectives.

F) Financial Resources:-

Recurring expenditure: Recurring expenditures are borne through Govt. Grant-in-Aid, Public Support & Membership Fee while for Development purposes; Government of Pakistan and Scout Foundation extend support.

Absorptive capacity of the system is good / flexible. Optimum utilization of released funds is ensured. No spare budget provided which may lapse

G) Research

World Bureau Research Centre keeps abreast the member associations of latest research / outcomes. The same is also practiced at National level of Scouting.

H) Data Base Creation (MIS):

Data is updated periodically at all levels. (Existing figures at **Annex–A**)

8- Rationale / justification and need for Policy interventions

* *Scouting Supplements the Formal Education of students*

* *Quaid-e-Azam said during his Investiture Ceremony as Chief Scout of Pakistan on 22nd December 1947:-*

“Scouting can play a very vital role in forming the character of our youth, promoting their physical, mental and spiritual development and making them well-disciplined, useful and good citizens. We are living in a far from perfect world. Despite the progress of civilization, the law of the jungle, unfortunately, still prevails. Might is considered right and the strong do not refrain from exploiting the weak. Self-advancement, greed and lust for power sway the conduct of the individuals, as that of nations. If we are to build a safer, cleaner and happier world, let us start with the individual, catch him young and inculcate in him the Scout Motto of Service before self and purity in thought, word and deed. If our young people learn to be friend to all, to help other people at all times and subordinate personal interests to the welfare of others, eschew violence of thought, word and action, I am sanguine that the attainment of universal brotherhood will be possible and within our reach. I wish you GOD speed”.

9- Implementation Strategies of Policy provision:

PBSA’s implementation Strategic priorities are: Trainings Programs for children, youth and adults, effective management, financial support, curriculum updating, Public Relations & use of ICT, as per Vision of Pakistan – 2025.

10- GoP Vision 2025, about scouting:

Pakistan Boy Scouts Association with one million membership will be recognized as a dynamic, self-reliant and leading youth organization offering stimulating Programme for all segments of the society by the year 2025.

11- Policy Statement:

The government of Pakistan resolves to extend scouting to the maximum students in the country, for making them healthy and useful citizens, as per vision of Quaid, employing PBSA’s Strategic Priorities and direction of G.o.P document Vision-2025.

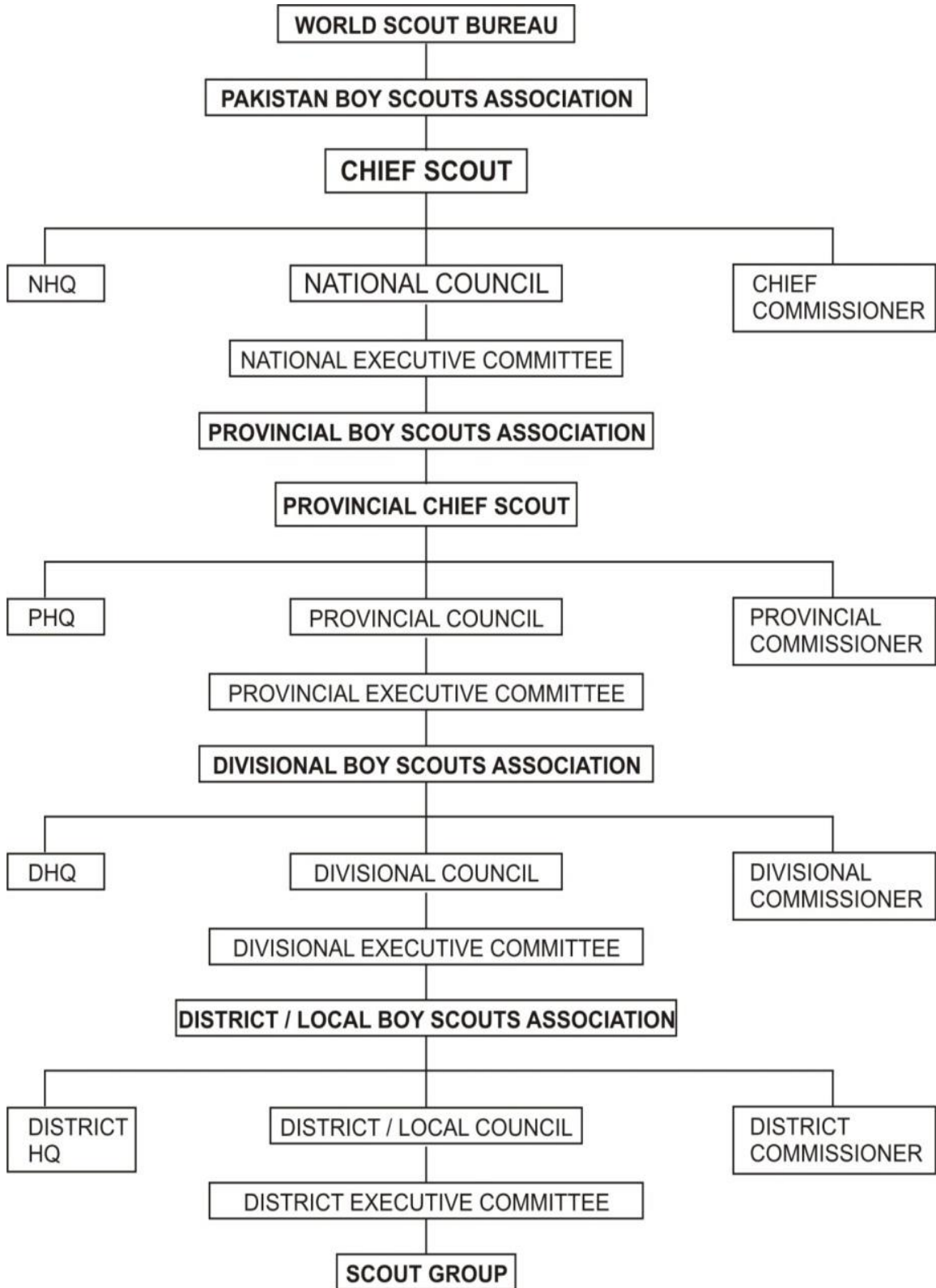
12- Policy Recommendations:

- To introduce Scouting compulsorily with proper infrastructure in each educational institution, both public and private.
- To give some additional marks to the bonafide Scouts in examination system as an incentive.
- Inclusion of Scouting material in the text books
- Provide development budget for renovation, up-gradation and establishment of scouting infrastructure at all levels.
- Financial/material support to low cost public and private schools.
- To make scouting part of teacher training programs during vacations.

SCOUTS CENSUS – 2015-16

S#	Provincial BSA	Shaheen Scout	Boy Scout	Rover Scout	Scout Leaders	Professional Staff / others	Total
1	Punjab	64828	150311	25863	7221	2058	250281
2	Sindh	10896	78144	5856	9519	20	104435
3	K.P	55315	76716	7304	5636	5	144977
4	Balochistan	38476	34320	3250	6883	105	83034
5	AJK	4005	60100	-	2000	4	66109
6	Islamabad	7500	20600	3000	525	10	31635
7	PIA	366	590	749	313	16	2024
8	P.R	-	162	2125	187	-	2474
9	G.B	4854	6112	1379	200	11	12556
10	FATA	3000	20500	13500	200	2	37202
Total		189240	447555	63026	32684	2231	734727

HIERARCHY / ORGANIZATIONAL CHART



LIST OF PUBLICATION

1. Policy Organization & Rules (POR)
2. National Training Policy & System
3. National Youth Programme Policy & System
4. Badge System (a part of Youth Programme Policy & System)
5. Scout Leader’s Handbook
6. E-newsletter (monthly basis)
7. Pak-Scout Magazine

b) Girls Guidance

Mission:

The Mission of Association is – to provide opportunities for the development of girls and young women, so that they become confident, patriotic and law abiding citizens capable of performing their duties in the home, as well as community and country.

Concept:

Girls Guiding is a non-political voluntary movement for the Girls & young women open to all without distinction of origin, race or creed

Purpose: To help the Girls & Young Women in their personality grooming through the:

- Spiritual Development
- Intellectual Development
- Physical Development
- Social Development
- Emotional Development
- Social & Economic Empowerment

Principles:

* Duty to Allah * Duty to Self * Duty to Community & Country

Method: Training is imparted for progressive self-development through:

- * Learning in Small Groups
- * Learning by Doing
- * My Path My Pace
- * Connecting with others
- * Connecting with my World

1- Importance and Significance:

Guiding provides environment & avenues for the personality development of girls and young women, to enable them turn confident, patriotic and law abiding citizens, capable of performing their duties in the home as well as community and the country

2- Constitutional and Legal provisions:

Pakistan Girl Guides Association (PGGA) is protected and incorporated by Ordinance No. XLIV of 1960 by Government of Pakistan. PGGA is a full member of the World Association of Girl Guides and Girl Scouts (WAGGGS). It is the member of Asia Pacific Region of WAGGGS. PGGA through WAGGGS has consultative status and is represented in UNO.

3- Situation Analysis (facts & figures):

For Youth: Young Females can join Girls Guiding as volunteer and can work on Guide program which is based on a holistic approach to personal development of the girl.

For Adults: Adult females can join Girls Guiding in various capacities.

Current situation analysis explains following indicators of Girls Guiding data, as per recent census:

	Junior Guides	Girl Guides	Senior Guides /young leaders	Guiders/ leaders	Cadet Guides	Executive Members/ Commissioners	HQ. Staff & Trainers	Project Teacher/ Beneficiaries/ Member Local Association	Total
Total	19130	47433	7418	3482	598	377	153	2359	80950

4- Issues and challenges:-

- * Shortage of funds at Chapter levels
- * Limited to school based stake holders /companies
- * Low participation by the private schools & colleges.
- * Dependence on Education Departments for selection of Girl Guide Leaders to carry out Guiding in Educational Institutions.

5- Goal, Objectives and Targets:

The Objectives of the Guiding are to:

- (a) Develop good citizenship in Girls by personality grooming;
- (b) Promote spiritual, intellectual, physical, emotional and social development of Girls Guides;
- (c) Train them in habits of observation, obedience and self-reliance;
- (d) Teach them to render useful services to the society with vocational training useful to themselves;
- (e) Make them useful and productive citizens capable to fulfil their responsibilities.

Policy provision to achieve the goals / targets covering the following areas:

A) Access (infrastructure, learning places, facilities, services & enrolment)

-Guiding is accessible to all Girls of different age groups throughout Pakistan.

-Complete hierarchy exists with infrastructure at district, provincial and national levels.

(Annex-‘B’)

- Wife of the Prime Minister/ Lady from the highest hierarchy is the Chief Guide and Wives of Governors of each Province/ lady from the highest Provincial hierarchy are the Provincial Chief Guides.

- Guide Houses are located at NHQ Islamabad, Habib-ullah-Road Lahore, Lahore City, GhoraGali, Sarghodha, Bahawalpur, Multan, Rawalpindi, Karachi, Hyderabad, Quetta, D.I. Khan, and Peshawar.

B) Quality:

- **Program:** PGGA has its own curriculum (hand books for all sections of membership) in accordance with standards of World Association of Girl Guides & Girl Scouts (WAGGGS). National Training & Programme Sub-Committee reviews and updates the Program time to time.
- Program books and learning/supplementary reading materials are also provided
- Training and program Material based on inter active learning is available for the Guides and for Guiders/Leaders (Adults).A list of publication is at **(Annex-‘C’)**
- **Teacher recruitment:** Guiders/ Leaders are selected and trained by PGGA in all Chapters for carrying out Guide program.
- **Teacher training:** We have National Training Scheme which applies at all levels for Adult Training.
- **Learning environment:** Theentire program of PGGA is implemented through participatory learning methods.
- **Monitoring, Evaluation and Supervision:** From grass root level to National level, proper system operates in accordance with Policy, Organization & Rules (POR).
- **Assessment, Examination, Certification, Accreditation and Equivalence:** Assessments are made for Awards, Shields and Proficiency badges and are issued accordingly by the National Award Committee in the Annual Meeting of the General Council of PGGA.

C) Governance and Management:

- School leadership: Teacher of the school voluntarily works as Guide leader.
- Community involvement in school management: Peer education and conveying messages to the families of Girl Guides is an effective tool of community involvement.
- Decision making (Centralization and Decentralization): At Guide company level, decisions are taken during Patrol Council (A group of 6 to 8 girls) and leader’s council meeting (A group of 32 to 40 girls). Decision making at District &Provincial level is done in a democratic way during Council meetings at District and provincial levels.

- **Organizational Development and Culture:** PGGA has its membership in all provinces and multi-cultural settings. The Association makes sure that cultural sensitivity is taken into consideration in all aspects.
- **Human Resource Development (Recurrent, Promotion, Pay packages and Capacity Building):** At National & Provincial Level, recruitments are made on merit (subject to availability of approved vacancy and budget). Promotion in accordance with PGGA Service Rules is clearly defined in the service rules.
- **Supervision:** Different Guide Committees at all levels exist for supervision.

D) Mode/Medium of Instructions: Urdu and English

E) Public Private partnership:

PGGA works in collaboration with various government and Private departments / stake holders

F) Financial Resources:-

- Recurring / occasional development expenditures are borne through Govt. Grant-in-Aid, Public Support & Membership Fee
- Optimum utilization of released funds is ensured

G) Research

PGGA conducts research on issues related to girls and young women at regular intervals.

H) Data Base Creation (MIS)

Yearly data is updated at the provincial and National levels. (Details at **Annexure – ‘A’**)

6- Rationale / justification and need for Policy interventions:

Quaid-e-Azam was the Founder of the PGGA in end 1947. Addressing the Muslim league meeting at Muslim University of Aligarh March 10, 1944, he said:

“Another very important matter which I want to impress upon you is that no nation can rise to the height of glory, unless women are side by side with you. We are victims of evil customs. It is a crime against humanity to shut up women within the four walls of houses as prisoners. Let us try to raise the status of women according to Islamic ideals and standards. There is no sanction anywhere for the deplorable conditions in which our women have to live. We should take the women along with us as comrades in every sphere of life. We cannot expect a woman who is ignorant herself to bring up our children properly. Women have the power to bring up children on the right lines. Let us not throw away this asset.”

He also said, "I have always maintained that no nation can ever be worthy of its existence that cannot take its women along with men. No struggle can ever succeed without women participating side by side with men. There are two powers in the world. One is the sword and the other the pen. However there is a third power stronger than both, that of the women."

"It is women alone who can teach men how and when to wield the sword or pen when the occasion arises. You, young women, are more fortunate than your mothers are. You are being emancipated. I do not mean that you must copy the west. But I do mean that man must be made to understand that a woman is his equal and that woman is his friend and comrade and they together can build up homes, families and nations."

7- Implementation Strategies of Policy provision:

PGGA's Strategic priorities are: Programs for children and youth, Training for adults, effective management, curriculum updating, Public Relations and financial management

8- Policy Statement:

"Create environment for the personality development of girls and young women, so that they become confident, patriotic and law abiding citizens capable of performing their duties in the home, as well as community and country."

9- Policy Recommendations:

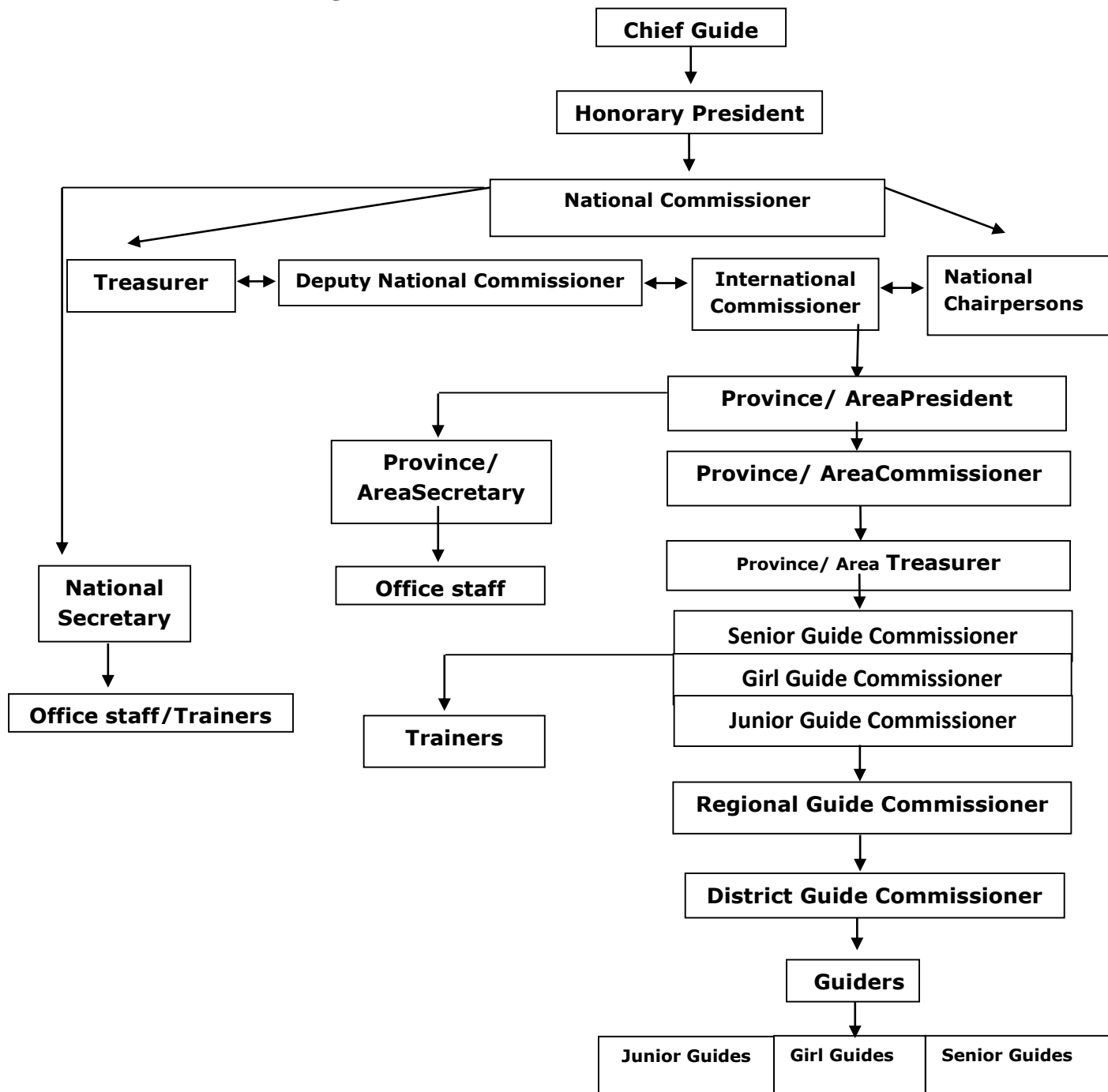
- a. Induction of Girls, as Girls in Scouting should not be encouraged as it is likely to give rise to social issues
- b. Girl Guides should be accorded preference in appointment against various jobs and incentive of 15 marks should be given to them in addition to the marks obtained.
- c. All the Provincial Governments should ensure time allocation for Girl Guiding in their educational institutions both in Government & Private Sectors.

Annexure – ‘A’

MEMBERSHIP FIGURES FOR THE YEAR 2015-16

No .	Province	Junior Guides	Girl Guides	Senior Guides /young leaders	Guiders /leaders	Cadet Guides	Executive Members/ Commissioners	HQ. Staff & Trainers	Project Teacher/Beneficiaries/ Member Local Association	Total
1	AJK	209	754	1238	37	-	19	03	-	2260
3	Balochistan	982	1722	64	161	49	93	15	2000	5086
4	Gilgit Baltistan	1926	2062	1078	339	-	28	11	-	5444
5	ICT	1607	2496	626	250	91	39	07	04	5120
6	Khyber Pakhtoonkhwa	1104	1284	490	295	-	44	07	02	3226
7	Punjab	8840	34618	2506	1775	458	121	62	196	48576
8	Sindh	4462	4497	1416	625	-	27	29	72	11128
9	NHQ	-	-	-	-	-	06	19	85	110
	Total	19130	47433	7418	3482	598	377	153	2359	80950

Organizational structure of Pakistan Girl Guides Association



LIST OF PUBLICATION

1. For Junior Guides

- Junior Guide Handbook
- Proficiency badges for Junior Guides
- Junior Guide Games
- GAT Book for Junior Guides
- Junior Guide Uniform Pamphlet

2. For Girl Guides

- **Girl Guide Hand book**
- Proficiency badges for Girl Guides
- Girl Guides Games
- GAT Book for Girl Guides
- Girl Guide Uniform Pamphlet

3. For Senior Guides

- Senior Guide Handbook (Urdu)
- Senior Guide Handbook (English)
- GAT Book for Senior Guides

4. Camping

- Gadget Book
- Girl Guide Camp
- Star Gazing
- Day Camp Pamphlet
- Work Camp Pamphlet
- Hike & Cook Out Pamphlet

5. For trainers/ Guiders/senior Guide Leaders

- Trainers Manual
- Senior Guide Leader Handbook
- Guider's Handbook
- Shield Awards Pamphlet

6. For commissioners

- Commissioner's Manual
- Constitution of PGGGA
- P.O.R

c) Revival of National Cadet Corps (NCC) Training

Challenges

Pakistan is one of the few countries, currently facing formidable internal security and acts of terrorism. War-like emergency situation prevails. Disguised enemy is targeting the strategic civil and military assets, security forces as well as people. Such conditions are undermining national stability and congeniality of environment. Adversely impacting entire spectrum of activities.

Response

Government of Pakistan is determined to;

- Foil the nefarious designs of terrorists
- Ensure protection of life and property of the people

Thus the Government Developed National Security Action Plan, after due consensus of the national leadership. Plan being implemented through the security forces. The magnitude of the challenge however, warrants expansion of stake-holders of the National Action Plan, making it more inclusive.

POTENTIAL OF YOUTH / STUDENTS

Existing Situation

Pakistan has youth manpower, more than many countries in the world. Untapped energies as Pakistani Youth If trained and involved in the internal civil defense disaster management, surveillance duties etc., youth would render tangible back up support to existing state institution and civil society at large. After devolution in April 2011, Pakistan Boy Scouts Association and Girls Guide HQs, both were placed under the Ministry of Interprovincial Coordination at Federal level. Organizations exist at Federal, Provincial and Local levels. Activities at present are somewhat sluggish, due to thin funding since 1990, and growing use of ICT in Educational Institutions.

REVIVAL OF NCC

Historical Perspective

NCC was initiated post 1971 Indo-Park War due to enhanced Security challenge/ external threat. It immediately Involvement of wider segment of Society, young Stake-holders.

Its Organizational Structure was:

- Controlled by the National Guard's Directorate, GHQ.
- Serving Army personnel imparted requisite training on tenure based posting to the colleges.
- Incentive of 20 marks was given to the students.
- Syllabus Drill and Firing.
- Termination of Scheme, in late 1990s, was mainly due to financial constraints.

WHY REVIVE NCC?

Presently Enhanced & multiple internet security threats warrant wider national response. Structured involvement of educated youth in moderate self-defense and service oriented activity is likely to pay fruitful dividends. Well laid-out organizational structure of our educational institutions give ready-made frame-work, to judiciously launch the NCC Scheme. Existing state of socio-psycho mindset of people of Pakistan is likely to receive such like measures positively and enthusiastically.

- ⊙ A cursory glance at the past experience reveals that revival of NCC would particularly be welcomed by the youth.
- ⊙ Revival of NCC would send an appropriate message to the existing would-be perpetrators.

PROPOSED REFORMS IN THE REVIVED NCC

(A) Organizational re-structuring:

Ex-service-men be inducted, making them integral part of existing educational system. Controlling HQs may be created at Federal as well as provincial levels, functioning under the respective Education Ministry/ Departments. Technical support may be sought from the relevant state departments/ institutions, e.g. Army, Civil defense, Red Crescent Society etc. Budgeting in all dimensions would be the responsibility of the Federal Ministry of Education and Professional Training.

(B) Curriculum:

Curriculum/syllabus is a matter of deeper consideration and detail , to be formulated after decision in principle is arrived to revive NCC. However, the concept and outline is proposed as under:

- Concept: Keeping in view the dynamic National and International scenario, the previous curriculum needs review , updating and expansion
- Outline: Besides drilling and firing , additional subjects are proposed below:
 - (a) Civil Defence Training
 - (b) Rescue & relief in disaster situations.

- (c) Elementary serving and surveillance duties.
- (d) Assisting in traffic management during emergency situations.
- (e) Basic life-skills related to health rehabilitation.
- (f) Skill in rowing during floods/ torrential rain-fall.

- Cumulative effect: Besides attainment of academic discipline, learning of afore-said skills and expertise would expectedly exert profound effect on the whole-some grooming and character-building of youth.

(C) Incentives:

Following incentives may be considered for the NCC trainees/ cadets:-

Award of 20 marks to the Board/ University results, upon satisfactory completion of training.

- i. Free uniforms.
- ii. Refreshments on gratis.
- iii. Career counseling for recruitment in forces.

RECOMMEDATIONS

1. (a) A balanced task force of relevant competent professionals be constituted to work-out the details of NCC revival plan.
 (b) After approval of NCC revival at various relevant levels/ forums , the action plan may be promulgated through an act of Parliament.
2. (a) The Scouting & Girl Guides activity be promoted/ revived in full scale in the schools and colleges, through executive orders, throughout Pakistan , as extra curricula activity and feeding streams for the NCC.
 (b) Their HQs be placed under the Ministry of Federal Education and Training, as per past practice , for better coordination with schools and colleges as well as Provincial/ Regional Education Departments.

Chapter 19

FINANCING OF EDUCATION

1. Conceptual framework

The world over, education system of countries are assessed through various indicators. One of the important indicators of education is the public expenditure on education as percentage of Gross Domestic Product (GDP) of the country and expenditure on education as percentage of the total expenditure by the government. Pakistan's education sector has persistently suffered from under-investment by the state, irrespective of the governments in power. Years of lack of attention to the education sector in the form of inadequate financing, poor governance as well as lack of capacity, has translated into insufficient number of schools, low enrolment, poor facilities in schools, high dropout rate, shortage and incompetent teachers, etc. All of this has led to poor quality of education for those who are fortunate enough to get enrolled and no education for the rest. The current situation, discussed below, is alarming enough to demand extraordinary measures to provide adequate resources to the education sector through the federal, provincial and district budgetary allocations.

The issues faced by the education system are gigantic, requiring a lot of financial resources for interventions to put the system on the right track. It has been agreed by the world community that economic development of a country is dependent on the good quality of education system. Thus, many countries have achieved progress in the recent past, through enhanced investment in education sector.

In line with the budgetary design, the education budget is divided along the development and non-development or recurring budget. The budgetary allocation to education sector has remained static around 2 % of GDP for the past decade, with a big chunk (about 92%) being spent on recurrent heads mainly salaries, leaving a small amount (about 8%) as development budget for quality enhancement such as provision of school facilities, teachers' training, curriculum development, monitoring and supervision of education, etc.(Annex-1).

2. Importance / significance

Financing of education sector in Pakistan is as important as soul to the human body for its normal functioning. Without financing of education sector, school buildings cannot be constructed or renovated, fixtures and furniture cannot be purchased & provided, teachers cannot be hired and appointed, curriculum and textbooks cannot be prepared, teaching learning materials cannot be procured, etc. Thus public sector education system cannot function without its proper financing on regular basis. Recent developments have made financial allocations for education and its awareness increasingly important and significant for its smooth functioning and wellbeing.

There is a very important saying that the money makes the mare go. Same is true for the education system of a country. The education system of a country cannot function properly and sustain itself without adequate financial resources or inputs. The effects of low funding of education sector in Pakistan in the past are already mentioned above and detailed below under situation analysis, issues and challenges. Increase in the amount proportionate to the population of children and other education indicators, which are low e.g. access (NER), Literacy Rate, etc.,

are again highlighted. Increased resources are urgently needed for; - Expanding Access (more schools for out of school children and millions of illiterates); - Improving quality; and other aspects of the system.

3. Constitutional and Legal provisions

The Constitution of Pakistan does not fix a specific percentage of GDP, or of total budget, to be provided for education sector, each year. Thus the respective governments are not bound to allocate enhanced education budget allocations, as recommended in policies and plans. Pledge by the parliament through Article 3 c of Fiscal Responsibilities and Debt Limitation Act 2005 that budget for education and health will be doubled within next 10 years in terms of percentage of GDP, need be considered by the state in letter and spirit. Reference is also made to Article 25-A, Article 37-b and 38-d – provision of basic necessities of life to citizens like food, health, education etc. Various other government publications indicate commitment of the government to provide enhanced budget allocations, to achieve the desired goals, as briefly mentioned below.

Under the 18th Amendment of the Constitution, education was fully devolved to the provinces in 2011. This has added to the responsibilities of the provinces. Article 25-A declares a collective responsibilities for education of children, as it uses the term ‘State’ and definition of State, as given in Article 7 of the Constitution, includes Federal Government, Provincial Governments, and Local Governments etc. Hence, Federal Government cannot absolve itself from the financial responsibility for provision of right to education. In addition, Article 25-A of the Constitution calls for the provision of free and compulsory education to all children of the age five to sixteen years, requiring increased education budget allocations. With more resources awarded to the provinces under the National Finance Commission (NFC) award, provincial governments are now required to provide significantly enhanced education budget allocations, to cater to a variety of additional dimensions of educational development. It is encouraging that there was a strong political resolve to enhance budgetary allocations from 2% to 4% by 2016 for education sector. References can also be made from various commitments signed by Government of Pakistan for increasing education budget up to 4% of GDP e.g. Pakistan signed Declaration of Education Ministers of Asia Conference, Tokyo, Japan in 1962 to achieve UPE and enhance education budget up to 4% of GNP by 1980, and many other commitments. The past education policies also recommended enhanced financial allocations for education sector to achieve envisaged targets. Pakistan Vision 2025 also aims at substantial expansion in levels of education as well as improvements in the quality of education and to increase public expenditure on education to reach 4 percent of GDP by 2018.

However, facts and figures show that there is no significant increase in education budget, except the nominal increases as done each year due to cost escalations and revision of pay scales.

4. Situation analysis

Pakistan is the sixth most populous country in the world. However, most of the social sector indicators are low as compared to other countries of the region or countries at similar level of development in the world. On the Education Development Index (EDI), Pakistan lies at the low end in the region. With 25 million children aged 6-16 year out of school, Pakistan has the 2nd highest number of out-of-school children in the world. The drop-out rate of enrolled students is above 70% from Grade 1 to 10 in public sector schools. The implications for under financing

of education include - 55 million illiterates, about one third children of primary age are out of school, low enrolment, high dropout rate, low learning outcomes as revealed through studies by NEAS and ASER. Pakistan failed to achieve EFA and MDG targets, and continue to miss such goals. There are so many deficiencies in the education system and already discussed for each sub-sector in other chapters.

Education expenditures, as percentage of GDP, have ranged between 1.5 percent in 2001-02 to 2.14% in 2013-14, indicating a big gap in policy and practice. As a percentage of total expenditures at the national level, actual education expenditures have ranged within a band of 7.4% to 10% only.

At national level, most of the education budget relates to recurring heads, mostly containing salaries of teaching and non-teaching staff. It is barely enough even to sustain the system at the existing level, with no room for improvement of the system, having poor quality of learning achievements with high drop-outs, or to absorb out-of-school children.

A very small proportion of government's education budget is earmarked for development schemes every year (only about 8%). Moreover, most of the meager allocated development budget is not utilized due to different factors, including poor management at different levels. For the year 2012-13, development expenditures was only 5% of the total education budget in Punjab, 6% in Sindh; 9% in Balochistan and 22% in Khyber Pakhtunkhwa. Moreover, the utilization of the meager development budget allocation for 2012-13 was only 23% for Punjab, 41% for Sindh, 72% for KP and 82% for Balochistan.

According to many research studies conducted on education budget in the recent past, low utilization of allocated development budget has become a common practice. It also indicates gaps in financial management at different levels. Therefore, the question is not only about finding more resources for education sector but also better and more efficient use of the allocated meager resources.

Expenditure on education by other countries: The expenditure on education by other countries of the region is much greater as compared to Pakistan in terms of percentage of their GDP. According to Pakistan Economic Survey 2015-16, the expenditure on education is 4.6% of GDP by Afghanistan, 6% by Bhutan, 5.2% by Maldives and 3.8% by India. According to EFA Global Monitoring Report 2016 a large number of less developed countries of the world spend much more than 4% of their GDP on education (Annex-2).

External Finance : Domestic spending is the most important source of funding to education sector in Pakistan. Foreign aid for education sector as a percentage of the total government budget has varied from 10% in 2002 to 7% in 2013 (OECD DAC). Even so, Pakistan is a significant recipient of bilateral and multilateral aid to education, and these funds are important for supporting the education system. A large number of donors are present in the country, making coordination very difficult, mainly due to their vested interests. Key donors are shifting from general budgetary support to projects via NGOs and international private companies for delivery, with management by results increasingly important to them. The impact of this approach, including on equity of education, has yet to be determined. Donor funds do not seem to be distributed in a way that reflects where most needs are within the country.

Foreign aid to education is stated to have been increased dramatically in absolute terms from \$20 million USD in 2002 to \$432 million USD in 2012 ([Annex-3](#)). Moreover, the country is amongst the top ten countries receiving aid to education. One potential reason for the relatively large amount of aid it receives may be that donor countries are keen to continue engagement for geo-political and security reasons.

Pakistan joined the Global Partnership for Education (GPE) in 2012. GPE has augmented the amount of international aid available for education by providing some additional funds, and is acting to coordinate some of the donors. Following country level consultations through the Local Education Group (LEG), GPE has allocated funding for projects in Sindh (\$66 USD million) and Baluchistan (\$34 USD million), on the basis of educational outcomes and financing needs. The World Bank is set to scale up funding for Punjab Education Foundation's (PEF) Assisted Schools, a program where low fee private schools are subsidized to make education services free at the point of delivery. DFID is funding access to finance initiatives for low fee private schools on a large scale. However, promotion of fee-charging schools as a matter of policy is interpreted to be a violation of the right to education. Subsidization of private schools builds capacity of school owners, not of the education system to deliver in the long run, and is not sustainable.

Private sector contribution: Private sector is supporting the education in Pakistan by accommodating more than 38.7% of the total students' enrolment in the country. Private sector manages 30.8% of total institutions with 48.96% of total teachers in the country, while providing better quality of education as compared to quality of education in public sector. The expenditure on education sector incurred by private sector is not documented, thus it is not available. However, it can be estimated to some extent, on the basis of unit costs at different levels, in public sector. On the similar assumptions, the private sector is spending not less than Rs 377 billion on 38.7% of total enrolment, excluding tuition and other fees, uniform, books, stationary and transport, etc., provided by the households (as compared to public sector spending of Rs 598.3 billion on 61.3% of total enrolment) ([Annex-4](#)).

The household expenditure incurred by parents is also estimated to be much more than Rs. 377 billion, including but not limited to, tuition and other fees, uniform, books, stationary and transport, etc., and it should be considered as expenditure on education at national level.

5. Issues and challenges in financing

There are a number of issues and challenges related to financing of education in Pakistan. The Education Sector in Pakistan suffers from insufficient financial input, low levels of efficiency for implementation of programs, and poor quality of management, monitoring, supervision and teaching. Despite some improvement in different education indicators, Pakistan has not kept pace with other countries, and so ranks among the world's worst performing countries in education. Many of the identified bottlenecks are linked to insufficient spending, particularly in districts where challenges are greatest.

The budget allocations for the education sector are uneven and inadequate, especially across the provinces and districts. Given the importance of teachers' salaries, salary related

expenses make up the majority of the education budget. This leaves little funds for non-salary expenses, thus no room for improvement of the system. Furthermore, access to non-salary funds is complicated.

Most of the funds for education sector in Pakistan are provided by the federation to the provinces out of federal revenues, which are distributed to the provinces under the National Finance Commission award. The provincial revenues constitute a small percentage. The districts receive the money through the Provincial Finance Commission award. The capacity of the districts to mobilize funds is even more constrained.

Adequate education sector budget allocation is crucial for ensuring proper implementation of various policy provisions. Education sector in Pakistan has been starving in the past due to low funding and poor management. The budget allocations are not enough to meet the urgent educational needs including minimal infrastructure, quality teachers, learning materials, physical facilities, supervision and management to ensure acceptable quality with equity. There is a high commitment but low spending on education, indicating a big gap in policy and practice. Major issues which are relevant in this context include, insufficient allocations compared with the actual needs, untimely fiscal flow, wastage, high administrative expenditure, inadequate engagement of legislature and other stakeholders in the process, and lack of transparency.

Different research studies indicate that the prescribed budget rules are not fully followed by many Districts, particularly the budget calendar. In practice, the budget making process is initiated in some of the districts in May and to be completed in hast before the end of June. The budget rules are not fully implemented because of a range of political constraints, capacity issues and bureaucratic inefficiencies. As a result, several problems are reported.

The deadlines set in the Budget Calendar are often ignored, which results in long delays in identification of development projects, preparation of estimates or proposals, and obtaining timely technical sanctions or finalization of draft budgets. These delays subsequently not only slow down but derail the entire development process. Draft budgets are usually not ready in time and are not presented in time.

The draft budgets are not easily accessible to the general public, which limits opportunities for public participation. This is partly because of the so called technical nature of budget documents. Stakeholders are not fully and effectively consulted in the process of identifying and prioritizing needs and new development projects.

Development funds are distributed among various Union Councils and, since the available funds are limited, very few and small projects can be implemented that sometimes require several years to complete. This impedes the implementation and completion of development projects within the stipulated timeframe.

Weak governance in financial management persists as a serious challenge, including allocations, expenditures, processes, procedures, financial management, accountability, etc. In order to resolve these serious issues, it is important to recommend the given policy provisions and actions.

Many other important issues related to financing of education can be highlighted such as injustice in allocation of budget amongst different sub-sectors of education. For example Early Childhood Education (ECE), literacy, technical education, etc., are deprived and ignored.

Most of the foreign assistance for education sector in Pakistan is utilized by the donors themselves with little or no involvement of the government, through their own project mode and not through budgetary support to the government. The provisions of Paris Declaration on Aid Effectiveness (Ownership, Harmonization, Alignment, Managing for Results and Mutual Accountability) 2005 and Accra Agenda for Action (AAA) 2008, and Recommendations of United Nations Participation in 2011 Paris Declaration Monitoring Survey 2011, are not honored and followed. Necessary mechanisms does not exist for effective utilization of foreign assistance by donors and NGOs in line with Paris Declaration on Aid Effectiveness and AAA. Country ownership is the key for harmonization with country policy and plans for effective utilization of foreign assistance in line with the Paris Declaration and Accra Agenda for Action.

Private sector is supporting the education in Pakistan by accommodating more than 38.7% of the total students' enrolment in the country. Private sector manages 30.8% of total institutions and 48.96% of total teachers in the country, while providing better quality of education as compared to public sector. The expenditure on education sector incurred by private sector is not documented (building / rent, administration, management, teachers, furniture, fixtures, teaching-learning materials, utilities, study tours, etc.). Thus such vital information from the large size private sector, it is not available. Necessary database does not exist at any level.

The household expenditure on each student at different levels of education includes, tuition & other fees, books and text books, stationary, uniforms, shoes, transport to & from school, lunch, health care, etc. It is a sizable amount per student per year and accumulates to billions of Rupees at national level. The necessary database does not exist at any level.

6. Rationale / justification & need for policy interventions

As mentioned above and different Chapters of the document, the existing level of education funding is too little even to sustain the existing education system thus there is no room for its improvement. Reference is again made to the need of enhancing education budget (Annex-5) proportionate to the unmet needs of millions of out of school children, high dropout rates, low learning outcomes, millions of illiterate people and as a whole, poor education indicators in Pakistan. Less than 10% of total education budget is allocated for development whereas manifold resources are needed to achieve the targets committed by Pakistan.

The recent research studies also highlight several aspects of the budget making process and seek serious policy attention to make it, among others, transparent and participatory. It confirms that across districts budget allocations for the education sector are uneven, inadequate and annual increases are, at best, marginal in real terms. Salary-related expenses are predominant in district education budgets, allowing limited funds for non-salary expenditures essential for maintenance and development of the system. Pronounced disparities exist in education indicators, among and within districts (Annex-6). Poverty is due to illiteracy and illiteracy is due to poverty. The recent Multidimensional Poverty Index report has also recommended enhanced

financial allocations for education sector (Annex-7). Analysis of enrolment data shows that there was no increase in class-wise enrolment during the past decade(Annex-8).

In order to resolve the issues briefly described above and in different Chapters of the draft education policy, it is imperative to recommend various policy provisions and actions relating to financing of education in Pakistan.

7. Goals, objectives and targets

- a) To make available financial resources required for making Pakistan a literate and educated nation, human resource development for knowledge economy, to improve learning environment in schools, and enhance literacy level etc.
- b) Increased investment in education. Allocation of 4% of GDP for education and training.
- c) Allocation of 25% of National budget for education sector.
- d) Allocation of 45% of educational budget for primary education, 4% of education budget for adult literacy and non-formal education, 1% for Special and inclusive education, and similarly a specific percentage for all other sub-sectors of education.
- e) Allocation of at least 25% of educational budget for development projects and programmes, including 1% of the education budget for regular monitoring and evaluation.
- f) Provision of adequate funds for free and compulsory education in compliance with the provisions of Article 25(A).
- g) Simplified procedures for releases and expenditure. Improved absorptive capacity of the system.
- h) To create and regularly update financial data base for each sub-sector of education. Financial data base will include detailed data on access, quality and statistics.
- i) Introduction of school based and enrolment based budgeting.
- j) Making education budget, free from all types of cuts, non-lapsable and non-transferable.
- k) Introduction of financial reforms in education & training sector, to relax the rigid rules, regulations and simplify the tedious procedures and processes to ensure on time releases and optimum utilization of education and training budget.
- l) Substantively improved absorptive capacity of the system.
- m) Mobilization of resources and generation of additional revenue through various programmes projects and activities.
- n) Development and installation of proper mechanism to persuade and enforce International Development Partners to provide assistance for education sector in Pakistan in line with

the Paris Declaration on Aid Effectiveness 2005 (to scale up more effective aid, Ownership, Harmonization, Alignment, Results, Monitor & Evaluate implementation using country level mechanisms and Mutual Accountability for results, etc..) and Accra Agenda for Action 2008 to accelerate and deepen implementation.

8. Policy provisions to achieve the goals, objectives and targets;
 - i. Accelerated enhanced funding, gradually increasing education budget allocation to 4% of GDP by the year 2025, shall be provided.
 - ii. At least 25% of National budget shall be allocated for education sector.
 - iii. 45% of educational budget shall be allocated for primary education, 4% of education budget for adult literacy and non-formal education, 1% for special and inclusive education, and similarly a specific percentage for all other sub-sectors of education.
 - iv. Non-salary budget allocations shall be increased to 25% of education budget, including 1% of the education budget for regular monitoring and evaluation.
 - v. Adequate funds shall be provided for free and compulsory education in compliance with the provisions of article 25(A).
 - vi. Fair equitable and needs-based allocation of education budget will be ensured.
 - vii. Education budget shall be made, free from all types of cuts, non-lapsable and non-transferable
 - viii. Procedures for releases and expenditure, especially for development budget shall be simplified. Absorptive capacity of the system shall be improved through simplified procedures and regular physical and financial monitoring and evaluation.
 - ix. The Budget Calendar shall be strictly followed by the district governments. In particular, the time lines, provisions relating to stakeholder consultations, timely completion of proposals, technical sanctions and presentations of draft budgets.
 - x. Greater need based provisions shall be made for schools and that the disparity in the numbers of educational institutions for boys and girls shall be reduced.
 - xi. **Quality:** The quality of education shall be improved through various new policy interventions, implemented through need based enhanced budget allocations.
 - xii. Performance based and out-put driven budgeting, instead of input driven budgeting shall be introduced.
 - xiii. **Governance and Management** : Financial management shall be improved at all levels through different interventions.
 - ~~xiv.~~ **Community involvement:** Additional resources shall be materialized through community involvement. The community involvement shall be increased especially in

- need assessment, education process, preparation of need based development schemes, its implementation, monitoring and evaluation, etc. Role of SMCs, PTAs, School Councils, etc., shall be revitalized.
- xv. **Decision making** (centralization and decentralization): Financial management shall be de-centralized at different levels.
 - xvi. **Coordination and communication**: Coordination among different Departments at provincial and District levels shall be enhanced (especially with Finance Department and Works Department involved in construction of school buildings, additional class rooms and other works, supply of furniture and equipment).
 - xvii. **HRD (Recruitment, Promotion, pay packages, capacity building)**: Capacity building of staff at different levels shall be done on regular basis, especially for optimal utilization of meagre funds allocated under development budget.
 - xviii. **Supervision**: Supervision and financial monitoring shall be carried out on regular basis especially to provide invaluable guidance for improved budgeting and expenditure procedures and practices.
 - xix. **Research** : Specific funds shall be allocated for research studies. Research studies shall be conducted by different government and non-government organizations, especially to highlight the bottlenecks in education financing, management, monitoring & evaluation and propose remedies.
 - xx. The research reports shall furnish details of the annual education budget making process, its implementation and effectiveness, at different levels of government. The research studies shall find flaws occurring in the budget making process and to make the process open and participatory. The views of civil society, teachers, parents, students and communities regarding needs and priorities shall also be taken into consideration at different stages of the process.
 - xxi. Budget making process shall not be treated as a confidential process or document. Furthermore, development priorities shall be determined in an informed, transparent and fair manner in consultation with all the stakeholders. The Budget Calendar shall be followed by the district governments to ensure efficiency and timely public participation in the budget making process.
 - xxii. **Financial Database creation**: Detailed financial database at all levels, national, provincial, district and sub-district shall be created, reported, disseminated and up-dated regularly. It will include detailed information about private sector as well as household expenditures at different levels and geographical areas.

- xxiii. **Foreign Assistance:** Proper mechanism shall be prepared and installed for International Development Partners to provide assistance for education sector in Pakistan in line with the Paris Declaration on Aid Effectiveness 2005 (insuring scale up for more effective aid, local country ownership, harmonization, Alignment, Results, Monitor & Evaluate implementation using country level mechanisms and Mutual Accountability for results) and Accra Agenda for Action 2008 to accelerate and deepen implementation of Paris Declaration. The mechanisms shall be developed and enforced for effective utilization of foreign assistance in line with Paris declaration and Accra Agenda for Action.

9. Implementation strategies of Policy provision

An implementation plan including detailed costing for implementation of key areas and main policy provisions shall be prepared, implemented and monitored & evaluated. Financial plan for implementation of various policy provisions for each province and federating unit shall be prepared, implemented, monitored and evaluated.

10. Appendices:

Annex-1 : Past Trends of Education Expenditure.

Annex-2 : Countries in South Asia and Sub-Sahara Africa spending more than 4% of GDP.

Annex-3 : Foreign Assistance for Education

Annex-4 : Size and Share of Private Sector in School Education in Pakistan

Annex -5 : Future Projections of Expenditure on Education

Annex-6 : Pronounced disparities in education indicators, among and within districts.

Annex-7: Absolute Poverty Ratio in Pakistan, hampering education sector.

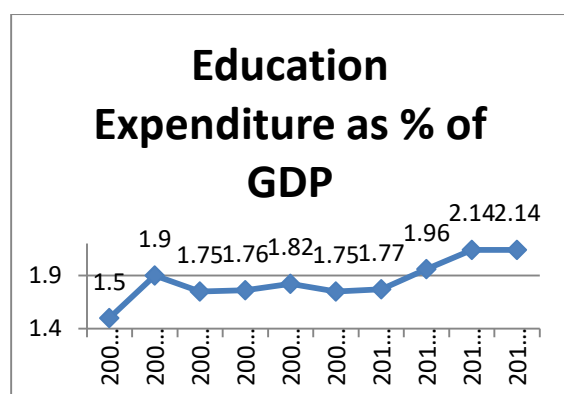
Annex-8: No increase in class-wise enrolment during the past decade

ANNEX – 1

Past Trends of Education Expenditure

Education Expenditure as % of GDP:

During the past decade, Pakistan's education expenditure as percentage of GDP has varied between 1.5% and 2.1%.



Expenditure on Education as % of GDP 2006-07 to 2013-14

Year	(Rs. In Million)			As % of GDP
	Current	Development	Total Expr.	
2006-07	130,313	31,771	162,084	1.75
2007-08	155,622	32,034	187,656	1.76
2008-09	197,723	42,655	240,378	1.82
2009-10	219,933	39,592	259,525	1.75
2010-11	276,239	46,572	322,811	1.77
2011-12	330,228	63,295	393,523	1.96
2012-13	428,944	50,909	479,853	2.14
2013-14	453,735	83,863	537,598	2.14

Source: Pakistan Economic Survey 2014-15. P. 179

Share of Education in Total Expenditures: As percentage of total expenditures at the national level, actual education expenditures have remained more or less constant for the past three years, remaining below 10%. For the provinces, this percentage i.e. education expenditures as percentage of total provincial expenditures, is higher i.e. roughly around 16% to 34%, in 2012-13.

Year / Area	2010-11			2011-12			2012-13		
	Edn. Exp	Total Exp	% of Total	Edn. Exp	Total Exp	% of Total	Edn. Exp	Total Exp	% of Total
Punjab	106,033	482,859	21.96	166,830	602,856	27.67	196,086	690,882	28.38
Sindh	52,870	310,212	17.04	47,213	412,283	11.45	98,425	404,253	24.35
KP	39,138	173,431	22.57	67,381	225,801	29.84	84,458	248,088	34.04
Balochistan	7,380	110,260	6.69	23,981	115,138	20.83	29,171	183,353	15.91
Federal	48,482	2,441,658	1.99	48,151	3,072,875	1.57	71,713	3,441,016	2.08
National	253,903	3,518,420	7.22	353,556	4,428,953	7.98	479,853	4,967,592	9.66

Source: Office of the Controller General Accounts (CGA), 2013, Govt. of Pakistan.

Distribution of Education Expenditures by Sub-Sectors : In 2012-13, national statistics show that pre and primary education expenditure was Rs 178,255 million i.e. the highest share (37%) in education expenditure, followed by Rs 138,512 million for secondary education (29%) and Rs 106,165 million for tertiary education (22%) sectors (Table 2.3 and Chart 2.1 of EFA Review 2015).

National Education Expenditure by Sub-Sectors (Rs. In Million)

Year / Item	2010-11	2011-12	2012-13
EDUCATION	253,903	353,556	479,853
Primary Education	100,518	132,150	178,255
Secondary Education	77,828	108,648	138,512
General Universities, Colleges & Institutes	60,365	69,453	82,616
Teacher & Vocational Training	8,886	9,572	10,484
Others	6,306	33,733	69,986

Source: Office of the Controller General Accounts (CGA), 2013, Govt. of Pakistan.

Distribution by Development vs. Non-Development Budget: The budgetary allocation to education sector has remained static around 2 % of GDP for the past decade, with a big chunk (about 92%) being spent on recurrent heads mainly salaries, leaving a small amount (about 8%) as development budget for quality enhancement such as provision of school facilities, teachers’ training, curriculum development, monitoring and supervision of education

Table 2.4: Distribution of Education Expenditures (actual) by Current and Development Heads (2012/13)

	Actual Expenditures (Rs m)			Distribution of Actual Education Expenditures	
	Current	Development	Total Expend.	%Current	%Development
Punjab	186,763	9,323	196,086	95%	5%
Sindh	92,697	5,728	98,425	94%	6%
KP	65,856	18,602	84,458	78%	22%
Balochistan	26,601	2,570	29,171	91%	9%
Federal	57,027	14,686	71,713	80%	20%
National	428,944	50,909	479,853	89%	11%

Source: Office of the Controller General, Accounts (CGA), 2013, Govt. of Pakistan

**Expenditure on Education in South Asia
and Sub-Sub-Sahara African countries,
above 4 % of GDP.**

Country	% of GDP	% of Total Budget
Bhutan	5.9	17.8
India	3.8	14.1
Iran,	3	19.7
Maldives	5.2	15.3
Nepal	4.7	22.1
Benin	4.4	22.2
Burkina Faso	4.5	19.4
Burundi	5.4	17.2
Cabo Verde	5	15
Comoros	5.1	18.5
Côte d'Ivoire	4.7	20.7
Ethiopia	4.5	27
Ghana	6	21.7
Malawi	6.9	16.3
Mali	4.3	18.2
Mauritius	5	20.9
Mozambique	6.5	19
Niger	6.8	21.7
Rwanda	5	16.6

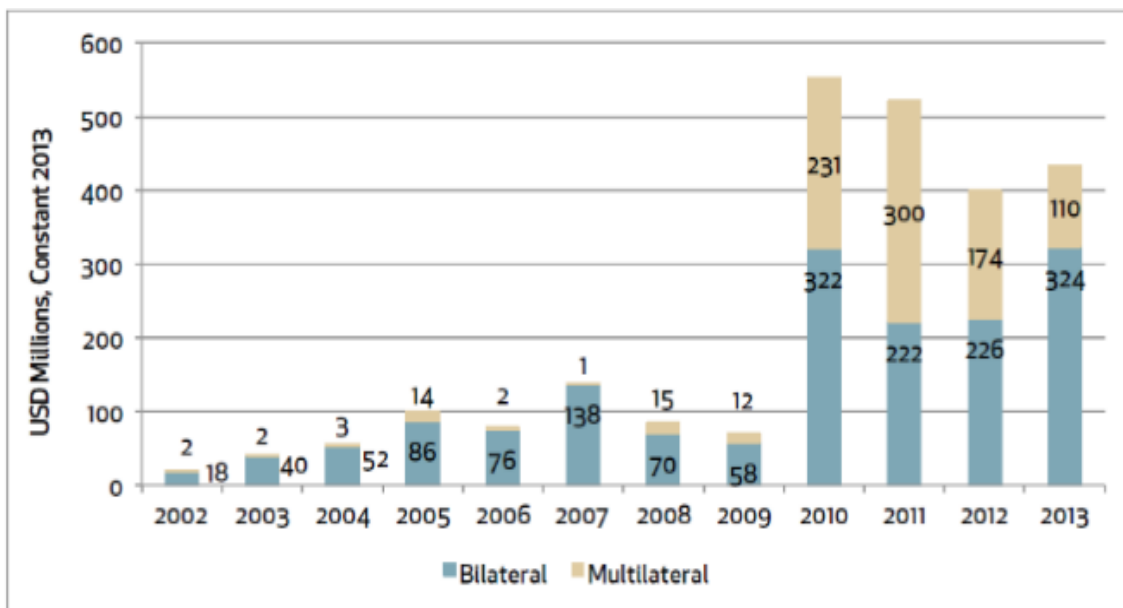
Source: EFA Global Monitoring Report 2016

Foreign Assistance for Education Sector

Foreign assistance from International Development Partners, for education sector in Pakistan, as a percentage of the total government budget has varied from 10% in 2002 to 7% in 2013 (OECD DAC). Foreign assistance to education has increased dramatically in absolute terms from \$20 USD million in 2002 to \$432 USD million in 2012.

Most of the foreign assistance for education sector in Pakistan is utilized by the donors themselves with little or no involvement of the government, through their own project mode and not through budgetary support to the government. The provisions of Paris Declaration for aid effectiveness and Accra Agenda for Action are not honored and followed.

Figure : Trends in aid to education of multi and bilateral aid (2002-13)



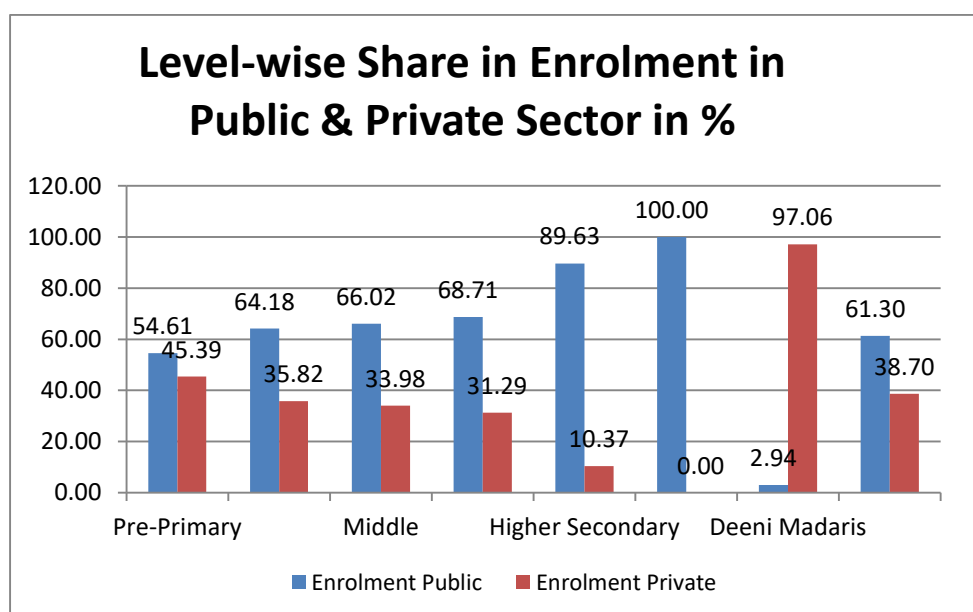
Source: OECD-DAC

Size and Share of Public & Private Sector in School Education in Pakistan

Public sector is looking after 61.3 percent of total students while private sector is looking after 38.7 percent of total students in Pakistan. The public sector is spending about Rs. 600 billion for education of 61.3% of total students. Using the same unit costs at different levels, it is estimated that private sector is spending not less than Rs. 377 billion on the education of 38.7% of total students in the country, excluding tuition and other fees, uniform, books, stationary and transport, etc. Such expenditure incurred by parents is also estimated to be more than Rs. 377 billion, and should be considered as expenditure on education.

Table: Size and Share of Public & Private Sector in School Education in Pakistan

Type / Level	Enrolment			Institutions			Teachers		
	Public	Private	Total	Public	Private	Total	Public	Private	Total
Pre-Primary	4,590,625	3,816,011	8,406,636		401	401		2187	2,187
Primary	11,279,057	6,295,792	17,574,849	129,092	17,093	146,185	330024	83457	413,481
Middle	4,039,815	2,079,382	6,119,197	16,489	25,658	42,147	132010	230570	362,580
High	1,948,292	887,034	2,835,326	12,178	17,696	29,874	216452	273136	489,588
Higher Secondary	1,216,157	140,668	1,356,825	1,710	3,320	5,030	48008	65442	113,450
BEC Schools	575,384		575,384	13,094		13,094	13094		13,094
Deeni Madaris	52,828	1,744,128	1,796,956	388	12,852	13,240	1813	56294	58,107
Sub-Total :	23,702,158	14,963,015	38,665,173	172,951	77,020	249,971	741,401	711,086	1,452,487
<i>Source: NEMIS 2012-13. Note: Public Sector figures includes Other Public.</i>									
Share in % :	61.30	38.70	100	69.19	30.81	100	51.04	48.96	100



Future Projections of Proposed Expenditure on Education

The actual expenditure by public sector on education during 2006-07 to 2014-15 and future projections of GDP and gradually enhancing education expenditure from 2015-16 to 2024-25, are given below.

Expenditure on Education as % of GDP 2006-07 to 2013-14

(Rs. In Million)

Year	Current	Development	Total Edn.Expr.	GDP (mp)	GDP Growth	As % of GDP
2006-07	130,313	31,771	162,084		Rate (%)	1.75
2007-08	155,622	32,034	187,656	10,284,000		1.76
2008-09	197,723	42,655	240,378	13,199,707	28.35	1.82
2009-10	219,933	39,592	259,525	14,886,996	12.78	1.75
2010-11	276,239	46,572	322,811	18,276,440	22.77	1.77
2011-12	330,228	63,295	393,523	20,046,500	9.68	1.96
2012-13	428,944	50,909	479,853	22,385,657	11.67	2.14
2013-14	453,735	83,863	537,598	25,168,805	12.43	2.10
2014-15	499,982	98,333	598,315	27,493,105	9.23	2.20
2015-16 *	230,880	32,823	263,703	29,597,905	7.66	2.20

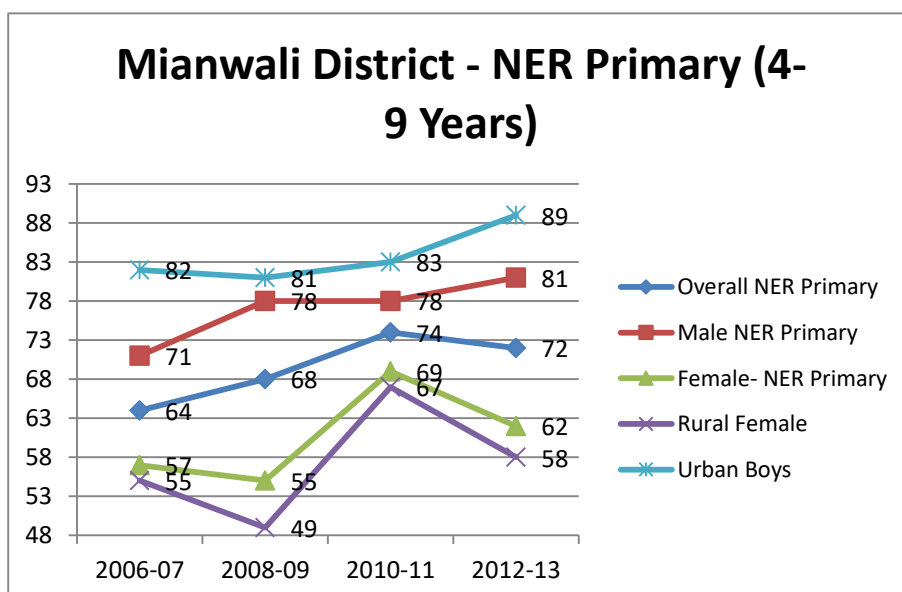
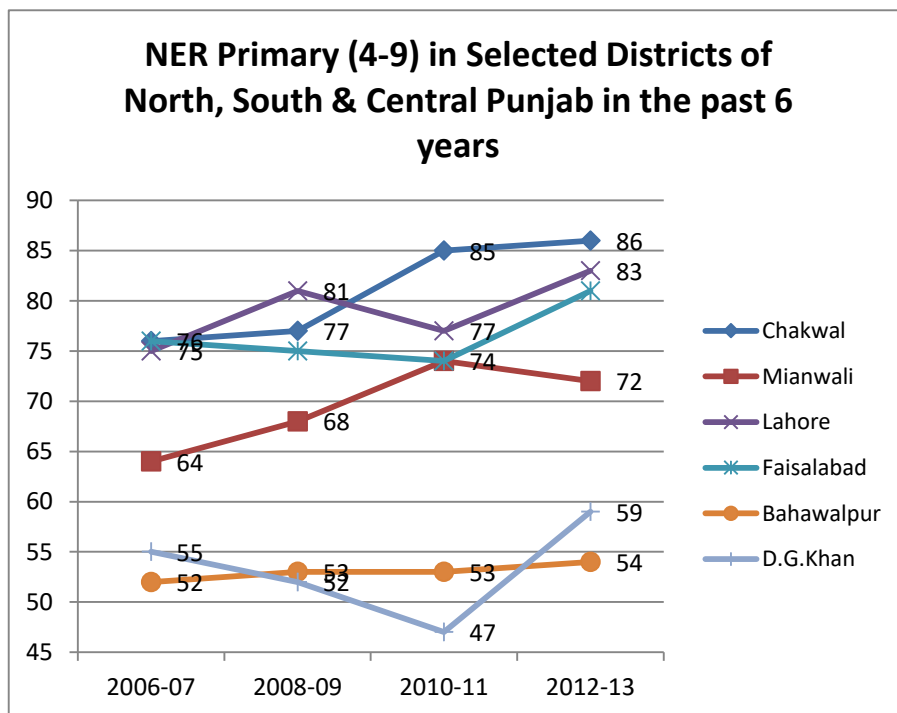
* = Jul-Dec. Source: Pakistan Economic Survey 2015-16. P. 175

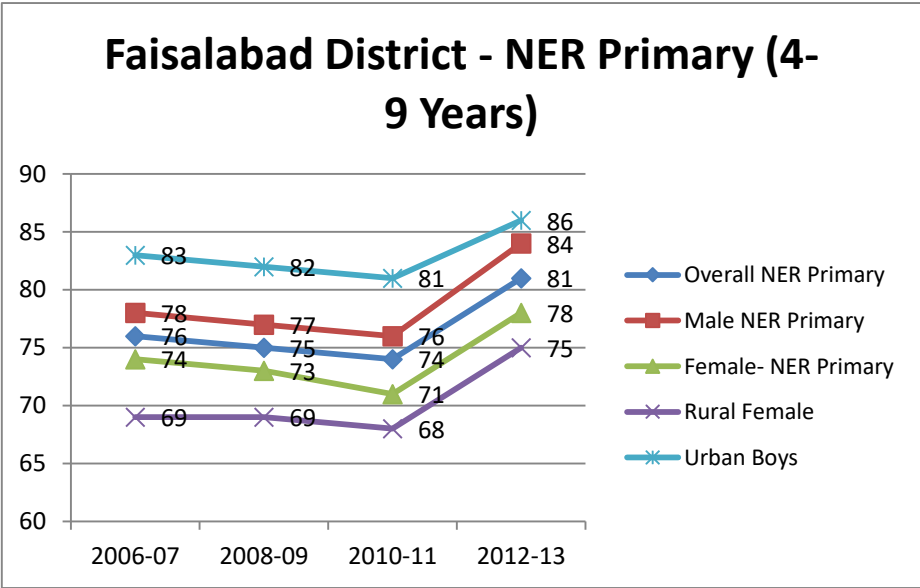
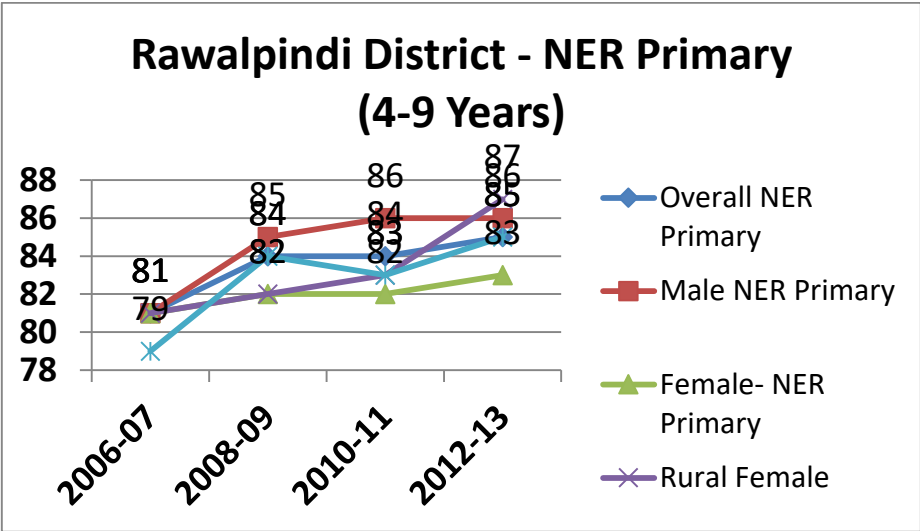
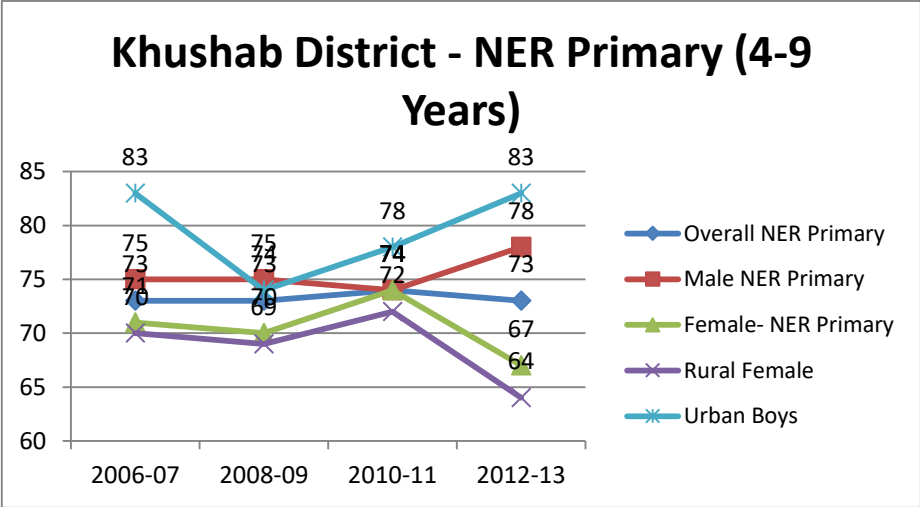
Future Projections of GDP (mp) and Education Budget as % of GDP

Year	Current	Development	Total Edn.Expr.	GDP (mp)	GDP Growth	As % of GDP
2015-16	546,969	104,185	651,154	29,597,905	10.00	2.20
2016-17	643,145	131,728	774,873	32,557,696	10.00	2.38
2017-18	751,796	165,028	916,825	35,813,465	10.00	2.56
2018-19	874,328	205,089	1,079,418	39,394,812	10.00	2.74
2019-20	1,012,289	253,072	1,265,361	43,334,293	10.00	2.92
2020-21	1,167,383	310,317	1,477,699	47,667,722	10.00	3.10
2021-22	1,341,484	378,367	1,719,851	47,667,722	10.00	3.28
2022-23	1,536,656	459,001	1,995,657	57,677,944	10.00	3.46
2023-24	1,755,163	554,262	2,309,425	63,445,738	10.00	3.64
2024-25	2,093,709	697,903	2,791,612	69,790,312	10.00	4.00

Disparities in access among Regions, Urban-Rural, Male-Female

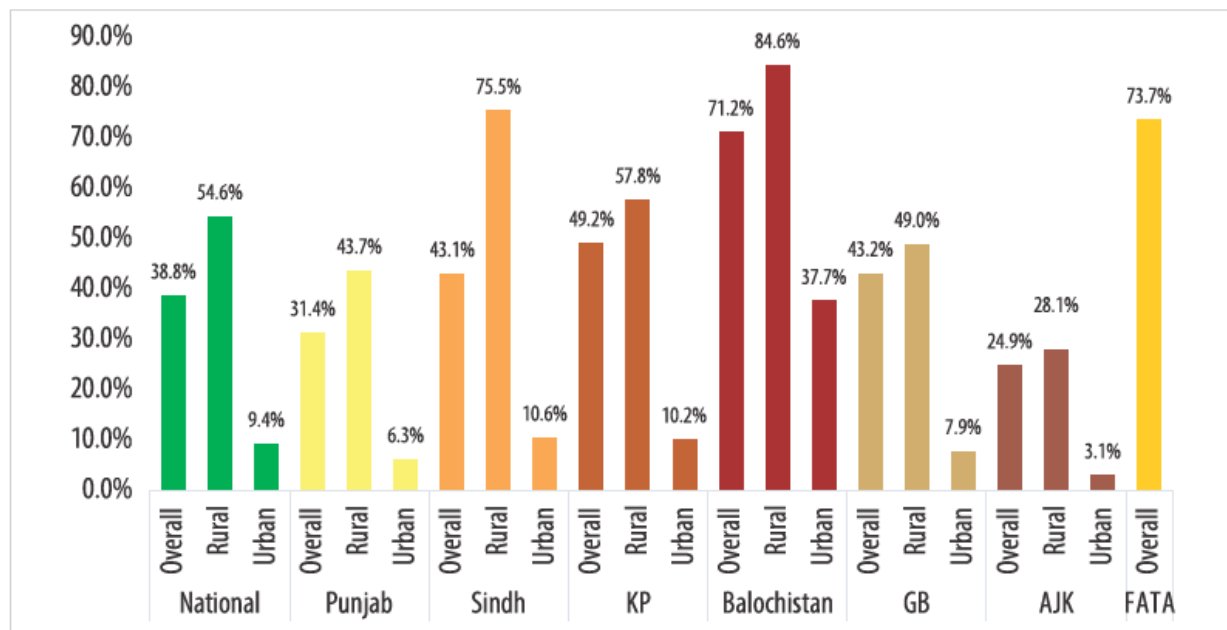
As a result of low financial inputs and some other factors, pronounced deficiencies and disparities exist even after many decades of independence, among regions, urban-rural settings, male-female aspects. The following NER graphs indicate low levels of access with pronounced disparities, to be redressed through enhanced funding of education sector in Pakistan and implementation of the proposed policy provisions.





Absolute Poverty Ratio in Pakistan

There are stark regional disparities in poverty in Pakistan, as evident from the following graph. It is one of the factors hampering education sector and in turn socio-economic development of the country. The poverty in rural areas, containing most of the population of the country, is much higher (84.6% in Balochistan, 75.5% in Sindh, 57.8% in KP, etc). The access and quality of education in poor rural areas is also poor (PSLM, NEAS, ASER).



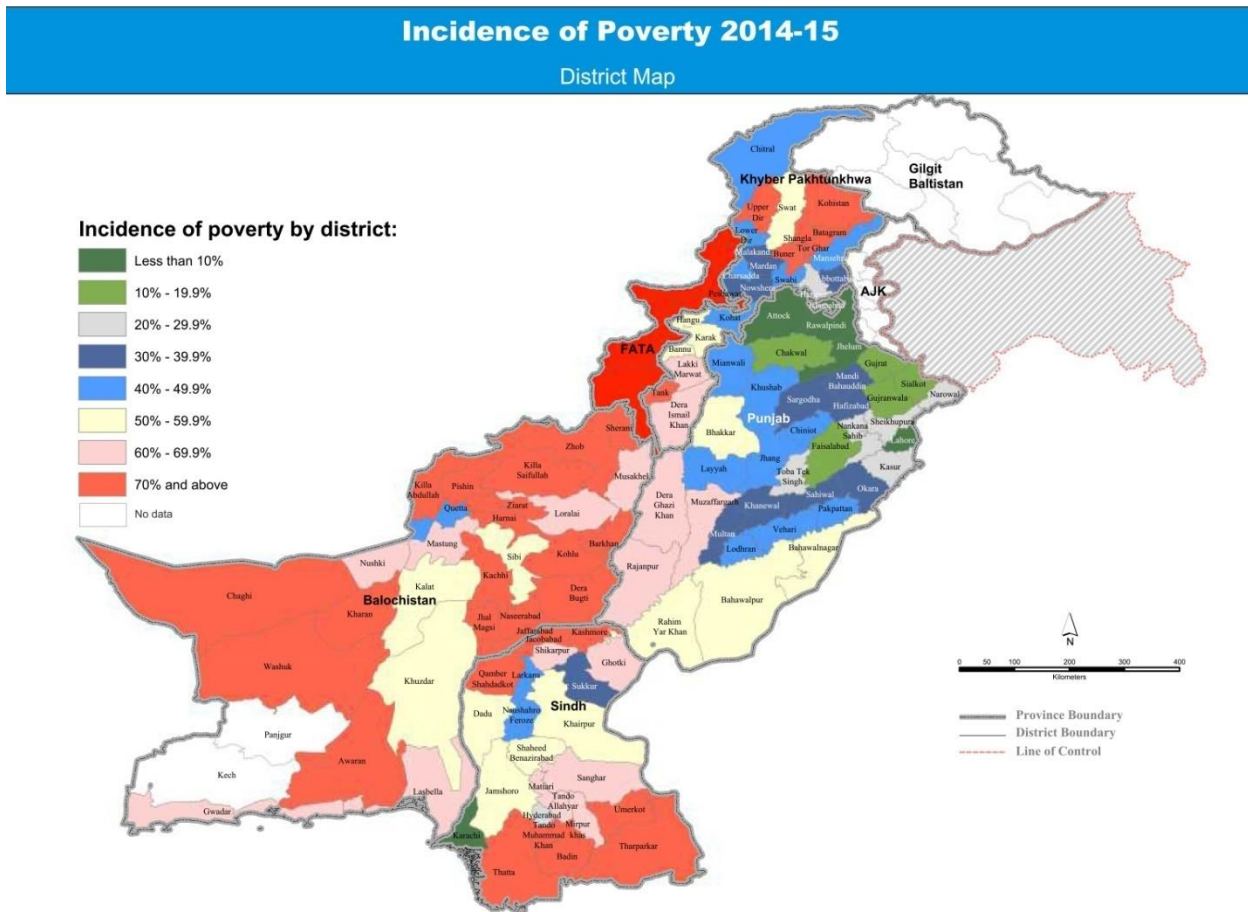
[Source: Multidimensional Poverty Index, Ministry of Planning, Development and Reforms GoP-UNDP, June 2016]

At the district level, absolute poverty headcount ratio is much more pronounced. In relative terms, only a few districts were the best performers in the past years. On the other hand, some districts have experienced an increase in their poverty incidence. In absolute and relative terms, the districts of Umerkot, Harnai, Panjgur, Killa Abdullah and Kashmore have witnessed the highest increase in incidence of poverty.

Multidimensional Poverty Index in Pakistan (2016) report published by Ministry of Planning, Development and Reforms, Government of Pakistan and UNDP, has used education (years of schooling, child school attendance and education quality), health and standard of living as main dimensions for calculating MPI. Among others, it has used the following weights to PSLM indicators related to education sector.

Dimension	Indicator	Deprivation Cut-off	Weights
Education	Years of schooling	Deprived if no man OR no woman in the household above 10 years of age has completed 5 years of schooling	1/6 = 16.67%
	Child school attendance	Deprived if any school-aged child is not attending school (between 6 and 11 years of age)	1/8 = 12.5%
	School quality	Deprived if any child is not going to school because of quality issues (not enough teachers, schools are far away, too costly, no male/female teacher, substandard schools), or is attending school but remains dissatisfied with service	1/24 = 4.17%

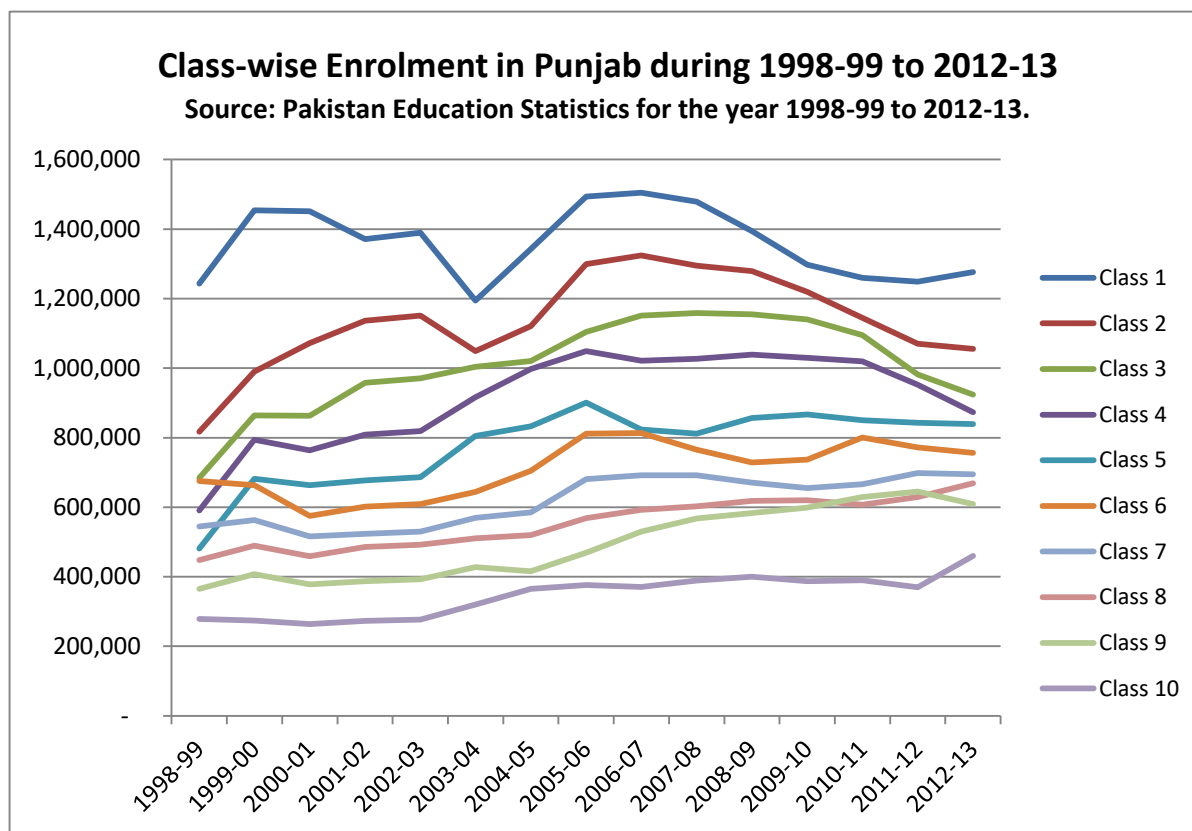
MPI report recommended the Federal and Provincial Governments in targeting poverty through improved policy reform and public spending.



Among and within districts much more pronounced disparities in poverty exist, requiring immediate action including increased funding for education, improved financial management and other aspects proposed in the draft education policy provisions.

No increase in enrolment over the past decade

There is no or little increase in enrolment if the official data is analysed for the past 15 years, as evident from the following graph for Punjab, stated to be the best among the provinces. The trend is negative if the year 2005-06 is considered as the base year.



This is overall provincial situation. Among and within districts pronounced disparities exist, requiring immediate action including increased funding, improved financial management and other aspects proposed in draft education policy provisions.

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(4)	Early Childhood Education (ECE) / ECED / ECCD	Dr. Muhammad Saleem	Mr. Arshad Saeed Khan
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