

**Retention and Transition Patterns
of Children at School Education
1995-96 to 2004-05**

S I N D H

Dr. Pervez Aslam Shami
Izaz-e-Fazeelat
Mirza Tauhiduddin Ahmad
S. Dawood Shah

Academy of Educational Planning and Management
Ministry of Education
Islamabad

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Dr. P.A. Shami, Mirza Tauhidudin Ahmed and Dawood Shah

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PREFACE

Development, expansion and qualities of education is, and has always been remained a flashing issue in the developing countries. The basic learning needs for toddlers to onward are multifacet and varied, requires multi-sectoral strategies for development and thereby actions to achieve the targeted goals. Such efforts need financial and technical resources for way, forward to achieve quality in the system.

Rapid advancement in the field requires planned strategies, which can enhance educational activities and then continue efforts aided by better analytical information. Incomplete data hampers the decision-making process it may reflect that the efforts made in this field did not prove effective as the available data fail to provide the realistic guidance to achieve the required developments in education. The policies based on the incomplete and invalid data can not achieve the envisaged goals. One of the crucial factors causing these failures and short falls in decision-making is owed to deficiencies in the supply and utilization of relevant information.

The rapid expansion in education sector for the provision of basic education, some achievements, in terms of quantitative increase in primary school enrolment, has been achieved. However, there are about 0.6 million children (age group: 5-9 years) in Sindh who are out of school, this group will eventually be a cause of illiteracy in the province if no education facilities are provided for them. Keeping in view the present dropout rate which is about 53 percent this group swells up to about 2.6 million. Further, retention and dropouts of children have also been a major issue for educator and decision-makers. Little emphasis, relatively, has been laid on the performance, and efficacy of the education system.

However, the overall situation of educational development can be assessed through analytical approach. Adequate measures and relevant indicators may help to identify the weak and thrust areas, which can be improved through the required inputs. The effective monitoring and evaluation of education system is imperative so that gender gap could be narrowed down by providing equal access and participation in education. Out of school children could be accommodate, survival in the system be maintained and while developing education indicators it is important for policy formulation and decision-making furnishing relevant valid information so that they may assess as to how much the education system is accomplishing its goals and can search ways and means to improve the state of the act.

Taking into account the prevailing situation, the Ministry of Education under the directives of the Federal Minister for Education is conducting a National Education Census covering all types of educational institutions. This would help to develop and strengthen a database in wide spectrum which ultimately leads to develop a scientific culture of computing indicators for monitoring and evaluation in the country.

The policy-makers require accurate and valid information on specific aspects at various levels. They need information for diagnostic purposes because education administrators are often concerned with problems of implementation of

various development programs. Difficulties arise when adequate and relevant information in educational planning is not readily available. By using statistical models the information analyst can provide some what correct information to fill in the gaps.

The availability of data on repeaters has been an important issue both at national and international levels. In order to resolve this issue AEPAM resorted to the Grade Retention Model, which is considered the best tool for assessing the trend of retention of children at primary schools. Further more, this data analysis of data on the transition rate of students from grade to grade or from lower level to higher will helps the decision-makers and planners to identify the needs for opening new schools. To assess the real situation and to determine the patterns and flow of students from grade to grade and one level to the other this effort has been made adopting analytical approach. The outcome of this effort is this report which highlights a series of retention and transition patterns of school children have been developed by AEPAM at national and provincial levels.

The guidance of Dr. Syed Fayyaz Ahmed, Joint Education Advisor, Policy and Planning Wing, Ministry of Education has been a source of encouragement for us to move forward. The efforts made by Mirza Tauhiduddin Ahmed, Coordinator and Education Statstician in producing this useful document applying the Grade Retention Model are highly appreciable. The efforts of Ms. Fahmaeda Khanum, Research Officer in providing assistance for compilation and analyses are also hereby acknowledged. It would be injustice if the inputs of Mr. Akhtar Hussain, Computer Operator and Mr. Zulfiqar Ali Joya, Stenographer are not documented who have worked very hard for composing this document.

As a book of reference it is hoped that this document would be useful to researchers, education managers, planners and policy makers in their research work, in capacity building programmes and in decision-making.

Any comment and suggestion for improving this report would be appreciated and acknowledged.

Dr. P.A. Shami
Izaz-i-Fazeelat
Director General

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RETENTION AND TRANSITION PATTERNS OF CHILDREN AT SCHOOL EDUCATION 1995-96 TO 2004-05 SINDH

a. General Information

Area: 140, 914 Sq. Km

Proportion of areas total area: 17.7 Percent
Proportion of Pop. To total population: 23.1 Percent

Administrative Units

• Districts	:	22
• Tehsils/ Taluka	:	105
• Blocks	:	9025
• Villages	:	5871

Demographic Indicators

• Total Fertility Rate (TFR) Per 1000 Women	:	3.40
• Crude Birth Rate (CBR) per 1000 persons	:	26.1
• Crude Death Rate (CDR) per 1000 persons	:	7.4
• Life Expectancy	:	
Male	:	65.3
Female	:	65.6

Human Development Index (HDI), 2005

Total	:	0.540
Urban	:	0.659
Rural	:	0.456

Source: National Report on Human Development
Index (HDI), 2003

b. **School Education at a glance, 2004-05**

Population (in thousand):

Total	:	34,892	Female	16,544
Rural	:	16,894	Rural Female	8,009

Table 1. School age Population

Level	Total	
	(in thousand)	Female (in thousand)
Primary level (5-9) Years	4,415	2,133
Middle level (10-12) Years	2,313	1,089
Secondary level (13-14) Years	1,506	705

Source: National Institute of Population studies (NIPS), Islamabad

Table. 1a

Level	Rural	
	Total Rural (in thousand)	Rural Female (in thousand)
Primary level (5-9) Years	1,893	910
Middle level (10-12) Years	1,087	520
Secondary level (13-14) Years	732	346

Source: National Institute of Population studies (NIPS), Islamabad

Table 2. School Education Situation

Level		No. of Schools	Enrolment (in thousand)	Total
				No. of Teacher
Primary	Total	44,441	3,820	115,683
	Female	7,009	1,548	45,694
Middle	Total	4,727	847	33,513
	Female	804	358	23,769
Secondary	Total	3,446	420	67,885
	Female	507	176	42,004

Source: AEPAM. 2004-05, Pakistan School Education Statistics
Note: Mosque and Private sector schools included.

Table 2a.

Level		No. of Schools	Enrolment (in thousand)	Rural No. of Teacher
Primary	Total	37,176	1,790	59,910
	Female	5,572	611	10,409
Middle	Total	1,992	202	6,186
	Female	505	53	2,006
Secondary	Total	800	80	9,885
	Female	118	17	1,621

Source: AEPAM, 2004-05, Pakistan School Education Statistics
 Note: Mosque and Private sector schools included.

**Table 3 Comparisons of retention situation by gender and location
 Sindh Province
 2004-05**

Grades		Percentage		
		Total	Rural	Urban
I - III	Total	57.8	53.4	71.6
	Male	55.4	51.5	68.7
	Female	63.7	57.8	75.1
I - V	Total	47.2	43.3	59.2
	Male	42.4	39.6	67.6
	Female	58.1	53.4	52.4

**Table 4 Survival of children upto grade X Sindh Province
 1995-96 to 2004-05**

Gender	Total	Percentage	
		Rural	Urban
Total	21	10	41
Male	19	11	39
Female	25	8	44

Source: Cohort Diagrams

**Table 5. Literacy rates (10 year and above) by gender and location
Sindh Province
2001-02 and 2004-05**

Year	Urban			Rural			Percentage		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
* 2001-02	74	54	64	51	14	33	60	31	46
** 2004-05	80	62	72	56	18	38	68	41	56

Source: PSLM, FBS. 2004-05 Statistical Division

* PIHS Survey

** PSLM Survey

**Table 6. Adult literacy rates (15 years and above) by gender & location
Sindh Province
2001-02 and 2004-05**

Year	Urban			Rural			Percentage		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
* 2001-02	74	53	64	50	11	32	60	29	45
** 2004-05	80	59	70	54	14	36	68	38	54

Source: PSLM, FBS. 2004-05 Statistical Division

* PIHS Survey

** PSLM Survey

**Table 7. Transition of Children at different Levels of Education
Sindh Province
1995-96 to 2004-05**

Transition of Children from	Percentage		
	Total	Male	Female
* Primary School to Middle School	61	56	68
* Middle School to High School	101	102	100

Source: Cohort Diagrams 1a to 9a.

Table. 7a.

Transition of Children from	Percentage		
	Total	Male	Female
* Primary School to Middle School	35	37	28
* Middle School to High School	83	86	71

Source: Cohort Diagrams 1a to 9a.

Transition of Children from	Percentage		
	Urban		
	Total	Male	Female
▪ Primary School to Middle School	96	92	100
▪ Middle School to High School	111	114	107

Source: Cohort Diagrams 1a to 9a.

**Table.8 Budgetary Allocations
Sindh Province
2000-01 to 2004-05**

Year	Current	Development	Rs. in Million
			Total
2000-01	14210.290	1958.964	16169.254
2001-02	14455.606	1438.000	15893.606
2002-03	17713.122	2550.711	20263.833
2003-04	17337.124	1677.867	19014.991
2004-05	23241.596	2223.040	25464.636

Source: Budgetary Allocation for Education, 2004-05 Policy Planning and Wing Ministry of Education

EXECUTIVE SUMMARY

Sindh is a province with a total country population of (~ 34 Million) moving steadily towards the universalization of primary education (UPE) but unfortunately it has not moved at a pace it aimed at. In each policy and plan emphasis has been given but it could not achieve its targets due to various constraints although the importance and role of primary education for the socio-economic development can not be ignored but the rapid universal changes demands enlightened citizenry to meet the 21st century challenges.

The Sindh government is making all possible efforts and striving hard to promote the literacy situation and to achieve the universal primary education. In this endeavor, the government put forward a package entitled as Education Sector Reform (ESR), 2001-2004. Amongst other objectives of ESR, it aims at improvement in literacy rate, universalization of primary education and quality education enabling all citizens to reach their maximum potential.

Under the new system of decentralization of power, in Sindh Province the distribution of available resources will be spent for education segregated by gender, age, and region with respect to the needs of population to make an efficient and effective planning and management for the development of education system.

For effective planning and better management assessment, the importance and role of facts and figures can not be ignored. It was therefore imperative to examine critically the transition and the retention of children who are enrolled at primary level of education in Sindh Province using Grade Retention Model.

In Sindh Province, the school going children population of age group 5-9 years is about 4415 thousands, of which 2133 thousands are girls in the year 2004. Out of this Cohort a total of 3820 thousands children and 1548 thousands girls are enrolled in Primary schools. It indicates that 595 thousands children (both boys and girls) and 585 thousands girls are out of primary school. It is emerged that about 86.5 percent children are participating at primary school level of which about 72.6 percent are girls.

According to UNESCO, Basic education refers to education intended to develop basic learning skills(i.e. "3Rs" as well as some basic life skills necessary for the children to survive, to improve the quality of their lives and to continue learning). Life skills refer to the basic educational skills that human beings need for their survival and to develop their intellectual potential to improve the quality of their lives.

For increasing the retention of children, the government has started incentives like free text books, scholarship and cooking oil under World Food Organization Program in some sample schools.

The network of primary and secondary schools has considerably increases in the province, facilitating access to schools. The demand for school lover has increased rapidly due to social demand, accompanied by stiff competition to obtain better paid work. The government has committed itself in the development of education, particularly the primary education.

There are a number of issues confronting the education system. The rural areas, particularly in remote locations, are still deficient in education facilities. Similarly, parents in absolute poor economic status still resist sending their children to school. Girls participation in education is still low particularly in rural areas.

In order to address the various problems the government has stressed to focus o the following areas.

- Improving the quality of education
- Achieving universal primary education
- Increase girls participation and narrow down the gender gap.
- Improving curriculum to cater societal needs
- Increasing opportunities of education to out of school children
- Establishing strong liaison between public and private sectors involving community
- Improving teachers performance
- Adult literacy
- Technical education
- Control of Teachers absenteeism

DATA ANALYSIS AND FINDINGS

The Grade Retention Model which is an unsophisticated, but handy tool in all those situations where a planner wishes to assess the functioning of an educational cycle in the absence of repetition data. One does not know whether it is drop-out or repetition that stands behind the retention rates observed, one can only infer that very high repetition rates have distorted the flow of students.

In such a situation, it was therefore necessary to determine the extent of retention of children in the education system. In this regards, documents of National Education Management System (NEMIS), Academy of Educational Planning and Management, Islamabad were referred. Data for the years 1995-96 to 2004-05 by gender, grade and location was put for the statistical treatment for the province of Sindh.

Efforts are made to present this document as informative and simple as possible. Descriptive and too narrative approach is avoided in the analyses of data so that researchers and users may not feel difficulty.

Retention of children of grade I and III

- The retention rate of children (total) at primary cycle of education who entered in grade I and could be retained in grade III was about 58 percent. (Table.5)
- The retention rate of girls was better (about 64 Percent) as compared to boys (about 55 percent) between the same grades.

Retention of children between grades I and V

- The overall situation of retention of children across the grades I to V of primary cycle of education was emerged as 47 percent . This indicates that 53 percent children could not be retained and they detached themselves from the system. Since the repeaters data is not available, hence in its absence 53 percent can be termed as apparent dropout.
- The girls retention situation was ascertained across the same grades. It was noted that about 58 percent could be retained as compared to boys (42 percent).

Comparisons by location

- Across grades I and III, girls retention rate was about 75 percent in urban areas as compared to rural areas (58 percent) in 2004-05.
- In case of boys Retention rate was higher (about 69 percent) in urban areas as compared to rural areas i.e. about 52 percent between grades I and III in 2004-05.
- Overall situation of urban areas was better (72 percent) in grades I and III as compared to rural areas (53 percent) in 2004-05.
- Overall retention of children across grades I and V in urban areas was much better (59 percent), it was 43 percent in rural areas in 2004-05.

Comparisons by gender

- Girls retention rates between the grades I and III was slightly higher
- (75 percent) as compared to boys (69 percent) in urban areas.
- The retention rates of girls between grade I and III was higher (58 percent) than the boys (52 percent) in rural areas.
- The retention rates across the grades I to V was obtained. It was revealed that the retention status of girls was (52 percent) in urban areas as compared to boys (68 percent) in 2004-05.
- Again, in rural areas the girls retention rate was higher (53 percent) than boys retention rate about 40 percent in 2004-05

Remarks

- It is interesting to note that the girls retention rate across the grades I to III and I to V was much better than the boys in 2004 05 in Sindh Province

SURVIVAL OF CHILDREN UPTO GRADE X 1995-96 to 2004-05

Data Analysis and Findings: In Sindh the percentage of children of a cohort of 100 members who entered in grade I in 1995-96 and stayed upto grade x was 21 of which 19 percent were male and 25 percent were females. In urban areas the survival of children upto grade x was much better as compared to rural side: Survival of rural female was critical (8 percent).

Comparison by Location: In urban areas the survival of children as a whole was (41 percent). The rural situation was not encouraging that is (10 percent). Urban male and female were in a better position as compared to rural male and female.

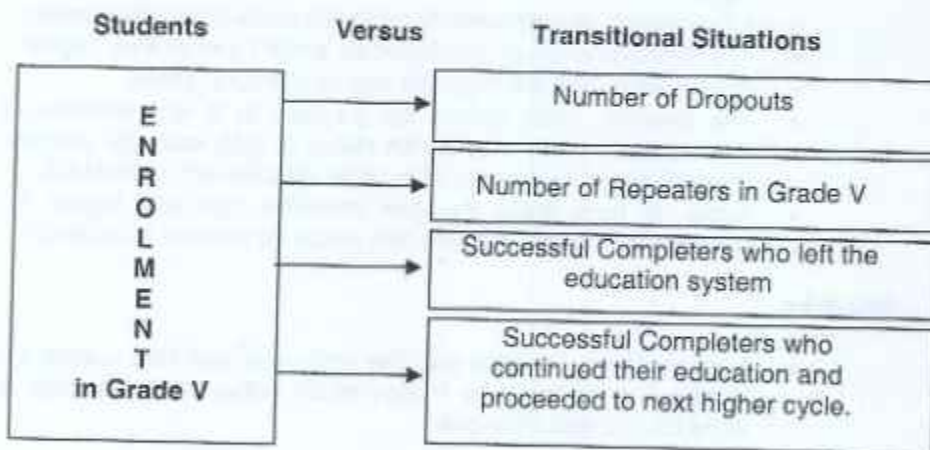
Comparison by Gender: The male percentage of survival was 19 percent whereas the female could survived upto grade X was 25 percent.

TRANSITION RATES

To ascertain what happens at the final grade of an educational cycle? The answer to this question is special look has to be taken at the final grade of each cycle. In our situation there are three final grades:

Grade V	End of Primary cycle of Education	→	Start of Middle School
Grade VIII	End of Middle School Education	→	Start of Sec. School. Edu.
Grade X	End of Secondary Education	→	Start of Higher Sec. Edu.

Layout: Transitional Situations of Students



Data Analysis And Findings:

Data an enrolment by grade from I to X was transformed which constitute a 10 years time series from 1995-96 to 2000-05, the transition rates of pupils from primary cycle of education to middle level of education and for middle level of education to high school education were computed.

- The overall transition of children from primary school to middle school was noted as about 61 percent in 2004-05.
- The Girls transition situation was higher (68 percent) from primary school to middle school as compared to boys (56 percent).
- The overall transition rate of children from middle school to high school exceeds hundred percent (101 percent) in 2004-05.
- The girls transition rate was (100 percent) as compared to boys (102 percent) from middle school to high school.

Comparison by location

- The girls transition rate from primary school to middle school was hundred percent (100 percent) in urban areas as compared to rural areas (28 percent).
- The boys transition rate from primary school to middle school was again 92 percent in urban areas as compared to 37 percent in rural areas.
- The transition rate of girls from middle school to high school in urban areas was 107 percent as compared to 71 percent in rural areas in 2004-05.
- The transition situation of boys from middle school to high school in urban areas was 114 percent as compared to 86 percent in rural areas. Cohort diagrams 5a and 8a.

Comparison by gender

- The transition situation from primary school to middle school indicates that transition amongst girls is (28 percent) in rural areas as compared boys (37 percent). Cohort diagrams 5a&6a.
- From middle school to high school the girls transition rate was lower (71 percent) as compared to boys (86 percent) in rural areas in 2004-05. Cohort diagrams 5a and 6a.
- The transition of students from primary school to middle school was 100 for girls in urban areas where as it was 92 percent for boys.
- The transition rate of girls was 107 percent from middle school to high school in urban areas whereas it was 114 percent for boys in 2004-05. Cohort diagrams 8a and 9a.

Note: The higher transition rate exceeding 100 percent indicates the high repetition of a grade of students.

1. BASIC EDUCATION IN SINDH PROVINCE

Topography:

Sindh, also spelled Sind, province of south eastern Pakistan. It is bordered by the provinces of Balochistan on the West and North, Punjab on the northeast and the Arabian Sea to the South.

The Sindh province is spread over an area of 140,914 Sq. km. with population of 34,892 thousand people. The female constitutes about 47 percent of the total population and about 48 percent people are inhabited in rural areas. The percentage of rural female to the total population was about 23 percent.

Sindh is essentially part of the Indus River delta and has derived its name from that river, which is known in Pakistan as the Dindhu. The Capital of Sindh was established in 1970. The provincial capital, Karachi is situated on the southeastern coast.

Sindh has a subtropical climate and experiences hot summers and cold winters. The major indigenous languages in Sindh are Sindhi, Seraiki and Balochi. The national official language, urdu is taught in the provincial schools alongwith Sindhi. The provinces population is overwhelmingly Muslim.

Agriculture is the basis of the economy. Sindh is one of the Pakistan's most industrialized regions with much of its large-scale manufacturing centered in Karachi.

1.1 Primary Education: An Overview

The relationship between education and the preservation of national identity is recognized in all enlightened countries. Education can never be a neutral factor in the life of a nation either it conserves and builds or destroys national identity. It may work slowly or rapidly, depending upon the character and outlook of the people. Every nation, therefore, tries to ensure that its educational system helps to build up its solidarity and inculcates an emotional loyalty to its existence, its outlook and its ideals. Thus, validity of the statement that education is the biggest single promoter of national ideology and identity has never been questionable.

Like health facilities, educational facilities are an item in the level of living. Like the enjoyment of health, access to education interpreted to mean

access to elementary education and equal opportunities to climb the educational ladder has gradually acquired recognition as a "human right". Article 26 of the Universal Declaration of Human Right is very explicit on this score.

"Everyone has the right to education. Educational shall be free, at least in the elementary and fundamental stages. Elementary education shall be compulsory. Technical and professional education shall be made generally available and higher education shall be equally accessible to all on the basis of merit

Relating situation to our Country, Sindh is a province having a population of 34,892 thousand persons which constitutes 23 percent of country's total population. As such from education point of view, this province has to serve the youth in the country and commensurate educational resources must be explored so that this province keeps on providing educational facilities to the largest part of Pakistan populace. As the population in Sindh is increasing at the rate of about 2.0 percent therefore, additional resources in education would be required to provide primary education to 3,820 thousand children of age 5-9 years in Sindh.

Resources for education in Sindh are derived from the general tax levied in the province. In addition to general tax money, educational cess is levied on commercial organization in private and public sector. Donations and gifts from rich persons, business organizations and charitable institutions are also received by the education institutions but the amount so received is very negligible. However, development grants are given by the Federal Government to the provinces for the development education.

Undoubtedly, basic education is the highest return investment available and performance improvement in this arena can produce great returns in terms of development. The Sindh province has potential to emerge as Pakistan new grown up economic frontier.

In Sindh province, the proportion of primary school population of age 5-9 years was 12.6 percent and secondary school (10-14) age group proportion was 11 percent to the total population.

There were 44,441 primary schools with a reported enrolment of 3820 thousand children. 7009 were female primary schools having enrolment 1548 thousand children. Teaching force was 59,910 primary school teachers and 10,409 female teachers. A number of schools have no building. Existing buildings need repair. There was lacking of basic physical facilities.

The proportion of female primary schools to total primary schools was about 16 percent whereas in rural areas it was about 15 percent. The proportion of female primary school children enrolled to the total enrolled children was about 41 percent whereas it was 34 percent in rural areas.

The female primary school teachers proportion to the total primary teachers was 39 percent whereas in rural areas it was 17 percent.

The pupils teacher ratio at primary school was 33 children whereas it was 34 female children per teacher. In rural areas, the pupils teacher ratio was 30 children whereas it was about 59 rural female.

The literacy rate (10 years and above) was 56 percent of which, 68 percent were male and 41 percent female during 2004-05. The urban areas literacy situation was better as compared to rural areas. The rural female literacy rate was 18 percent.

The adult literacy rate was 54 percent. The male and female literacy rates were 68 and 38 percent respectively. The adult literacy for rural female was 14 percent.

The participation rate at primary school level was 86.5 percent of which, 72.5 percent was for female. The rural female participation rate was noted as 67 percent.

The retention rate from grade I to V was about 47 percent. The female retention situation was better (58 percent) as compared to male (42 percent). In rural areas too, female stayed more at a percentage of 53 percent as compared to male about 40 percent.

The survival rate from grade I to X was 21 percent of which, 25 percent were female and 19 percent were male. In rural areas, both male and female situations were not encouraging i.e. 11 and 8 percent respectively.

The transition rate of primary school children to middle school was about 61 percent of which, 68 percent were female. In rural areas, it was 35 percent as compared to urban areas (96 percent). The transition rate of rural female was 28 percent.

The transition rate of children from middle school to high school was 101 percent (may be due to high repetition) of which, 100 percent were female. In rural areas, it was 83 percent as compared to urban

areas 111 percent. The transition rate of rural female from middle to high school was 71 percent.

There is a need to realize that education can revolutionize social attitudes, economic trends and the political mindsets be it Sindh province or any other province. It is therefore, highly important to develop human resources to open up the provinces for economic activities. It is the educational backwardness that has given rise to negative perceptions over the ongoing development process.

The basic education needs to be prioritized in any development plan or strategy in the province. It lacks physical facilities in each province and those that exist at primary level are also in dire need of up gradation. Long walking distances, lack of basic amenities, and teacher absenteeism are some of the main factors to gather with poor quality teaching and learning material that are responsible for low retention and high repetition rates.

1.2 Literacy Situation:

It is generally argued that literacy is a Human right. If it is really a Human right, then "literacy for literacy's sake" is justified. According to Muslim's faith "acquire knowledge from the cradle to the grave". On the other hand "seeking education is compulsory for every Muslim man and woman " Therefore, literacy is a crucial element for the growth of societies by way of nurturing individual abilities to learn and to create in direct contribution to social, economic and cultural development and improvement of quality of life.

Efforts are being made to adopt on priority basis to achieve goals of universalization of basic education and eradication of illiteracy utilizing channel such as formal, non-formal and involving community. To achieve objective literacy for All, policy making and implementation will have to be based on valid and authentic data.

1.2.1 Data Analysis and Findings: According to Pakistan Social and Living Standards Measurement Survey (PSLM), 2004-05, the literacy rate of population 10 years and above in Sindh province increased from 46 percent in 2001-02 to 56 percent in 2004-05. (Table 5)

1.2.2 Comparison by location: The literacy rate was significantly higher 72 percent in urban areas as compared to rural areas (38 percent) in 2004-05. but in 2001-02, the situation was observed similar (Table 5)

1.2.3 Comparison by gender:

- Male situation of literacy was better in urban as well as in rural areas. (Table 5)
- Female both in urban and rural areas situation had literacy rates 62 and 18 percent respectively. (Table 5)

1.3 Adult literacy

1.3.1 Data Analysis and Findings: The situation of Adult literacy was assessed. It was noticed that the overall status of adult literacy was 54 percent (persons of age 15 years and above) in 2004-05 as compared to 2001-02 literacy situation which was observed as 45 percent. (Table 6)

1.3.2 Comparison by location: The overall urban adult literacy rate was better (70 percent) as compared to rural literacy rate (36 percent) in 2004-05. Similar, situation was appeared in 2001-02. (Table 6)

1.3.3 Comparison by gender:

- The overall literacy rate of male was 68 percent as compared to female (38 percent). The male literacy rate was higher (80 percent) as compared to female (59 percent) in urban areas. (Table 6)
- The male literacy rate was also better (54 percent) as compared to female (14 percent) in rural areas. (Table 6)

1.4 Educational Finances:

Financing of education in Sindh is in the form of budget allocations. The data given below reveals that education service in Sindh is quite sizeable. The proportion of current allocation to the total allocation in education is 91.3 percent in 2004-05. As far as developmental allocation is concerned, the proportion is about 8.7 percent. There is an increase of about 16 percent per year in the current budget in 2004-05 over 2000-01 whereas in development side 3.4 percent increase is noted for the same period. The overall increase per annum is about 14 percent.

1.5 Current steps and innovative approaches for promotion of primary education

The government of Sindh accepted the challenges by making all possible efforts to eradicate illiteracy and achieve universalization of primary education (UPE) in Sindh Province. In this regards, under the package entitled as Education Sector Reform (ESR), 2001-2004. Initiatives have been taken mobilizing the people not only at the public sector but also through private- partnership.

2. GRADE RETENTION MODEL AND TRANSITION OF PUPILS: CONCEPTS AND METHODS

Based on the overall assessment and critical examination of the situation in respect of education development which plays a pivotal role for the economic development, it is necessary to make an attempt in identifying some of the concrete issues and questions which are crucial and of immense importance, i.e. wastage in education. Usually, two technical jargons namely repetitions and dropouts are considered responsible to contribute the wastage.

Therefore, it is necessary to determine the internal efficiency of education system to ensure its efficiency and effectiveness. In this regard, wastage ratio is the best tool, which can be applied for assessing internal efficiency of education system. Wastage or internal efficiency in education would ensure that all children eligible for education are enrolled and show their progress without wasting any pupil-year to complete the cycle. Grade repetition and dropout from school, therefore, constitute elements of inefficiency or wastage; hence it should be measured in order to assess the degree of internal efficiency of the education system.

The concept of wastage and internal efficiency takes into account the aspect of access of children to education which is normally measured by admission/intake rate, (gross or net in nature), transition rate, retention in school, completion/graduation rate and also learning achievement level etc. Generally, more operational definition of wastage in education, which is adopted focuses on examining of internal dynamics of children who entered in the education system but could not complete their schooling in specific cycle within the stipulated period due to repetitions and dropouts.

2.1 Objectives

The main purpose of this attempt was to assess the degree of retention of students who are enrolled in primary cycle of education and the transitional situation from lower level to higher level of education.

2.2 Literature Review

Documents for basic concepts clearance and methods were referred.

2.3 Methodology

The documents of National Education Management Information System (NEMIS) were referred for data by grades, gender and location (urban/rural) for the year 1995-96 to 2004-05. A Chain Base Method for determining the retention rates of different grades was adopted in which every succeeding/ subsequent year was considered as a base year. In such a fashion, the retention of children between each grade, gender and location is calculated.

Limitations: The data on enrolment of each grade of public sector was used. The private sector data on enrolment by grade was not available.

2.4 Most Commonly used Pupils Flow Models

The flow models quantify the flow of pupils of education system. Such models are most commonly used throughout the world. The main purpose is to apply these models for analyzing wastage in education. Each method is based on certain assumptions which to a large extent affect the quality of data. The use of a particular method needs specific data for determining internal efficiency indicators.

The following methods are applied to compute indicators of wastage and internal efficiency of education system. These methods are covered under the umbrella of two main models.

2.4.1 Grade Transition Model

- Reconstructed Cohort Method

2.4.2 Grade Retention Model

- Apparent Cohort Method
- Grade Retention Method or Grade Ratio Method

Reconstructed Cohort Method: Education statisticians and planners have developed more simplified method which under certain hypothesis permits to reconstruct the progression of a cohort through a cycle of education. This is referred to as Reconstructed Cohort Method.

The Reconstructed Cohort Method describes the flow rates e.g. promotion, repetition and drop-out rates .If there is no repetition, then this

method will be identical to the grade retention method and the two methods will give the same estimate of cohort survival.

- This method implies using the Grade Transition Model.
- It is frequently used when data by grades for two consecutive years and repeaters by grades for the preceding year is available.
- Assumptions: The assumption on which this reconstruction is based is summarized as:
- No fresh entrants would be allowed during the reconstruction of the cohort diagram.
- The promotion, repetition and dropout rates are assumed to remain constant over the entire period.
- The number of repetitions, a pupils is allowed to avail must be well defined.

Apparent Cohort Method: There is another more approximate method which can also be applied to determine the apparent situation of the dynamics of pupils of the cycle. This method is termed as Apparent Cohort Method. This method is often used to estimate both drop-out between grades and the survival of the cohort to successive grades in successive years. It assumes that the decline in enrolment between two successive grades in two subsequent school-years represents apparent drop-out. This method is based on the grade retention model. For this method a time-series data by grade is needed.

- It is sometimes used to derive indicators of survival by grade.
- It is based on comparing the enrolment in successive grades in successive school years.
- The hypothesis being that the decline in enrolment between two successive grades in two subsequent school-years represents the dropouts.
- This method is applied and is more appropriate when a time-series data is collected by grades when the data on repeaters is not available.

Grade Retention Method: It is a common difficulty in developing countries to systematically collect data on repeaters. Normally schools provide the data on enrolment by grades for a series of successive years, but the calculations of flow rates is not possible in this situation. Even then, under such a situation it is possible to form a rough idea of student movements from one grade to the other, and of the thinning out process that

occurs through a school cycle. The technique that may be employed to assess the internal movements or dynamics of pupils is referred to as Grade Retention Method or Grade Ratio Method. It is the simplest method used in cases where the data available are limited to cover enrolment only. The model is used when data on repeaters is not available.

The grade retention method is an unsophisticated, but handy tool in all those situations where a planner wishes to assess the functioning of an educational cycle in the absence of data on repetition. One does not know whether it is drop-out or repetition that stands behind the retention rates observed, sometimes, though, when high retention rates in excess of 100 percent are observed, one can infer that very high repetition rates have distorted the flow of students.

2.5 GRADE RETENTION MATHEMATICAL MODEL*

Year/ Grade	I	II	III	IV	V
Year I Enrolment	E_1	E_2	E_3	E_4	E_5
Year II Enrolment	\hat{E}_1	\hat{E}_2	\hat{E}_3	\hat{E}_4	\hat{E}_5

Retention between Grade I and II	= $\hat{E}_2 / E_1 = e_{12} p$
Retention between Grade II and III	= $\hat{E}_3 / E_2 = e_{23} p$
Retention between Grade III and IV	= $\hat{E}_4 / E_3 = e_{34} p$
Retention between Grade IV and V	= $\hat{E}_5 / E_4 = e_{45} p$
Retention between Grade I & III	= $e_{12} \times e_{23} = e_{13} p$
Retention between Grade I & IV	= $e_{12} \times e_{23} \times e_{34} = e_{14} p$
Retention between Grade I & V	= $e_{12} \times e_{23} \times e_{34} \times e_{45} = e_{15} p$

Where

- $e_{12} p$ = percentage retention of children between grades I & II
- $e_{23} p$ = percentage retention of children between grades II & III
- $e_{34} p$ = percentage retention of children between grades III & IV
- $e_{45} p$ = percentage retention of children between grades IV & V
- $e_{13} p$ = percentage retention of children between grades I & III
- $e_{14} p$ = percentage retention of children between grades I & IV
- $e_{15} p$ = Overall percentage retention of children between grades I & V of primary cycle of education.

* Developed by Mirza Tauhiduddin Ahmed, Education Statistician and Ms. Fahneeda Khanam, Research Officer

2.6 Data Analysis and Findings

The data has been analyzed employing the Grade Retention Mathematical Model.

2.6.1 Comparisons by location

Retention of children between grades I and II

- The overall retention was noted. It is emerged that 77 percent children in primary schools could be retained between grade I and II in urban areas as compared to rural areas (60 percent) Table 1.
- In grade I and II the retention of males and females children was better in urban areas as compared to rural areas.

Retention of children between grade II and III

- The retention of children (Total) was slightly higher (about 93 percent) in urban areas as compared to rural areas (about 90 percent). (Table 2).
- The male retention rate at primary school was higher (89 percent) in urban areas as compared to rural areas about 86 percent. The female retention picture was interestingly better (about 99 percent) in rural areas as compared in urban areas. (98 percent).

Retention of children between grade III and IV

- Again, the retention of children (Total) was better (92 percent) in urban areas as compared to about 88 percent in rural areas. (Table 3)
- The retention of males was better comparatively (89 percent) in urban areas as against the retention of children in rural areas (86 percent). But the female retention indicated as 94 percent in rural areas as compared to 95 percent in urban areas.

Retention of children between grade IV and V

- The retention of children at primary school in urban areas was compared to rural areas. It was observed that the retention rates were about 90 percent and 88 percent for urban and rural areas respectively. (Table 4).

- The females who could be retained in grades IV and V indicated better percentage as a whole in urban as well as in rural areas.

Retention of children between grade I and III

- The urban overall picture regarding the retention of primary school children (Total) in grade I to III was about 72 percent. In rural areas it was about 53 percent (Table 5).
- The urban and rural picture was noted. It was appeared that males retention rates was 69 percent in urban areas and about 52 percent in rural areas. But in rural areas female retention rate was lower (58 percent) as compared to urban area (75 percent)

Retention of children between grade I and IV

- The children (Total) in urban areas indicated better position (about 66 percent) as compared to rural areas (about 47 percent) Table 6.
- The retention of children in grade I to IV in Urban areas was better (61 percent) as compared to rural areas (44 percent).

Retention of children between grade I to V

- In grades I through V in the entire cycle of primary schools, the overall retention of children (Total) was higher (about 59 percent) in urban areas as compared to about 43 percent in rural areas. This means that 41 percent was apparent dropt rate in urban areas and 57 percent in rural areas.
- Males retention was higher (68 percent) in urban areas as compared to rural areas (about 40 percent) whereas female situation in rural areas was slightly better (53 per cent) than in urban areas. (52 percent).

2.6.2 Comparisons by gender:

Retention of children between Grade I and II

- It is observed that the retention of children at primary school level was about 64 percent in the year 2004-05 (Table 1).
- It is interesting to note that the retention of girls was higher (about 98 percent) as compared to males (about 87 percent).

Retention of children between Grade II and III

- It is noted that 90 percent of enrolment of children (Total) at grade II in 2003-04 have been retained in next higher grade III of primary school in the year 2004-05. (Table 2).
- Similarly, regarding the gender wise situation the retention of female children was higher (98 percent) as compared to males (about 87 percent) for the same period.

Retention of children between Grade III and IV

- It is revealed that the total retention was about 90 percent in the year 2004-05. (Table 3).
- Again, the female retention at primary school was better i.e. about 95 percent as compared to males i.e. about 87 percent.

Retention of children between Grade IV and V

- It is emerged that the overall situation of children in 2003-04 at primary school of grade IV who could retained in grade V in 2004-05 was 91 percent. (Table 4).
- The primary schools girls in grade IV in 2003-04 who could retained to next higher grade V was better (96 percent) as compared to males (88 percent)

Retention of children between Grade I and III

- The retention of children from grade I to grade III was about 58 percent both combined of males and females. (Table 5).
- The females retention rate was noted better (64 percent) as compared to males (about 55 percent)

Retention of children between Grade I and IV

- The children (Total) who could be retained in grade I to IV was about (52 percent). (Table 6).
- The female retention situation was much better (about 60 percent) as compared to males (about 48 percent).

Retention children between Grades I and V

- The assessment of overall situation of children (Total throughout primary cycle of education was of immense importance. It was emerged from the data that about 47 percent could be retained from grade I through grade V. This means that in the absence of repeaters data, 53 percent children are missing or their whereabouts are not known. In such a situation one may conclude these missing number of children as apparent dropout rate i.e. 53 percent. (Table 7).
- The male and female retention picture was about 42 percent and 58 percent respectively. The girls retention ratio as indicated throughout was much better than the male children. One may infer 58 percent apparent dropout of males and 42 percent females.

2.7 Transition Rate:

This indicator tells us the rate of the movement of the pupils from one grade or level to the other. In other words, number of pupils admitted to the first grade of a higher level of education in a given year expressed as a percentage of the number of pupils enrolled in the final grade of the lower level of education in the preceding year. The number of repeaters will be subtracted from it, if available.

$$\text{Transition rate} = \frac{\text{New entrants into higher grade in succeeding year}}{\text{Enrolment into lower grade in preceding year}} \times 100$$

Purpose: This indicator is to convey information on the amount of access or transition from one cycle or level of education to a higher one. It is an output indicator from the lower level of education to the higher level of education.

Interpretation: High transition rates as indicates sustained access or transition from one level of education to the next higher level. It also indicates the intake capacity of the next level of education. On the other hand, low transition rates signals problems in the bridging between two cycles or levels of education due to either deficiencies in the examination system or inadequate admission capacity in the higher cycles of education or both. This indicator is based on new entrants (on enrolment and repeaters) especially in the first grade of the higher level or cycle of

education. If the calculated value is in excess of unity, then there may be high number of repeaters.

It can be looked into two different dimensions. One when assessed from lower cycle of education, it is treated as output indicator. On the other hand, if it is viewed from higher level of education, it is termed as access indicator.

Data on enrolment by grade from I and X was transformed which constitute a 10 years time series. The transition rates of pupils from primary cycle of education to middle level of education and from middle level of education to high school education were computed. The result can be seen in Cohort diagrams.

The transition of students between cycles or levels has a great significance. It can be manipulated for purposes of educational policies and it may be considered a kind of starring value to increase or decrease the flow of students through the chain of educational cycle.

At these final grades, there are following options a student may choose:

- A student may repeat the same grade
- A student may dropout
- A student may complete the cycle successfully and then leave the school
- A student may complete the cycle successfully and then enroll in the first grade of the next higher cycle.

All successful completers of the final grade, whether they leave the school system subsequently or continue in the next higher cycle, should be counted as a measure of the final output from the cycle they have completed.

However, the education planner is particularly interested in those successful completers who proceed in the next higher grade/cycle. In order to trace the flow of students from one cycle to the other, the planner calculates so-called transition rates. These are very similar to promotion rates.

The transition rates of children were computed to determine the extent of transition from lower level of education to next higher level of education. The primary schooling of children is considered as the base of next higher learning and also as a feeding institution to provide educational planners and decision-makers the facts of flow of students from lower level

to higher level of education to plan for the future. The transition rates may also exceed to 100 percent which indicates high repetition of students.

2.7.1 Data Analysis And Findings: Data an enrolment by grade from I to X was transformed which constitute a 10 years time series from 1995-96 to 2000-05, the transition rates of pupils from primary cycle of education to middle level of education and for middle level of education to high school education were computed.

- The overall transition of children from primary school to middle school was noted as about 61 percent in 2004-05.
- The Girls transition situation was higher (68 percent) from primary school to middle school as compared to boys(56 percent).
- The overall transition rate of children from middle school to high school exceeds hundred percent (101 percent) in 2004-05.
- The girls transition rate was (100 percent) as compared to boys (102 percent) from middle school to high school.

2.7.2 Comparison by location

- The girls transition rate from primary school to middle school was hundred percent (100 percent) in urban areas as compared to rural areas (28 percent).
- The boys transition rate from primary school to middle school was 92 percent in urban areas as compared to 37 percent in rural areas.
- The transition rate of girls from middle school to high school in urban areas was 107 percent as compared to 71 percent in rural areas in 2004-05.
- The transition situation of boys from middle school to high school in urban areas was 114 percent as compared to 86 percent in rural areas. Cohort diagrams 5a and 8a.

2.7.3 Comparison by gender

- The overall transition situation from primary school to middle school indicates that transition amongst girls is (28 percent) as compared boys (37 percent) in rural areas. Cohort diagrams 5a and 6a.
- From middle school to high school the girls transition rate was (71 percent) as compared to boys (86 percent) in rural areas in 2004-05. Cohort diagrams 5a and 6a.
- The transition of girls from primary school to middle school was 100 percent in urban areas where as it was 92 percent for boys.

- The transition rate of girls was 107 percent from middle school to high school in urban areas whereas it was also 114 percent for boys in 2004-05. Cohort diagrams 8a and 9a.

2.8 Survival Rates Of Children Upto Grade X, 1995-96 To 2004-05

The survival rate is commonly considered as pre-requisite for sustainable literacy. The difference between survival rate with and without repetition provides the degree of wastage contributed due to dropout and repetition. The computation of this indicator is based on pupil flow rates. The reliability of these indicators depends on the consistency of data on enrolment and repeaters in term of coverage over tier and across grades.

It is defined as the percentage of a cohort of pupils enrolled in grade I of primary education in an academic year who are retained across the grades and could reach to grade.

The main purpose of computing the survival rate is to assess the extent of retention of children from grade to grade and internal efficiency of an education system. Conversely it shows the magnitude of dropout by grade.

Formula:

$$\text{Survival rate} = \frac{\text{No. of pupils who could reach in Successive grades}}{\text{No. of pupils in the school cohort}} \times 100$$

2.8.1 Data Analysis and Findings: In Sindh the percentage of children of a cohort of 100 members who entered in grade I in 1995-96 and stayed upto grade x was 21 of which 19 percent were male and 25 percent were females. In urban areas the survival of children upto grade x was much better as compared to rural side: Survival of rural female was critical (8 percent).

2.8.2 Comparison by Location: In urban areas the survival of children as a whole was (41 percent). The rural situation was not encouraging that is (10 percent). Urban male and female were in a better position as compared to rural male and female.

2.8.3 Comparison by Gender: The male percentage of survival was 19 percent whereas the female could survived upto grade X was 25 percent.

2.9 Cohort Diagrams

**Cohort diagram-1: Internal dynamics of pupils (Total) through grade I to grade X
Sindh province
1995-96 to 2004-05**

Year/ Grade	I	II	III	IV	V	VI	VII	VIII	IX	X
1995-96	563,959									
1996-97		433,901								
1997-98			358,948							
1998-99				322,681						
1999-2000					276,637					
2000-2001						187,952				
2001-2002							146,618			
2002-2003								135,913		
2003-2004									137,766	
2004-2005										118,158

Source: Derived from Annexure D.

**Cohort diagram-1a: Internal dynamics of pupils (Total) through grade I to grade X
and Transition from lower level to higher level 1995-96 to 2004-05
(Base year 1995-96= 100)**

Year/ Grade	I	II	III	IV	V	VI	VII	VIII	IX	X	Percentage
1995-96	100										
1996-97		77									
1997-98			64								
1998-99				72							
1999-2000					49						
2000-2001						30(80.7)					
2001-2002							26				
2002-2003								24			
2003-2004									24(101.1)		
2004-2005											21

Source: Computed from above table. Figures in parenthesis are transition rates.

**Cohort diagram-2: Internal dynamics of pupils (Male) through grade I to X
Sindh Province
1995-96 to 2004-05**

Year/ Grade	I	II	III	IV	V	VI	VII	VIII	IX	X
1995-96	376,192									
1996-97		281,820								
1997-98			234,481							
1998-99				209,034						
1999-2000					177,917					
2000-2001						100,460				
2001-2002							87,004			
2002-2003								79,721		
2003-2004									81,415	
2004-2005										71,032

Source: Derived from Annexure D1.

**Cohort diagram-2a: Internal dynamics of pupils (Male) through grade I to X
and Transition from lower level to higher level 1995-96 to 2004-05
(Base year 1995-96= 100)**

Year/ Grade	I	II	III	IV	V	VI	VII	VIII	IX	X
1995-96	100									
1996-97		75								
1997-98			62							
1998-99				56						
1999-2000					47					
2000-2001						27(56)				
2001-2002							23			
2002-2003								21		
2003-2004									22(102)	
2004-2005										19

Source: Computed from above table. Figures in parenthesis are transition rates.

**Cohort diagram-3: Internal dynamics of pupils (Female) through grade I to IX
Sindh Province**

1995-96 to 2004-05

Year/ Grade	I	II	III	IV	V	VI	VII	VIII	IX	X
1995-96	187,767									
1996-97		142,281								
1997-98			124,467							
1998-99				113,647						
1999-2000					98,720					
2000-2001						67,492				
2001-2002							59,614			
2002-2003								56,192		
2003-2004									56,351	
2004-2005										47,126

Source: Derived from Annexure D2.

**Cohort diagram-3a: Internal dynamics of pupils (Female) through grade I to X
and Transition from lower level to higher level 1995-96 to 2004-05
(Base year 1995-96= 100)**

Year/ Grade	I	II	III	IV	V	VI	VII	VIII	IX	X	Percentage
1995-96	100										
1996-97		76									
1997-98			66								
1998-99				60							
1999-2000					52						
2000-2001						36(68)					
2001-2002							32				
2002-2003								30			
2003-2004									30(100)		
2004-2005											25

Source: Computed from above table. Figures in parenthesis are transition rates.

**Cohort diagram-4: Internal dynamics of pupils (Total) through grade I to X
Rural areas, Sindh Province**

1995-96 to 2004-05

Year/ Grade	I	II	III	IV	V	VI	VII	VIII	IX	X
1995-96	365,390									
1996-97		261,229								
1997-98			215,965							
1998-99				191,968						
1999-2000					159,164					
2000-2001						55,379				
2001-2002							47,955			
2002-2003								45,482		
2003-2004									37,710	
2004-2005										36,205

Source: Derived from Annexure E

**Cohort diagram-4a: Internal dynamics of pupils (Total) through grade I to X
and Transition from lower level to higher level in Rural areas, 1995 to2004-05
(Base year1995-96)= (100)**

Year/ Grade	I	II	III	IV	V	VI	VII	VIII	IX	X	Percentage
1995-96	100										
1996-97		71									
1997-98			59								
1998-99				52							
1999-2000					44						
2000-2001						15(34.8)					
2001-2002							13				
2002-2003								12			
2003-2004									10(83)		
2004-2005											10

Source: Computed from above table. Figures in parenthesis are

**Cohort diagram-5: Internal dynamics of pupils (Male) through grade I to X
Rural areas, Sindh Province
1995-96 to 2004-05**

Year/ Grade	I	II	III	IV	V	VI	VII	VIII	IX	X
1995-96	268,014									
1996-97		193,590								
1997-98			158,780							
1998-99				139,037						
1999-2000					115,859					
2000-2001						43,328				
2001-2002							37,608			
2002-2003								34,906		
2003-2004									30,172	
2004-2005										28,657

Source: Derived from Annexus
!!!

**Cohort diagram-5a: Internal dynamics of pupils (Male) through grade I to X
and Transition from lower level to higher level in Rural areas, 1995-96- to 2004-05
(Base year 1995-96 =100)**

Year/ Grade	Percentage									
	I	II	III	IV	V	VI	VII	VIII	IX	X
1995-96	100									
1996-97		72								
1997-98			59							
1998-99				52						
1999-2000					43					
2000-2001						16(37)				
2001-2002							14			
2002-2003								13		
2003-2004									11(86)	
2004-2005										11

Source: Computed from above table. Figures in parenthesis are transition rates.

**Cohort diagram-6: Internal dynamics of pupils (Female) through grade I to X
Rural areas, Sindh Province
1995-96 to 2004-05**

Year/ Grade	I	II	III	IV	V	VI	VII	VIII	IX	X
1995-96	97,376									
1996-97		67,639								
1997-98			57,205							
1998-99				52,031						
1999-2000					43,305					
2000-2001						12,051				
2001-2002							10,347			
2002-2003								10,576		
2003-2004									7,538	
2004-2005										7,548

Source: Derived from Annexure E2

**Cohort diagram-6a: Internal dynamics of pupils (Female) through grade I to grade X
and Transition from lower level to higher level in Rural areas, 1995-96- to 2004-05
(Base year 1995-96 =100)**

Year/ Grade	Percentage									
	I	II	III	IV	V	VI	VII	VIII	IX	X
1995-96	100									
1996-97		69								
1997-98			59							
1998-99				53						
1999-2000					44					
2000-2001						12(27.8)				
2001-2002							11			
2002-2003								11		
2003-2004									8(71)	
2004-2005										8

Source: Computed from above table. Figures in parenthesis are transition rates.

**Cohort diagram-7: Internal dynamics of pupils (Total) through grade I to X
Urban areas, Sindh Province**

1995-96 to 2004-05

Year/ Grade	I	II	III	IV	V	VI	VII	VIII	IX	X
1995-96	198,560									
1996-97		162,672								
1997-98			142,983							
1998-99				130,713						
1999-2000					117,473					
2000-2001						112,573				
2001-2002							98,663			
2002-2003								90,431		
2003-2004									100,056	
2004-2005										81,953

Source: Derived from Annexure F

**Cohort diagram-7a: Internal dynamics of pupils (Total sexes) through grade I to X
and Transition from lower level to higher level in urban areas, 1995-96 to 2004-05
(Base year 1995-96 = 100)**

Year/ Grade	Percentage									
	I	II	III	IV	V	VI	VII	VIII	IX	X
1995-96	100									
1996-97		82								
1997-98			72							
1998-99				66						
1999-2000					59					
2000-2001						57(95.8)				
2001-2002							50			
2002-2003								45		
2003-2004									50(110.6)	
2004-2005										41

Source: Computed from above table. Figures in parenthesis are transition rates.

**Cohort diagram-8: Internal dynamics of pupils(Male) through grade I to X
Urban areas, Sindh Province
1995-96 to 2004-05**

Year/ Grade	I	II	III	IV	V	VI	VII	VIII	IX	X
1995-96	108,178									
1996-97		88,030								
1997-98			75,721							
1998-99				69,097						
1999-2000					62,058					
2000-2001						57,132				
2001-2002							49,396			
2002-2003								44,615		
2003-2004									51,243	
2004-2005										42,375

Source: Derived from Annexure F1

**Cohort diagram-8a: Internal dynamics of pupils (Male) through grade I to X
and Transition from lower level to higher level in Urban areas, 1995-96 to 2004-05
(Base year 1995-96 =100)**

Year/ Grade	Percentage									
	I	II	III	IV	V	VI	VII	VIII	IX	X
1995-96	100									
1996-97		81								
1997-98			70							
1998-99				64						
1999-2000					57					
2000-2001						53(92)				
2001-2002							46			
2002-2003								41		
2003-2004									47(114)	
2004-2005										39

Source: Computed from above table. Figures in parenthesis are transition rates.

**Cohort diagram-9: Internal dynamics of pupils(Female) through grade I to X
Urban areas, Sindh Province
1995-96 to 2004-05**

Year/ Grade	I	II	III	IV	V	VI	VII	VIII	IX	X
1995-96	90,391									
1996-97		74,642								
1997-98			67,262							
1998-99				61,616						
1999-2000					55,416					
2000-2001						55,441				
2001-2002							49,267			
2002-2003								45,616		
2003-2004									48,813	
2004-2005										39,578

Source: Derived from Annexure F2.

**Cohort diagram-9a: Internal dynamics of pupils(Female) through grade I to X
and transition from lower level to higher level in Urban areas, 1995-96 to 2004-05
(Base year 1995-96 =100)**

Year/ Grade	Percentage									
	I	II	III	IV	V	VI	VII	VIII	IX	X
1995-96	100									
1996-97		83								
1997-98			74							
1998-99				68						
1999-2000					61					
2000-2001						61(100)				
2001-2002							54			
2002-2003								50		
2003-2004									54(107)	
2004-2005										44

Source: Computed from above table. Figures in parenthesis are transition rates.

3. SOME FACTORS AFFECTING RETENTION OF CHILDREN IN SCHOOL.

Factors responsible for affecting retention are usually classified into (i) internal and (ii) external in the education system. Interaction between internal and external factors is continual and this interrelationship should be borne in mind when the various factors are taken into considerations.

3.1 Internal factors affecting retention of children

The primary school, its facilities, and pedagogical methods, all affect the child's learning experience and exert an influence upon retention or dropout. In most of the situations, the facilities available are inadequate for the number of students who attend the schools. There are not enough schools, schools are over crowded and within existing schools, there are not enough benches, desks, taps, drinking water latrine and boundary walls etc. particularly in the case of rural female situation. There are quite a large number of one teacher schools and multi grade teaching learning is obviously functional. The school situation then resembles an upgraded classroom, and the teacher becomes a resource person to all his or her students.

Provision of sufficient basic facilities would be a major factor which may have direct affect on retention of children therefore, according to general reports, there is always a greater stress on quality trained teachers to improve the standard of education and to retain the children. A conducive educational environment also help in retaining of children.

Beside from inadequate facilities and untrained teachers, organizational practices within the school also have an impact on retention. There is no general promotion of children, annual examinations are well established feature and the child who fails in the examination repeat the same grade next year. This is pedagogically and psychologically dubious. In countries like Malaysia and Republic of Korea, there is automatic promotion, the result is highly significant with no dropout and cent per cent retention of children. Where as in Thailand, to thirds of dropouts had been repeaters. In nut shell, the policy matter relates broadly on the following factors to retain children:

- Provision of sufficient schools with learning/ teaching materials and V-aids.
- Enough adequately trained teachers
- Conducive School environment

- Automatic promotion
- Provision of basic physical facilities such as drinking water Latrines, Boundary Walls etc.
- Some food provision to attract children
- Free text books etc.
- Polite and sympathetic approach of a teacher towards pupils.

3.2 External Factors affecting retention of children in Schools.

Socio cultural factor is one of the crucial variables which is within the child's family. Research evidences indicates that dropout of children is more prominent in poor families. In addition, parental illiteracy, malnutrition, parents land holding etc. many such parents have little understanding of the need to let their children continue education. Moreover, the poverty also led the children to contribute for their family's welfare on daily wages.

Further, family's ethnic or social status also has negative impact on children retention and they drops out of the system. The child's age and sex also has influence on retention. Many children enter late in school. Geographical location also affect on the enrolment of children and their survival in the school. Teachers and students in mountainous areas poses difficulty in traveling to school which affect on students interest even if a attends regularly, he /she may not be able to give sufficient attention to his/her studies because of physical and mental fatigue.

3.3 Strategies to Retain Children in Schools

Following five measures are distinguished which attract parents to send their children They act together and interact upon the child, in school and society:

- (i) Organizational
- (ii) Pedagogical
- (iii) Incentives
- (iv) Community
- (v) Non-Formal approaches

3.3.1 Organizational measures: The most important measure of retaining the children across the primary cycle is the organizational action. Evidences shows that institutions which have introduced automatic promotion have attained UPE e.g. Japan, Malaysia and Republic of Korea. Pedagogical measures helps children to solve learning difficulties to enable them to be promoted. Special arrangements should be made to enable the

school dropouts to return to the formal system to complete their education. Re-organization of the grades within the primary school may create interests amongst children to continue their education.

3.3.2 Pedagogical Measure: Generally, it has been realized that highly qualified and trained teachers has direct positive correlation with the students achievements and their retention. Great attention should be paid to in-service training to up-grade and up-date the qualification and knowledge, pre-service training ensures more effective teaching force. In primary schools, female teachers are preferred both for their gentle approach to very young kids and for the model they present to girls. In some situations with highly qualified teachers, the students could not be retained in the system, the reason may be due to low educational level of teacher, the quality of pedagogical training imparted and the working conditions not conducive. The most significant factor of pedagogical measure is the establishment of pre primary to give deprived rural and urban children a head start to the formal educational process. Usually, much of the verbal and intellectual development of a child depends upon pre-school years, which ultimately help a child to retain himself. The reason of it is that the first few months of school are probably crucial to the child perceptions. Those early months set the pattern and the child either desire to continue (retain) or an aversion to the school. Further, annual examinations have been used since long as a means of promotion, it is therefore imperative to introduce general promotion which may remove much stress and strain from the system both for a child and for the teacher.

The primary education should require mastery of skills, not competitive attainment in an annual examination. Improvement of teaching methods is a factor which also may have some bearing on dropouts. Some of the countries have followed individualized learning modules on experimental basis which yielded an appreciable success in enrolment and retention of children.

3.3.3 Incentives: This approach will encourage to enhance the enrolment of children at primary level, retain the children and achieving UPE. These incentives may be in the form of free education, provision of text books, mid day provision of fruits/snacks, uniform and some financial assistance, if possible, free or subsidized transportation facilities may be necessary to enable children to attend in sparsely populated areas particularly for girls.

3.3.4 Community participation It is obvious that involving the community in primary level education may be a means of enhancing enrolment and

preventing dropout. When parents are active in the educational process it is more likely that their children will stay in school.

The community may need educating about the importance of education, especially girls. This may be done by Mass-Media and political parties and by district administration. Further, inviting community participation in primary education may enable government to share the costs with the community. This may be important in situations where there is lacking in basic facilities.

3.4. 5 Non-Formal measures: The non-formal approach supplements the formal school. The non-formal programs usually based on community resources which are applied at two or three grades of primary level and the children may then enter in the formal schools. In many countries such as Bangladesh and Indonesia approach has been adopted with a significant results. In India, models like DACEP (Developmental Activities in Community Education and Participation) and CAPE (Comprehensive Access to Primary Education) have shown successful results in retaining children. In Pakistan, mosque schools are used to supplement the formal system where schools are scarce. This has been considered a viable model with grade I-III and thus reduces overcrowding of the primary school enrolment. The non-formal would enhance the efficiency of the formal system and thereby help to retain the children.

4. CONCLUSIONS: SUGGESTIONS AND RECOMMENDATIONS:

Amongst a host of problems and issues involved in the promotion of basic education the following are some identified general factors for considerations which may have a direct impact on controlling the children retention in the education system:

- **Low Internal Efficiency:** High dropouts and repetitions of children.
- **School Environment:** Poor facilities no play grounds and harsh attitude of teachers. Teacher Absenteeism: Shortage of classrooms, lack of supervision and no
- **Involvement of private sector:** This will help a lot to enhance the enrolment and its retention. NGOs and CBOs are the best sources at grass root level.
- **Curriculum:** It needs further considerations meeting the societal requirements. The textbook should be attractive. Their contents should be in accordance with the children mental level.
- **Shortage of rural Teachers:** There is a great need of female teachers in rural areas. Science and mathematics teachers are not available particularly in rural areas.
- **Access to primary education:** Significant social inequality (male/female, and Urban/rural etc), high opportunity cost for parents, low GNP percentage to education as a whole.
- Community participation is important for the successes of educational programmes. When the quality of education available improves and students learn, families respond positively by sending their children to school and supporting them in their learning and quality improves at a school when the local community is participating more strongly in its functioning.
- Serious efforts and consistent policies are needed to beat back the prevailing educational backwardness. Undoubtedly, an effective and sustained educational reform hinges on a combination of policy and institutional changes. Equally

important is to invest the right amounts for the appropriate types of education.

- The experience shows that there is scope for collaboration between the public and private sectors in education, targeting low income households. Opening up the system to non- public provision with public sector financial support can increase access and improve equity. This support will increase enrollment, retain children and reduce dropouts.
- There is a need to follow a common set of professional standards in curriculum design. Arguably, this can be achieved most readily by creating overarching staff groupings that share common interests and provide a single career path.
- Lack of access is a problem for certain remote population in general, as schools remain closed due to unavailability of teachers. Expansion of elementary and secondary schools may be required in certain locations to accommodate remote areas and increasing enrolment of student especially girls. Special efforts are needed to rationalize resources and to improve the internal efficiency of the education system.
- There is a need to improve technical education, expand the curriculum in secondary schools and introduce vocational schemes at the middle school level. Other major developments are increasing community involvement in school management and the hiring of location specific contract teachers, both requiring capacity building and training.

Serious problem of teacher absenteeism that amply indicates how weak governance threatens the quality of education. A well-functioning educational system relies on a combination of social pressure, institutional pressure, and property structured pay systems. Community monitoring can play an important role through local school committees.

4.1 **Recommendations:** The prerequisite for universalization of primary education are:

- The motivation of parents and community through mass- media.
- Status of teachers and supervisory staff needs to be elevated.
- Special considerations and relaxation in respect of age, qualification and experience should be given to lady teachers for appointment in rural areas.
- Periodical in-service and refresher courses be arranged to enhance the capabilities to improve instruction effectively which will ultimately help in retaining the children and quality assurance.
- Contents of the curricula and its language should be based on graded vocabulary of the children.

It is therefore strongly recommended that for retaining the children more emphasis should be given to economically weak children in respect of cash awards, some food/ snacks, health care, flexible time- table and parents- community meetings.

**Table. 1 Retention of Primary School Children between Grades I and II
Sindh Province
2004-05**

Gender	Total	Percentage	
		Rural	Urban
Total	64.2	59.5	76.8
Male	86.7	60.0	76.9
Female	98.5	58.5	76.8

Source: Annexure A, A1, A2, B, B1, B2, and C, C1, C2

**Table. 2 Retention of Primary School Children between grade II and III
Sindh Province
2004-05**

Gender	Total	Percentage	
		Rural	Urban
Total	90.1	89.7	93.2
Male	86.7	85.8	89.3
Female	98.5	98.9	97.8

Source: Annexure A, A1, A2, B, B1, B2, and C, C1, C2

**Table.3 Retention of Primary School Children between grades III and IV
Sindh Province
2004-05**

Gender	Total	Percentage	
		Rural	Urban
Total	89.7	88.4	92.0
Male	86.9	86.0	89.3
Female	94.7	94.4	95.1

Source: Annexure A, A1, A2, B, B1, B2, and C, C1, C2

**Table.4 Retention of Primary school Children between grades IV and V
Sindh Province
2004-05**

Gender	Total	Percentage	
		Rural	Urban
Total	91.1	88.4	89.9
Male	88.2	86.0	85.5
Female	96.2	94.4	94.7

Source: Annexure A, A1, A2, B, B1, B2, and C, C1, C2

**Table. 5 Retention of Primary School Children between Grades I and III
Sindh Province
2004-05**

Gender	Total	Percentage	
		Rural	Urban
Total	57.8	53.4	71.6
Male	55.4	51.5	68.7
Female	63.7	57.8	75.1

Source: Annexure A, A1, A2, B, B1, B2, and C, C1, C2

**Table. 6 Retention Primary School Children between grade I and IV
Sindh Province
2004-05**

Gender	Total	Percentage	
		Rural	Urban
Total	51.9	47.2	65.9
Male	48.1	44.3	61.3
Female	60.3	54.6	71.4

Source: Annexure A, A1, A2, B, B1, B2 and C, C1, C2

**Table. 7 Retention Primary School Children between grade I and V
Sindh Province
2004-05**

Gender	Total	Percentage	
		Rural	Urban
Total	47.2	43.3	59.2
Male	42.4	39.6	67.6
Female	58.1	53.4	52.4

Source: Annexure A, A1, A2, B, B1, B2, and C, C1, C2

Enrolment (Total) in Primary School by grade and Stage
Sindh Province
 2003-04 and 2004-05

Annexure A

Grade/ Enrolment	I	II	III	IV	V
2003-04	855,974	486,000	408,716	349,642	283,134
2004-05	879,104	549,870	441,569	366,796	318,480

Source: 1. AEPAM. Pakistan School Education Statistics, 2003-04
 2. AEPAM. Pakistan School Education Statistics 2004-05

Enrolment (Male) in Primary School by grade and Stage
Sindh Province
 2003-04 and 2004-05

Annexure A-I

Grade/ Enrolment	I	II	III	IV	V
2003-04	531,652	315,768	262,868	224,620	179,455
2004-05	538,434	339,862	273,915	228,662	198,187

Source: 1. AEPAM. Pakistan School Education Statistics, 2003-04
 2. AEPAM. Pakistan School Education Statistics 2004-05

Enrolment (Female) in Primary School by grade and Stage
Sindh Province
 2003-04 and 2004-05

Annexure A-2

Grade/ Enrolment	I	II	III	IV	V
2003-04	324,322	170,232	145,848	125,022	103,679
2004-05	340,670	210,008	167,654	138,134	120,243

Source: 1. AEPAM. Pakistan School Education Statistics, 2003-04
 2. AEPAM. Pakistan School Education Statistics 2004-05

**Enrolment (Total) in Primary School by Grade and Stage
Rural Areas, Sindh
2003-04 and 2004-05**

Annexure B

Grade/ Enrolment	I	II	III	IV	V
2003-04	622,575	324,614	262,029	214,244	166,363
2004-05	634,561	370,522	291,084	231,787	196,739

*Source: 1. AEPAM. Pakistan School Education Statistics, 2003-04
2. AEPAM. Pakistan School Education Statistics 2004-05*

**Enrolment (Male) in Primary School by Grade and Stage
Rural areas, Sindh
2003-04- and 2004-05**

Annexure B-1

Grade/ Enrolment	I	II	III	IV	V
2003-04	408,774	228,956	186,200	153,477	119,490
2004-05	407,768	245,386	196,383	160,222	137,365

*Source: 1. AEPAM. Pakistan School Education Statistics, 2003-04
2. AEPAM. Pakistan School Education Statistics 2004-05*

**Enrolment (Female) in Primary School by Grade and Stage
Rural areas, Sindh
2003-04 and 2004-05**

Annexure B-2

Grade/ Enrolment	I	II	III	IV	V
2003-04	213,801	95,658	75,829	60,767	46,873
2004-05	226,793	125,136	94,701	71,565	59,374

*Source: 1. AEPAM. Pakistan School Education Statistics, 2003-04
2. AEPAM. Pakistan School Education Statistics 2004-05*

**Enrolment (Total) in Primary School by Grade and Stage
Urban areas, Sindh Province
2003-04- and 2004-05**

Annexure C

Grade/ Enrolment	I	II	III	IV	V
2003-04	233,399	161,386	146,687	135,398	116,771
2004-05	244,543	179,348	150,485	135,009	121,691

*Source: 1. AEPAM, Pakistan School Education Statistics, 2003-04
2. AEPAM, Pakistan School Education Statistics 2004-05*

**Enrolment (Male) in Primary School by Grade and Stage
Urban areas, Sindh province
2003-04- and 2004-05**

Annexure C1

Grade/ Enrolment	I	II	III	IV	V
2003-04	122,878	86,812	76,668	71,143	59,965
2004-05	130,666	94,476	77,532	68,440	60,822

*Source: 1. AEPAM, Pakistan School Education Statistics, 2003-04
2. AEPAM, Pakistan School Education Statistics 2004-05*

**Enrolment (Female) in Primary School by Grade and Stage
Urban areas, Sindh province
2003-04- and 2004-05**

Annexure C-2

Grade/ Enrolment	I	II	III	IV	V
2003-04	110,521	74,574	70,019	64,255	56,806
2004-05	113,877	84,872	72,953	66,569	60,869

*Source: 1. AEPAM, Pakistan School Education Statistics, 2003-04
2. AEPAM, Pakistan School Education Statistics 2004-05*

Enrolment (Total) by grade and stage

Sindh Province
1995-96 to 2004-05

Year/Grade	I	II	III	IV	V	VI	VII	VIII	IX	X
1995-96	563,959	416,521	377,428	350,142	312,360	199,625	175,791	144,610	137,866	116,247
1996-97	606,752	433,901	354,628	342,941	314,669	217,660	199,660	183,628	152,554	137,668
1997-98	579,292	435,243	356,348	326,389	303,226	215,854	197,593	180,251	163,390	139,448
1998-99	580,950	418,282	375,276	322,661	289,493	196,857	183,036	181,419	163,195	148,788
1999-2000	614,129	423,133	354,800	322,699	276,637	175,215	174,247	170,870	156,182	135,577
2000-2001	636,011	428,187	356,869	311,152	286,042	167,952	159,574	153,062	140,964	128,060
2001-2002	668,694	441,595	366,572	306,402	261,044	192,788	146,618	136,108	127,200	118,365
2002-2003	797,055	455,412	383,841	328,862	266,943	167,930	150,141	135,913	127,601	113,177
2003-2004	865,974	486,000	408,716	349,542	283,134	181,156	161,915	146,535	137,766	122,185
2004-2005	879,104	549,870	441,569	366,796	318,430	186,816	164,824	151,391	133,756	118,158

Source: AEPAM, 1995-96 to 2004-05 Pakistan School Education Statistics.

**Annexure
D1**

Enrolment (Male) by grade and stage

**Sindh Province
1995-96 to 2004-05**

Year/Grade	I	II	III	IV	V	VI	VII	VIII	IX	X
1995-96	376,192	274,794	245,306	233,471	210,401	125,541	113,405	99,566	92,009	75,532
1996-97	401,991	281,620	239,670	225,835	208,509	136,646	128,412	120,090	106,672	92,072
1997-98	380,112	265,265	234,481	211,821	197,766	133,991	124,458	113,979	107,294	81,304
1998-99	380,860	271,193	242,566	209,034	186,185	118,762	120,096	111,739	102,934	95,924
1999-2000	401,201	277,937	228,642	208,226	177,917	102,739	104,654	104,015	96,544	85,338
2000-2001	415,990	282,688	232,177	201,274	170,913	100,460	95,566	92,212	86,961	79,116
2001-2002	435,629	291,303	230,056	197,137	166,326	98,928	87,004	80,411	77,454	70,414
2002-2003	493,810	295,007	246,362	211,007	169,112	99,331	90,044	79,721	75,367	67,010
2003-2004	531,652	315,768	262,868	224,620	179,455	109,238	97,190	86,015	81,415	72,363
2004-2005	538,434	339,862	273,915	228,682	198,167	113,207	97,350	87,804	80,736	71,032

Source: AEPAM, 1995-96 to 2004-05 Pakistan School Education Statistics.

Enrolment (Female) by grade and stage

Sindh Province
1995-96 to 2004-05

Year/Grade	I	II	III	IV	V	VI	VII	VIII	IX	X
1995-96	187,787	141,729	128,120	116,671	101,969	74,084	62,386	55,042	45,857	40,715
1996-97	204,761	142,281	124,958	117,106	106,480	81,014	71,248	63,538	50,882	45,596
1997-98	199,180	148,978	124,467	114,568	105,480	81,860	73,135	66,272	56,096	48,144
1998-99	200,070	147,089	132,712	113,647	103,328	78,095	72,940	69,880	60,361	52,964
1999-2000	212,926	145,196	126,158	114,473	98,720	72,482	69,593	66,855	58,638	50,239
2000-2001	220,021	145,499	124,892	109,878	95,129	67,492	64,008	60,850	58,023	49,942
2001-2002	233,065	150,293	127,516	109,265	94,718	63,860	59,614	55,697	49,746	47,951
2002-2003	303,245	160,405	137,479	117,675	97,831	68,599	60,097	56,192	52,214	46,767
2003-2004	324,322	170,232	145,648	125,022	103,679	73,920	64,725	60,520	56,351	49,822
2004-2005	340,670	210,008	167,634	138,134	120,243	73,609	67,574	63,587	53,020	47,128

Source: AEPAM, 1995-96 to 2004-05 Pakistan School Education Statistics.

Annexure E

Enrolment (Total) by grade and stage Rural areas, Sindh Province 1995-96 to 2004-05

Year/Grade	I	II	III	IV	V	VI	VII	VIII	IX	X
1995-96	365,390	253,526	20,821	199,905	173,275	67,414	63,611	54,100	41,980	32,156
1996-97	403,041	261,229	214,368	193,136	173,309	71,817	69,832	66,543	47,493	42,412
1997-98	385,350	274,566	215,965	186,949	169,623	73,515	68,706	63,445	51,538	42,110
1998-99	394,905	265,803	232,143	191,968	164,506	62,828	64,300	62,194	47,712	47,214
1999-2000	413,845	268,683	217,800	193,269	159,164	54,164	54,706	56,775	42,485	37,753
2000-2001	441,592	279,100	222,854	188,023	155,180	55,379	51,914	50,737	38,177	35,739
2001-2002	469,067	288,779	227,592	182,369	150,761	55,725	47,955	44,448	33,159	30,557
2002-2003	580,599	247,625	247,625	203,138	158,424	60,760	52,804	45,482	34,950	31,229
2003-2004	622,575	324,614	262,029	214,244	166,363	65,468	56,859	48,916	37,710	33,681
2004-2005	634,561	370,522	291,064	231,787	196,739	74,473	63,466	55,640	41,144	36,205

Source: AEPAM, 1995-96 to 2004-05 Pakistan School Education Statistics.

Enrolment (Male) by grade and stage
Rural areas, Sindh Province
1995-96 to 2004-05

Year/Grade	I	II	III	IV	V	VI	VII	VIII	IX	X
1995-96	268,014	187,269	164,958	152,135	133,281	54,383	52,280	44,551	36,424	27,891
1996-97	292,845	193,590	158,868	145,199	132,193	58,020	56,757	54,793	39,784	36,393
1997-98	277,116	199,702	158,760	138,586	127,361	58,356	54,459	50,376	42,917	35,449
1998-99	280,112	191,720	167,406	139,937	120,773	49,014	51,128	48,570	38,456	37,937
1999-2000	292,715	194,079	156,811	139,949	115,859	42,051	42,923	44,095	34,767	30,990
2000-2001	310,015	201,500	160,956	136,417	112,799	43,328	40,508	39,869	31,265	29,055
2001-2002	327,064	208,539	164,857	132,712	109,445	43,973	37,608	34,771	27,221	24,961
2002-2003	379,898	214,478	175,194	144,958	113,408	46,128	40,868	34,906	27,936	25,140
2003-2004	408,774	228,956	186,200	153,477	119,490	49,797	44,103	37,635	30,172	27,137
2004-2005	407,768	245,386	196,383	160,222	137,365	55,842	46,848	41,438	33,018	28,657

Source: AEPAM, 1995-96 to 2004-05 Pakistan School Education Statistics.

Annexure-E2

Enrolment (Female) by grade and stage
Rural areas, Sindh Province
1995-96 to 2004-05

Year/Grade	I	II	III	IV	V	VI	VII	VIII	IX	X
1995-96	07,376	66,257	55,863	47,770	39,994	13,031	11,331	9,549	5,556	4,265
1996-97	110,196	67,639	55,500	47,937	41,116	13,797	13,075	11,750	7,709	6,019
1997-98	108,243	74,864	57,205	48,361	42,262	15,159	14,247	13,069	8,621	6,661
1998-99	114,783	74,083	64,737	52,031	43,733	13,814	13,172	13,624	9,256	9,277
1999-2000	121,130	74,804	60,989	53,320	43,305	12,113	11,783	11,680	7,718	6,763
2000-2001	131,577	77,600	61,898	51,606	42,381	12,051	11,406	10,868	6,912	6,684
2001-2002	142,003	90,240	62,735	49,657	41,316	11,752	10,347	9,677	5,938	5,596
2002-2003	200,701	91,116	72,431	58,186	45,016	14,632	11,936	10,576	7,014	6,089
2003-2004	213,801	95,658	75,829	60,767	46,873	15,671	12,756	11,261	7,538	6,544
2004-2005	226,793	125,138	94,701	71,565	59,374	18,631	16,618	14,202	8,126	7,548

Source: AEPAM, 1995-96 to 2004-05 Pakistan School Education Statistics.

Enrolment (Total) by grade and stage
Urban areas, Sindh Province
1995-96- to 2004-05

Year/Grade	I	II	III	IV	V	VI	VII	VIII	IX	X
1995-96	198,588	162,995	156,607	150,237	139,085	132,211	112,180	100,510	95,886	84,091
1996-97	203,711	162,672	150,260	149,805	141,680	145,843	129,828	117,085	105,061	95,256
1997-98	193,933	160,677	142,983	139,440	133,603	142,339	126,867	116,806	111,852	97,338
1998-99	186,045	152,479	143,135	130,713	124,987	134,029	128,736	119,225	115,483	101,874
1999-2000	200,264	154,250	137,000	129,430	117,473	121,061	119,541	114,895	112,697	97,824
2000-2001	194,419	149,087	134,915	123,129	110,862	112,573	107,660	102,325	102,807	93,321
2001-2002	199,627	152,817	138,980	124,033	110,283	107,063	99,663	91,660	94,041	87,806
2002-2003	216,456	149,818	136,216	125,744	108,519	107,170	97,337	90,431	90,651	81,948
2003-2004	233,399	161,368	146,687	135,368	116,771	115,688	105,056	97,619	100,056	89,604
2004-2005	244,543	179,348	150,485	135,009	121,601	112,343	101,458	95,751	92,612	81,953

Source: AEPAM, 1995-96 to 2004-05 Pakistan School Education Statistics.

Annexure F1

Enrolment (Female) by grade and stage
Urban areas, Sindh Province
1995-96 to 2004-05

Year/Grade	I	II	III	IV	V	VI	VII	VIII	IX	X
1995-96	108,178	87,525	84,350	81,336	77,120	71,158	61,125	55,017	55,585	47,841
1996-97	109,146	88,030	80,802	80,636	78,316	78,626	71,655	65,297	61,888	55,679
1997-98	102,996	85,563	75,721	73,233	70,405	75,635	69,999	63,603	64,377	55,855
1998-99	100,758	79,473	75,180	69,097	65,392	69,748	68,968	63,169	64,378	57,887
1999-2000	106,486	83,858	71,831	68,277	62,058	60,682	61,731	58,920	61,777	54,348
2000-2001	105,975	81,188	71,221	64,857	58,114	57,132	55,060	52,343	5,896	50,063
2001-2002	108,565	82,864	74,199	64,425	58,881	54,955	49,396	45,640	50,233	45,453
2002-2003	113,912	80,529	71,168	66,055	55,704	53,203	49,176	44,815	47,451	41,870
2003-2004	122,878	86,812	76,888	71,143	59,965	57,439	53,087	48,380	51,243	45,226
2004-2005	130,886	94,476	77,532	68,440	60,822	57,365	50,502	46,366	47,718	42,379

Source: AEPAM, 1995-96 to 2004-05 Pakistan School Education Statistics.

Enrolment (Male) by grade and stage
Urban areas, Sindh Province
1995-96 to 2004-05

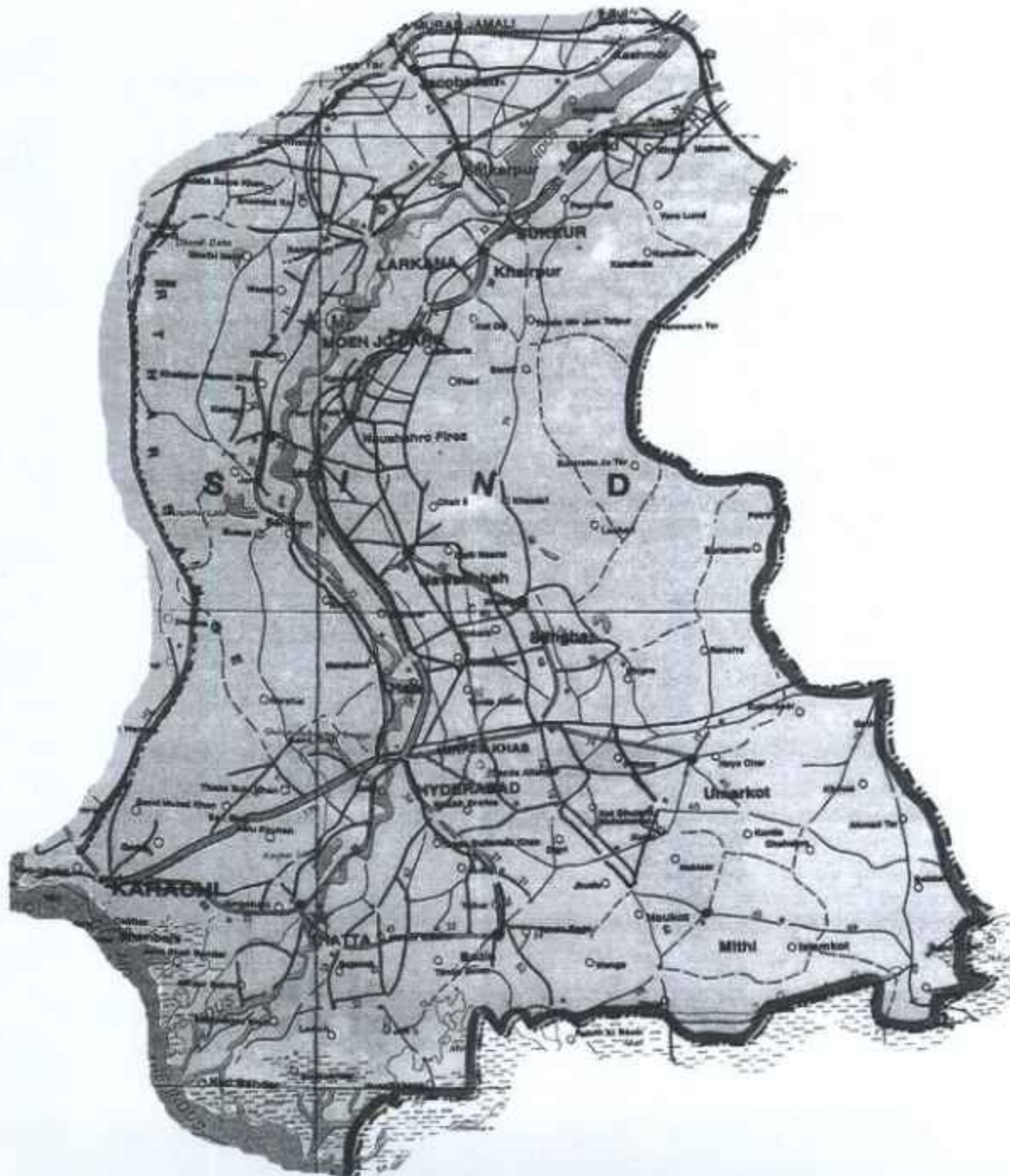
Year/ Grade	I	II	III	IV	V	VI	VII	VIII	IX	X
1995-96	90,391	75,470	72,257	66,901	61,965	61,053	51,055	45,493	40,301	36,450
1996-97	94,565	74,642	69,458	69,189	65,364	67,217	58,173	51,788	43,173	39,571
1997-98	90,937	75,114	67,262	66,207	63,196	66,704	58,888	53,203	47,475	41,483
1998-99	85,287	73,006	67,975	61,616	59,595	64,281	59,768	56,056	51,105	43,687
1999-2000	91,798	70,392	65,169	61,153	55,415	60,369	57,810	54,975	50,920	43,476
2000-2001	68,444	67,899	62,794	58,272	52,748	55,441	52,800	49,982	47,111	43,258
2001-2002	91,062	70,153	64,761	69,608	63,402	62,109	49,267	46,020	43,808	42,356
2002-2003	102,344	69,289	65,046	59,689	52,815	53,967	48,161	45,619	45,200	40,078
2003-2004	110,521	74,574	70,019	64,255	56,806	58,249	51,958	49,239	46,613	43,276
2004-2005	113,677	84,872	72,953	65,569	60,869	54,979	50,956	49,385	44,894	38,576

Source: AEPAM, 1995-96 to 2004-05 Pakistan School Education Statistics.

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SINDH



SINDH



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