Formative Research Project (FRP) for School Sector Reform Program (SSRP) in Nepal

LONGITUDINAL STUDY ON SYSTEM INDICATORS

A Study Jointly Conducted by:

Department of Education

and

Research Centre for Educational Innovation and Development (CERID)
Tribhuvan University

Submitted by:

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Balkhu, Kathmandu
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Acronyms and Abbreviations

CERID	Research Centre for Educational Innovation and Development
DoE	Department of Education
EFA	Education for All
FRP	Formative Research Project
GoN	Government of Nepal
LongSIS	Longitudinal Study on System Indicators
MoE	Ministry of Education
MS	Micro Soft
PTA	Parent Teacher Association
SIP	School Improvement Plan
SSDP	School Sector Development Plan/Program
SSRP	School Sector Reform Plan/Program

Executive Summary

Government of Nepal implemented School Sector Reform Program (SSRP) 2009-2015 through Ministry of Education/Department of Education. Formative Research Project (FRP) for School Sector Reform Program (SSRP) has been commenced and conducted jointly by Department of Education (DoE) and Research Centre for Educational Innovation and Development (CERID), Tribhuvan University. In this context, Longitudinal Study on System Indicators (LongSIS) is a part of the project and has been continued since the very inception of the project.

LongSIS reports of last few years based on acquired data of sample schools of five districts show the enrolment of students as new entrants in Grade I has been in a decreasing trend. All the cohorts show the flow of the students from Grade I to Grade II has the lowest one. The hurdle in the flow from Grade I to II as seen in all the cohorts demands and deserves specific qualitative input based study.

The percentage of students reaching Grade V, Grade VIII and Grade X in subsequent years without repeating any grades was found around twenty, eleven and eight percent irrespective of the school leaving students. The percentage of girl students reaching to these grades in the subsequent years was higher than boys.

The academic qualification of the majority of teachers in sample schools of five districts is found to have Bachelor degree and above.

Per student classroom space was in par with the government norms in the beginning years of the study; however, decreasing trend of student enrolments has increased per student classroom space in the sample schools.

Acknowledgements

Longitudinal Study on System Indicators is the continuation of the studies that has been conducted for Ministry of Education/Department of Education since the year 2002 for Education for All(EFA) and since 2009 for School Sector Reform Program (SSRP) under Formative Research Project. The study has so far conducted analysis on various indicators defined for EFA and SSRP in close collaboration with the MoE/DoE and the study team, since the commencement of the study in 2002.

The information provided by the study to MoE/DoE has been found to be very relevant in order to facilitate its process of planning, implementing, monitoring and managing EFA and SSRP.

I would like to take the privilege to thank and acknowledge on behalf of the study team of CERID for the continuous collaboration and valuable support of all the head teachers and teachers of the sample schools for the role they have played in collecting and ensuring the quality of data.

My sincere thanks are due to Dr. Khagaraj Baral, Director General, Ms. Dev Kumari Guragain, Director, Planning Division and Mr. Kewali Ram Adhikari, Deputy Director of DoE for their support in successfully completing this study. I would like to express sincere thanks to all directors and section officers from DoE and MoE for their creative and constructive suggestion given in during dissemination program of the report. Sincere thanks to Prof. Dr. Kishor Shrestha former co-ordinator of the project for many years who got retired from TU.

Last but not the least, I would like to appreciate and thank entire research team and administrative staff of CERID for their unceasing support and commitments towards the study.

Prof. Dr. Krishna Chandra Sharma
Executive Director
July, 2016

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Chapter I: Introduction

Background

Government of Nepal, Ministry of Education have stated that "The experiences gained from the Formative Research conducted by CERID and other research institutions during EFA implementation have provided a basis for the continuation and expansion of these types of activities in the SSR program. Formative Research will be continued and used to support the GoN/MoE in making informed policy decisions." (pg.51) in the School Sector Reform Plan (SSRP) 2009-2015 document. The successful implementation of Formative Research Project (FRP) and the support it has provided in the successful implementation of EFA has further prompted the Government of Nepal to continue FRP in the implementation of SSRP.

In this context, Longitudinal Study on System Indicators (LongSIS) is one of the major components of FRP. The study started in 2002 with sixty two sample schools from sixteen districts as sixteen stratums of Nepal representing three geographical and five development regions. CERID has been conducting this study continuously since the year 2002.

LongSIS is the only research component of FRP for SSRP that has been continued by CERID jointly with DoE since 2011. In the year 2011-12, the study has been limited to nine schools from three districts representing three geographical regions. However, in the year 2012-13 DoE increased the number of sample districts to five, representing five development as well as three geographical regions of Nepal as suggested by CERID and recognizing the importance of the findings of the study. The same sample schools and districts have been continued since 2013.

The study has revealed quite interesting and very useful data and information on various aspects and indicators of the SSRP as being implemented in the country. Although the study was limited to 15 sample schools of five districts of Nepal, it provided statistical data and a sound basis for trend analysis.

Objectives

The main objective of the LongSIS under FRP for SSRP is to generate research based strategic information on selected SSRP indicators for the MoE/DoE to monitor the progress.

The specific objectives are:

- To collect information on basic indicators of SSRP from sample schools included in 2015
- To find out internal efficiency of school system by using Cohort Analysis.
- To provide research-based updated information on basic indicators to MoE/DoE for monitoring of the attainment regarding the set targets of SSRP.
- To establish a model computerized database system for students' tracking.
- To establish a model computerized database system for teachers' information.

Advisory committee

The project was jointly conducted by DoE and CERID. An Advisory Committee was formed for the continuous support for the research work. There was representation from both DoE and CERID in the committee. The advisory committee was formed consisting of the following personnel.

1.	Chair Person	Executive Director – CERID
2.	Member	Director General – DoE
3.	Member	Director, Planning and Monitoring Division – DoE
4.	Member	Director, Educational Administration Division – DoE
5.	Member	Director, Administration Division – DoE
6.	Member	Director, Educational Quality Evaluation Centre – MoE
7.	Member	Deputy Director, Research and Educational Standard Determination Section – MoE
8.	Member	Deputy Director, Educational Research and Development Section - DoE
9.	Member	Chief, Program and Budget Section - DoE
10.	Member	Chief, Financial Administration - DoE
11.	Member	Chief, Related Topic Section DoE
12.	Member	Chief, Educational Research and Development– DoE.
13.	Member	Associate Researcher – CERID
14.	Member Secretary	Coordinator/Researcher – CERID
15.	Invitees (Maximum 2 in each meeting)	

The committee provided necessary guidance and guidelines to the research team throughout the work period on the basis of the progress of the project based on the

reporting made by research team. Other relevant officials and experts were invited to attend the advisory committee meetings when necessary.

The relevant officials from Research and Monitoring Division of DoE and a team of researchers from CERID conducted the study.

Chapter II: Methodology

The government has initiated the individual student tracking system in the data collection of Flash Reports. However, LonSIS study is the first of its kind in Nepal to initiate to provide unique ID to each student entered in the sample schools. The study attempted to commence the cohort analysis by giving eleven digit unique students ID to each individual student of sample schools.

Sample

The sample districts and schools included in the previous years since 2013 were continued as the sources of the LongSIS data for this year too as they constitute important grids that strategically cover the geographical diversities in the country. The list of sample districts and number of schools by development and geographical regions is given below.

Table 1: Number of Sample Schools by District and Stratum

SN	District	Development Region	Geographical Region	Number of sample schools
1	Dhankuta	Eastern	Hill	2
2	Rasuwa	Central	Mountain	3
3	Syangja	Western	Hill	4
4	Banke	Mid-Western	Tarai	3
5	Dadeldhura	Far-Western	Hill	3
Total				15

Tools

The laptop computers with database software developed for LongSIS were used in order to gather the information directly from the schools. The information was directly computerized in the software installed in laptops of the field researchers.

The information was collected in these four categories using the following tools:

1. **School Information Form**: This form captures the general information of the sample school. The location, address, type of school, number of students in all grades, classroom size, etc. are included in this form.
2. **Student Information Form**: The student information form includes the basic information of the students, their caste/ethnicity, information about their parents, monthly attendance, final achievement scores obtained and the status in the final school examination.

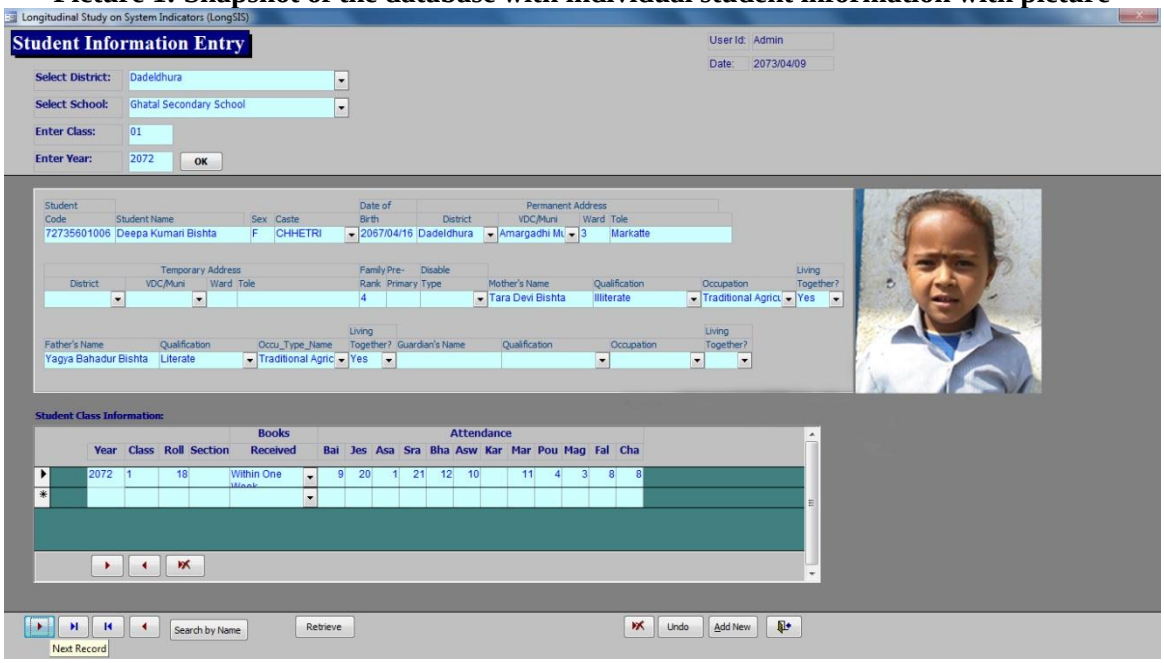
3. **Teacher Information Form**: This form contains basic information of the teacher of the sample school. The information on the work experience, level, training, attendance, etc. of the teachers was collected in this form.

4. **School Finance and other Information Form**: The information on library, income and expenditure, SIP, PTA, VEC, and school visits by different personnel was collected in this form.

Photographs of Students

The photographs of individual student enrolled in Grade I and who was present on the day of school visit by the research team in all fifteen sample schools of five sample districts was taken and entered into student's database. This new initiative is taken to make it easy to track the children by their photographs and to keep a track of the visible changes in children's outlook in due course of time.

Picture 1: Snapshot of the database with individual student information with picture



The head teachers/data managers of the sample schools of Rasuwa district were invited at CERID with necessary data due to the time constraint. Hence, the photographs of the students have not been included in the database from the sample schools of Rasuwa district.

The existing computer software developed for the data entry and analysis was updated. The data entry software is in Microsoft Access and it was modified and the necessary initiatives are being taken for this purpose.

Orientation

In order to bring the consistency on the data collection from the sample schools, two days orientation program was conducted for the field researchers at CERID. Also, as a new section to include the photographs of the students of Grade I in the database, the technique of taking photographs was also oriented to the field researchers.

Process of data collection

The school authorities were involved during data collection and data management activities at school level. This is done in order to assure that the schools take the ownership and control over the process and the product of collecting and analyzing the data of individual students,

The data was collected from the schools for the academic session of the year 2015, which includes school information, student information, teacher information and financial as well as other necessary information.

The head teachers/data managers from three sample schools of Rasuwa districts were invited at CERID for the data collection. The field visit to this district was not possible due to the time constraint, however, inviting the head teachers/data managers from the sample schools of Rasuwa reminded the cluster level data collection workshops that were used to be conducted in previous years.

The collected data was entered in the data entry software by the field researcher in the field itself using their laptops in order to ensure the quality of the data.

The database consist ten students' cohorts from 2002 to 2006 who have reached Grade 5 without repeating any grades in five subsequent years up to 2015.

Likewise, there are seven students' cohorts from 2002 to 2009 who have reached Grade 8 in the year 2015 without repeating any grades in eight subsequent years.

Similarly, there are five students' cohorts from 2002 to 2011 who have reached Grade 10 in the year 2015 without repeating any grades in ten subsequent years.

Error! Not a valid bookmark self-reference. shows the data collection matrix till the year 2015 by the number of cohorts with grades and years.

Table 2: Data Collected till 2015

BS		2059	2060	2061	2062	2063	2064	2065	2066	2067	2068	2069	2070	2071	2072
	AD	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
2059	**2002**	1													
2060	**2003**	2	1												
2061	**2004**	3	2	1											
2062	**2005**	4	3	2	1										
2063	**2006**	5	4	3	2	1									
2064	**2007**	6	5	4	3	2	1								
2065	**2008**	7	6	5	4	3	2	1							
2066	**2009**	8	7	6	5	4	3	2	1						
2067	**2010**	9	8	7	6	5	4	3	2	1					
2068	**2011**	10	9	8	7	6	5	4	3	2	1				
2069	**2012**		10	9	8	7	6	5	4	3	2	1			
2070	**2013**			10	9	8	7	6	5	4	3	2	1		
2071	**2014**				10	9	8	7	6	5	4	3	2	1	
2072	**2015**					10	9	8	7	6	5	4	3	2	1

The database contain huge amount of data on students' demographic information, monthly attendance and subject wise annual exam scores. However, the cohort analysis of three categories of the cohorts i.e., Cohort up to Grade 5, 8 and 10 are presented in this report. Also, trend analyses of some pertinent indicators are also presented here.

Limitations

The volume of data collected so far shows that there are tremendous possibilities for looking into various characteristics of education of Nepal by using this huge amount of information gathered since the year 2002 till date.

As the limitation of time and resources available for the study, comparison has been made only using a few of the indicators. In the course of this study, the use of other statistical analysis were overlooked, hence, this has not been explored in this report.

Chapter III: Students' Cohort Flow

In the following section, the analysis of ten cohorts of students from 2002 to 2011 who were enrolled in Grade I and reached Grade V without repeating any grades in five consecutive years is presented.

Similarly, the analysis of seven cohorts of students from the year 2002 to 2008 who were enrolled in Grade I and reached Grade VIII without repeating any grades in eight consecutive years is also presented.

And, five students' cohorts enrolled in Grade I in the year 2002 to 2006 and reached Grade X in ten consecutive years without repeating any grades is presented in this section.

Only the students who were enrolled in Grade I as fresh new entrants were included and analysed in this student cohort flow.

The repeater students who were already in Grade I have been excluded from overall student flow. The school leaving students are not included in the analysis.

New Entrant Students in Grade I

Only new students who got enrolled in Grade I in the year 2002 are taken as the base year and the enrolment percentage of students in Grade I in the consecutive years is presented in Figure 1.

Figure 1: Trend of New Entrants in Grade I

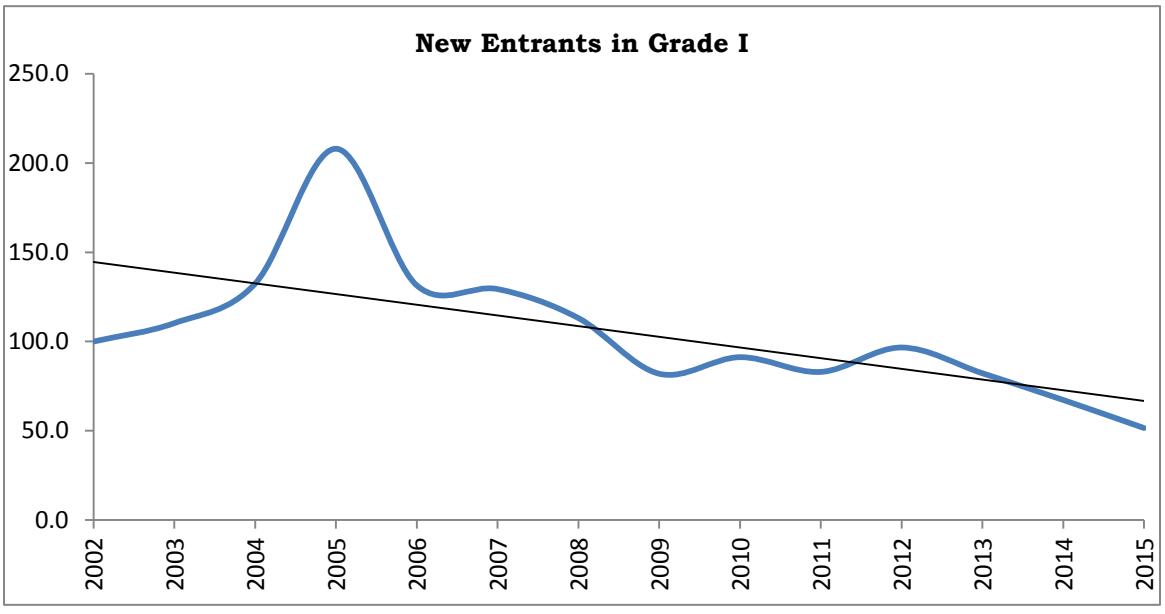


Figure 1 shows that the enrolment of students started increasing up to the year 2005. In the year 2005 , the student enrolment was more than double of the base year; however the student enrolment started decreasing since the year 2006, which continued till now. The percentage of student enrolment is slightly higher than half of the base year in the year 2015.

Student Cohort Flow up to Grade V

The overall flow of the ten student cohorts, enrolled in Grade I from the year 2002 to 2011 is presented here. All the fifteen school have been included for analysis, since all the sample schools do have classes up to Grade V.

The number of students enrolled in Grade I in the year 2002 is taken as the base year as 100 percent. The number and percentage of students who were upgraded in the subsequent years are presented in Table 3.

Table 3: Student Cohort Flow up to Grade V

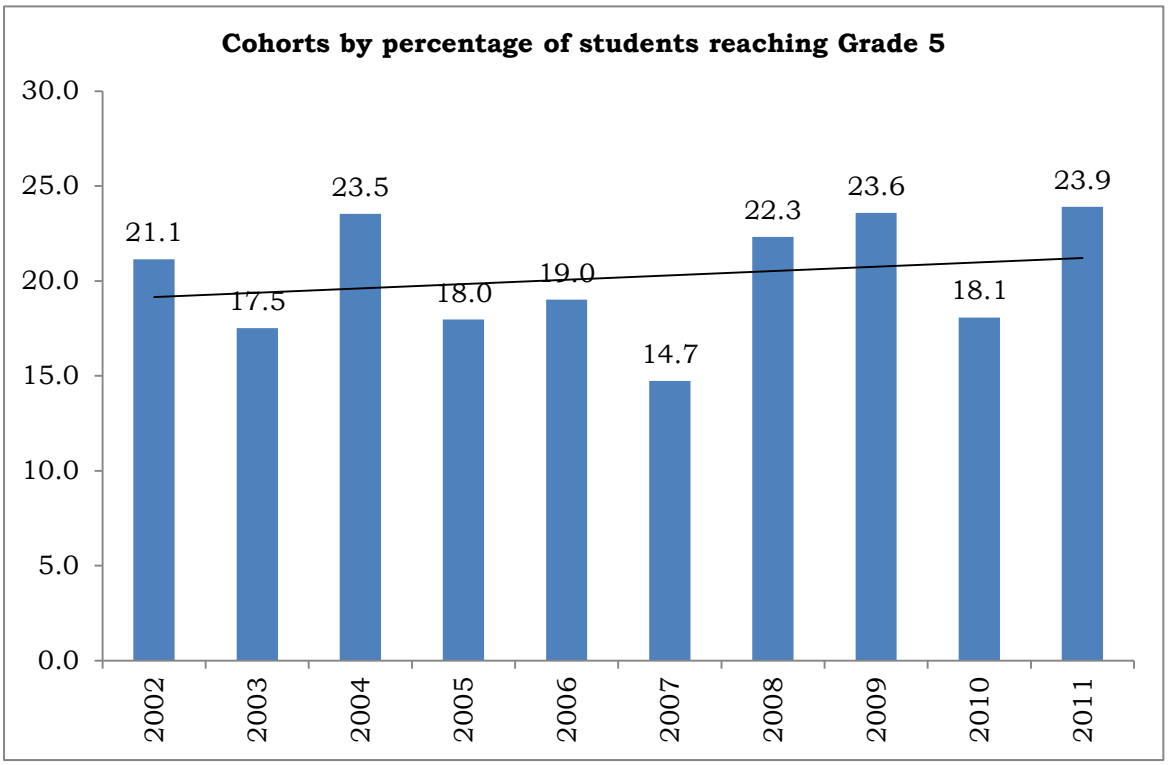
	Grade I	Grade II	Grade III	Grade IV	Grade V
2002	100 (388)				
2003	100 (428)	50.8			
2004	100 (514)	43.0	30.2		
2005	100 (807)	50.4	29.9	25.0	
2006	100 (510)	57.2	36.0	22.2	21.1
2007	100 (502)	45.3	30.0	28.2	17.5
2008	100 (439)	45.2	32.5	21.8	23.5
2009	100 (318)	54.2	34.9	23.7	18.0
2010	100 (354)	55.7	37.1	24.3	19.0
2011	100 (322)	57.3	23.0	29.2	14.7
2012		55.6	31.1	29.6	22.3
2013			38.8	22.6	23.6
2014				30.4	18.1
2015					23.9

The student cohort flow shows that in an average more than fifty percent of the students who got enrolled in Grade I as new entrants are promoted to Grade II in the next year. Around thirty two percent students reach Grade III in the third year and around twenty six percent students reach Grade IV in the fourth consecutive year without repeating any grades.

It shows that nearly twenty percent of the students enrolled in Grade I as new entrants in the year reach to Grade V in five consecutive years without repeating any grades.

Among these ten students' cohorts, the highest percentage of students reaching to Grade 5 in five subsequent years was in the cohort of the year 2011 and the lowest was of the year 2007.

Figure 2: Percentage of students reaching Grade V by Cohort year



The figure shows that out of total students enrolled in Grade I in 2002, only 21.1 percent students reached Grade V in five consecutive years.

Among the ten cohorts from 2002 to 2011, the highest percentage of the students reaching Grade V in five consecutive years without repeating any grades was about 24 percent in 2004, 2009 and 2011cohorts.

The lowest percentage was about 15 percent of the 2007 cohort, students reaching in Grade V in five consecutive years.

Student Cohorts flow up to Grade V by Sex

The sex of the students and the differences in the pattern of reaching to Grade V in five successive years are presented in this section.

The percentage of girl and boy students enrolled in Grade I as new entrants in the years from 2002 to 2011and who reached Grade V in the year 2005 to 2015 are respectively analysed in the following figure.

Figure 3: Percentage of students reaching Grade V by cohort and sex

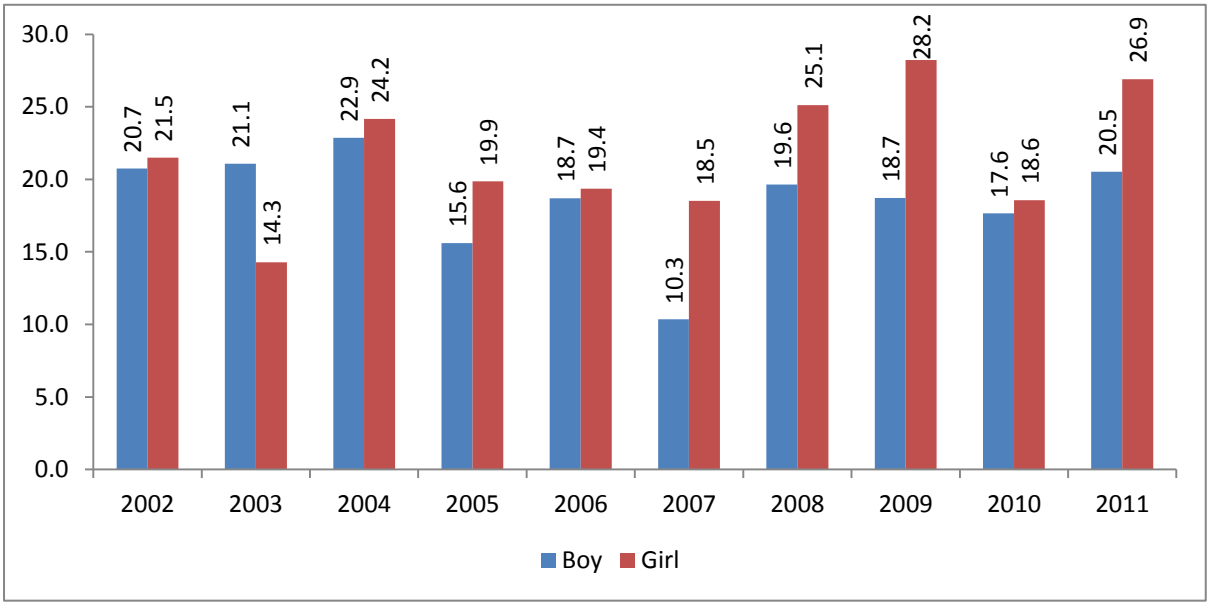


Figure 3 shows that the percentage of girls reaching Grade V in five successive years without repeating any grades is higher than the percentage of boys in most of the cohorts except in the year 2003. The highest percentage of girls was found in the year 2009 and the lowest of boys was found in the year 2007.

Student Cohort Flow up to Grade VIII

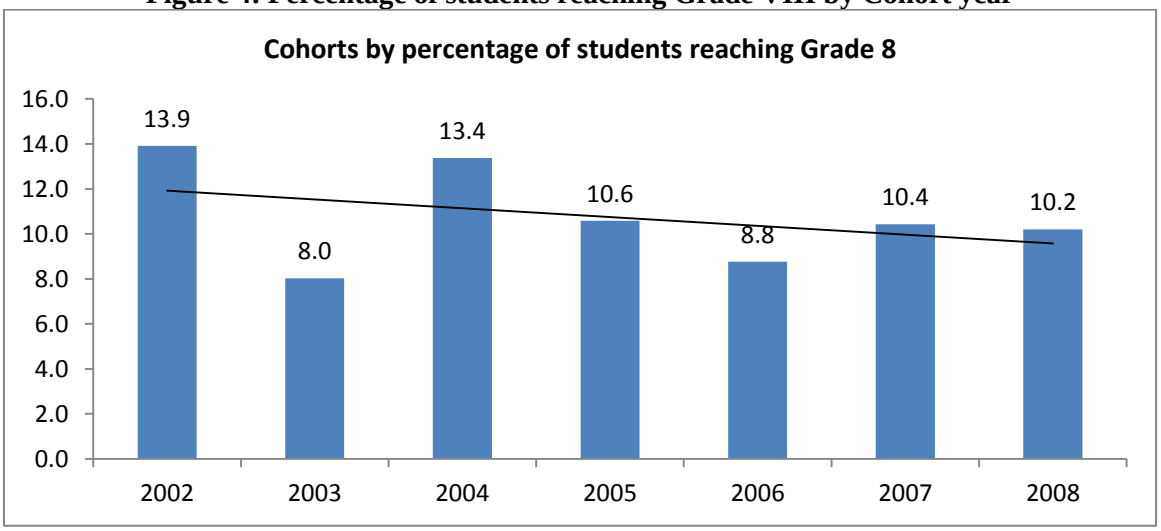
The student flow of six cohorts from the year 2002 to 2008 have been analysed here. Out of 15 sample schools only nine schools having lower secondary (upper-primary) grades were included for the analysis.

Table 4: Student Cohort Flow up to Grade VIII

	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5	Grade 6	Grade 7	Grade 8
2002	100 (266)							
2003	100 (299)	60.9						
2004	100 (344)	41.1	35.7					
2005	100 (595)	51.5	29.1	28.9				
2006	100 (388)	57.3	39.0	22.7	25.6			
2007	100 (403)	42.5	30.1	30.2	18.1	19.2		
2008	100 (353)	46.7	32.0	23.4	25.0	13.0	16.2	
2009		50.7	35.7	22.4	18.7	23.0	10.7	13.9
2010			33.4	23.6	17.8	15.0	17.2	8.0
2011				27.8	20.8	14.9	8.9	13.4
2012					20.4	16.9	10.8	10.6
2013						19.3	12.9	8.8
2014							13.3	10.4
2015								10.2

It shows that, in an average half of the students enrolled in Grade I as new entrants in all the cohorts reached Grade II in the following year. Around 34 percent reached Grade III, 26 percent reached Grade IV, 21 percent reached Grade V, 17 percent reached Grade VI, 13 percent reached Grade VII and 11 percent reached Grade VIII in the successive years.

Figure 4: Percentage of students reaching Grade VIII by Cohort year



The cohort of students reaching Grade VIII in eight consecutive years was the highest in the year 2002 and the lowest in the year 2003. There are variations in the percentages of students reaching Grade VIII without repeating any grades in the cohorts. The reasons affecting this variation in the percentage in these cohorts is beyond the scope of this study.

Student Cohorts flow up to Grade VIII by Sex

The analysis of student cohort flow reaching Grade VIII by Sex is presented in this section.

Figure 5: Percentage of students reaching Grade VIII by cohort and sex

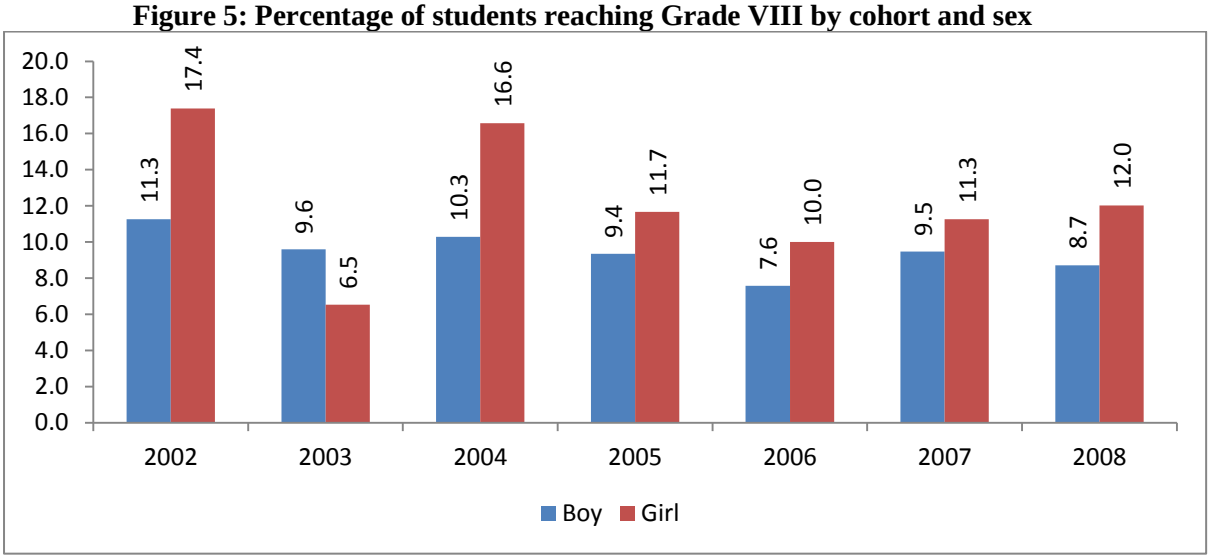


Figure 5 shows that the percentage of girls reaching Grade VIII without repeating any grades in eight successive years was found higher compared to boys in all the cohorts except 2003 cohort.

Student Cohort Flow up to Grade X

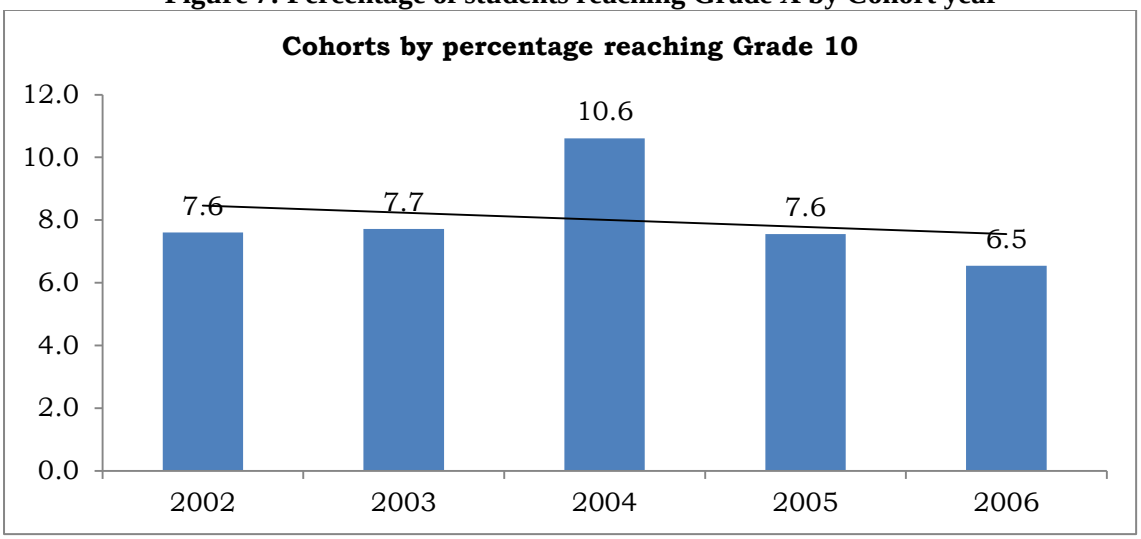
There are seven schools out of fifteen sample schools with up to Grade X and above, and these are included in this part of analysis.

Figure 6: Student Cohort Flow up to Grade X

	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5	Grade 6	Grade 7	Grade 8	Grade 9	Grade 10
2002	100 (250)									
2003	100 (285)	64.0								
2004	100 (330)	42.8	37.6							
2005	100 (569)	53.3	30.5	30.4						
2006	100 (382)	58.7	40.3	23.9	26.8					
2007		42.4	30.8	31.2	18.9	20.4				
2008			32.3	24.3	25.8	13.7	17.2			
2009				22.8	19.3	23.6	11.2	14.8		
2010					18.1	15.5	17.6	8.8	12.0	
2011						11.0	9.1	13.6	8.1	7.6
2012							9.9	10.9	11.2	7.7
2013								8.9	9.7	10.6
2014									7.6	7.6
2015										6.5

In an average, about 53 percent of students enrolled in Grade I as new entrants in these five cohorts reached Grade II in the next year. Similarly, about 34 percent in Grade III, 27 percent in Grade IV, 22 percent in Grade V, 17 percent in grade VI, 13 percent in Grade VII, 11 percent in Grade VIII, 10 percent in Grade IX and 8 percent in Grade X is seen from the cohort given above.

Figure 7: Percentage of students reaching Grade X by Cohort year

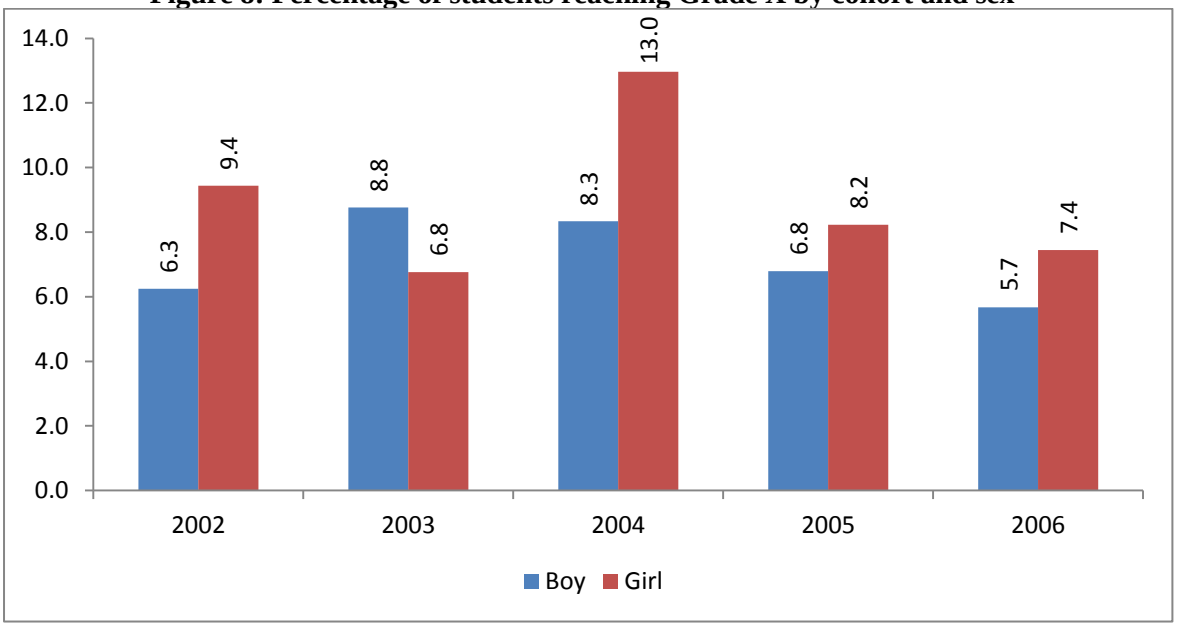


Specifically, the percentage of students reaching Grade X without repeating any grades in ten consecutive years was around eight percent in all the cohorts except in the year 2004 and 2006 cohorts.

Student Cohorts flow up to Grade X by Sex

The percentage of student cohort reaching Grade X by sex is presented in Figure 8.

Figure 8: Percentage of students reaching Grade X by cohort and sex



It shows that the percentage of girls reaching Grade X is higher compared to boys in all the cohorts, except in the year 2003 cohort. The percentage of girls is highest in the student cohort of the year 2004.

Chapter IV: Trend Analysis of some of the Indicators of SSRP

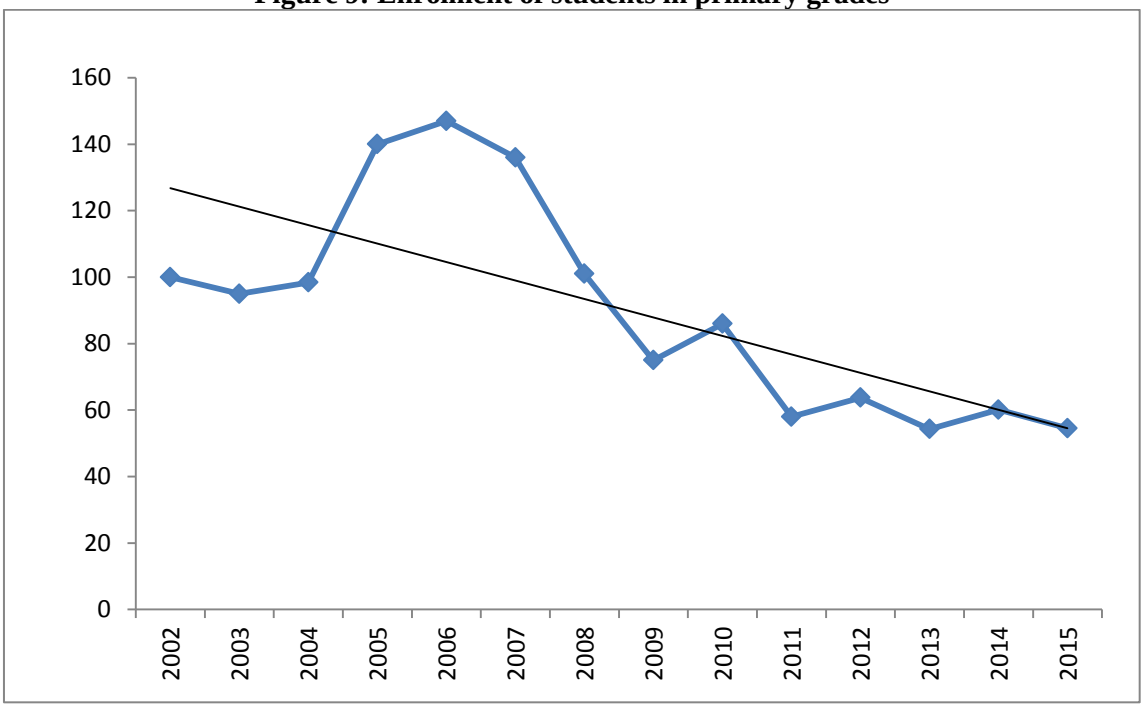
The Trend Analysis of some of the indicators of SSRP is presented in this chapter. The study was initiated in the year 2002. In the given report the trend of the indicators is presented from the year 2002 to 2015.

Trend of Student Enrolment

The year 2002 is the base year for the trend analysis. It has been started by taking 100 percent in the base year and different percentages of other years are calculated accordingly. In this section the trend analysis of some pertinent indicators has been done over a period of time from 2002 to 2015.

The student enrolment trend in primary grades in the sample schools is presented in the given chart.

Figure 9: Enrolment of students in primary grades

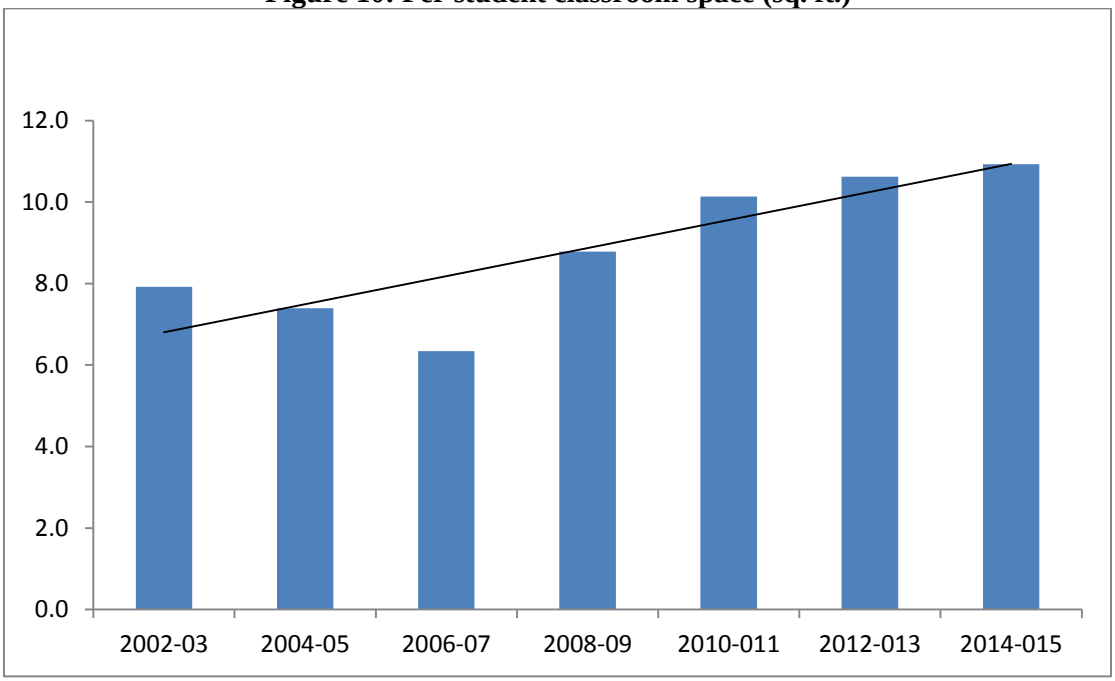


The student enrolment trend in primary grades shows that there is a noticeable peak up from the year 2005 to 2006. There is great increase in the percentage of student enrolment in the year 2006 in the sample schools. The trend shows a decline in student enrolment since the year 2007; however in 2010 it increased and started falling again in the subsequent years.

Per Student Classroom Space

The Education Regulation has set 0.75 sq. meters i.e., 8.1 sq. ft. per student classroom space for Primary Level. The available space for the students in the sample schools during the study period is presented in this section.

Figure 10: Per student classroom space (sq. ft.)



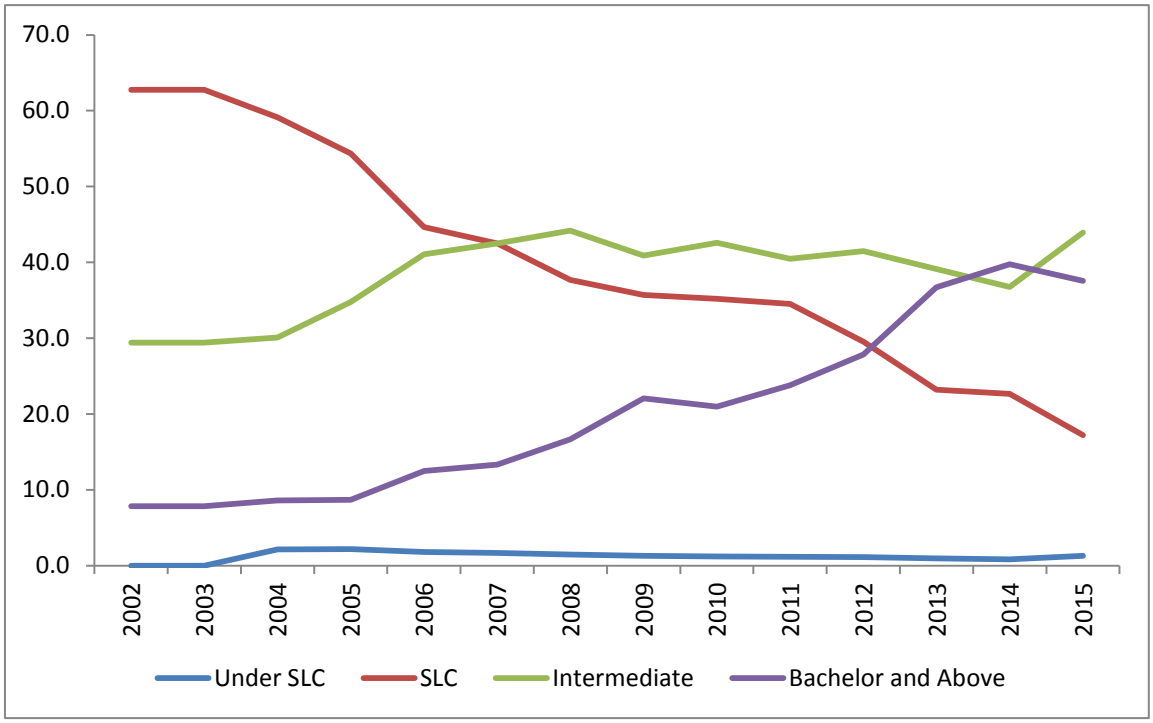
The measurement of per student classroom space was in par with the government norms in the beginning years of the study. Then the sudden increase in the student enrolment in the years 2005 to 2007 has decreased the per student classroom space. Again, the decrease in the student enrolment since 2008 has increased per student classroom space in the sample schools.

In Rasuwa district two sample schools has built two classrooms each with prefabricated materials since their old building were seriously affected by the recent earthquake. However, these 10x10 feet classrooms are not adequate at all to run the classes smoothly.

Status of teachers' qualification

The distribution of teachers by their educational qualification in the sample schools is analysed in this section.

Figure 11: Teacher's Qualification



The majority of teachers in the base year 2002 were with the qualification of SLC, which gradually started decreasing in the subsequent years. The percentage of teachers with the qualification of Intermediate level has started increasing gradually from 2002 in the subsequent years and started to down fall from the year 2008. This is because of the percentage of teachers with Bachelor and Masters Level of educational qualification started increasing. The percentage of teachers with qualification of SLC is gradually decreasing in the subsequent years.

There are still some teachers with educational qualification under SLC, however, the percentage is in declining trend.

Chapter V: Findings and Recommendations

The findings and recommendations of the study and the conclusions are presented in this section. The overall recommendations based on the major findings from both cohort and trend analysis is presented in this chapter.

Findings

The student enrolment as new entrants in Grade I is in decreasing trend in comparison to the previous years.

The flow of the students shows that the flow from Grade I to Grade II appears to be the most difficult for all the cohorts as it has the lowest flow.

The percentage of students reaching Grade V without repeating any grades in five subsequent years was found around twenty percent irrespective of the school leaver students.

Generally, the percentage of girl students reaching Grade V in five subsequent years was higher than boys.

Among the students enrolled as new entrants, around eleven percent reached Grade VIII in eight subsequent years and in this percentage girls percentage is higher compared to boys.

It was found that around eight percent of students enrolled in Grade I as new entrants reached to Grade X in ten successive years without repeating any grades. The school leaver students, who might have enrolled in other schools, were excluded in this analysis. The percentage of girl student is higher compared to boy students.

The intake of students in primary grades shows a decreasing trend.

The academic qualification of the teachers is found more towards the Bachelor and above degrees reducing the percentage of teachers with qualification of SLC and intermediate level.

Per student classroom space was in par with the government norms in the beginning years of the study; however decreasing trend of student enrolments has increased per student classroom space in the sample schools.

Recommendations

The stakeholders should take ownership of the data generated in the schools and use it for planning of their schools. The school level data keeping and the data analysis need to be consistent in all the schools. The school level data keeping system needs to be strengthened at the school level for analysis, reporting and the use of their own data.

The characteristics of the schools and students such as physical facilities, qualification/training of teachers, sex, attendance, achievement scores, student family background, etc. need to be statistically analyzed in order to enhance the internal efficiency of schools education. This will provide research based information to the policy makers.

Future directions in the context of SSDP

The study design was initiated in the 2002 and still the study is following the same methodology except some modification on cluster data collection workshops in 2005, however the context has undergone changes in the present time. In the beginning of the study 40 indicators were developed based on EFA and other documents. In 2005 in the context of SSRP the previous 40 indicators of the study were revised and 43 indicators based on SSRP were adopted for the study. Now, in the context of SSDP these 43 indicators need to be reviewed and revised.

The sample schools selected at the initial phase of the study included 62 schools from 16 districts of Nepal. Since the priority and focus at that time was primary grades, the sample schools were basically primary schools with at least one lower secondary attached primary school where possible. Now most of these schools have been upgraded to higher levels.

In the context of SSDP, more representative sample schools and districts need to be added with the continuation of the existing 62 schools and 16 districts.

The data has been collected from 14 cohorts by 2015 and each year data is collected for a new cohort. Hence, there should be a clear vision on the limitation of the number of cohorts. In the LongSIS database, there are data of ten cohorts up to Grade 5, seven cohorts up to Grade 8 and five cohorts up to Grade 10.

Similarly, the students of the initial five cohorts have completed Grade X and the same data has been analyzed. There are sample schools where the students of these cohorts are doing their higher studies in higher secondary level; also some cohorts have passed out

the school level and perusing their higher studies in colleges. The cohort study demands the tracer studies of those students; therefore there should be clarity on the limitation of the study design.

As a part of this study, a set of computer, printer and UPS were provided to 62 sample schools of 16 sample districts in 2010 in order to make the schools capable in record keeping system and use the data for the school itself. No follow up has been done, and therefore, there should be a follow-up mechanism and further trainings in those schools.

The modality of data collection also needs to be revised by using Information, Communication Technology, which will minimize the cost of data collection. The human resources in the schools need to be trained and make them responsible as well as accountable for the ownership of their school's data.

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Annex

SampleSchool

Dhankuta

MargeshworiPrimary School, Charagaun, Dhankuta - 4

Gokundeshwor Higher Secondary School, Siran Bazar, Dhankuta – 7

Rasuwa

BhimaliPrimary School, Bhimali, Dhunche – 4

Rasuwa Higher Secondary School, Dhuche - 8

SaraswatiLowerSecondary School, Thade, Dhunche - 2

Syangja

Bhumre Higher Secondary School, Bhumre, Bidhyalaxmi – 1

SaraswatiSecondary School, Gairhikhet, Syangja – 4

DurgaDeviPrimary School, Devisthan, Putali Bazar – 2

AmilithumPrimary School, Waling – 3

Banke

NepalRastriyaSecondary School, Manakamanapur, Bageshwori – 5

SaraswatiPrimary School, Bankegaun, Nepalgunj – 12

Secondary School, Lagdhawa, Karkando, Nepalgunj – 6

Dadeldhura

Ghatal Higher Secondary School, Nuwakot, Amargadhi – 3

MastabaijyanathLowerSecondary School, Dhoda, Dandaban, Nawadurga – 4

JanajyotiPrimary School, Adityapur, Amargadhi - 2