

Quality and Accuracy of School Reported Data



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Executive Summary

Background

Data reliability involves accuracy and timely supply of the data. Accuracy involves all the stages from questionnaire development to data collection, transcription, editing, compilation and output development from the school level to the central level. As we know, all schools in Nepal have to fill in the school information form each year and the school should pay enough attention to keeping data in a systematic and organized manner. The Department of Education (DOE) started implementation of the Basic and Primary Education Program II (BPEP) in 1999. The BPEP II has made provision for periodic monitoring and evaluation of progress toward achieving systematic goals through EMIS. Earlier studies of New ERA (1989) and The Third Party Review of BPEP II have also pointed out reservations on the accuracy of the data. So this type of study is necessary to examine the quality and accuracy of school level data for DOE to strengthen the BPEP II.

Objectives

- to assess the level of understanding on data collection instruments among the local level data managers;
- to examine the data keeping system at the school level;
- to explore the range and magnitude of errors in school reported data;
- to identify the factors responsible for data errors at the local/school level; and
- to suggest possible measures for quality data collection and compilation at the school level.

Methodological Approach

Procedure: The focus of the study is to determine the quality of the reported data from the schools and it selected three districts on the basis of the amount of inconsistencies with negative growth on schools, students and teachers. From each district, six primary schools (including community and institutionalised) were sampled.

The study focused on student information modules. In the student information modules, the study focused on the current year student enrolment (Table No. 3.1.1 of school information form, 2001), current year repetition, new entrants/transfer and promotion and dropout (Table No. 3.2 of school information form, 2001), current year age-wise enrolment (Table No. 3.3 school statistical information form, 2001).

In the selection of schools, the following criteria were applied i) primary schools not tallying the current enrolment data with promotion, repetition, new entrants/transfer and dropout, ii) primary schools not tallying the current enrolment data with age-wise enrolment; and iii) primary schools not tallying the age-wise enrolment data with promotion, repetition, new entrants/transfer and dropout. To explore the magnitude of error the reported data were collected from school information forms submitted to the respective DEOs and actual figures were collected from different records available in the schools and tallied. For the subjective judgment and understanding of the school information form the structured questionnaires for HTs, RPs, SMC members and DEOs were also administered.

Major Findings and Recommendations

Record Keeping System and Level of Understanding

Most of the schools have kept records on admission forms, student attendance register, student performance register, fee record register. The data keeping system is comparatively poorer in community schools than in institutionalised schools. The collection and distribution time of the school information form also vary in the districts from one school to other.

Out of 18 schools, in 8 schools the form is filled in by HTs, in 4 schools by a teacher and in 6 schools by data assigned staffs. Generally, in community primary schools the form is filled in by HT and in institutionalised schools by data assigned staffs. About 39 percent of the HTs made a point of asking the RPs, when they got confused about the form and about 61 percent of the HTs have never asked RPs for filling in the form. About 44 percent of HTs have expressed their view that RPs discuss about school information form and 56 percent RPs have never discussed about the form during their visit in the school.

So far as the level of understanding of the school information form is concerned out of surveyed 18 schools all the data managers understand well about promotion, 15 data managers easily understand (data transfer easily in the form) on repetition and 3 have expressed as complex (difficult to transfer the data in the form) to understand. Likewise, 16 data managers easily understand on new entrants/transfer and age-wise enrolment and 2 have expressed as complex. But in the case of dropout, 10 data managers easily understand, 2 do not clear (do not understand the topics) and 6 have expressed as complex to understand. On the form filling training, only 8 schools have got training. All the data managers of institutionalised schools do not have any kind of training on school information form. The RP's visit to the school is limited and most of the RPs do not verify the school information form.

Data Error at School Level

Discrepancies on current year enrolment

In Lalitpur district, the highest percentage of total discrepancies is observed in Phulchoki Primary School, Bisankhu Narayan at 17.1 percent. In that school the discrepancies among the boys and girls are 19.4 and 15.7 percent respectively. Similarly, the least discrepancy is observed in Radiant Readers Academy School at 1.7 percent. In Lalitpur district the average discrepancy is 9.2 percent

In Dhanusha district, the highest percentage of total discrepancies is observed in Laxminiya Janta Secondary School, Laxminiya at 31.0 percent. In that school the discrepancies among the boys and girls are 29.5 and 33.3 percent respectively. Similarly, the least total discrepancy is observed in Rashtriya Primary School, Naktajhij at 1.1 percent. In Dhanusha district the average discrepancy is 12.5 percent

In Ilam district, the highest percentage of total discrepancies is observed in East Point English School, Rungsum at 35.1 percent. In that school the discrepancies among the boys and girls are 37.8 and 32.4 percent respectively. Similarly, the least discrepancy is observed in Amar Secondary School, Barbote at 1.2 percent. In Ilam district the average discrepancy is 13.2 percent.

As a whole in three districts the average total discrepancy in current year enrolment is 11.6 percent (11.4 % in boys and 11.9 % in girls).

Over/under/correct reporting. In three districts, 12 community schools and 6 institutionalized schools were sampled and they had either over reported or under-reported or correctly reported in the total number. Among them 8 schools (7 community and 1 institutionalized) had over-reported and the total number of students are 163. Similarly, 7 schools had under-reported (4 community and 3 institutionalized) with the total number of students 51 and 3 schools had reported correctly (1 community and 2 institutionalized). The difference between the sum of over reporting and under-reporting students is 112. It indicates that on current year enrolment data the number of over-reporting is higher than that of under reporting.

Discrepancies on promotion, repetition and new entrants/transfer and drop out. In three districts the discrepancy in repetition for boys is 47.4 percent and for girls is 56.8 percent, whereas in new entrants/transfer for boys is 35.8 percent and for girls 47.0 percent. The discrepancy in promotion for boys is 9.9 percent and girls for 16.6 percent and in dropout for boys is 99.0 percent and for girls is 93.4 percent respectively.

Over/under/correct reporting. In three districts 12 schools have over-reported, 4 schools under-reported and 2 schools reported correctly on repetition. Five schools have-over reported, 12 schools under-reported and 1 school reported correctly on new entrants/transfer. Twelve schools have over-reported, 2 schools have under-reported and 4 schools have correctly reported on promotion. Three schools have over reported, 9 schools under reported and 6 schools reported correctly on dropout.

Age-wise enrolment. All 18 schools have no complete record on age-wise enrolment and the total unavailability of records in three districts is 37.9%. Among them in Lalitpur 39.4%, in Dhanusha 39.3% and in Ilam 30.9% have no record in the school.

District-wise errors

Data blank. In the year 2057 (2000) the total number of forms verified in three districts was 829 out of which 28 (3.4%) were found with blank data in one or another items of the three information-a) current enrolment, b) promotion/repetition, new entrants/transfer and c) age-wise enrolment. The incidence data blank on current enrolment, promotion/repetition, new entrants/transfer and age-wise enrolment was 10 (35.7 %), 10 (35.7 %) and 8 (28.6%) respectively. In the year 2058 (2001) a total of 948 forms were verified out of which 488 (51.5%) bear errors. Among 488 schools 44 (4.6%) schools had send blank data. The data blank on current enrolment, promotion, repetition, new entrants/transfer and age-wise enrolment were 15 (34.1%), 19 (43.2%) and 10 (22.7%) respectively.

Error and blank on promotion, repetition, new entrants/transfer and dropout. In the year 2000, a total of 829 forms were verified in which, 531 forms were found to have errors and blank and number of error was 462. Likewise in 2001, in three districts a total of 948 forms were verified and errors and blank were found in 488 forms and the total number of errors was 348

Error and blank on age-wise enrolment. In the year 2000, the total number of errors found on age-wise enrolment only was 245 (29.6% out of surveyed schools 829 & 46% out of 531 total error schools). Likewise, in 2001 the number of errors was 162 (17.1%

out of total surveyed schools 948 & 33% out of 488 total error schools) and a mistake in one of the grades was conspicuous.

So, unavailability of record has emerged as a major problem for the collection of qualitative data in the schools.

Factors of Errors

The factors responsible for errors are negligence at the time of form filling, transcribing the of data from the registers, incomplete records, lack of training/orientation, compel to admit the students without any documents, no specification of deadlines for the form collection and distribution, complexity of the form, if at all, lack of proper record keeping system and incomplete instructions/directions given in the form.

Possible corrective measures to minimise errors

- Short-term training-cum workshop session for data managers at the school level,
- Development of form-filling guidelines,
- Compulsion to be imposed on birth certificate or vital register for each student,
- Verification of the data on current year enrolment with promotion, repetition and new entrants/transfer and age-wise enrolment should be made,
- Make awareness campaign on the importance and use of data for HTs, teachers, SMCs, and RPs
- Data dissemination mechanism should be developed at each level,
- Development of time frame on data collection and distribution of school statistical information form/tabulation form and summary form from school to DOE,
- Provision of reward and punishment system,
- Data validity system should be developed: The data validating system should be developed in each RED on the internal basis within 10 percent sample and disseminate it,
- Maintaining appropriate record keeping system in each school using a standard format.

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Chapter I: Introduction

1.1 Background

This is the age of information. It is the information that tells us about our situation, our weak and strong points, and that indicates where improvement is needed. In other words, information serves as a guide for our future world. No one would disagree when we say that without information we would just be fumbling in the dark. That is why many people say that information is a power. For the decision makers, administrators and managers to arrive at a certain decision regarding the selection of suitable development schemes and to assist field administration in program implementation and evaluation, the qualitative information will help as adopt the right track and evolve a more efficient and effective planning and management system.

The qualitative data will be supportive in making better planning, better decision-making, proper management and proper evaluation. It facilitates to build good models, undertake simulation and make better projection exercises based on past trends and/or to create scenarios based on specified targets/objectives. If our information is not qualitative, then all our efforts will go in vain.

As we know, all the schools in Nepal have to fill-in a school statistical information form each year. So schools should pay enough attention to keeping the data in a systematic and organized manner. At the same time schools should be made well acquainted with the importance of data and the quality of the data for school management and development. One other point we need to understand is that all educational policies and programmes are developed on the basis of the data derived through the school statistical information form. So we should be very careful while keeping, processing, managing and supplying the school level data.

The Department of Education (DOE) has implemented the Basic and Primary Education Program II (BPEP) since 1999. BPEP II has made provision of periodic monitoring and evaluation of progress toward achieving systematic goals through EMIS. In one aspect the main thrust of EMIS is to collect school level data on an annual basis and to determine the progress made on quantitative terms in relation to access, equity and quality improvement of BPEP II, but in others there are some flaws on the part of school level data quality.

BPEP II EMIS Achievement: With the establishment of DOE, the statistics section also settled down to take care of this job and put several efforts on the improvement of quality, accuracy and timeliness of school level of data. The major progress made by this section consists in:

Development and implementation of new EMIS form incorporating almost each section of DOE on supporting one door policy of data dissemination;

EMIS training for RPs, from all the districts, few SMCs in some of the districts and 10 regional level personnel;

- Distribution of computer facilities for selected districts;
- Development on EMIS software and place it at the central level and in few districts;
- Regional level training (Outside country);

- Development of school and teacher coding system; and
- Data Entry work was fed directly from school information forms to the computer at the central level

Within a short span of time, these achievements made by the statistics section of DOE gave the right indication on the development of the qualitative data, but all these are concentrated mainly at the central level with focus only in some of the districts. On the part of the school level only few efforts have been made from the central level in terms of EMIS training through RED and DEO. Based on this view, at the school level EMIS, the DOE has to put concrete efforts for its improvement on data quality and accuracy.

1.2 Past Experiences on Improvement of Data Quality

The Planning, Statistics and Research Division (Now Planning Division) was created in 1962 in the MOES. This division was given the responsibility of handling school level data function along with other important functions of planning and monitoring of educational activities. In 1964/65, the first educational statistical report was published. Over the time so far there have been many changes effected in the production and reporting of educational statistics.

In 1983/84, the USAID supported a project Improving the Efficiency of Education System (IEES) which assisted the statistics and computer section of MOES in its efforts to increase the quality and timeliness of the collected data. Under this project, the central level was computerized (IBM compatible zenith computer with enable software) and reintroduced the data collection form (school information, tabulation, and summary form). The project also provided training on data management and computer operation at the central and district levels and distributed calculators in 75 districts for data processing. Although, this project worked for the central and district level EMIS, it could not yet reach the school level EMIS.

The UNDP supported Participatory Management Development Programme (PMDP) project provided two 486 computers and launched EMIS training for local and central level personnel in some districts. Likewise, the UNESCO and some other agencies had also provided training on EMIS to the central level personnel. However, this project also could not attend to the improvement of school level EMIS.

In 1992, BPEP I put some efforts on the improvement on data quality and management and developed a separate monitoring package form incorporating EMIS activities as a separate entity. It also developed the registers for the district level, the resource centre level and the school level, distributed the computers in a few districts and provided training on monitoring package along with EMIS. The registers developed by BPEP I are focussed on project districts and are meant for five years. This could not cover the 75 districts. The contents of the registers were on BPEP I programme and the registers were incomplete due to the training for HTs and RPs. Actually, for the uniformity of the data and to avoid duplication these registers could be supportive but they could not be sustained properly so as to reach the school level. These above efforts had brought about improvement on the data quality to some extent.

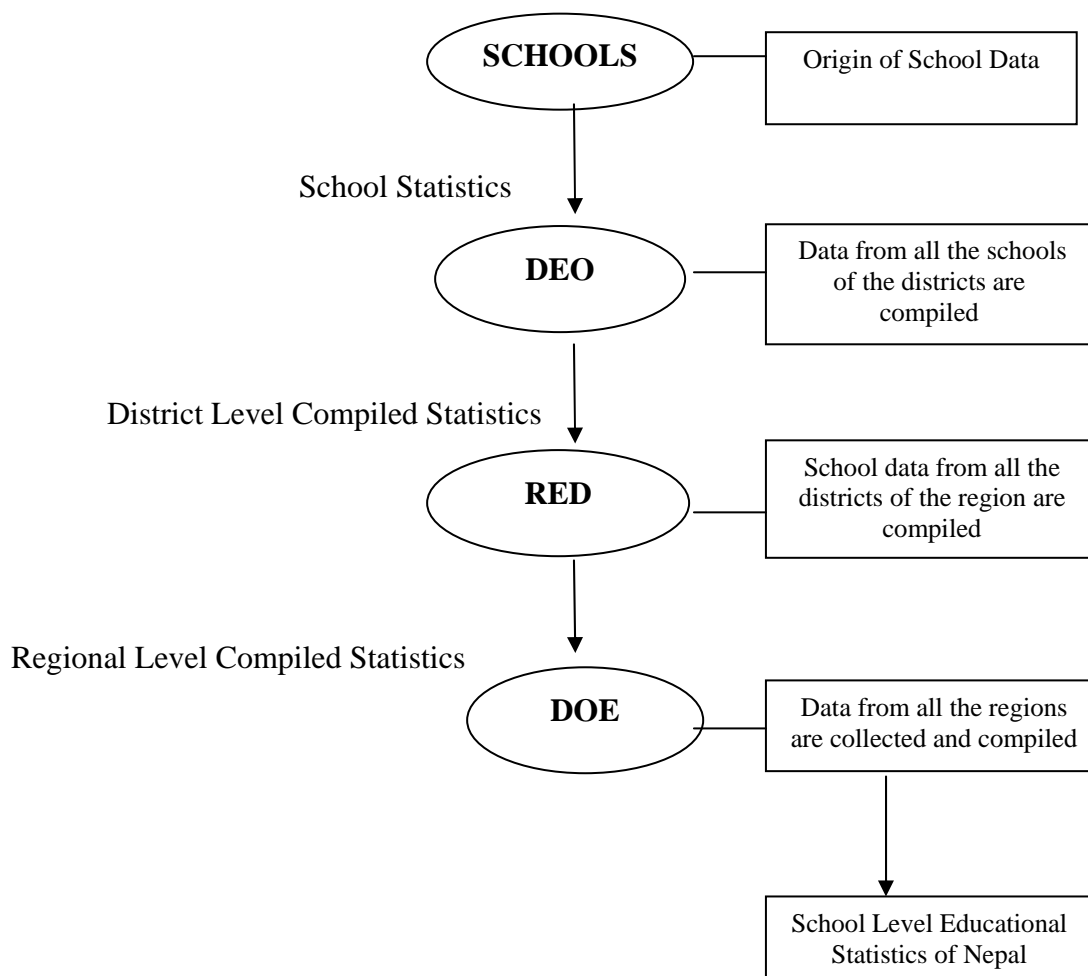
1.3 Existing Data Flow System (School Level to DOE Level)

At present there are four layers of educational data flow system: school, district, region and DOE. Each of the schools in the country, community-run as well as institutionalised,

is required to fill-in four copies of school statistical information form and send them to the respective DEO.

Existing Data Flow System

(School to DOE)



The DEO is responsible for the printing and distributing of the forms to all schools and for the collection of these forms. Then the DEO tabulates all the forms, prepares summary of educational statistics and sends it to the RED. The RED is responsible for the preparation of the regional summary of educational statistics and the DOE is responsible for the amendment and development of school information forms, preparation, analysis, editing and production of School Educational Statistics and for dissemination of education information to users and researchers.

In the year 2000, the DOE collected individual school data directly from the school via DEO and RED. In the collection process, the DEO first collected all the individual school level data and sent them to the RED. The RED in turn collected all the school level data and sent them to the DOE. The DOE then processed, analyzed and published the School Level Educational Statistics on Nepal for the year 2000.

1.4 Current Status on School Level Statistics of the Study Districts

Lalitpur District is located in the valley of the central hilly region. According to DOE 2000, it had 335 primary schools and out of them 121 were institutionalised. The total number of primary students was 44282 and of girls 21523, out of them the total number of institutionalised primary students was 14295 and of girls 6490. Likewise, the total number of teachers in the primary level was 1672 and that of the female teachers was 892 and out of the total primary school teachers the total number of institutionalised primary male teachers was 588 and of females 414. The following Table 1 shows the number of schools, students and teachers in Lalitpur district.

Table 1: Primary Schools, Students & Teachers in Lalitpur by Sex, 2000

Schools		Student		Teacher	
Type	Number	Total	Girls	Total	Female
Total Primary	335	44282	21523	1672	892
Institutionalised	121	14295	6490	588	414

Source: School Level Statistics, DOE, 2000.

Dhanusha District, which is located in the Central Terai Region, had 325 primary schools, out of them 22 were institutionalised. The total number of primary students was 41182 and of girls 15011, out of them the total institutionalised primary students were 3146 in number and that of girls was 1057. Likewise, the total number of teachers in primary schools was 896 and that of females was 234 and out of them the total number of institutionalised primary teachers was 221 and 95 of them were females. The following table shows the number of schools, student and teachers in Dhanusha district.

Table 2: Primary Schools, Students & Teachers in Dhanusha by Sex, 2000

Schools		Student		Teacher	
Type	Number	Total	Girls	Total	Female
Total Primary	325	41182	15011	896	234
Institutionalised	22	3146	1057	221	95

Source: School Level Statistics, DOE, 2000.

Ilam District lies in the eastern hilly region of the country. According to the records of DOE 2000, there were 375 primary schools and out of them 25 were institutionalised. The total number of primary students was 46675 and that of girls was 22901, out of them the total institutionalised primary students were 1910 and girls were 718. The total number of teachers in primary schools was 1355 and among them 292 were females. Among them the total number of primary teachers in institutionalised schools was 195 and 71 were females. The following table shows the number of schools, students and teachers in Ilam district.

Table 3: Primary Schools, Students & Teachers in Ilam by Sex, 2000

Schools		Student		Teacher	
Type	Number	Total	Girls	Total	Female
Total Primary	375	46675	22901	1355	292
Institutionalised	25	1910	718	195	71

Source: School Level Statistics, DOE, 2000.

1.5 Rationale

Data reliability involves accuracy and timeliness in the supply of the data. The accuracy involves all stages from questionnaire development to data collection, transformation, and compilation at the central level as well as at the school level. Timely produced information guides the right track on policy decision and the quality of the records generally depends on the initiative and interest of the data managers from the local level to the central level. The school level information generates from the schools and its quality and accuracy depends on the records kept by the schools.

An earlier study on EMIS in Nepal conducted by New ERA (1989) has focused on the data needs of the MOEC (presently MOES) and of other agencies involved in the education sector of Nepal, and the process in which the data are being collected, analyzed and disseminated. It has also assessed the quality, coverage and timeliness of the data, examined how currently available educational data are being used by the senior officials, and identified the existing data gaps and their effect on the decision making process. The study has indicated that there are gaps on the transmitting data from school records to the central level.

The Third Party Review of BPEP II has also pointed out the level of the reliability of the data and highlighted it as a major issue and focused on strengthening the school level EMIS - which serves as the basic provider of information by which district and central level EMIS can be strengthened. The study identified the need of training for HTs/teachers on collection, compilation, storage, processing, use and supply of educational information. The major issues raised by the review are:

- Unavailability of the current status and lack of integrated information are the critical parts of BPEP II.
- The BPEP II information unit is not in existence.
- EMIS was taken as a ritual exercise to satisfy the centre's requirements and not for using it for decision -making and district level planning.
- No one is there to supervise whether they performed their jobs correctly or not.
- With regard to filling in the EMIS forms, adequately trained personnel were not available at the local level.
- There is a strong tendency to report inflated enrolment figures and thus more often than not they had to readjust the figures.
- DEOs did not have qualified manpower to check the reliability or inconsistency of data at the data source and to guide the concerned personnel to properly present them.
- Data were also not properly stored at the offices of DEOs due to the lack of technical manpower for recording data.
- Delay occurred in data collection and reporting to the centre.
- HTs generally gather at the RP's residence and filled in the forms in his presence as instructed by him.

Likewise, the International Institute for Educational Planning (IIEP), 2001 has also raised that the districts and below the districts information is badly organized and is seldom used for decision-making. Similarly, the Mid Term Review Report (MTR) 2002 has also raised questions as to the fact that the reliability of the school level data is doubtful.

While assessing accuracy of the data, the above-mentioned studies and reports have not focused on over, under or correct reporting on current year enrolment, promotion,

repetition, new entrants/transfers and dropout in community and institutionalized schools. These studies have also not concentrated on the magnitude, extent and causes of data error at the school level.

With this view, the study tries to explore the range and magnitude of data errors on current year enrolment, promotion, repetition, new entrants/transfers, dropouts and age-wise enrolment in school reported data, which is an aspect virtually absent in the country. In addition, this study attempts to identify the causes of errors, record keeping system and level of understanding at the school level. So this study has appeared as an important attempt to minimize the errors and to lead support on strengthening the school level EMIS for BPEP II.

In addition, the study on the inconsistencies in the number of schools, students and teachers as reported by the schools forms the basis for rationalising the essentiality of the study.

At the school level, the likely factors that cause errors and issues can be cited as:

1.5.1 School Level

Regarding the information provided by the schools with the errors inherent the forms and the major issues at the school level are as follows:

- Schools do not have an organized data keeping system (The old and recent data of the schools are not retrievable easily);
- Schools provide incorrect data (knowingly or unknowingly);
- Schools report incorrect data due to incompleteness of the records kept;
- HTs do not have sufficient knowledge on filling-in the forms (repetition, new entrants/transfer, promotion and drop-out and age-wise enrolment); and
- HTs are not fully aware about the need and importance of accurate reporting of the data.

In addition, the study on the inconsistencies in the number of schools, students and teachers as reported by the schools forms the basis for rationalising the need of the study.

Inconsistencies in the number of schools, students and teachers in the school reported data: An attempt has been made towards the calculation of positive and negative growth on moving base from the basic education data on the basis of the number of schools, students and teachers from 1990 to 2000. The rationale behind the calculation of this basic data is to think of the data inconsistencies among the districts. These inconsistencies reflect the inaccuracy in the school level data and raise the questions "are the schools reporting accurate data? And to what extent do the schools' actual records vary from the reported data?"

The need of this study was the result of the findings of the calculation of the basic education data on schools, students and teachers from 1990 – 2000. To examine the accuracy and quality of the data several analyse were made on the basis of different information. One of the tables developed is on the basis of the positive and negative growth on the moving base. It reveals the occurrences of minimum and maximum growth within the period of ten years from 1990 to 2000.

In Table No. 4 the calculation was made on the school level data trends by districts, which shows in the positive growth it ranges from 0.0 percent minimum growth to 94.2

percent maximum growth and in the negative growth it ranges from 0.2 percent minimum growth to 32.2 percent maximum growth. This figure reflects that there are huge inconsistencies in reporting the data from the school to the district. The details in the primary schools data on positive growth and the negative growth on maximum and minimum are given below.

Table 4: Primary School Data Inconsistency by District, 1990-2000 (Moving Base)

No. of District	No. of Positive Growth	Min	Max	No. of Negative Growth	Min	Max
1	5	5.4	12.4	5	0.3	6.3
3	6	0.0	94.2	4	1.7	31.8
22	7	0.0	58.3	3	0.3	32.2
12	8	0.0	44.9	2	0.2	19.1
26	9	0.0	29.5	1	0.4	18.4
11	10	0.0	31.3	0	0.0	0.0

Source: Educational Statistics of Nepal, MOES, DOE, 1990 - 2000

Note: Calculation based on MOES and DOE records.

The Table No. 2 presents the calculation on primary level student data inconsistencies, which shows that on the positive growth it ranges from 0.0 percent minimum growth to 83.1 percent maximum growth and on the negative growth it ranges from 0.02 percent minimum growth to 49.2 percent maximum growth. The details on primary school student data with frequency of positive and negative growth are described below.

Table 5: Primary Student Data Inconsistency by District, 1990–2000 (Moving Base)

No. of District	No of Positive Growth	Min.	Max.	No of Negative Growth	Min.	Max.
2	4	3.7	39.9	6	0.6	13.0
8	5	0.7	34.0	5	0.02	29.2
15	6	0.4	59.9	4	0.1	26.0
19	7	0.0	83.1	3	0.1	49.2
22	8	0.1	45.0	2	0.1	47.9
8	9	0.0	17.6	1	1.7	9.8
1	10	0.5	12.7	0	0.0	0.0

Source: Educational Statistics of Nepal, MOES, DOE, 1990 - 2000

Note: Calculation based on MOES and DOE records.

Table No. 3 shows the calculation on the data inconsistency of primary level girl students. The calculation shows that in the positive growth it ranges from 0.0 percent minimum growth to 91.2 percent maximum growth and in the negative growth it ranges from 0.02 percent minimum to 49.2 percent maximum growth. The details on the growth of primary school girl students are shown below.

Table 6: Primary Girl Students' Data Inconsistency by District, 1990-2000 (Moving Base)

No. of District	No of Positive Growth	Min	Max	No of Negative Growth	Min	Max
5	5	2.2	30.3	5	0.1	18.1
9	6	0.3	43.5	4	0.1	21.9
16	7	0.2	91.2	3	0.02	32.2
24	8	0.0	71.8	2	0.04	47.5
19	9	0.0	53.2	1	0.2	29.8
2	10	0.9	13.8	0	0.0	0.0

Source: Educational Statistics of Nepal, MOES, DOE, 1990 - 2000.

Note: Calculation based on MOES and DOE records.

The Table No. 4 presents the calculation on the primary level teacher data inconsistency, which shows that the positive growth ranges from 0.0 percent minimum growth to 215.0 percent maximum growth and the negative growth ranges from 0.1 percent minimum to 66.0 percent maximum growth. The details on primary school teachers' data with positive and negative growth are shown below.

Table 7: Primary Teacher Data Inconsistency by District, 1990-2000 (Moving Base)

No. of District	No of Positive Growth	Min	Max	No of Negative Growth	Min	Max
4	5	0.4	32.5	5	0.4	21.8
12	6	0.0	68.8	4	0.1	46.2
24	7	0.0	83.5	3	0.2	47.4
22	8	0.0	55.1	2	0.2	42.6
12	9	0.0	215.0	1	0.4	66.0
1	10	0.3	8.2	0	0.0	0.0

Source: Educational Statistics of Nepal, MOES, DOE, 1990 - 2000.

Note: Calculation based on MOES and DOE records.

Because of inconsistencies in the school level data on schools, students and teachers and for raising the data quality by the third party review, IIEP, Mid-term review and other concerned bodies have identified the need of this study. The study on exploring the typological errors and the magnitude of data discrepancy in the school reported data is virtually absent in the country. So this study has appeared as an important attempt to fulfil this demand. And this study will be supportive in strengthening the school level EMIS for BPEP II.

1.6 Objectives

The major objectives of the study are:

- ◆ to assess the level of understanding on data collection instruments among the local level data managers;
- ◆ to assess the data keeping system at the school level;
- ◆ to explore the range and magnitude of errors in school reported data;
- ◆ to identify the factors responsible for data errors at the local/school level; and

- ◆ to suggest possible measures for quality data collection and compilation at the school level.

1.7 Limitation of the Study

The school level statistical information form, 2001 basically covers the following five modules. They are as follows:

- Students Information Modules
- Physical Facilities Information Modules
- School Information Modules
- Financial Information Modules
- Teacher Information Modules

Among them, the study has focused on student information modules. In the student information modules, the study focused on current year student enrolment (Table No. 3.1.1 of school statistical information form, 2001), current year repetition, new entrants/transfer and promotion and dropout (Table No. 3.2 of school statistical information form, 2001), current year age-wise enrolment (Table No. 3.3 school statistical information form, 2001). The study selected only three districts on the basis of the amount of inconsistencies in the data. From each district six primary schools were taken as the sample to study the nature of data error at the school level. So the sample size is limited.

As a result, the findings derived only from those schools may not give the actual picture of the country in totality, but it reveals an approximate situation of the school data quality.

Chapter II: Methodological Approach

2.1 Scope of the Study

The study has covered community and institutionalised schools and as its objective is concentrated on the primary level. It includes not only the primary schools but also primary attached lower-secondary and secondary schools.

2.2 Approach of the Study

In order to achieve the objectives of the study, different methods were adopted for the collection of different types of data. Since the focus of the study is to assess the quality of the school reported data, a separate form had also been developed on the basis of the form developed by the DOE, Statistics Sections, for the verification of the school reported data on current year enrolment, promotion, repetition, new entrants/transfer and dropout and age-wise enrolment (Annex 1).

For actual data of the current year students' enrolment, the figures were collected from the records kept in the student attendance registers and those for promotion, repetition, new entrants/transfer and dropout the data were collected from the annual result sheet, school admission register, transfer certificate and records of fee account. The age-wise enrolment data were collected from student admission register, student admission form and transfer certificate of the school.

To find out the typology of the errors in the school reported data all the available school information forms submitted to the respective DEOs were verified on the basis of current year enrolment with promotion, repetition, new entrants/transfer and dropout and age-wise enrolment. For the subjective judgment, structured questionnaires for HTs, RPs, SMC members and DEOs were also developed.

2.3 Design of Instruments

Questionnaire development. Five different types of questionnaires have been developed for this educational data quality survey. One questionnaire has been designed for HTs and the questions are related to the training, record keeping system, problems in filling-in the school information form, DEOs action to incomplete informants, RPs' role on filling-in the form, information on birth certificate and suggestions on improving the data quality. (Annex 2)

The second type of questionnaires has been developed for RPs and the questions are related to the perception of RPs supervision and attitude towards the monitoring and supervision of school information form and data verification. (Annex 3)

The third type of questionnaire has been designed for DEOs and the questions are related to the perception of data accuracy, process on filling-in the school information form by the schools, number of staffs working in statistical section, and their training and its solution. (Annex 4)

The fourth questionnaire has been designed for SMC members and the information expected is related to the meetings about school information form and the need of birth certificate, etc. (Annex 5)

2.4 Selection Criteria of the Districts

For the selection of the districts, the basic educational data on schools, students and teachers 1996 - 2000 of each district had been calculated on the basis of compound growth rate index and the following assumptions had been developed. They were:

- Negative growth on students and teachers.
- Negative growth on students and schools.
- Negative growth on schools and teachers.

It had been assumed that the negative growth means less reporting which seems no intention on less reporting the data and error appears unknowingly on filling up the forms. It had been assumed that the:

- Schools did not know how to fill up the form.
- Schools had no training on the filling up the form.
- Schools had not given proper attention on filling-up the form.
- Community or institutionalized schools did not respond the form.
- Calculation error

Further it had been assumed that the accurate reporting makes positive growth on school, student and teacher and the schools send the correct data on school information form. Thus, the positive growth districts had been ignored

Based on the above criteria, the negative growth districts had been selected. According to the first selection criteria, Ilam, Dhanusha and Lalitpur had been selected due to the negative growth in the total number of student, girls and teachers. One strong reason behind this selection is that the range of negative growth was high on the total number of students, girls and teachers. And the remaining district lies either in the second criteria or in one other criterion. So, other districts have been ignored.

Table 8: Study Area Negative Growth Districts on School, Student and Teacher

(Compound Growth Rate: 1996-2000)

District	School	Student		Teachers
		Total	Girls	
Ilam		- 3.1	- 2.7	- 1.0
Jhapa		- 1.2	- 0.7	
Makawanpur	- 0.4			- 1.7
Dhanusha		- 8.4	- 6.0	- 8.6
Lalitpur		- 0.9	- 1.7	- 2.1
Syangja		- 6.4	- 3.1	
Rukum	- 2.9			- 1.4

Source: School Level Statistics, MOES, DOE, 1996 - 2000.

2.5 Geographical Location of the Selected Districts

- | | | |
|------------|--------|----------------------------|
| ◆ Lalitpur | Valley | Central Development Region |
| ◆ Dhanusha | Terai | Central Development Region |
| ◆ Ilam | Hill | Eastern Development Region |

2.6 School Selection Criteria

For the selection of schools in the districts, no kind of statistical sampling method was applied because of its nature of study. In stead of the sampling procedure, the following criteria were applied for the selection of the schools.

- Primary schools not tallying with the current enrolment data with promotion, repetition, new entrants/transfer and dropout;
- Primary schools not tallying with the current enrolment data with age-wise enrolment; and
- Primary schools not tallying with the age-wise enrolment data with promotion, repetition, new entrants/transfer and dropout.

To incorporate the representation of all categories of schools in the sampling, schools were selected in the following way:

- Primary School (community and institutionalised)
- 6 schools from each district (6* 3 districts =18 schools)
- 1-5 grade teaching school (2 community and 1 institutionalised)
- 1-7 grade teaching school
- 1-10 grade teaching school
- At least two schools from the urban area in each district

Lalitpur. To select the school, first of all a total of the available 335 schools were verified on current enrolment vs. age-wise enrolment vs. promotion, repetition and new entrants/transfer in DEO. The verification had been made on the basis of current year enrolment. Out of 335 schools, six schools had been selected for the study on the basis of the number of errors found in the school information forms. The name, category, location, grade and selection interval of six schools are given below:

Table 9: Characteristics of the Selected Schools in Lalitpur District

School S. N.	Loc.& Dis. from Dist Hq.	Grade	Category	Errors Found
1.	Rural, 10 km	1 - 10	Community	PRN/T
2.	Urban, 3 km	1 - 5	Institutionalised	Age
3.	Urban, 2 km	1- 10	Community	PRN/T
4.	Urban, 1 km	1 - 10	Institutionalised	PRN/T; Age
5.	Rural, 15 km	1-5	Community	PRN/T; Age
6.	Rural, 8 km	1 - 5	Community	PRN/T; Age

Source: *Field Survey Data, 2002*

Note: PRN/T: Promotion, Repetition and New Entrants/transfer
Age: Age-wise Enrolment

Dhanusha. In Dhanusha district the available 256 schools forms were verified on current enrolment vs. age-wise enrolment vs. promotion, repetition and new entrants/transfer and six schools have been selected for the study. The name, category, location, grade and selection interval of the selected six schools are given below:

Table 10: Characteristics of the Selected Schools in Dhanusha District

School S. N.	Loc..& Dis. from Dist Hq.	Grade	Category	Errors Found
1.	Rural, 18 km	1 - 5	Community	PRN/T
2.	Rural, 13 km	1 - 10	Institutionalised	PRN/T
3.	Rural, 14 km	1 - 7	Institutionalised	PRN/T
4.	Rural, 8 km	1-10	Community	PRN/T
5.	Urban, 2 km	1-10	Community	PRN/T
6.	Urban, 1 km	1 - 5	Community	PRN/T

Source: Field Survey Data, 2002

Ilam. In Ilam district, a total of 389 schools were verified on current enrolment vs. age-wise enrolment vs. promotion, repetition and new entrants/transfer and among these six schools had been selected for the study. The name, category, location, grade and selection interval of the selected six schools are given below:

Table 11: Characteristics of the Selected Schools in Ilam District

School S. N.	Loc..& Dis. from Dist Hq.	Grade	Category	Errors Found
1.	Rural, 39 km	1 - 10	Community	PRN/T; Age
2.	Rural, 46 km	1 - 5	Community	PRN/T
3.	Rural, 10 km	1 - 10	Community	PRN/T; Age
4.	Urban, 3 km	1 - 5	Community	PRN/T; Age
5.	Urban, 1 km	1 - 5	Institutionalised	PRN/T; Age
6.	Rural, 49 km	1- 7	Institutionalised	PRN/T; Age

Source: Field Survey Data, 2002

Chapter III: Data Management

3.1 Data Managers

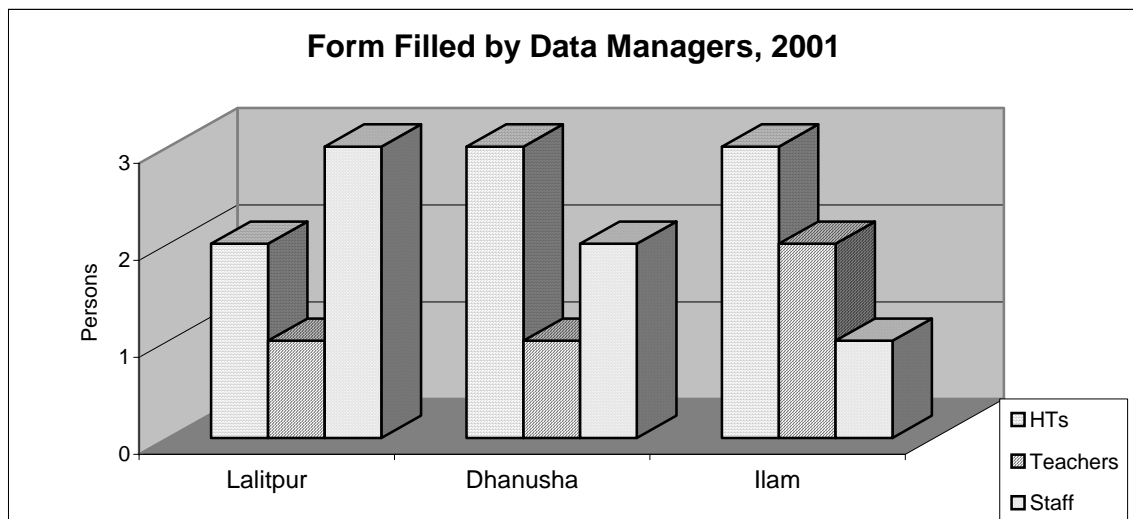
Generally, the HTs/teachers/staffs are the data managers in the school. The HTs have to sign on the form before submitting to the RPs, so the responsibility goes to the HTs for filling in and submitting the form. In the surveyed community primary schools the forms are filled in by the HTs and in institutionalised primary schools the forms are filled in either by the HTs or by staff/accountants. In community and institutionalized lower secondary and secondary schools the data managers are either accountant/staff or shift in-charge (primary class in-charge).

In Lalitpur district 2 forms have been filled in by the HTs, 3 by the staffs and 1 by the teacher. In Dhanusha district, 3 forms have been filled in by the HTs, 1 by the teacher and 2 by the staffs. Likewise, in Ilam district 3 forms have been filled in by the HTs, 2 by the teachers and 1 by the staff. Out of 18 schools in 8 schools HTs have filled up the form and the teacher and staff have filled up in the remaining 10 schools.

Table 12: Form Filled by Data Managers, 2001

Districts	HTs	Teacher	Staff
Lalitpur	2	1	3
Dhanusha	3	1	2
Ilam	3	2	1
Total	8	4	6

Source: Field Survey, 2002



3.2 Form Filling Training

The RED/DOE will provide the form filling training to the RPs and DEOs staff in the district and the RPs will in turn provide the training to the HTs in the respective districts. According to the DOE, all the data managers in the school have received the form filling training. But in the study, out of 18 schools, only 8 schools have received form filling training and the data managers of institutionalized schools have not received any kind of form filling training.

3.3 Level of Understanding on School Information Form

The data managers in the school were asked about the level of understanding in relation to three tables of the school information form namely, current year student enrolment (Table No. 3.1.1), repetition, new entrants/transfer and promotion and dropout (Table No. 3.2), and current year age-wise enrolment (Table No. 3.3).

The accuracy of the data depends upon the level of understanding on data collection instruments among the local level data managers. Generally, the local level data managers are HTs, RPs, accountants/staffs and assigned teachers who deal with the educational data in the EMI system. HTs are the focal persons because they are the providers of the data which are ultimately supplied to the central level. So, HTs must clearly understand the format of the tables as demanded in the school information form. And the second responsible persons in the district are RPs. The main role of RPs on the school information form is to distribute, collect, compile, edit and conduct training on the school statistical information form to each school at the cluster level; to assist the DEO in its development process and in sending the tabulated form and summary form to RED; and to provide feedback on filling in the school statistical information form.

Instructions on school information form. School information forms are the main tools for generating the school level information from the schools and in the questionnaire tool the proper instruction plays pivotal role for the accuracy of data. The study has focussed on the three tables of the school information form namely, current year student enrolment (Table No. 3.1.1), repetition, new entrants/transfer and promotion and dropout (Table No. 3.2), and current year age-wise enrolment (Table No. 3.3). In the form it is not clearly mentioned how to derive data on repetition, new entrants/transfer and promotion and dropout and in age-wise enrolment. On age-wise enrolment the instruction was given only for the new entrants not for promotes, dropouts, and repeaters which may mislead the data for data managers.

HTs. The HTs are the administrative and academic staff of the school and the form has to fill-up by him. In the school, the HTs fill in the form in close coordination with the teacher and the staffs. Apart from many other functions the HTs have to fill and send the certified form to DEO on proper time. So it is necessary for the HTs on the understanding of school information form.

So far as the level of understanding on the form is concerned, almost all data managers (form filling persons) easily understand the aspect of current year enrolment and promotion. During the survey 15 form filling persons easily understand the aspect of repetition and 3 have expressed these aspects as complex to understand. Likewise, 16 form-filling persons easily understand the aspect of new entrants/transfers and age-wise enrolment and 2 have expressed it as complex. But in the case of dropouts, there was no column included in the previous year's form, so most of the data managers do not know about the proper definition of dropout. The study shows that 10 persons easily understand the aspect of dropouts, 2 do not understand it and 6 have expressed it as complex.

Table 13: Level of Understanding on School Information Form, 2001

Topics	Easy	Complex	Not Clear
Current Year Enrolment	18	*	*
Promotion	18	*	*
Repetition	15	3	*
New Entrants/Transfer	16	2	*
Dropout	10	6	2
Age-wise Enrolment	16	2	*

Source: Field Survey, 2002

Note: Easy = Can easily transform data in the form

Complex = Difficult to transfer the data in the form.

Not Clear = Do not understand the topics

Consultation with RPs. Seven HTs made queries with RPs, when they got confused about the form and 11 HTs have never consulted the RPs while filling in the form. Eight HTs have said that the RPs discussed with them about the form during their visit to the school and 10 HTs have said that the RPs never discussed with them about the form during their visit to the school. The reactions of the HTs regarding the causes of errors in filling in the form are as follows:

- ◆ Complexity of calculation on repetition, new entrants/transfer and dropout.
- ◆ Partial availability of age-wise information of 1 to 5 grade students.
- ◆ Confusion felt in filling the information form of grade 1 (students who were weak were placed in grade 1 B and those who were not weak were placed in grade 1 A).
- ◆ Unawareness about the importance of data tally between current enrolment and promotion, repetition, new entrants/transfer and dropout and age-wise enrolment.
- ◆ Lack of support staff.

RPs and school information form. RP's major responsibility in the task connected with EMIS is to distribute, collect, compile, and analyze cluster-wide educational statistics and send them to the DEOs. In addition the RPs should provide training to HTs/teachers/staff on filling the form and verify and supervise up-to-date school records on students, teachers, physical facilities, financial information and other related information of the school. The RPs should visit the schools at least once a month and inspect all the activities of the school and should distribute and collect the form but in the study RP's visit to the school was infrequent and most of the RPs did not verify the school forms. The school sends whatever data they have for the forms, most of the RPs accept it and never verifies it. If the RP verifies the form by comparing the previous year's form with the current year enrolment into repetition, new entrants/transfer, promotion and dropout or during the time of compilation, the errors on data can be identified and it will be easy to minimise the errors.

RPs' views on causes of error. The causes of error are connected with carelessness on the part of data managers, HTs do not verify the data from the attendance register, result sheets and school registers. There is lack of seriousness during the training; there are cases of incomplete records in the school (age-wise), there is the factor of superiority complex (HTs do not ask with the RPs) at work and often there is the lack of manpower in schools. During the study, RPs have raised several issues, like most of the institutionalised schools are not responding to the form, there is complexity in the form (promotion, repetition, new entrants/transfer and dropout) and the form had to be sent well in time etc.

RPs' suggestions. On minimising the error, the RPs have made some suggestions such as short term training-cum workshop session (at least 2 to 3 days) needs to be organised for each HT. If the school makes mistakes or does not respond to the form, strong warning should be served.

SMC member. Among the three districts only the Lalitpur district has formed the SMC and the HTs never discuss about the form in the SMC meeting, so the SMC members are not familiar with the form.

DEOs. The DEO is responsible for the implementation of all educational programmes and general administration of schools within the district. Apart from many other functions, the DEO in the district has to print, distribute, collect, compile, analyze and publish the district level educational statistics annually and send the compilation form to the respective REDs. In the study it was found that in the district there is one staff working on statistics section and the RPs will provide support to him. In the district the possibility of data error will be on the transfer of data from the form to the compilation form. The staff in the district neither verifies the current year enrolment with repetition, new entrants/transfer, promotion and dropout as such nor cross-checks it with the previous year data in the form.

According to DEO, the main cause of error in the form lies in the incomplete record at school. In Lalitpur district if the schools do not submit the form or submits a blank form the DEO sends a reminder to the school and puts up the name of the school in the notice board. And in Dhanusha and Ilam district the RPs remind to the HTs submit the forms.

DEOs' suggestions. The DEOs' suggestions for accuracy and quality data are - fixed time schedule for collecting, and distributing the form, management of incentives to the schools, provision of reward and punishment, provision of training for HTs, logistic support for statistical section and prompting RPs in verification of the data.

3.4 Data Keeping System at School Level

The schools are the primary source of information and the quality of available data depends upon the records kept by them. Generally, the data have to be kept in a systematic way by maintaining files and by following a register system. The data keeping system may vary from one school to another because it depends on the availability of physical facilities, financial position and the management capacity of the HTs. In the surveyed districts all the schools have kept information in their own way which does not fulfil the need of the school information form. In most of the schools the following records are kept.

Attendance register. The format of the attendance registers kept by all the surveyed school is uniform and is kept for each grade in every school. But the variation in the total number of students is found in some of the grades in the monthly attendance register because of admission and transfer/dropout in mid-session. It is the only base for retrieving the sex-wise number of students in the schools and the current year enrolment data is processed or tabulated manually on the basis of student attendance register of each grade.

Admission forms. Most of the information on the admission form is uniform. The usual information kept by community and institutionalized schools in the admission form is about the name and caste of the student, citizenship, father's name/address, local guardian's name and address, religion, occupation, date of birth, admission class,

previous school's name, class, and previous school's name. It was observed that one community secondary school and two community primary schools have no provision made for admission form and the student's record are kept in the register. Similarly, where there is provisions made for admission form, important information, like date of birth, is also found missing. The current year age-wise enrolment data and new entrants' data are processed or tabulated manually on the basis of the admission forms and records of school register of each grade

Result sheet. All the surveyed schools have kept the result sheet of the student. In the result sheet the available records are names, scoring marks in each subject, number of students who appeared in the exam, etc. The promotion, repetition and dropout data are processed on the basis of student result sheet, attendance register and last year's attendance register. The dropout and repetition data are not readily available and so these have to be calculated by tracing the failed students and previous year's records.

Fee records. The main purpose of the fee records is to maintain up-to-date record of the students to raise the monthly and other fees. Records found in this section are names of the students, record of fees paid on each month, grade, roll number, and scholarships. Information on new entrants/transfer, current year enrolment, dropout, repeaters data can be derived from fee records also.

School register. Most of the surveyed schools have maintained a school register in which the names of the students are entered during the admission time. In the school register date of admission, students' name, fathers name and occupation, name of the local guardian, date of birth, admitted class, basis of admission are mentioned. However, the types of indicators and information given are not uniform and are sketchy in most of the schools. From the school register and admission form the age-wise enrolment data is processed for the form.

Available physical facilities for maintaining school records. In the surveyed schools most of the primary level schools have only one cupboard and tank box and all the information is kept by the HTs. The HTs have to take care of all the office work including filling in the form and there is no provision made for any other helping staff. In secondary schools there are more physical facilities in which to store the school records. In institutionalised schools generally physical facilities seem to be adequate and generally the office staff fills in the form and he also stores necessary records.

Records in Lalitpur. In most of the surveyed schools of Lalitpur district the above records are available but the data keeping system is not uniform and there is no printed and standardized register. In Shanti Vidyashram Secondary School there is a school register but it has no headings/topics and the staff has kept the records which can be understood by her only. In one of the community schools, Phulchoki primary school has no provision of the admission form and school register and Saraswoti Primary School has no school register at all. Generally it is found that the record keeping system in institutionalized schools is better than in the community schools.

Availability of past record in the school. Each and every school, community as well as institutionalised, is required to fill-in four copies of school information form and send three of them to the respective DEO with one copy to be kept in the school. In the surveyed school most of the schools have the past records of school information form. The following table shows the past record availability in six schools of Lalitpur district.

Table 14: Availability of Past School Information Form in Lalitpur

School Name	Estd. Year	Form Available Year
Shanti Vidyashram Secondary School	2007 BS	2052 to 2058 BS (1995- 2001)
Radiant Readers Academy	2052 BS	2057 to 2058 BS (2000 - 2001)
Shikhar Boarding Secondary School	2044 BS	2050 to 2058 BS (1993 - 2001)
Mahalaxmi Secondary School	2004 BS	2045 to 2058 BS (1988 - 2001)
Saraswoti Primary School	2038 BS	2054 to 2058 BS (1997 - 2001)
Phulchoki Primary School	2028 BS	2058 BS & other no idea (2001)

Source: Field Survey, 2002

The above table shows that the oldest record is found in Mahalaxmi secondary school where the record of 1988 is also available, but in the case of Phulchoki primary school it has only the record of the current year nothing about the past records. Most of the schools have found the past record but none of the school makes a point of comparing and checking the past records with the present data.

Records in Dhanusha. In Dhanusha district, all the surveyed schools have maintained a similar type of standardized printed school register. In Shankat Mochan Secondary School all the records are kept but not in a systematic way. In Shree Rashtriya Primary School, Naktajhij there is no provision of admission form and it has maintained one register only and all the information of the students is kept in the register. But Sita Ram Primary School has maintained the records of all the students. The study shows that out of 332 total primary schools in 2000 the available forms were found to be only 256. It shows that this district is the most neglectful in sending the form.

Availability of past record in the school. Most of the schools have kept a copy of the past school information form but these past records are never used to verify with the present record. The following table shows the availability of the form in different six schools of Dhanusha district.

Table 15: Availability of Past School Information Form in Dhanusha

School Name	Estd. Year	Form Available Year
Shree Rashtriya Primary School Nakatajhij	2043 BS	2049 to 2058 BS (1992- 2001)
Gyan Mandir English Boarding School, Sakhuwa	2045 BS	2058 BS (2001)
Morning Glory Lower Secondary English, Mahendranagar	2054 BS	2057 to 2058 BS (2000 – 2001)
Laxminiya Janata Secondary School Laxminiya	2011 BS	2030 to 2058 BS (1973 - 2001) intermittent
Sankat Mochan Secondary School, Shantinagar	2021 BS	2049 to 2058 BS (1993 – 2001)
Sita Ram Rashtriya Primary School, Pani Tanki	2018 BS	2043 to 2058 (1986 - 2001)

Source: Field Survey, 2002

Laxminiya Janta Secondary School kept past records since 2030 but the records are interrupted. Sita Ram Rashtriya Primary School has stored the past records since 2043.

Records in Ilam. From BPEP I, Ilam has been considered as a prioritized district in terms of BPEP programmes and of consciousness about the form. In Ilam district the records are not uniform in all the schools. The HT in Amar Secondary School, Barbote is serious on form filling, because the school had displayed all the data in the office by which the necessary information easily can be derived. But the rest of the schools have the same

problem as in other schools. In Krishanashan Secondary School there is no admission form prepared for the students so that the records are kept in the school register only but Sunakhari English Boarding school has not even maintained the school register.

Availability of past records in the school: In most of the surveyed schools the past records on school information form are found. The following table shows the availability of the past records on school information form in six schools in Ilam district.

Table 16: Availability of Past School Information Form in Ilam

School Name	Estd. Year	Year
Krishnashan Secondary School., Gogane, Kanyam	NA	2057 to 2058 BS (2000- 2001)
Shree Rashtriya Primary School, Ramphok	2025 BS	2057 to 2058 BS (2000 - 2001)
Amar Secondary School, Barbote	2014 BS	2048 to 2058 BS (1991 – 2001)
Dripa Devi Primary School, Barbhैया	2026 BS	2037 to 2058 BS (1973 - 2001) intermittent
Sunakhari English Board. School, Shahidpath	2047 BS	2056 to 2058 BS (1999 - 2001)
East Point English Lower Secondary School, Rungsung	2053 BS	2053 to 2058 BS (1996 - 2001)

Source: Field Survey, 2002

The above table shows that the Dripa Devi Primary School has the oldest record starting from 2037 but the records are interrupted. But in Krishanashan Secondary and Shree Rashtriya Primary School, Ramphok has recent records only. These schools are not particular about maintaining the records.

Table 17: Types of Record Found in Lalitpur, Dhanusha and Ilam District

Records	Lalitpur	Dhanusha	Ilam
Attendance Register	6	6	6
Admission Forms	5	5	5
Result Sheet	6	6	6
Fee records	6	6	6
School Register	4	6	5

Source: Field Survey, 2002

From the study it can be conclude that, the data-keeping system is not well managed in most of the community schools except in two schools, Sita Ram Rashtriya Primary School, Dhanusha and Amar Secondary School of Ilam. The observation shows that the data keeping system is comparatively poor in community schools rather than in institutionalised schools. If the schools are asked to provide the information they have to calculate and tabulate the data from the registers and the schools have no register for retrieving the information quickly.

3.5 Congruence between Record Keeping System and the Form

Current year enrolment. For the current year grade-wise and sex-wise enrolment data the schools were asked to fill in the form. The HTs/teachers/staffs have to split and calculate the number of boys and girls of each grade on the basis of names mentioned in the attendance register. In course of the work involving calculation, splitting of boys and girls

data and entering the data in the form there can be chances for errors to creep in. The errors can be in the form of over- and under-reporting and incorrect category. In some of the schools in class 1, the normal and weak students (which should be in pre-primary class) are kept in one common classroom and one combined register maintained. Due to combined class with mixed register the data manager cannot distinguish the actual number of class one students and pre-primary students. The level of congruence between record keeping system with the form is given below:

Congruence between School Records with the Form and Probable Causes of Error

School Records	School Information Form	Probable Causes of Error
<ul style="list-style-type: none"> • Attendance Register 	Current Year Enrolment <ul style="list-style-type: none"> • Grade-wise • Sex-wise 	<ul style="list-style-type: none"> • Transforming Data • Incorrect Category (Splitting boys and girls) • Calculation Error
<ul style="list-style-type: none"> • Result Sheet • School Register • Admission Form • Attendance Register (Previous and Current year) 	Promotion, Repetition, New Entrants and Dropout <ul style="list-style-type: none"> • Grade-wise • Sex-wise 	<ul style="list-style-type: none"> • Transforming Data • Incorrect Category (Splitting boys and girls) • Calculation Error • Incomplete Record • Complexity in the Form
<ul style="list-style-type: none"> • Admission Form • School Register • Attendance Register 	Age-wise Enrolment <ul style="list-style-type: none"> • Grade-wise • Sex-wise 	<ul style="list-style-type: none"> • Transforming Data • Incorrect Category (Splitting boys and girls) • Calculation Error • Incomplete Record

Repetition, New Entrants/Transfer, Promotion and Dropout. The HTs/teachers/staffs have to bring together the student attendance register, school register, admission form, and result-sheet of each grade of different sections for making calculation on the repetition, new entrants/transfer, promotion and dropout data. Generally, the schools have not kept the dropout data in the school register. In fact the schools have no clear idea about the dropout definition. As in the current year enrolment the data managers have to split and calculate the number of boys and girls of each grade on the basis of the names mentioned in the attendance register, school register, admission form, and result-sheet of different sections. In course of making calculation, splitting of boys' and girls' data, transforming and scrutinizing data into the form with different registers there can be chances of making errors.

Age-wise enrolment. On the identification of the age of the each student the data manager needs to look at the previous year's school register or admission form on the basis of the names mentioned and to derive current year age of individual student with the help of the date of birth. But most of the schools have no complete records of the dates of birth of the students.

The study has found that neither there are already processed data in the school, nor do the data managers' process the data gathering all the available records to enter the accurate figure in the form. The forms submitted by the schools could not represent the actual figure of the school. So, we can say that the absence of systematic and sketchy data keeping system is one of the factors responsible for the error in the school reported data.

3.6 School Information Form Collection Process

According to the rule, the schools have to fill up the data on the basis of data record in the second week of Bhadra (From 2059 BS the school session has been changed to begin from Baisakh and the schools information collection, distribution, compilation etc date has been changed and the form should have to be filled up in the second week of Asadh). Generally, the RPs distribute the school information form either in the HTs Friday meeting at DEO's office or when they visit the schools. Some of the HTs collect the form during their visit to DEO. So there is no homogeneity in the distribution of the forms. It varies from one district to another. As a consequence of it, it affects the submission of the forms.

Likewise, the forms are collected back at the DEOs as in the same process, i.e., data managers in the school bring the form and these forms are never verified by the HTs/teachers/staff from their records before the submission of the form. Generally, the forms were sent by the HTs when they have to visit DEO for some other purposes and sometimes the RPs also collect the forms at the time of their school visit. And most of the RPs do not check the collected form before submitting it to the DEO.

In this study, it has been found that there is no consistency in collection and distribution of the school information form among the districts. The following table shows variation in the collection of the form from DEOs.

Table 18: Form Submission Months by Schools to DEO, 2001

District	School Types	Form Submission Date to DEO							Total
		Bhadra	Ashwin	Kartik	Mangsir	Poush	Magh	Falgun	
Lalitpur	Community	111	92	4	2	0	1	1	211
	Institutionalized	33	35	8	8	3	2	1	90
Dhanusha	Community	0	0	0	49	158	38	0	245
	Institutionalized	0	0	0	6	4	2	0	12
Ilam	Community	0	244	15	67	21	1	0	348
	Institutionalized	0	20	1	8	8	4	0	41

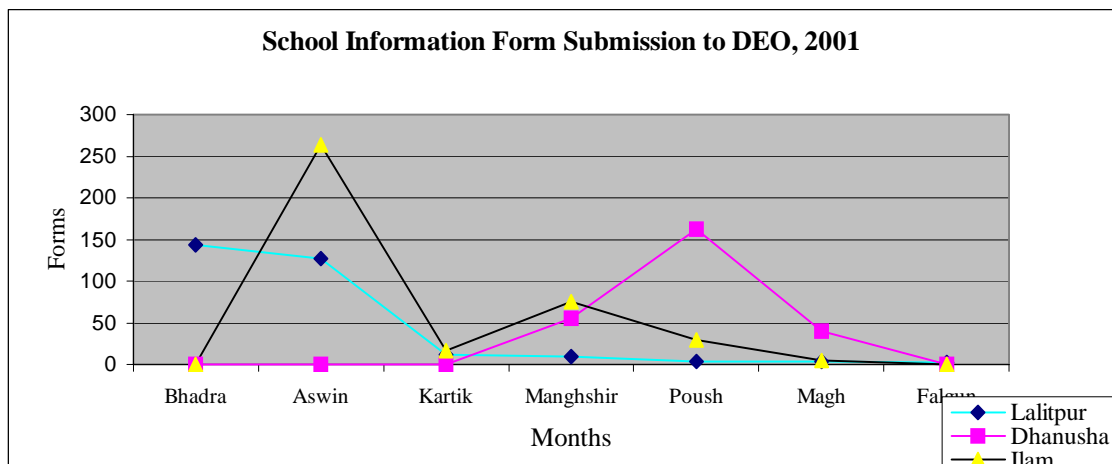
Source: Field Survey, 2002

In Lalitpur, the DEO had printed and sent the form to schools in the month of Asadh/Shrawan and it has been found that 111 community schools had sent the form in the month of Bhadra and 92 schools had sent the form to DEOs in the month of Ashwin. Likewise, 33 institutionalized schools had sent the form on the month of Bhadra and 35 schools had sent the form in Ashwin and some of the institutionalized schools also had sent the form in Kartik, Mangsir, Poush and Magh. The district had distributed the form timely in the month of Shrawan and the DEO had published a notice in a newspaper (Kantipur) about sending the duly filled form well in time otherwise the school grants will be withheld.

In Dhanusha district, the DEOs had printed and sent the forms to schools in the month of Bhadra/Ashwin and 49 Community schools had sent the form to DEO in the month of Mangsir, 158 schools had sent it in Poush and 38 schools in Magh. In that district a copy of the original form was received only in the month of Bhadra from DOE and the printing of the form was completed only in the month of Kartik. Then after the forms were distributed in the schools, consequently most of the forms were submitted in the month of Mangsir, Poush and Magh.

In Ilam district, the RED printed the forms and sent them to DEOs in the month of Ashwin and Mangshir. In that district the forms were distributed in the last week of Bhadra but some of the RPs received the forms only in Ashwin because of inadequate forms dispatched by the RED. In Kartik few forms were submitted because of Dashain festival in Kartik. The remaining schools began to submit the forms in Mangshir, Poush and Magh. Two hundred forty four forms were submitted back by the community school in the month of Ashwin, 15 in Kartik, 67 in Mangsir and 21 in Poush. Likewise, 20 institutionalized schools sent the forms back in the month of Ashwin, 8 in Manghsir and 8 in Poush.

Thus the duration of response varies from school to school and from district to district and it seems that the form takes about four to seven months to come back to DEOs. The major cause for delayed data reporting is that the schools are not prompt enough to be responsive to data requests and of course there is a kind of carelessness among the schools or lack of promptness among the RPs and carelessness of DEOs.



Chapter IV: Data Errors at School Level

One of the major objectives of this study is to explore the type and magnitude of data error at the school level and check the quality of the data. The types of data error are detected by verifying after the collection of school-reported data and school record actual data. Discrepancies between the school reported data and surveyed data are calculated on current enrolment, repeater, promotion, new entrants/transfer and dropout and current age wise enrolment. At the school level the following types and magnitude of errors was found.

4.1 Current Year Enrolment

Current year enrolment is the main component of the school information form. Though it seems quite simple but there is no consistent pattern on the school reported data and the actual figure in the school. The over, under and correct reported data have been traced out through the student attendance register in the school. The magnitude of error in current year enrolment at the school level and the district level is analysed below.

4.1.1 Magnitude of over/under/correct reporting schools on current year enrolment

Number of over, under, and correct reporting schools. In three districts, 12 community schools and 6 institutionalized schools were sampled and they reported a mixture of over or under or correct numbers in the total number. Among them 8 schools over reported the total number of students, 7 schools had under-reported and 3 schools reported correctly (See Table 19).

Table 19: Number of over/under/correct reporting schools on current year enrolment

Category	Number of Schools
Over Reporting	8
Under Reporting	7
Correct Reporting	3

Source: Field Survey, 2002

Number of over, under, and correct reporting schools by grade. The maximum number of over reporting schools was 8 in grade 1 and 2 and the minimum number reported was 3 in grade 5. Similarly, the maximum number of under reporting schools was 5 in grade 1 and the minimum number was 3 in grade 2, 3 and 4. Likewise, the maximum number of correct reporting schools was 11 in grade 5 and the minimum number was 5 in grade 1.

Table 20: Number of over, under & correct reporting schools on current year enrolment by grade

Categories	Grade				
	1	2	3	4	5
Over Reporting	8	8	5	7	3
Under Reporting	5	3	3	3	4
Correct Reporting	5	7	10	8	11

Source: Field Survey, 2002

Magnitude of over and under reporting schools in current year enrolment. The magnitude of over and under reporting on total number of schools is shown in Table 21 and 3 schools have over reporting of 15 to 20 percent and 2 schools have reported below 5

percent. Similarly, 5 schools have under-reported below 5 percent and 2 have 5 to 10 percent. So, the table indicates that the magnitude of under-reporting is less than 10 percent while that of over reporting is found to be from 5 to 20 percent.

Table 21: Magnitude of over/ under reporting schools in current year enrolment

Magnitude in Percentage	Over Reporting	Under Reporting
Below 5	2	5
5 – 10	1	2
10 – 15	1	-
15 – 20	3	-
Above 20	1	-
Total	8	7

Source: Field Survey, 2002

Magnitude of over-reporting schools in current year enrolment by grade. The magnitude of over reporting on the total number of schools is shown in Table No. 22 and 3 schools on grade 1 have over-reported above 20 percent, 3 schools on grade 2 over reported below 5 and above 20 percent. In grade three 3 schools over reported below 5 percent and in grade 4 above 20 percent 3 schools over-reported. Likewise in grade 5 the over reported percentages are 5 – 10 percent from 2 schools.

Table 22: Magnitude of over-reporting schools in current year enrolment by grade

Magnitude in Percentage	Grade				
	1	2	3	4	5
Below 5	1	3	3	2	-
5 – 10	2	-	-	1	2
10 – 15	2	1	-	1	1
15 – 20	-	1	-	-	-
Above 20	3	3	2	3	-
Total	8	8	5	7	3

Source: Field Survey, 2002

Magnitude of under reporting schools in current year enrolment by grade. The magnitude of under reporting on the total number of schools is shown in Table No. 23--3 schools on grade 1 have below 5 percent under reporting and equal number of schools has below 5 percent in grade 2. In grade 3 the under reported below 5 percent are by 2 schools and in grade 4 under reporting of 5 – 10 percent are from 2 schools. Likewise, 3 schools on grade 5 have under reported by 5 – 10 percent.

Table 23: Magnitude of under reporting schools in current year enrolment by grade

Magnitude in percentage	Grade				
	1	2	3	4	5
Below 5	3	3	2	1	1
5 – 10	1	-	-	2	3
10 – 15	-	-	-	-	-
15 – 20	1	-	1	-	-
Above 20	-	-	-	-	-
Total	5	3	3	3	4

Source: Field Survey, 2002

4.1.2 Discrepancies in current year enrolment

Analyses of discrepancies in reporting of student enrolment by sample districts are presented in the following section:

4.1.2.1 Lalitpur District

The surveyed and school reported data on current year enrolment in different schools of Lalitpur district are shown in the following tables.

Table 24: Discrepancy on School Reported & Surveyed Data on Current Year Enrolment in Lalitpur District, 2001

Grade	1		2		3		4		5		Total (1 – 5)		
	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Total
School Reported	146	142	130	99	96	106	87	113	91	93	550	553	1103
Surveyed Data	154	139	123	94	104	103	96	110	86	101	563	547	1110
Discrepancies o	10	25	13	15	8	3	9	5	5	8	45	56	101
Discrepancies in %	6.8	17.6	10.0	15.2	8.3	2.8	10.3	4.4	5.5	8.6	8.2	10.1	9.2

Source: Field Survey, 2002

Note: School Reported Data = School forwarded data to DEO, Surveyed Data = Data derived from the school attendance register, Base Data = School Reported Data

o Total discrepancies are derived from adding discrepancies of individual schools (ignoring algebraic signs).

The above table shows that the school reported data and surveyed data and variation is not uniform in all the schools. So far as the grade-wise discrepancy is concerned, the highest percent is observed in grade 2 at 12.2 percent among them 10.0 percent in boys and 15.2 percent in girls. The least discrepancy is observed in grade 3 at the average of 6.0 percent and among them 8.3 percent in boys and 2.8 percent in girls. The total average discrepancy of the six surveyed schools is 9.2 percent. The discrepancies among boys and girls are 8.2 and 10.1 percent respectively.

4.1.2.2 Dhanusha District

As in Lalitpur district, in Dhanusha district also the discrepancies on school reported and school surveyed data is detected.

Table 25: Discrepancy in School Reported & Surveyed Data on Current Year Enrolment in Dhanusha District, 2001

Grade	1		2		3		4		5		1 - 5		
	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Total
School Reported	205	149	199	140	173	139	199	156	187	144	963	728	1691
Surveyed Data	176	125	187	130	187	137	225	136	203	139	978	667	1645
Discrepancies o	37	34	20	22	14	16	28	20	16	5	115	97	212
Discrepancies in %	18.0	22.8	10.1	15.7	8.1	11.5	14.1	12.8	8.6	3.5	11.9	13.3	12.5

Source: Field Survey, 2002

Note: School Reported Data = School forwarded data to DEO, Surveyed Data = Data derived from the school attendance register, Base Data = School Reported Data

o Total discrepancies are derived from adding discrepancies of individual schools (ignoring algebraic signs).

In Dhanusha district the discrepancies on school reported data and surveyed data is not uniform in all the schools. So far as the grade-wise discrepancy is concerned, the highest percent is observed in grade 1 at 20.4 percent among them 18.0 percent in boys and 22.8

percent in girls. The least discrepancy is observed in grade 5 at the average of 6.1 percent and among them 8.6 percent in boys and 3.5 percent in girls. The total average discrepancies of the six surveyed schools including institutionalised and community school are 12.5 percent. The discrepancies among boys and girls are 11.9 and 13.3 percent respectively.

4.1.2.3 Ilam District

In Ilam district, the magnitude of discrepancies in current enrolment is more or less similar to that in Lalitpur and Dhanusha district. So far as the grade-wise discrepancy is concerned, the highest percent is observed in grade 4 at 25.1 percent, among them 31.0 percent in boys and 19.3 percent in girls. The least discrepancy is observed in grade 5 at the average of 6.7 percent and among them 8.1 percent in boys and 5.1 percent in girls. The total average discrepancy of the six surveyed schools is 13.2 percent. The discrepancies among boys and girls are 14.4 and 11.9 percent respectively. The picture of the discrepancies is shown below.

Table 26: Discrepancy in School Reported & Surveyed Data on Current Year Enrolment in Ilam District, 2001

Grade	1		2		3		4		5		1 - 5		Total
	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	
School Reported	83	78	91	76	67	71	84	83	86	78	411	386	797
Surveyed Data	74	71	85	75	66	63	62	67	87	74	374	350	724
Discrepancies ◦	9	11	8	5	9	10	26	16	7	4	59	46	105
Discrepancies in %	10.8	14.1	8.8	6.6	13.4	14.1	31.0	19.3	8.1	5.1	14.4	11.9	13.2

Source: Field Survey, 2002

Note: School Reported Data = School forwarded data to DEO, Surveyed Data = Data derived from the school attendance register, Base Data = School Reported Data

◦ Total the discrepancies are derived from adding discrepancies of individual schools (ignoring algebraic signs).

In three districts the highest and lowest variations with school reported data and surveyed data show that the highest discrepancies are observed in district Ilam with the total average discrepancies being 13.2 percent, (14.4 % in boys and 11.9% in girls). Likewise, the least discrepancies are observed in Lalitpur, where the total average discrepancies stand at 9.2 percent (8.2 % in boys and 10.1 % in girls). As a whole in three districts the average total discrepancies are 11.6 percent (11.4 % in boys and 11.9 % in girls).

4.1.3 Nature of Reporting by Community and Institutionalised schools

Community. The number of over-reporting schools is 7 and the average number of high reporting per school is 20.6 and number of under-reporting schools is 4 schools and average number of under-reporting per school is 11.5. One school has reported the correct number in total but there is variation in between the number of boy and girl students in the reported and surveyed data.

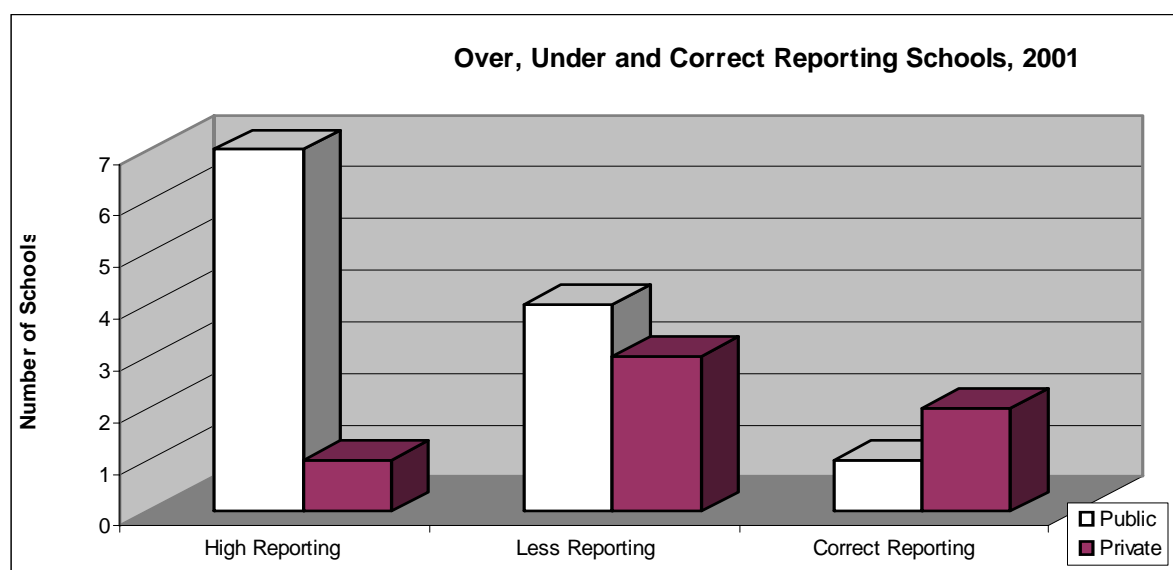
Institutionalised. The numbers of over-reporting institutionalised schools are 1 and 24 reported as a high number. In the same way the number of under-reporting schools is 3 with the average of 1.7 students per school. Two schools have correctly reported in the total number though there are variations in the number of boys and girls.

The number of high reporting, under reporting and correct reporting and their average discrepancies are shown in the following table.

Table 27: Over- and Under-Reporting Community and Institutionalised School.

School Types	Over-Reporting		Under-Reporting		# of Correct Reporting School
	No. of Schools	Average # of students in a school	No. of Schools	Average # of students in a school	
Community	7	20.6	4	11.5	1
Institutionalised	1	24	3	1.7	2
Total	8	21.0	7	7.3	3

Source: Field Survey, 2002



In total, 8 schools have over-reported and the average size of high reporting of student size per school is 21.0 and 7 schools have under-reported with the average number of less reporting on student size is 7.4. It indicates that there is the tendency of over-reporting.

4.1.4 Causes of Discrepancies

Transcribing and calculating data from Attendance Register to School Information Form: The HTs/teachers/ data assigned staff mistake make in course of transcribing and calculating the number of boys and girls. For this the HTs/teachers/data assigned staff should be careful and commitment in course of transcribing and calculating the data.

Weak Students in grade 1 B and normal students for section A: In some of the schools in class 1, the normal and weak students (which should be in pre-primary class) are also kept in one classroom and maintain one mixed register. Due to one class mixed register they cannot distinguish the grade 1 and pre-primary students and make mistakes in filling the figures in the school information form. *The attendance registers and classrooms for grade 1 and pre-primary should be separated.*

Unaware of the Importance of Data: Most of the HTs/teachers/data assigned staff are not aware of the use and the importance of the data. They think it is the routine work of the DEOs. Due to unawareness of the importance and use of the data they neglect, ignore and do not want to devote a long time for filling the school information form because he/she does not get any return. *The DEOs/REDS/DOEs should make the concerned personnel aware of the use and importance of data and distribute them in the schools and make*

provision of the reward and punishment system and HTs should consider it as a part of the duty.

4.2 Promotion, Repetition, New Entrants/Transfer and Dropout

As in current enrolment, another attempt has been made to verify the school reported data with the actual records on promotion, repetition, new entrants/transfer and dropout in 18 schools of three districts. The discrepancies are shown as over- and under-reporting.

4.2.1 Magnitude of Over/Under/Correct Reporting Schools on Repetition, New Entrants /Transfer, Promotion and Dropout

Number of over/under/correct reporting schools on repetition. In three districts 12 schools have over-reported, 4 schools under-reported and 2 schools reported correct data on repetition.

Table 28: Number of schools over/under/correct reporting of repetition

Categories	Number of Schools
Over Reporting	12
Under Reporting	4
Correct Reporting	2

Source: Field Survey 2002

Number of over/under/correct reporting schools on repetition by grade. The maximum number of over-reporting schools was 11 in grade 1 and the minimum number was 4 in grade 2 and 5. Similarly, the maximum number of under-reporting school was 5 in grade 3 and the minimum number was 3 in grade 1, 4 and 5. Likewise, the maximum number of correct reporting schools was 11 in grade 5 and the minimum number was 4 in grade 1.

Table 29: Number of over, under & correct reporting schools on repetition by grade

Categories	Grade				
	1	2	3	4	5
Over Reporting	11	4	5	6	4
Under Reporting	3	4	5	3	3
Correct Reporting	4	10	8	9	11

Source: Field Survey, 2002

Magnitude of over- and under-reporting schools in repetition. The maximum number of over reporting schools are 6 which reported above 80 percent and 4 schools have reported 20 – 40 percent respectively and remaining 2 schools reported 40 – 60 and 60 – 80 percent respectively. Similarly, 1 school has under reported below 20 percent, 2 schools reported 20 - 40 percent, and 1 has reported above 80 percent.

Table 30: Magnitude of over/ under reporting schools on repetition

Magnitude in %	Over Reporting	Under Reporting
Below 20	2	1
20 – 40	2	2
40 – 60	1	-
60 – 80	1	-
Above 80	6	1
Total	12	4

Note: Percentage is derived from actual data.

Number of over/under/correct reporting schools on new entrants/transfer. In three districts 5 schools have over-reported, 12 schools under-reported and 1 school reported correctly on new entrants/transfer.

Table 31: Number of schools over/under/correct reporting of new entrants/transfer

Categories	Number of Schools
Over Reporting	5
Under Reporting	12
Correct Reporting	1

Source: Field Survey 2002

Number of over/under/correct reporting schools on new entrants/transfer by grade. The maximum number of over-reporting schools was 5 in grade 1, 2 and 3 and the minimum number was 3 in grade 5. Similarly, the maximum number of under-reporting schools was 10 in grade 1 and the minimum number was 5 in grade 4. Likewise, the maximum number of correct reporting schools was 9 in grade 4 and the minimum number was 3 in grade 1.

Table 32: Number of over, under & correct reporting schools on new entrants/transfer by grade

Categories	Grade				
	1	2	3	4	5
Over Reporting	5	5	5	4	3
Under Reporting	10	7	7	5	8
Correct Reporting	3	6	6	9	7

Source: Field Survey, 2002

Magnitude of over- and under-reporting schools in new entrants/transfer. The maximum number of over-reporting schools is 3 that reported below 20 percent and 2 schools have reported 40–60 percent. Similarly, 7 schools have under-reported below 20 percent, 4 have reported 20 - 40 percent and 1 have reported 40 - 60 percent. The magnitude of over- and under-reporting schools of new entrants/transfer data are mentioned below:

Table 33: Magnitude of over/ under reporting schools on new entrants/transfer

Magnitude in %	Over Reporting	Under Reporting
Below 20	3	7
20 – 40	-	4
40 – 60	2	1
60 – 80	-	-
Above 80	-	-
Total	5	12

Note: Percentage is derived from actual data.

Number of over/under/correct reporting schools on promotion. In three districts 12 schools have over-reported, 2 schools have under-reported and 4 schools have correctly reported on promotion.

Table 34: Number of over/under/correct reporting schools on promotion

Categories	Number of Schools
Over Reporting	12
Under Reporting	2
Correct Reporting	4

Source: Field Survey 2002.

Number of over/under/correct reporting schools on promotion by grade. The maximum number of over-reporting schools was 11 in grade 5 and the minimum number was 5 in grade 3. Similarly, the maximum number of under reporting schools was 7 in grade 3 and the minimum number was 2 in grade 5. Likewise, the maximum number of correct reporting schools was 6 in grade 3 and the minimum number was 3 in grade 4.

Table 35: Number of over, under & correct reporting schools on promotion by grade

Categories	Grade				
	1	2	3	4	5
Over Reporting		8	5	10	11
Under Reporting		5	7	5	2
Correct Reporting		5	6	3	5

Source: Field Survey, 2002

Note: There is no promotion data in grade 1.

Magnitude of over- and under-reporting schools in promotion. The maximum number of over-reporting schools is 11 that comes to below 20 percent and 1 school has reported above 80 percent. Similarly, 2 schools have under-reported below 20 percent only. The magnitude of over and under reporting school of promotion data are explained below:

Table 36: Magnitude of over/ under reporting schools on promotion

Magnitude in %	Over-Reporting	Under-Reporting
Below 20	11	2
20 – 40	-	-
40 – 60	-	-
60 – 80	-	-
Above 80	1	-
Total	12	2

Source: Field Survey 2002

Note: Percentage is derived from actual data.

Number of over/under/correct reporting schools on dropout. In three districts 3 schools have over-reported, 9 schools under-reported and 6 schools reported correctly on dropout.

Table 37: Number of over/under/correct reporting schools on dropouts

Categories	Number of Schools
Over Reporting	3
Under Reporting	9
Correct Reporting	6

Source: Field Survey 2002.

Number of over, under, and correct reporting schools on dropout by grade. The maximum number of over-reporting schools was 5 in grade 5 and the minimum number was 2 in grade 3. Similarly, the maximum number of under reporting schools was 9 in grade 2 and the minimum number was 5 in grade 5. Likewise, the maximum number of correct reporting schools was 8 in grade 3, 4 and 5 and the minimum number was 6 in grade 2.

Table 38: Number of over, under & correct reporting schools on dropouts by grade

Categories	Grade				
	1	2	3	4	5
Over Reporting	4	3	2	4	5
Under Reporting	7	9	8	6	5
Correct Reporting	7	6	8	8	8

Source: Field Survey, 2002

Magnitude of over- and under-reporting schools in dropout. The maximum number of over-reporting schools is 1 that comes to 40 - 60 percent and 2 schools have reported above 80 percent. Similarly, 1 school has under reported below 20 percent and the other 8 schools have under-reported from 20 – 40 percent to above 80 percent respectively.

Table 39: Magnitude of over/ under reporting schools on dropout

Magnitude in %	Over Reporting	Under Reporting
Below 20	-	1
20 – 40	-	2
40 – 60	1	2
60 – 80	-	2
Above 80	2	2
Total	3	9

Source: Field Survey 2002.

Note: Percentage is derived from actual data.

As there is no significant sex-wise difference in these indicators the sex aggregated data are not presented here.

4.2.2 Discrepancies in promotion, repetition, new entrants/transfer and dropout

District wise discrepancy in school reported and surveyed data on promotion, repetition, new entrants/transfer and dropout:

4.2.2.1 Lalitpur District

The total picture of discrepancy on promotion, repetition and new entrants/transfer and drop out in Lalitpur district is shown below.

Table 40: Discrepancy in School Reported & Surveyed Data on Promotion, Repetition, New Entrants/Transfer & Dropout in Lalitpur District, 2001

Grade	1- 5							
	Repeaters		New Entrants/Transfer		Promotion		Dropout	
	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
School Reported Data	61	82	183	152	290	319	46	36
Surveyed Data	51	60	231	196	281	291	42	55
Discrepancies ^o	24	46	82	108	29	36	24	23
Discrepancies in %	39.3	56.1	44.8	71.1	10.0	11.3	60.9	52.8

Source: Field Survey, 2002

Note: School Reported Data = School forwarded data to DEO, Surveyed Data = Data derived from the school performance register (Result Sheet), Base Data = School Reported Data

^o Derived adding discrepancies of six schools.

The above table of Lalitpur district shows that the discrepancy from grade 1 to 5 on repetition for boys is 39.3 percent and in girls is 56.1 percent. In new entrants/transfer the total discrepancies for the boys and girls are 44.8 percent and 71.1 percent respectively. Likewise in promotion, the total discrepancies for boys and girls are 10.0 and 11.3 percent respectively and in dropout the total discrepancies for boys and girls are 60.9 and 52.8 percent respectively.

4.2.2.2 Dhanusha District

In Dhanusha district the discrepancies in repeaters, new entrants/transfer, promotion and dropout are similar to those in Lalitpur district. The picture of discrepancies is shown below:

Table 41: Discrepancy in School Reported & Surveyed Data on Promotion, Repetition, New Entrants/Transfer & Dropout in Dhanusha District, 2001

Grade	1- 5							
	Repeaters		New Entrants/Transfer		Promotion		Dropout	
	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
School Reported Data	63	48	232	155	660	534	26	21
Surveyed Data	40	32	289	192	649	443	42	38
Discrepancies ◦	39	26	77	59	37	103	30	27
Discrepancies in %	61.9	54.2	33.2	38.1	5.6	19.3	115.4	128.6

Source: Field Survey, 2002

Note: School Reported Data = School forwarded data to DEO; Surveyed Data = Data derived from the school performance register (Result Sheet); Base Data = School Reported Data

◦ Derived adding discrepancies of six schools.

In Dhanusha, the discrepancies between school reported data and surveyed data from grade 1 to 5 on repetition for boys are 61.9 percent and for girls 54.2 percent. In new entrants/transfer the total discrepancies for the boys and girls are 33.2 percent and 38.1 percent respectively. Likewise in promotion, the total discrepancies for boys and girls are 5.6 and 19.3 percent respectively and in dropout the total discrepancies on boys and girls are 115.4 and 128.6 percent respectively.

4.2.2.3 Ilam District

In, Ilam district also discrepancies on promotion, repetition, new entrants/transfer & dropout are detected. But the magnitude of discrepancies is different from the Dhanusha and Lalitpur districts.

Table 42: Discrepancy in School Reported & Surveyed Data on Promotion, Repetition, New Entrants/Transfer & Dropout in Ilam District, 2001

Grade	1- 5							
	Repeaters		New Entrants/Transfer		Promotion		Dropout	
	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
School Reported	72	39	102	99	219	228	25	19
Surveyed Data	58	33	94	97	223	220	17	14
Discrepancies ◦	30	24	26	24	50	40	38	25
Discrepancies in %	41.7	61.5	25.5	24.2	22.8	17.5	152.0	131.6

Source: Field Survey, 2002

Note: School Reported Data = School forwarded data to DEO, Surveyed Data = Data derived from the school performance register (Result Sheet), Base Data = School Reported Data

◦ Derived adding discrepancies of six schools.

In Ilam, the discrepancies between the school reported data and surveyed data from grade 1 to 5 on repetition for boys are 41.7 percent and for girls 61.5 percent. In new

entrants/transfer the total discrepancies for the boys and girls are 25.5 percent and 24.2 percent respectively. Likewise in promotion, the total discrepancies for boys and girls are 22.8 and 17.5 percent respectively and in dropout the total discrepancies on boys and girls are 152.0 and 131.6 percent respectively.

In repetition the highest discrepancies for boys are 61.9 percent in Dhanusha district and for girls 61.5 in Ilam district. Similarly, in new entrants/transfer the highest discrepancies for boys are 44.8 percent and for girls 71.1 percent in Lalitpur district. In promotion the highest discrepancies for boys are 22.8 percent in Ilam district and for girls 19.3 percent in Dhanusha district. The lowest discrepancy in repetition for boys is 39.3 in Lalitpur district and for girls is 41.7 percent in Ilam district. Likewise, in new entrants/transfer the lowest discrepancy for boys is 25.5 percent and for girls 24.2 percent in Ilam districts respectively.

In three districts the discrepancy in repetition for boys is 47.4 percent and for girls 56.8 percent, whereas in new entrants/transfer for boys at is 35.8 percent and for girls 47.0 percent. The discrepancies in promotion for boys are 9.9 percent and for girls are 16.6 percent and in dropout for boys 99.0 percent and for girls 93.4 percent respectively. Dropout is considered as a critical issue and its perception varies from one school to another. So, the differentiation percentage on dropout is found high.

4.2.3 Causes for Discrepancies

No records on repeaters, new entrants/transfers and dropouts. Most of the schools do not maintain the records on repeaters, new entrants/transfers and dropouts. And the schools do not make the transfer certificate compulsory for enrolment. . It is obvious that the figures entered in the form without records cannot be correct. To maintain the records of repeaters, new entrants/transfers and dropouts the HTs can advise grade teachers to maintain the information in the attendance book because grade teachers are well familiar with all the students of their class. The school should make the transfer certificate compulsory for enrolment in it.

Ignorance on counting of dropout data. Most of the HTs/teachers/data assigned staffs do not know how to count the dropout data as a result of which the data get inflated. *In the school information form there should be a guideline developed on counting and calculating the dropout data.*

Promotion/Repetition/New Entrants/Transfer is the most complex, difficult and time-consuming part of the form. Due to the complexity and time-consuming nature of promotion, repetition, new entrants/transfer the HTs/teacher/data assigned staff puts in approximate figures in the form regardless of actual figures. *In the school information form there should be a guideline developed for counting the Promotion/Repetition/New Entrants/Transfer and Dropout data and provision of training made for the concerned personnel.*

4.3 Incomplete Record on Age-wise Enrolment

Another component of the study on school reported data is current year age-wise enrolment. To verify the school reported age-wise enrolment data the actual data were derived from the available records such as school admission form and school admission register.

4.3.1 Magnitude of Incomplete Age-wise Record

In three districts all the 18 schools have no complete record on age-wise enrolment and the total unavailability of records in three districts comes to 37.9%. Among them in Lalitpur 39.4%, in Dhanusha 39.3% and in Ilam 32.2% have no records in the school. It shows that the major cause of error in age-wise enrolment in the schools is the unavailability of age-wise records of the students.

Table 43: Incomplete Age-wise Records in three Districts

Districts	Total Reported	Total Actual	Record Available	Record Not Available %
Lalitpur	1063	1110	673	39.4
Dhanusha	1687	1645	998	39.3
Ilam	806	724	491	32.2
Total	3556	3479	2162	37.9

Source: Field Survey, 2002

Magnitude of incomplete age-wise record in the schools by grade. The magnitude of incomplete age-wise records by grade ranges from below 20 percent to above 80 percent. According to the 7th amendment to the Education Act, the students who do not have birth certificates or admission forms are not permitted to enrol in the school but the study shows that in grade 1, 5 schools have no age records of below 20 percent and 6 schools have no records of 20 – 40 percent and it ranges up to 80 percent and above. It shows that schools are enrolling students without their age records. The magnitude in the percentage of incomplete age-wise record by grade is as follows:

Table 44: Magnitude of incomplete age-wise record in the schools by grade

Magnitude in %	Grade				
	1	2	3	4	5
Below 20	5	3	5	5	4
20 – 40	6	10	8	3	2
40 – 60	3	3	2	4	7
60 – 80	3	-	2	5	5
Above 80	1	2	1	1	-

Source: Field Survey, 2002

4.3.1.1 Discrepancies on Age-wise Enrolment

The calculation of three districts shows that the highest number of discrepancy between school reported data and surveyed data is 263 in grade one boys and the lowest discrepancies are 111 in grade five girls. In grade 1 – 5 the total records not available in percentages for boys and girls are 42.6 and 32.7 respectively.

Table 45: Discrepancies on School Reported & Surveyed Data on Age-wise Enrolment by grade in Lalitpur, Dhanusha & Ilam District, 2001*

Age	Grade	1		2		3		4		5		1-5	
		B	G	B	G	B	G	B	G	B	G	B	G
Below 3	School Reported Data												
	Surveyed Data												
	Discrepancies												
3	School Reported Data	4	5									4	5
	Surveyed Data	0	0									0	0
	Discrepancies	4	5									4	5
4	School Reported Data	17	18									17	18
	Surveyed Data	10	9									10	9
	Discrepancies	21	19									21	19
5	School Reported Data	151	102	2	1	0	0					153	103
	Surveyed Data	42	32	0	1	1	1					43	34
	Discrepancies	49	106	1	1	1	1					51	108
6	School Reported Data	142	144	80	46	8	1					230	191
	Surveyed Data	57	67	15	23	0	2					72	92
	Discrepancies	105	204	81	57	8	1					194	262
7	School Reported Data	78	69	154	133	87	46	12	8			331	256
	Surveyed Data	50	50	42	52	15	15	2	4			109	121
	Discrepancies	56	51	120	101	82	32	14	8			272	192
8	School Reported Data	20	18	101	73	120	155	66	38	12	13	319	297
	Surveyed Data	49	37	65	51	56	53	10	6	2	2	182	149
	Discrepancies	37	36	78	120	94	120	64	38	12	11	285	325
9	School Reported Data	12	8	46	34	39	47	156	150	61	30	314	269
	Surveyed Data	11	9	53	31	63	53	33	45	12	22	172	160
	Discrepancies	21	11	47	31	50	57	131	109	59	34	308	242
10	School Reported Data	2	3	26	14	29	24	55	76	138	129	250	246
	Surveyed Data	12	7	30	20	50	46	66	66	48	37	206	176
	Discrepancies	14	10	28	26	43	40	65	70	110	100	260	246
Above 10	School Reported Data	2	0	15	10	37	38	70	87	153	141	277	276
	Surveyed Data	9	7	21	14	52	55	93	81	161	136	336	293
	Discrepancies	11	7	22	18	39	46	85	102	160	123	317	296
Total	School Reported Data	428	367	424	311	320	311	359	359	364	313	1895	1661
	Surveyed Data	240	218	226	192	237	225	204	202	223	197	1130	1034
	Discrepancies ◦	318	449	377	354	317	297	359	327	341	268	1712	1695
	Current Enrolled Surveyed Data	401	334	390	298	357	302	383	313	376	314	1907	1561
	Age-wise Record Not Available	161	116	164	106	120	77	179	111	153	117	777	527
	Age-wise Record Not Available in %	40.1	34.7	42.1	35.6	33.6	25.5	46.7	35.5	40.7	37.3	40.7	33.8

Source: Field Survey, 2002

Note: School Reported Data = School forwarded data to DEO, Surveyed Data = Data derived from the school admission form/register, Base Data = School Reported Data, Current Enrolled Surveyed Data = Surveyed Data derived from Current Enrolment, Record Not Available = Current Enrolled Data - Surveyed Data (Discrepancies)

* Age and discrepancies are derived adding corresponding age and discrepancies of the three districts.

◦ Derived adding the discrepancies of each age.

4.3.1.2 Discrepancies on Age-wise Enrolment by District

In totality, the most age-wise record absent district is Dhanusha where, out of 1645 students 645 student's age-wise record is not available. It constitutes 39.2 percent of the total students. Similarly, age-wise record not available is 38.8 percentage in Lalitpur and 32.2 in Ilam. In the average of three districts the age-wise records not available is 37.6 percent.

Table 46: District wise Discrepancies on School Reported & Surveyed Data on Age-wise Enrolment by grade in Lalitpur, Dhanusha & Ilam District, 2001

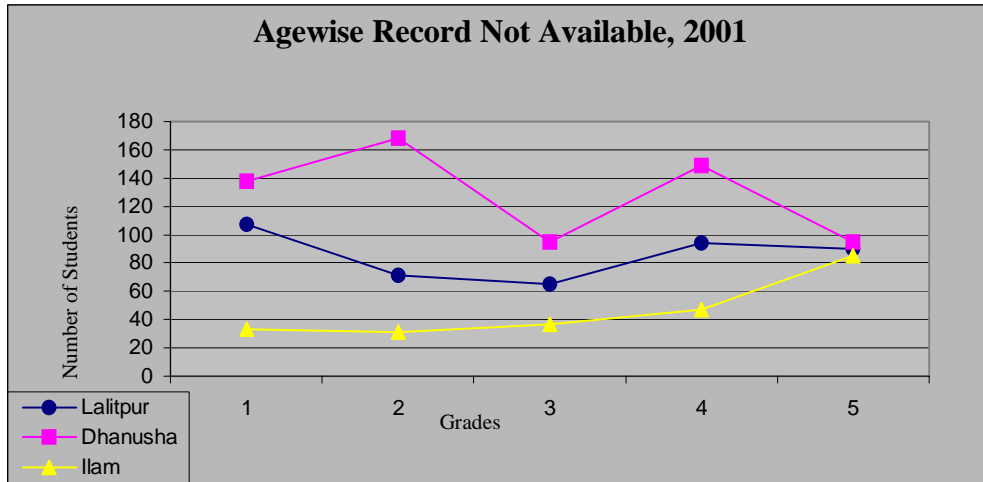
Districts	Grade	1		2		3		4		5		1-5	
		Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
Lalitpur	School Reported Data	139	137	134	87	87	96	89	112	91	91	540	523
	Surveyed Data	95	88	77	63	71	70	54	58	48	49	345	328
	Discrepancies	120	143	101	70	86	74	77	90	81	76	465	453
	Current Enrolled Surveyed Data	153	136	118	93	104	102	96	110	86	101	557	542
	Age-wise Record Not Available	58	48	41	30	33	32	42	52	38	52	212	214
	Age-wise Record Not Available in %	37.9	35.3	34.7	32.3	31.7	31.4	43.8	47.3	44.2	51.5	38.1	39.5
Dhanusha	School Reported Data	209	149	199	140	173	139	192	155	187	144	960	727
	Surveyed Data	93	70	83	66	119	110	118	94	140	107	553	447
	Discrepancies	218	127	191	139	184	160	224	171	201	143	1018	740
	Current Enrolled Surveyed Data	174	127	187	130	187	137	225	136	203	139	976	669
	Age-wise Rec. Not Available	81	57	104	64	68	27	107	42	63	32	423	222
	Age-wise Rec. Not Available in %	46.6	44.9	55.6	49.2	36.4	19.7	47.6	30.9	31.0	23.0	43.3	33.2
Ilam	School Reported Data	80	81	91	84	60	76	78	92	86	78	395	411
	Surveyed Data	52	60	66	63	47	45	32	50	35	41	232	259
	Discrepancies	80	74	75	67	47	63	58	66	59	49	319	319
	Current Enrolled Surveyed Data	74	71	85	75	66	63	62	67	87	74	374	350
	Age-wise Rec. Not Available	22	11	19	12	19	18	30	17	52	33	142	91
	Age-wise Rec. Not Available in %	29.7	15.5	22.4	16.0	28.8	28.6	48.4	25.4	59.8	44.6	38.0	26.0
Total	School Reported Data	428	367	424	311	320	311	359	359	364	313	1895	1661
	Surveyed Data	240	218	226	192	237	225	204	202	223	197	1130	1034
	Discrepancies ◦	418	344	367	276	317	297	359	327	341	268	1802	1512
	Current Enrolled Surveyed Data	401	334	390	298	357	302	383	313	376	314	1907	1561
	Age-wise Rec. Not Available	161	116	164	106	120	77	179	111	153	117	777	527
	Age-wise Rec. Not Available in %	40.1	34.7	42.1	35.6	33.6	25.5	46.7	35.5	40.7	37.3	40.7	33.8

Source: Field Survey, 2002

Note: School Reported Data = School forwarded data to DEO, Surveyed Data = Data derived from the school admission form/register, Base Data = School Reported Data, Current Enrolled Surveyed Data = Surveyed Data derived from Current Enrolment, Record Not Available = Current Enrolled Data - Surveyed Data (Discrepancies)

* Age and discrepancies are derived adding corresponding age and discrepancies of the three districts.

◦ Derived adding the discrepancies of three districts.



4.3.2 Causes for Discrepancies

No Compulsion placed on birth certificate for each student. In most of the surveyed schools there is no provision of keeping record of the age of the students. The age record was filled in approximately without checking any records. The parents also do not submit the birth certificate of their children during the admission time. *Provision of compulsion on birth certificate or vital registration of each student must be made in the schools during the time of admission or the school can keep a register with the age record of each child filled in on the basis of what the parent says.*

No compulsion placed on filling in the admission form. In the admission form there is provision of age record and in the surveyed school there is compulsion placed on filling in the admission form for the students. Hence the HTs/teachers and accountant enrol the students without the admission form and without any record of the age data. If the HTs ask for submission of the age data then the parent may ignore at or he/she may say that the age record will be submitted later. Such a practice is likely to give the wrong age of the students. *For this the HTs should make filling the age record in the admission form and in the register or asking it to the student from the level class teacher compulsory.*

Chapter V: Typology of Errors

5.1 School Information Form Verification

The only method to identify the district level data error is to check the school information forms available in the DEO. So, in connection with school information form, 2000 and 2001, the data on current year primary student enrolment (3.1.1), repetition, new entrants/transfer, promoters and dropout (3.2) and primary level age-wise enrolment (3.3.1) were tallied. After the verification of available forms in three headquarters are following typology of errors were detected.

- Data blank on i) current year enrolment; ii) promotion, repetition/new entrants/transfer; and iii) age-wise enrolment;
- Calculation errors on i) current year enrolment, ii) promotion, repetition/new entrants/transfer, dropout and iii) age-wise enrolment;
- Incorrect category entry (girls data in place of boys and boys data in place of girls);
- Data blank on some of the grades; and

Over reporting and under-reporting on i) promotion, repetition/new entrants/transfer, dropout and ii) age-wise enrolment. (Annex 16).

Among the above types of errors, the study had enumerated data blanks and the number of errors in promotion, repetition, new entrants/transfer, dropout in different grades and the number of errors in age-wise enrolment

5.1.1 Data Blank

Among different types of errors found after the verification, one is the data blank on current enrolment, promotion/repetition, new entrants/transfer and age-wise enrolment. In the year 2057 (2000) the total number of surveyed primary level schools in three districts was 829 and out of them 28 (3.4%) were found to have blank data on one or other of the three heads of information: current enrolment, promotion/repetition, new entrants/transfer and age-wise enrolment. The data blank on current enrolment, promotion/repetition, new entrants/transfer and age-wise enrolment were 10 (35.7 %), 10 (35.7 %) and 8 (28.6%) respectively. In year 2058 (2001) the total number of the primary level was 948 and out of them 488 (51.5%) had made errors. Among 488 schools 44 (4.6%) schools had sent data blanks. The data blank on current enrolment, promotion, repetition, new entrants/transfer and age-wise enrolment were 15 (34.1%), 19 (43.2%) and 10 (22.7%) respectively. If we compare the figure of data blanks of 2001 with 2000, the data blanks have increased by 1.2 percent.

Community school. In 2000, the total number of community schools surveyed was 664 and among them, 392 (59%) Community schools had made errors. The data blank found in Community schools was 15 (3.8% out of 392 community schools with errors). In 2001, the total number of community schools surveyed was 804 and among them 388 (48.3%) community schools had made errors. The data blank found in Community schools was 30 (7.7% out of 388 Community schools with errors).

Institutionalised school. In the year 2000, the total number of institutionalised schools was 165 and the number of errors was 139 (84.2%) and the data blank was 13 (9.4% out

of 139 institutionalised schools with errors) and in 2001, the total number of institutionalised schools was 144 and the number of errors was 100 (69.4%) and the data blank only was 14 (14% out of 100 Institutionalised schools with error).

If we compare the number of errors between the community and institutionalised schools, the errors were more common in institutionalised schools and they used to send more data blanks in comparison to community schools. Both in 2000 and 2001, the number of errors made by institutionalised schools was higher than that made by the community schools

Table 47: Data Blank on Current Enrolment, Promotion, Repetition, New Entrants/Transfer & Age-wise Enrolment, 2057 (2000)

Level	Types	Surveyed School				Blank		
		Total Surveyed	Total Error	Blank Error	Blank Error %	CE	PRNT	Age
Primary	Community	493	280	11	39.3	7 (63.6)	NA	4 (36.4)
	Institutionalised	62	51	6	21.4	1 (16.7)	4 (66.6)	1 (16.7)
Primary Attached to Lower Secondary	Community	57	42	1	3.6	1 (100)	NA	NA
	Institutionalised	20	16	2	7.1	NA	1 (50.0)	1 (50.0)
Primary Attached to Secondary	Community	114	70	3	10.7	1 (33.3)	1 (33.3)	1 (33.3)
	Institutionalised	83	72	5	17.9	NA	4 (80.0)	1 (20.0)
Total		829	531	28	100.0	10 (35.7)	10 (35.7)	8 (28.6)

Source: School Statistical Information Form, 2002 (Lalitpur + Dhanusha + Ilam)

Note: CE = Current Year Enrolment, PRNT = Promotion, Repetition, New Entrants/Transfer, NA = Not Available

Figures in the parenthesis indicate the percentage.

Table 48: Data Blank on Current Enrolment, Promotion, Repetition, New Entrants and Age-wise Enrolment, 2058 (2001)

Level	Types	Surveyed School				Blank		
		Total Surveyed	Total Error	Blank Error	Blank Error %	CE	PRN	Age
Primary	Community	581	266	27	61.4	10 (37.0)	12 (44.5)	5 (18.5)
	Institutionalised	50	28	5	11.4	2 (40.0)	2 (40.0)	1 (20.0)
Primary Attached to Lower Secondary	Community	77	38	NA	NA	NA	NA	NA
	Institutionalised	14	12	3	6.8	NA	2 (66.7)	1 (33.3)
Primary Attached to Secondary	Community	146	84	3	6.8	3 (100.0)	NA	NA
	Institutionalised	79	60	6	13.6	NA	3 (50.0)	3 (50.0)
Total		948	488	44	100	15 (34.1)	19 (43.2)	10 (22.7)

Source: School Statistical Information Form, 2002 (Lalitpur + Dhanusha + Ilam)

Note: CE = Current Year Enrolment, PRNT = Promotion, Repetition, New Entrants/Transfer, NA = Not Available

Figures in the parentheses indicate the percentage.

5.1.2 Errors in Promotion, Repetition, New Entrants/Transfer

The number of errors on promotion, repetition, and new entrants/transfer was derived after matching the number of boy and girl students in current year enrolment (3.1.1) with promotion, repetition, new entrants/transfer (3.2). In the form the number of errors ranges from one to five, i.e., if a school makes a mistake in one of the grades it is counted as one error and if a school makes a mistake in any two grades (grades may be 1 and 3 or grades may be 2 and 5), it has been counted as two errors.

In the year 2000, a total of 829 forms were verified in which, 531 forms were found to have errors and the number of errors on PRN/T was 462. Among them one, two, three, four and five errors were 192 (41.6%), 123 (26.6%), 54 (11.7%), 38 (8.2%) and 55 (11.9%) respectively. Likewise in 2001, in three districts a total of 948 forms were verified and errors were found in 488 forms and the total number of errors on PRN/T only was 348. The number of errors in any one of the grades was 150 (28.5%), in any two grades 77 (22.1%), in any three grades 50 (14.4%), in any four grades 28 (8.0%), and in all the five grades 43 (12.4%).

Table 49: Errors in Promotion, Repetition, New Entrants/Transfer, 2057 (2000)

Level	Types	Surveyed School		No of Error on Promotion/Repetition/New Entrants				
		Error on PRN	Error %	I	II	III	IV	V
Primary	Community	232	50.2	102 (44.0)	61 (26.3)	29 (12.5)	14 (6.0)	26 (11.2)
	Institutionalised	49	10.6	18 (36.7)	11 (22.5)	7 (14.3)	6 (12.2)	7 (14.3)
Primary Attached to Lower Secondary	Community	36	7.8	16 (44.4)	6 (16.7)	4 (11.1)	5 (13.9)	5 (13.9)
	Institutionalised	15	3.3	4 (26.7)	5 (33.4)	2 (13.3)	2 (13.3)	2 (13.3)
Primary Attached to Secondary	Community	64	13.8	24 (37.5)	19 (29.7)	7 (10.9)	8 (12.5)	6 (9.4)
	Institutionalised	66	14.3	28 (42.4)	21 (31.8)	5 (7.6)	3 (4.6)	9 (13.6)
Total		462	100.0	192 (41.6)	123 (26.6)	54 (11.7)	38 (8.2)	55 (11.9)

Source: School Statistical Information Form, 2002 (Lalitpur + Dhanusha + Ilam)

Note: I, II, III, IV and V indicates the numbers of error on grades, NA = Not Available
Figures in the parentheses indicate percentage.

Table 50: Errors in Promotion, Repetition, New Entrants/Transfer, 2058 (2001)

Level	Types	Surveyed School		No of Error on Promotion/Repetition/New Entrants				
		Error on PRN	Error %	I	II	III	IV	V
Primary	Community	161	46.2	67 (41.6)	42 (26.1)	30 (18.6)	5 (3.1)	7 (10.6)
	Institutionalised	23	6.6	12 (52.2)	3 (13.0)	4 (17.4)	2 (8.7)	2 (8.7)
Primary Attached to L.Secondary	Community	35	10.0	22 (62.9)	8 (22.9)	2 (5.7)	1 (2.8)	2 (5.7)
	Institutionalised	10	2.9	2 (20.0)	1 (10.0)	NA	3 (30.0)	4 (40.0)
Primary Attached to Secondary	Community	75	21.6	39 (52.0)	11 (14.6)	9 (12.0)	8 (10.7)	8 (10.7)
	Institutionalised	44	12.7	8 (18.2)	12 (27.3)	5 (11.4)	9 (20.4)	10 (22.7)
Total		348	100.0	150 (43.1)	77 (22.1)	50 (14.4)	28 (8.0)	43 (12.4)

Source: School Statistical Information Form, 2002 (Lalitpur + Dhanusha + Ilam)

Note: I, II, III, IV and V indicates the numbers of error on grades, NA = Not Available
Figures in the parentheses indicate percentage.

Community school. In 2000, a total of 664 community schools were verified and 332 (50.0%) schools had made mistakes in promotion, repetition and new entrants/transfer. In 2001, a total of 804 community schools were verified and 271 (33.7%) schools have made mistakes. Both in the year 2000 and 2001, the majority of the schools have made mistakes in one of the grades.

Table 51: Errors in Promotion, Repetition, New Entrants/Transfer in Community & Institutionalised Schools

Level	Types	Surveyed School			No of Error on Promotion/Repetition/New Entrants				
		Total Surveyed	Error on PRN	Error %	I	II	III	IV	V
2057	Community	664	332	50.0	142 (42.8)	86 (25.9)	40 (12.1)	27 (8.1)	37 (11)
	Institutionalised	165	130	78.9	50 (38.4)	37 (28.5)	14 (10.8)	11 (8.5)	18 (13)
2058	Community	804	271	33.7	128 (47.2)	61 (22.5)	41 (15.1)	14 (5.2)	27 (10)
	Institutionalised	144	77	53.5	22 (28.5)	16 (20.8)	9 (11.7)	14 (18)	16 (20.8)

Source: School Statistical Information Form, 2002 (Lalitpur + Dhanusha + Ilam)

Note: I, II, III, IV and V indicates the numbers of error on grades, NA = Not Available, PRN = Promotion, Repetition and New Entrants/Transfer

Figures in the parentheses indicate percentage.

Institutionalised School. In the year 2000, 165 institutionalised schools forms were verified and it was found that 131 (78.9%) schools had made mistakes. And in 2001, 144 forms were verified and 77 (53.5%) had made mistakes. The maximum number of errors made in 2000 and 2001 found in one of the grades were 38.2 percent and 28.5 percent respectively.

In 2000, the error was 50.0 percent among the community schools whereas it was 78.9 percent in institutionalised school. Similarly, in 2001 the error was 33.7 percent only in community schools and 53.5 percent in institutionalised schools.

5.1.3 Error in Age-wise Enrolment

The number of errors on age-wise enrolment was calculated after matching the number of boy and girl students in current year enrolment (table 3.1.1) with age-wise enrolment (3.3.1). In one form the number of errors ranges from one to five, i.e., if one school mistakes in one grade it is counted as one error and if one school mistakes in any two grades (grades may be 1 and 3 or may be 2 and 5) has been counted as two errors.

In the year 2000, the total number of errors found in age-wise enrolment only was 245 (29.6% out of surveyed schools 829 & 46% out of 531 total error schools) and the errors in I, II, III, IV and V were 43.3, 20.8, 16.3, 4.5 and 15.1 percent respectively. Percentage in one of the grades was 43.3, which shows the maximum percentage of the errors. Likewise, in 2001 the number of errors was 162 (17.1% out of total surveyed schools 948 & 33% out of 488 total error schools) and the errors in I, II, III, IV and V were 51.2, 21.0, 13.0, 3.7 and 11.1 percent respectively. And mistake in one of the grades come to 51.2 percent out of the total number of errors.

Table 52: Errors in Age-wise Enrolment, 2057 (2000)

Level	Types	Surveyed School		No of Error on Age-wise Enrolment				
		Error in Age	Error %	I	II	III	IV	V
Primary	Community	148	60.5	66 (44.6)	31 (20.9)	23 (15.5)	6 (4.1)	22 (14.9)
	Institutionalised	10	4.1	3 (30.0)	2 (20.0)	4 (40.0)	NA	1 (10)
Primary Attached to Lower Secondary	Community	25	10.2	8 (32.0)	5 (20.0)	5 (20.0)	2 (8.0)	5 (20)
	Institutionalised	6	2.4	3 (50.0)	1 (16.7)	2 (33.3)	NA	NA
Primary Attached to Secondary	Community	29	11.8	12 (44.8)	6 (20.7)	4 (13.8)	2 (6.9)	4 (13.8)
	Institutionalised	27	11.0	13 (48.2)	6 (22.2)	2 (7.4)	1 (3.7)	5 (18.5)
Total		245	100.0	106 (43.3)	51 (20.8)	40 (16.3)	11 (4.5)	37 (15.1)

Source: School Statistical Information Form, 2002 (Lalitpur + Dhanusha + Ilam)

Note: I, II, III, IV and V indicates the numbers of error on grades, NA = Not Available
Figures in the parentheses indicate percentage.

Table 53: Errors in Age-wise Enrolment, 2058 (2001)

Level	Types	Surveyed School		No of Error on Age-wise Enrolment				
		Age Error	Error %	I	II	III	IV	V
Primary	Community	89	54.9	46 (51.7)	17 (19.1)	17 (19.1)	3 (3.4)	6 (6.7)
	Institutionalised	5	3.1	3 (60.0)	NA	1 (20.0)	NA	1 (20.0)
Primary Attached to Lower Secondary	Community	12	7.4	6 (50.0)	6 (50.0)	NA	NA	NA
	Institutionalised	3	1.9	2 (66.7)	NA	NA	NA	1 (33.3)
Primary Attached to Secondary	Community	30	18.5	14 (56.7)	8 (26.7)	1 (3.3)	NA	4 (13.3)
	Institutionalised	23	14.2	9 (39.2)	3 (13.0)	2 (8.7)	3 (13.0)	6 (26.1)
Total		162	100.0	83 (51.2)	34 (21.0)	21 (13.0)	6 (3.7)	18 (11.1)

Source: School Statistical Information Form, 2002 (Lalitpur + Dhanusha + Ilam)

Note: I, II, III, IV and V indicates the numbers of error on grades, NA = Not Available
Figures in the parentheses indicate percentage.

Table 54: Error in Age-wise Enrolment in Community and Institutionalised Schools

Level	Types	Surveyed School			No of Error on Age-wise Enrolment				
		Total	Age Error	Error %	I	II	III	IV	V
2057	Community	664	202	30.4	87 (43.1)	42 (20.8)	32 (15.8)	10 (5.0)	31 (15.3)
	Institutionalised	165	43	26.1	19 (44.2)	9 (20.9)	8 (18.6)	1 (2.3)	6 (14.0)
2058	Community	804	131	16.3	69 (52.7)	31 (23.7)	18 (13.7)	3 (2.3)	10 (7.6)
	Institutionalised	144	31	21.5	14 (45.1)	3 (9.7)	3 (9.7)	3 (9.7)	8 (25.8)

Source: School Statistical Information Form, 2002 (Lalitpur + Dhanusha + Ilam)

Note: I, II, III, IV and V indicates the numbers of error on grades, NA = Not Available
Figures in the parentheses indicate percentage.

Community school. In 2000, a total of 664 community schools were verified and 202 (30.4%) schools made mistake in age-wise enrolment and in 2001, the total 804 community schools were verified and 131 (16.3%) schools were found to have made mistakes. In 2000 and 2001, the maximum mistake was observed in one of the grades.

Institutionalised school. In 2000, 165 institutionalised schools forms were verified and 43 (26.1%) schools made mistakes. And in 2001, 144 forms were verified and 31 (21.5%) made mistakes. Among the institutionalised schools also the number of maximum errors in 2000 and 2001 was found in one of the grades at 44.2 percent and 45.1 percent respectively.

In 2000 the error was 30.4 percent in community schools and 26.1 percentage in institutionalised schools, whereas in 2001 it was 16.3 percent in community schools and 21.5 percent in institutionalised school. So the percentage slightly declined in 2001.

5.1.4 Total Number of Schools with Errors

In three districts, 829 school information forms of the year 2057 (2000) and 948 school information forms of the year 2058 (2001) were verified. After the verification of forms, 531(64.1 %) in 2000 and 488 (51.5%) forms in 2001 were found to have committed errors. So in comparison to 2000, in 2001 the number of errors dipped.

Table 55: Total Number of Schools with errors, 2000 & 2001

Level	Types	Surveyed School, 2000			Surveyed School, 2001		
		Total	Non-error	Error %	Total	Non-error	Error %
Primary	Community	493	213	56.8	581	315	45.8
	Institutionalised	62	11	82.3	50	22	56.0
Primary Attached to Lower Secondary	Community	57	15	73.7	77	39	49.4
	Institutionalised	20	4	80.0	14	2	85.7
Primary Attached to Secondary	Community	114	44	61.4	146	62	57.5
	Institutionalised	83	11	86.7	80	20	75.0
Total		829	298	64.1	948	460	51.5

Source: School Statistical Information Form, 2002 (Lalitpur + Dhanusha + Ilam)

Figures in the parentheses indicate percentage.

Primary level, 2000 and 2001. In community primary level 2000, in three districts the total surveyed schools were 493 and out of them 280 schools had made errors which work out to 56.8 percentage and in 2001 the total surveyed schools was 581 and out of them 266(45.8 %) schools had made errors. These figures show that the error percentage has decreased by 11 percent in 2001 in comparison to 2000. And in institutionalized schools 2000, the total surveyed schools were 62 and out of them 51 (82.3%) schools had committed errors and in 2001, the total surveyed schools were 50 and out of them 28 (56.0%) schools committed errors. In 2001 the percentage of error had decreased by 26.3 percent.

Primary attached lower secondary level, 2000 and 2001. In 2000, the primary attached community lower secondary level, the number of total surveyed schools was 57 out of them 42 (73.7%) schools had made error and in 2001, the total surveyed schools was 77

out of them 38 (49.4%) schools had made mistakes. The figures show that the percentage of decline went down by 24.3 percent in 2001. Similarly, the total surveyed institutionalised schools in 2000 were 20, 16 (80.0%) schools had made errors, and in 2001, 12 (85.7%) schools out of 14 schools had made errors. So percentage of errors was higher by 5.7% in 2001 in comparison to 2000.

Primary attached secondary level, 2000 and 2001. In the case of primary attached community secondary schools, 2000, the total surveyed schools were 112 and 61.6 percentage of schools had made mistakes and in 2001, out of 140 schools 56.4 percentage had made errors. So, in Community secondary school the percentage of error in 2001 is low by 5.2 percent. Likewise in institutionalised schools 83 schools were verified and 72 forms were found to contain errors, which represents 86.7 percent and in 2001, 140 forms were verified and 79 (56.4%) forms were found to have errors. The error percentage suddenly decreased by 30.3 percent.

The findings of the above data reflect that at the primary level 59.6 percent, at the lower secondary level 75 percent and at the secondary level 72 percent in 2000 had committed errors. In 2001, primary level 46.6 percent, lower secondary level 55.0 and secondary level 63.0 percent of the forms had errors. The data shows that the higher the level of schools the higher the occurrence of error.

5.1.5 Corrective measures

Based on the above errors in three districts, we can assume that these sort of errors are to be found made not only in primary level but also at the lower secondary and secondary level data as well as in other non-surveyed districts of the country. The school level statistical, 2000 report are already in the publishing stage and there is no possibility of correction on it. But in the case of 2001, there is still room to make for correction. So, the report would like to suggest some following corrective measures to improve errors. They are:

Verify school information form, 2001 before entry of the data into the computer. *This verification can correct calculation errors on current year enrolment, promotion, repetition, new entrants/transfer and age wise enrolment.*

5.2 Common Factors on Errors

According to the study on field survey and calculation on school reported data and surveyed data the following common factors are responsible for the data errors. They are:

Negligence in filling in the form. The data quality generally depends upon commitment, seriousness and interest of the data managers during the form filling time. The data transformation from register to form is a tedious job, which needs patience. The data managers has to fill in the form by referring to the student attendance register, admission register, admission form, and result-sheet of each grade of different sections and have to count the number of boys and girls of each grade on the basis of names mentioned in the register. Likewise on filling in the age-wise data the data manager needs to look at the previous year's records and needs to derive current year age of individual student with the help of the date of birth. This lengthy procedure makes the data providers careless and negligent on the transfer of the data from the registers.

Lack of awareness about the importance of the data. Most of the data managers are not aware of the use and the importance of the data. They think it is a routine affair of the DEOs. Due to their being unaware of importance and use of the data they neglect, ignore and do not want to devote long time for filling in the form.

Lack of sufficient knowledge/skill in filling in the form. In connection with filling the form training is a crucial part for the data managers. In the study 8 schools have got training from the RPs and 10 schools have not received training either from the RPs or from the DOEs and none of the institutionalized schools have received training on the form.

Complexity of the form. Another factor for data errors is the complexity of the form. Most of the interviewed data managers referred to the complexity of the form in the aspect of promotion, repetition, new entrants/transfer and dropout and the study shows that 15 data managers easily understand the portion on repetition and 3 have expressed it as complex to understand. Likewise, 16 data managers easily understand the aspect of new entrants/transfer and 2 have expressed it as complex. But in the case of dropout, 10 data managers easily understand, 2 do not and 6 have expressed it as complex to understand. Most of the data managers do not know the proper meaning and do not know to count the dropout.

Lack of proper record keeping system. Another important factor for data errors at the school level is poor data keeping system. In all 18 surveyed schools, there was not found any systematic and proper data keeping system, so systematic data are not available in any of the schools. All the surveyed schools have student attendance registers and result sheets but do not have admission forms and school admission registers. The information has been kept in their own peculiar way and the format of the registers also varies from one school to another.

Admission of students without basic documents: Most of the schools are compelled to admit the students in the schools both in institutionalized and community without looking for minimum documents of the students. The minimum documents include admission form and birth certificates. The admission forms and birth certificate would help to trace out the actual age of the students and supports on filling in the form. Generally, the schools try to increase the number of students for their sustainability. If the schools stick to the birth certificate/transfer certificate which the parents cannot provide easily, the potential student may get diverted to another school, which cause a negative impact on the size of the students. So, the schools admit the students without any document or certificates during the admission time or even in the mid-session. It is obvious that without necessary supporting certificates or documents a school cannot provide the accurate age information. In the study 10 data managers said that due to incomplete records the errors took place in the form.

Incomplete instruction given in the school information form. In the age-wise enrolment the form has demanded the sex-wise age of students of different grades. But in the study some of the schools have filled the age of newly admitted students only because just below the table instruction is given to fill in the age of new students. This misleading note has also caused incorrect filling in the form.

No Specification of deadlines for form collection and distribution. In the study it has been found that the form distribution time and collection time vary from one school to another. This variation on form collection and distribution in each school may cause error because of insufficient time to fill in the form.

Transcription of Data from the registers. The data transcription from register to form is a kind of tedious job which needs patience. The study shows that the higher the number of students the more the errors and the lower the number of students the less the errors. About 11 HTs committed errors during the data transcription into the form from the register.

Chapter VI: Conclusions and Recommendations

6.1 Conclusion

Data quality and reliability are among the most important concerned issues in an educational system. Timely available qualitative data provide the right track to proper educational planning, decision-making and accurate evaluation.

The quality of the data depends upon the interest shown and commitment provided by HTs/teachers/data assigned staff and other individuals involved in the data processing job. As a data work is a kind of tedious job, it is difficult to find the person who it seriously does a good job of it.

Data errors can emerge through carelessness, lack of adequate training, non-existence of maintaining a proper record keeping system, unavailability of the data, lack of knowledge of the importance of data, lack of systematic approach and deliberate manipulation and tampering with the figures to get some benefits. If care is taken to ensure correction, the consistencies on data can be improved and when care is not taken then inconsistencies and unreliable data will accrue.

In the surveyed schools, it has been found the error due to negligence during the form filling time, transcription of data from the registers, lack of training/orientation, compulsion to admit the students without any documents or incomplete records, non-specification of deadlines for the form collection and distribution, complexity of the form, lack of proper record keeping system, incomplete descriptions/directions in the form have brought about inconsistencies or anomalies in between school reported data and surveyed data.

The data keeping system vary from one school to another because it depends on the availability of physical facilities, financial position and management capacity of the HTs. In the surveyed schools most of the schools did not maintain the records of all students. The data keeping system is comparatively poorer in community schools than in Institutionalised schools.

Regarding the level of understanding of school information form, out of surveyed 18 schools, 13 had expressed the view that the form is complex. They contended that the major cause for it being complex is the lack of training to them. Only 8 schools had got training. All the data managers of institutionalised schools have not participated in any kind of training on the school information form.

The study dealt with the data error at the school level on three sections i) current year enrolment, ii) promotion, repetition, new entrants/transfer, and dropout, and iii) age-wise enrolment. The magnitude of error was calculated by comparing the school reported data as submitted to DEO and the actual surveyed data in the school.

The total average discrepancy of the surveyed data in Lalitpur, Dhanusha and Ilam works out to 9.2%, 12.5% and 13.2 % respectively. The total average discrepancy of three districts observed at 11.6%. This amount of error is not considered as very high but it does not mean that we can remain complacent. We ought to make efforts to minimize the size of errors.

If the total figure reported by the schools and surveyed is compared, it can be remarked that the number of over-reporting schools is 8, under reporting is 7 and correct reporting is 3. The average size of over-reporting of student size per school is 21 and under-reporting size is 7.4 students per school. It indicates that there is the tendency to make over-reporting but the magnitude of over-reporting does not seem so high.

In promotion, repetition, new entrants/transfer, and dropout section, in Lalitpur district the discrepancy from grade 1 to 5 on repetition for boys is 39.3 percent and for girls is 56.1 percent. In new entrants/transfer the total discrepancy for boys and girls is 44.8 percent and 71.1 percent respectively. Likewise in promotion, the total discrepancy for boys and girls is 10.0 and 11.3 percent respectively and in dropout the total discrepancy for boys and girls is 60.9 and 52.8 percent respectively.

In Dhanusha district, the discrepancy between school reported data and surveyed data from grade 1 to 5 on repetition for boys is 61.9 percent and for girls 54.2 percent. In new entrants/transfer the total discrepancies for boys and girls are 33.2 percent and 38.1 percent respectively. Likewise in promotion, the total discrepancies for boys and girls are 5.6 and 19.3 percent respectively and in dropout the total discrepancies for boys and girls are 115.4 and 128.6 percent respectively.

Similarly in Ilam district, the discrepancy between the school reported data and surveyed data from grade 1 to 5 on repetition for boys is 41.7 percent and in girls for 61.5 percent. In new entrants/transfer the total discrepancies for boys and girls are 25.5 percent and 24.2 percent respectively. Likewise in promotion, the total discrepancies for boys and girls are 152.0 and 131.6 percent respectively.

In three districts the discrepancy for boys is 47.4 percent and for girls is 56.8 percent, whereas in new entrants /transfer it is for boys 35.8 percent and for girls 47.0 percent. The discrepancy in promotion for boys is 9.9 percent and girls for 16.6 percent and in dropout for boys it is 99.0 percent and for girls 93.4 percent respectively. The percentages of discrepancies are very high in this part. So, there may arise the question of reliability. And it can be concluded that the data are not reliable. In this part adequate attention must be paid to cope with the high degree of errors.

On age-wise enrolment two kinds of problems are seen: one sharp discrepancy between reported data and surveyed data and the other unavailability of age-wise records of all the students. It is obvious that when information is not available there can be a high chance of error.

In most of the schools the age of the students has been entered only by guesswork because there is no record keeping system of all students. In three districts, out of the total 1907 boys and 1561 girls studied the number of records not available is 777 (40.7%) for boys and 527(33%) for girls. So record unavailability stands as a major problem for the collection of qualitative and reliable data in the schools.

The study verified 2000 and 2001 school information forms as submitted to respective DEO by the schools is to find out the typology of errors from the schools. For verification the current year student enrolment was taken as the basis. The number of students as filled in the repeater, promotion, new entrants/transfer and current year age-wise enrolment columns must match with the current year student enrolment. After verification of school forms the typology of errors are detected in the forms.

- Data left blank on i) current year enrolment; ii) promotion, repetition/new entrants/transfer; and iii) age-wise enrolment;
- Calculation Error made on i) current year enrolment, ii) promotion, repetition/new entrants/transfer, dropout and iii) age-wise enrolment;
- Incorrect category entry (putting girls data boys column and boys data in girls column);
- Data left blank on some of the grades; and

Over reporting and under reporting on i) promotion, repetition/new entrants/transfer, dropout and ii) age-wise enrolment.

In three districts, altogether 829 school forms were verified, among them 28 blanks were found in the year 2000. Similarly in 2001, the number of blanks found was 44 out of a total of 948 total forms verified.

Inconsistency in repeater, promotion, new entrants/transfer is a prominent error because out of a total of 829 verified forms 462 (55.7%) schools made mistakes in this section in 2000. In the same way in 2001, 348 (36.7%) schools made mistakes out of 948 verified forms in the same section. The inconsistency ranged from any one of the grades to all the five grades.

Information on age-wise enrolment was also a prominent error found in the forms. In 2000, 245(29.6%) schools made errors in age-wise information section out of 829 total verified schools and 162 (17.1%) schools out of 948 total verified forms in 2001.

The picture of total errors in the forms shows that in total 64.1% of the total verified schools in 2000 and 51.5% of the total verified schools in 2001 had not reported correct figures either in the current year enrolment section or in repeater, promotion, new entrants/transfer or current age-wise enrolment section. Although, there is some improvement on cases of error in 2001 as compared to that in 2000 still the study has raised the question of quality of data.

With this survey, it can be concluded that there are sharp inconsistencies in school reported data and the surveyed data on repetition, promotion, new entrants/transfer, dropout and age-wise enrolment. So the HTs, RPs and DEOs must play a significant role on correcting these inconsistencies with full commitment and proper attention.

The findings that can be deduced only from those schools may not give a total picture of the country, but they do give a rough index of the situation of the school data quality.

6.2 Measures for Improving Quality Data Record System & Accuracy in School Data

- *Simplify the school information form along with clear guidelines give in it.*

It is quite necessary to combine simplicity with proper directives in the form and the guidelines will clear up misunderstandings, and as a result they provide right inputs for HTs without getting them into confusion in filling the form and improving data quality. DOE should simplify the school information form along with clear guidelines.

- *Provide hands-on experience in calculating indicators and filling in the school information form.*

RPs should provide hands-on experience in calculating indicators and filling-in the school information form for data managers (both community and institutionalised schools) at DEOs. (This type of training should be integrated in other trainings such as HTs management training, RPs training and SIP training in the district)

- *Develop a standardized record keeping system with particular attention to birth certificates in each school.*

The school should develop a school register with particular attention to birth certificates. (See school register in Annex.)

- *Launch awareness raising campaign on the importance and use of data to data managers:*

The DOE/RED should launch an awareness raising campaign on the importance and use of data to the data managers on five years interval.

- *Verify calculated data on repetition, new entrants/transfer, promotion and dropout vis-à-vis current year enrolment*

The HTs in the schools and the RPs in the RCs should verify the calculated data on repetition, new entrants/transfer, promotion and dropout vis-à-vis current year enrolment.

- *School should give the standard admission form for enrolment:*

The school should develop and distribute an admission form to the new entrants during the admission time.

- *School should distribute the transfer certificate for transfer students:*

The school should distribute the transfer certificate for transfer students.

- *Share student progress data with SMC and parents*

The school should share the student progress data with SMC and parents before the session start.

- *Strict enforcement of data collection time limit and deadline*

Schools

- Schools should fill in the form: (From two weeks to two months after the academic session starts.)

RCs

- RPs should distribute the forms to schools: (During the session)
- RPs should collect the school information forms from schools (After three and half months of session)
- RPs should verify the forms on current year enrolment with repetition, new entrants/transfer, promotion and dropout and age-wise enrolment (After four months of session)
- RPs should tabulate and compile the data (After four and half months of session)
- Send the summary forms to DEOs (After five months of session start)

DEO

- Amendment (On their need) and printing the forms: (Before two months of the session start)
- Distribution of the forms to RCs (Before one month of session start)
- Collection of the forms by DEOs (After five months of session start)
- Tabulation and preparation summary forms of DEO (After five and half months of session)
- Send the summary forms to REDs (After sixth months of session start)
- Disseminate the published information (After seventh months of session start)
- Make awareness on use and importance of data (After eighth months of session start)

RED

- Tabulation and preparation of summary form of RED (After six and half months of session)
- Send the summary form to DOE (After seventh months of session start)
- Publish the regional level school information (After eighth months of session start)

DOE

- Amendment of the form (if necessary) (A month before the session starts)
- Distribution of the amended form to DEOs/REDs (After eighth months of session start)
- Publish the school level statistics (After ninth months of session start)
- Disseminate the published information (Before session start month)
- Make awareness on use and importance of data (Before session start month)

6.3 Implications

Some of the major implications from the study on the improving the accuracy on school reported data are outlined below:

- The third party panel should make the assessment of data quality with national representative sample on five years interval.
- The cross validation/verification of data at district should be made by the RED
- Data dissemination mechanism should develop on each level by the RED/DOE.

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Annex 1

Quality and Accuracy of School Reported Data
Formative Research Project for BPEP II
CERID/TU

School Statistical Information Form, 2001

Name of the School:.....

District:..... **Ward No:**

VDC/Municipality:

Location of the School (Village/Tole):

Types of the School:

School	Class	Pre-Primary	1	2	3	4	5	6	7	8	9	10	11	12
Public School														
Community School														
Private Boarding School														

1. Current Year Student Enrolment

School	Class	Pre-Primary	1	2	3	4	5	Total 1-5
Boys								
Girls								
Total								

3. Repetition, New Entrants/Transfer, Promotion and Dropout

School	Class	Pre-Primary	1	2	3	4	5	Total 1-5
Repeaters	Boys							
	Girls							
New Entrants/Transfer	Boys							
	Girls							
Promotion	Boys							
	Girls							
Dropout	Boys							
	Girls							
TOTAL	Boys							
	Girls							

4. Current Year Age-wise Enrolment

Age	Class	Pre-Primary		1		2		3		4		5		1-5	
		Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
Below 3															
3															
4															
5															
6															
7															
8															
9															
10															
Above 10															
Total															

Annex 2

Quality and Accuracy of School Reported Data Formative Research Project for BPEP II CERID/TU

Questionnaire for Headteachers

नाम:- विद्यालयको नाम:-

गा.वि.स./न.पा. वडा नं.:-

विद्यालय रहेको गाउँ/टोलको नाम:-

१. तपाईंले हालसम्म विद्यालय तथ्याङ्क विवरण फाराम सम्बन्धी तालिम कहीं कतैबाट प्राप्त गर्नु भएको छ र यदी तालिम प्राप्त गर्नु भएको छ भने कहाँबाट प्राप्त गर्नु भएको हो र कति अवधिको हो उल्लेख गर्नु होस ।
२. School Session कहिले शुरु भयो ।
३. तपाईंले कति वर्ष देखि विद्यालय तथ्याङ्क विवरण फाराम भर्दै आउनु भएको छ र भरेका सबै फारामहरु तपाईंले राख्नु भएको छ कि छैन । (मागेर हेर्ने)
४. यदि विद्यालय तथ्याङ्क विवरण फाराम भर्दा नबुझिने छ भने तपाईंले कसैसँग यस वारे सोध्नु भएको छ ।
५. २०५८ सालको विद्यालय तथ्याङ्क विवरण फाराम कस्तो लाग्यो र कुन पक्ष तपाईंलाई भर्न अफ्तयारो वा नबुझिने छ ।
६. विद्यालय तथ्याङ्क विवरण फाराम २०५८ मा के कारणले गलति गर्नु भयो ।
७. विद्यालय तथ्याङ्क विवरण फाराम समयमा नभर्दा खेरी स्रोतव्यक्ति/ जिल्ला शिक्षा कार्यालयले के गर्दछ ।
८. विद्यालय तथ्याङ्क विवरण फाराम तपाईंले आफै भर्नु हुन्छ कि अन्य शिक्षक कर्मचारीहरुले भर्छन ।
९. जिल्ला शिक्षा कार्यालयले विद्यालय तथ्याङ्क विवरण फाराम कहिले र कसरी पठाउँछन र तपाईंले कहिले भरेर पठाउनु हुन्छ ।
१०. विद्यालय तथ्याङ्क विवरण फाराम भर्दा श्रोत व्यक्तिले के कस्तो सहयोगहरु गर्दछन् र अन्य शिक्षक कर्मचारीहरुले के कस्तो सहयोग गर्छन ? (आफनो अनुभव छलफल गर्ने)
११. विद्यालय तथ्याङ्क विवरण फाराम सम्बन्धमा विद्यालय व्यवस्थापन समितिको बैठकमा छलफल हुन्छ कि हुँदैन ।
१२. विद्यालय तथ्याङ्क विवरणलाई व्यवस्थित गर्न जिल्ला शिक्षा कार्यालयले के के गर्नु पर्दछ।
१३. विद्यालयमा नयाँ विद्यार्थी भर्ना गर्दा जन्म दर्ता प्रमाणपत्र माग्ने गरेको छ कि छैन । यदी छैन भने विद्यार्थीको जन्म कसरी पत्ता लगाउनु हुन्छ ।
१४. विद्यालयहरुबाट तथ्याङ्कहरु सुलभ रुपमा उपलब्ध हुन के कस्तो तरिका अपनाउनु पर्दछ ।
१५. विद्यालय तथ्याङ्क विवरण फाराम सम्बन्धि समस्या र हालको अवस्थाको कसरी सुधार गर्न सकिन्छ । (छलफल कार्यक्रम राख्ने)
१६. विद्यालय तथ्याङ्क विवरण फाराम वर्षमा कति पटक भर्न उपयुक्त हुन्छ ?

Annex 3
Quality and Accuracy of School Reported Data
Formative Research Project for BPEP II
CERID/TU
Questionnaire for RPs

नाम:-

जिल्ला:-

योग्यता:-

श्रोतकेन्द्र :-

श्रोतकेन्द्र अर्न्तगतका विद्यालयको नाम :-

१. तपाईंको श्रोतकेन्द्रमा प्रधानाध्यापकहरुलाई विद्यालय तथ्याङ्क विवरण सम्बन्धी तालिम दिनुहुन्छ कि हुँदैन ?
२. तपाईंको श्रोतकेन्द्रमा विद्यालय तथ्याङ्क विवरण फाराम सम्बन्धी शिक्षा विभाग/क्षेत्रीय शिक्षा निर्देशनालयबाट के कस्तो सहयोग पाउँदै आउनु भएको छ ? यदि त्यो पर्याप्त छैन भने कस्तो सहयोगको आवश्यकता छ ।
३. तपाईंले कति वर्षदेखि विद्यालय तथ्याङ्क विवरण फाराम सम्बन्धी कार्य गर्दै आउनु भएको छ ।
४. २०५८ विद्यालय तथ्याङ्क विवरण फाराममा कुन कुन पक्षमा वढी अफठयारो अथवा नवुक्तिने छ ।
५. विद्यालय जाँदा तथ्याङ्क सम्बन्धि निरीक्षण गर्ने गरेका छ कि छैन ।
६. केही विद्यालयहरुले विद्यालय तथ्याङ्क विवरण फाराममा केहीले खालि छाड्ने र केहीले गलत भने पाईएको छ यसरी गलति हुनाका कारणहरु के के हुन् ।
७. विद्यालयहरुबाट तथ्याङ्कहरु सुलभ रुपमा उपलब्ध हुने तरिकाबाट राख्नु जरुरी छ । उल्लेख गर्नु होस ।
८. विद्यालय तथ्याङ्क विवरण फाराम वारे तपाईंको के के सुझावहरु छन् ?

Annex 4
Quality and Accuracy of School Reported Data
Formative Research Project for BPEP II
CERID/TU
Questionnaire for DEO

नाम:-

जिल्ला:-

योग्यता:-

१. तपाईंको जिल्लामा सार्वजनिक विद्यालयहरूले विद्यालय तथ्याङ्क विवरण फाराम नियमित रूपमा भर्छन् कि भर्दैनन् ? भर्दैनन् भने किन भर्दैनन् र कतिले भर्दैनन् ।
२. कुनै कुनै विद्यालयले फाराम नभर्नु समस्या हो कि होईन ? समस्या हो भने समाधानको लागि तपाईंले के गर्नु भयो ? यस समस्याको समाधानमा मन्त्रालय/ विभागले के गर्न सक्छ र गर्नु पर्छ ।
३. तपाईंको जिल्लामा विद्यालयहरूले विद्यालय तथ्याङ्क विवरण फाराम नियमित रूपमा भर्छन् कि भर्दैनन् ? भर्दैनन् भने किन भर्दैनन् र कतिले भर्दैनन् ।
४. तपाईंको जिल्लामा विद्यालय तथ्याङ्क विवरण फाराममा काम गर्ने कर्मचारी कति जना छन् ? कर्मचारीले तालिम लिएका छन् कि छैनन् ? छ भने कस्तो प्रकारको तालिम हो।
५. यदि कुनै पनि विद्यालयले विद्यालय तथ्याङ्क विवरण फाराम नभरेमा वा गलत भरेमा के गर्नु हुन्छ ?
६. यदि विद्यालय तथ्याङ्क विवरण नियमित रूपमा तथा सही रूपमा भर्ने विद्यालयलाई के गर्नुहुन्छ ?
७. तपाईंले हालसम्म विद्यालय तथ्याङ्क विवरण फाराम सम्बन्धी तालिम कहीं कतैबाट प्राप्त गर्नु भएको छ र यदी तालिम प्राप्त गर्नु भएको छ भने कहाँबाट प्राप्त गर्नु भएको हो र कति अवधिको हो उल्लेख गर्नु होस ।
८. कञ्जययि कभककष्यल कहिले शुरु भयो ।
९. विद्यालयहरूलाई तथ्याङ्क विवरण फाराम कहिले र कसरी पठाउनु हुन्छ र साधारणतया विद्यालयहरूले कहिले र कसरी भरेर पठाउँछन् ।
१०. विद्यालय तथ्याङ्क विवरण फाराममा श्रोत व्यक्तिहरूले खमचषथ गर्ने गरेको छ कि छैन ।
११. विद्यालय तथ्याङ्क विवरणलाई व्यवस्थित गर्न जिल्ला शिक्षा कार्यालयले के के गर्नु पर्दछ।
१२. विद्यालयहरूबाट तथ्याङ्कहरू सुलभ रूपमा उपलब्ध हुन के कस्तो तरिका अपनाउनु पर्दछ ।
१३. विद्यालय तथ्याङ्क विवरण फाराम सम्बन्धि समस्या र हालको अवस्थाको कसरी सुधार गर्न सकिन्छ । (छलफल कार्यक्रम राख्ने)
१४. विद्यालय तथ्याङ्क विवरण फाराम वर्षमा कति पटक भर्न उपयुक्त हुन्छ ?
१५. तपाईंको जिल्लामा प्रधानाध्यापक तथा स्रोतव्यक्तिहरूलाई विद्यालय तथ्याङ्क विवरण सम्बन्धी तालिम दिनुहुन्छ कि हुँदैन ?

१६. तपाईंको जिल्लामा विद्यालय तथ्याङ्क विवरण फाराम सम्बन्धी शिक्षा विभाग/क्षेत्रीय शिक्षा निर्देशनालयबाट के कस्तो सहयोग पाउँदै आउनु भएको छ ?
१७. विद्यालय तथ्याङ्क विवरण बाहेक अन्य तथ्याङ्क विवरण सम्बन्धी फारामहरु वर्षमा कतिवटा आउने गर्दछन् ?
१८. विद्यालय तथ्याङ्क विवरण फाराम वारे तपाईंको के सुझावहरु छन् ?
१९. यदि ऋकउगतभच छ भने तथ्याङ्क विवरणलाई ऋकउगतभच मा राख्नु भएको छ, कि छैन ?

Annex 5

Quality and Accuracy of School Reported Data Formative Research Project for BPEP II CERID/TU

Questionnaire for SMC Members

नाम:-

पेशा:-

गा.वि.स./न.पा.

उमेर:-

गाउँ/टोलको नाम:-

योग्यता:-

विद्यालयको नाम:-

१. तपाईंलाई जिल्ला शिक्षा कार्यालयमा विद्यालयले विद्यालय तथ्याङ्क फाराम पठाउनु पर्ने कुरा थाहा छ कि छैन ।
२. विद्यालय व्यवस्थापन समितिको बैठकमा विद्यालय तथ्याङ्क फाराम सम्बन्धमा छलफल हुन्छ कि हुँदैन ।
३. व्यक्तिगत रूपमा पनि प्रधानाध्यापक/शिक्षकले विद्यालय तथ्याङ्क फाराम वारे कुनै छलफल गर्ने गरेका छन् कि छैन ।
४. विद्यालयले विद्यालय तथ्याङ्क राख्ने गरेको तथा नगरेको, राम्रोसँग राखेको तथा नराखेको केहि ज्ञान छ कि छैन ।
५. विद्यालयमा नयाँ विद्यार्थी भर्ना गर्दा जन्म दर्ता प्रमाणपत्र माग्ने गरेको वारे तपाईंलाई थाहा छ कि छैन ।

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