

CHAPTER IV: EQUITY ANALYSIS OF SLC EXAMINATIONS *

1. INTRODUCTION

In Nepal, education has been considered as one of the key instruments for the progress and prosperity of the country ever since the advent of democracy in 1951. In the course of time thereafter a lot of progress has been achieved in the extension and expansion of educational opportunities at all levels. Particularly after restoration of democracy in 1990, there was a common realization that while access to all levels of education had increased significantly, participation had remained unequal in terms of gender, development regions, eco-zones, ethnic/caste groups, etc. For example, after over five decades of interventions to expand and extend participation in education, the Net Enrollment Rate (NER) at the school level reveals a wide range of gender disparity. As per the data (2003), NER at the primary level has been recorded as 89.4% for boys and 77.5% for girls. This gender gap remains wider at the lower secondary and secondary levels and varies across the development regions and eco-zones. The NER by school level and region revealing gender and regional disparities is shown in Table 1.

Table 1. NER by School Level and Development Region 2003 (in %)

Level Development Regions	Primary			Lower Secondary			Secondary		
	Total	Girl	Boy	Total	Girl	Boy	Total	Girl	Boy
Eastern	80.8	77.0	84.5	48.8	45.7	51.8	34.7	32.8	36.5
Central	79.8	70.8	88.4	41.1	35.8	45.9	33.9	30.1	37.5
Western	86.7	83.0	90.0	47.8	47.1	48.6	30.4	28.0	32.9
Mid-Western	88.4	82.1	94.6	35.9	29.7	41.6	15.8	12.1	19.4
Far-Western	89.5	84.1	94.7	34.4	27.0	41.3	18.8	13.3	24.2
Nepal	83.5	77.5	89.4	42.9	38.7	46.8	29.5	26.3	32.7

Source: School Level Educational Statistics of Nepal, 2003, HMG/MOES/DOE.

It is clear from the above table that at all the three levels of school education and in all the five development regions, NER of girls is lower than that of boys. Moreover, the higher the level of school, the lower is NER in all the regions. NER (covering boys and girls both) varies across regions. Although the highest NER is seen at the primary level in the Mid-Western and Far Western regions, these regions show the lowest NER at the lower-secondary and secondary levels for both the genders. For instance, the NER in the Mid-Western region is the lowest (19.4% for boys and 12.1% for girls) at the secondary level (all regions). Clearly, inequalities exist at the very entry level.

Taken by eco-zone, the total NER varies from the highest value of 92.7 % in Western Hills to the lowest of 70.7 % in Central Tarai at the primary level. At the lower secondary level, Western Hills have the highest NER, i.e., 56.3% and Central Tarai and Mid-Western Mountains show the lowest NER of about 29%. NER at the secondary level is surprisingly low in all the eco-zones. For example, the secondary level NER in a top-ranking region like Eastern Tarai is only 38.3%

* This chapter is based on the report 'Equity Analysis of SLC Examinations' prepared by Prof. Pramila Rajbhandari for the SLC Study Team

and Mid-Western Mountain region, with the lowest enrollment rate, has NER value of only 14 %. Thus, there is a common trend: the higher the school level, the lower is NER across the eco-zones. In terms of gender disparities in all the eco-zones except the Eastern Hills (where NER of girls is a bit higher), NER of boys is ahead of girls at all school levels.

Likewise, inequality is seen at the literacy levels of genders across regions and ethnic groups at the national level. For example, the proportion of literate population (6 years+) was recorded as 54% (65% for males and 42.5% for females) in 2001. This genderwise difference in literacy ranged from about 20% in Dhading and Kathmandu to 42% in Bajhang. By development region, a still wider gender gap persists between Mid-Western and Far Western Hill districts. The extent of gender gap in literacy appears to be related directly to the level of literacy; that is, the higher the literacy level, the lower is the gender gap (Literacy Situation in Nepal, 2002).

Thus, the proportion of literate persons (6+ years) in the country has not only remained low but also shows inequality between genders and across regions.

Evidence also exists to show that the achievement levels at all the levels of school education do vary between gender in all the eco-development regions as well.

Analysis of the SLC Examination results of the past few decades reveals that the pass rates have been not only discouraging, they also reveal disparity in performance levels between genders and across regions.

For example, an analysis of the SLC results of 1985 to 2004 (2041 to 2060 BS) showed that "except for occasional jumps in performance", the pass rate in many of the years was below 45%, ranging from about 25% (2048 BS) to 49.2 % (2055 BS). Besides this, evidences of bigger difference were vividly seen. In the year 2004, the overall pass rate had stood at 46.18% (41% for girls and 50% for boys). The gender gap in pass rate was especially high in Mathematics and Science. The performance gap between public and private schools (pass rates 85% for private schools and 38% for public schools) was even more alarming. Regarding regional differences in SLC performance in the same period, Kathmandu Valley had a pass rate of 74% while the worst performing region had only 16% (A Descriptive Analysis of Disparities in Student Performance in SLC 2005).

The perpetually low level of SLC pass rates (ranging from 25% to 49% as mentioned above) in SLC examination results and the varying degrees of this rate across the gender, ethnicities, regions, subjects, etc is an evidence of the high degree of inefficiency and wastage of valuable national resources. Also, in the recent years, the percentage of SLC pass rate has been further declining, which is a grave concern of the policy makers/planners, educators, parents, students, and the civil society as well.

It is thus time to ask whether the entire SLC examination practices and processes, the exam question papers, marking or other post-exam activities are fair to all or whether the entire SLC examination operations themselves are the potential sources of inequity or unequal outcomes. Theories of testing reveal that an equitable public examination is one that offers equal opportunity to all to participate in the tests and demonstrate one's learning achievement and competence. Meanwhile, some of the research studies also report that public examinations are never neutral and that they favor some groups of students at the cost of others.

As such, there has also been a realization to analyze the various dimensions of inequities/disparities in SLC examination results under an equity perspective. In other words, there is a need to study whether SLC examination is equitable to all so that the students

possessing a similar level of capability irrespective of gender, ethnicity/caste, and location differences to perform in the exam obtain similar results. Against such a backdrop, the SLC Study Team undertook a study to examine how the SLC examination system has been contributing to put some groups of students at an advantage or disadvantage compared to other students and is helping to continue the existing spatial, gender, ethnic/caste-related disparities in results. The following paragraphs summarize the findings of the study.

For details on the objectives and methodology, please refer to the report 'Equity Analysis of SLC Examinations'.

2. RESPONSIVENESS EQUITY CONCERNS IN THE SLC EXAMINATION

This Section attempts to examine the various contextual factors such as remoteness, inaccessibility, poverty, level of educational attainments/ literacy, level of socio-economic status associated with SLC exam that put some students at an advantage against others. The findings of the study 'Equity Analysis of SLC Examination' have revealed that these factors were responsible in placing certain groups of students at advantage compared to others groups in the SLC exam. The findings relating to the contextual dimensions of inequalities have been discussed under the heading of Structural Inequities below.

The SLC exam-related factors like the Manual guiding the entire exam practices/procedures, test materials, testing situations, and other associating aspects were also examined to see whether these have been sources of inequity or unequal outcomes placing the students at a disadvantage against others. These aspects have been dealt under the headings of Responsiveness of SLC Examination Practices and Processes towards Equity Concerns.

2.1 Structural Inequalities

Nepal is a country of geographical and social diversities. The ridges, which run east-west and the numerous north to south flowing rivers divide the country into diverse topographical areas, reflecting its socio-cultural, educational, and economic diversities. Consequently, particular parts of the country are often associated with disadvantages due to adverse topographical situations leading to inaccessibility, isolation, lack of integration with development activities, or poor access to road links/markets, poor educational infrastructure, health facilities, etc. These features interlinked with low literacy rates, low parental income, lack of good schools, shortage of qualified and trained teachers, and paucity of quality instructional aids that result in low levels of learning achievement.

The students who live in and attend schools located in the remotest areas of the country are at a great disadvantage. Their access to good schooling is restricted and they have little or no opportunity for exposure to high quality schools/ resources which eventually lead to low performance.

Attempts have been made in this study to analyze how some groups of students become more or less disadvantaged compared to others in terms of how much they can perform in SLC examinations due to inherent structural conditions such as regional disparities in terms of HDI, literacy, gender, ethnicity and caste, type of school, home conditions and learning environment, cultural and religious beliefs regarding gender roles and conflicting role expectations for boys

and girls, the need to work inside/outside school (which differ for boys and girls), influence of private tuition, quality of schooling, etc.

Regional and Eco-Zones Disparities (Human Development Index)

According to the Nepal Human Development Report, 2004 (UNDP), the Human Development Index (HDI) has improved marginally from 0.403 in 1996 to 0.471 in 2001. A wide gap persists between the rural and urban areas and between the eco-development regions. The document reports that the HDI in the urban areas stood at 0.581 and that in the rural areas at 0.452. The HDI is lowest in the Mountains followed by the Tarai and the Hills. Region wise, the Far Western and Mid-Western Development Regions lag far behind. These low levels of HDI indicate poor socio-economic conditions and limited opportunities for the expansion and progression of human capabilities, denial of access to gainful employment opportunities/ high level of parental income that severely limit access to quality schooling of the children.

On the other hand, the situation/ opportunities are much better for the children living in the locations with higher HDI values. The age-old remoteness, inaccessibility, severe poverty, limited access to productive assets, etc, of those backward locations of the country have created structural inequities in access to quality educational opportunities (schools with conducive learning environments, qualified and trained teachers, quality instructional aids, etc) for the children substantial in those areas. Consequently, these situations do place children/ students of these locations at disadvantage in many ways restricting their access to good schooling, exposure with quality educational materials/qualified and trained teachers, and result in their poor.

The out the inter-relations of the HDI values and the SLC pass rates for the different eco-development regions were these have been computed and presented in Table 2.

Table 2. Performance of SLC Candidates and HDI by Eco-Development Region

Eco-Dev Region	Pass %		Gender		HDI	HDI rank	Pass rank
	Male	Female	Total	Gap (%)			
Kathmandu Valley	77.3	69.2	73.5	8.10	0.612	1	1
Central Hills	48.2	33.7	42.0	14.40	0.547	2	6
Eastern Hills	34.7	25.9	30.6	8.80	0.500	3	13
Western Tarai	56.1	39.0	48.8	17.10	0.494	4	4
Eastern Tarai	45.2	32.4	39.8	12.90	0.491	5	7
Western Hills	64.1	49.4	57.4	14.70	0.489	6	3
Western Mountain	52.2	70.5	60.9	-18.30	0.488	7	2
Eastern Mountain	36.8	23.2	30.9	13.60	0.477	8	12
Central Tarai	41.6	35.0	39.2	6.60	0.451	9	8
Far Western Tarai	42.6	28.8	37.7	13.80	0.450	10	10
Mid-Western Tarai	42.9	31.8	38.7	11.10	0.440	11	9
Central Mountain	51.0	33.8	44.0	17.20	0.425	12	5
Mid-Western Hills	24.7	18.5	22.4	6.20	0.417	13	15
Far Western Hills	30.2	22.0	27.8	8.10	0.403	14	14
Far Western Mountain	38.7	25.2	34.9	13.50	0.355	15	11
Mid-Western Mountain	15.3	20.3	16.4	-5.00	0.347	16	16
Total	50.2	40.6	46.2	9.60	0.471		

The ranking analysis of the 16 regions, pass rates and HDI values shows a positive relationship between with the rank correlation at 64. Attempts were also made to analyze the interrelationships of these variables at the district level. Accordingly, a strong correlation

between HDI and SLC pass rate was found at the district-level as well. This is depicted in Table 3 and discussed in the following section.

Regional and Eco-Zone Disparities in terms of Literacy Status

As described in the earlier sections, literacy in Nepal is not only low but also manifests regional /ecological and gender variations. An attempt has been made here to probe into the inter-relations of the students' SLC performance with HDI and literacy status at the district level (Annex 2). It was observed that Humla and Mugu districts representing the Mid-Western Mountain with the lowest total pass percentage of 0.8 and 4.8 % respectively had the lowest value of literacy rate (27.1 and 28 % respectively) corresponding closely to their with HDI (0.367 and 0.304 respectively). In contrast, Kathmandu district, which has the highest total pass percentage (76.3%), has also the highest HDI value (0.652) and the highest level of total literacy rate (77.2 %) and female literacy rate (66.6 %).

The interrelationships among the variable such as, HDI, SLC performance, and literacy status (total literacy rate, male literacy and female literacy rates) also show high correlations at the district levels, shown in Table 3.

Table 3. Correlations between HDI, Literacy Rates, and Pass Rates (SLC 2004)

	1	2	3	4	5	6	7
HDI (1)	1.000						
Total Literacy Rate 2001 (2)	0.883	1.000					
Male Literacy Rate 2001 (3)	0.810	0.967	1.000				
Female Literacy Rate 2001 (4)	0.897	0.984	0.911	1.000			
Male Pass % (5)	0.697	0.653	0.610	0.671	1.000		
Female Pass % (6)	0.603	0.540	0.492	0.557	0.909	1.000	
Total Pass % (7)	0.665	0.614	0.570	0.629	0.984	0.967	1.000

Disparities (Gender, Ethnicity, and Caste)

Historically, the Gender Gap in SLC exam participation and performance has been a familiar phenomenon in Nepal. The recently completed study 'Disparities in School Performance in the SLC examinations' (2005) reveals that the number of girls taking the SLC examinations in Nepal has been historically lower than the number of male candidates. Although the participation of girls has been improving over the past years, the percentage of girl candidates in the year 2003 was only 42%. Furthermore, the average SLC performance of girls has also been lower than that of boys. In 2003, the average overall score for girls was around 7% lower than the figure for boys, and the pass rate for girls was only 41% compared to 50% pass rate for boys. The study also reveal that, although the overall pass rate for girls was lower than that for boys in all compulsory subjects in 2003, the gender difference in pass rate was rather small in Nepali and HPE-two subjects in which both boys and girls performed relatively well. The subjects with the largest gender gap in pass rate were Mathematics and Science.

The study also shows ethnic disparities in SLC pass percentage and total average scores. It reports that out of the total respondents (about 19,000), the students representing Newar community had the highest pass percentage (70%) and the highest total average score (54.9%), followed by Brahmans, Chhetris, Janjatis, and Dalits. The Report on Literacy Situation in Nepal (2001) depicts the lowest literacy status of some ethnic groups, namely, Tharus, Tamangs, Yadavs, and Muslims. These groups had a literacy status lower than the national average (70%).

Similar trend is revealed in the SLC exam performance of ethnic groups shown in the following Table 4.

Table 4. Literacy Status and SLC Pass Percentage of Selected Ethnic Groups

Ethnic Groups	Tharu	Tamang	Yadav	National Average
Literacy %	47.12	45.04	40.83	70
SLC pass %	37.7	42.2	31.7	46

Sources: Literacy data from Literacy Situation in Nepal, 2002

SLC pass percentage from Survey Data, 2004

The literacy rates of some ethnic groups below the national average clearly had similar SLC pass percentages. The research findings show a positive relationship between literacy attainment and the status caste and ethnic, as well. Acharya (2004) reports that the caste and ethnic disparity in literacy attainment is still reflected in the output level; for example, the increase in literacy rate among upper caste hill women (19%) and hill ethnics (18.7%) are higher than those of other caste and ethnic groups.

Thus, inequalities are obviously exist not only between the genders but also are within the hierarchies of caste and ethnicities.

Characteristics of Schools Contributing to Inequalities

The public schools in Nepal often lag far behind the private schools in their total pass percentage and total average scores in SLC results. Analysis of the SLC results of the year 2003 (2060 BS), shows that the pass rate of public schools was as low as 38% compared to an average pass rate of 85% for the private schools. Also by subject, the pass rate and the average scores were lower than those of private schools in all subjects, with substantial differences in Mathematics, Science, and English. The type of school (private and public) in the country does thus make a difference in placing the students at a disadvantage.

Over the years, the total number of students participating in the SLC exam from public schools was overwhelmingly high. In the year 2003, it was 79% compared to 21% of the students from the private schools. It is also a reality of the country that the mainstay for a very large majority of students is the public school system due to the low socio-economic status of the parents who cannot send their children to the private schools.

These facts show that completion of the tenth Grade in the private schools raises the probability of passing the SLC exam with higher scores.

This national scenario suggests that the students competing from the private schools enjoy a substantial advantage over their counterparts (who represent lower level of socio-economic stratum) from the public schools.

Thus the question arises: Are the public schools doing justice to their students belonging to the low socio-economic status or are from backward groups?

Schools, Home Backgrounds, Cultural and Social Taboos

Research evidences gathered at the national and international levels have confirmed that the features of a good school such as regular teaching, teachers' time on task; availability of trained, qualified, and well-motivated teachers (good command of the subject matter content and possession of pedagogical skills); availability of complete set of textbooks and teaching aids;

science equipments; comfortable classrooms with benches and desks; toilet facilities for boys and girls have direct impact upon the accomplishment of high level learning achievements of students.

Most of the secondary schools of our country, public or private, lack these aspects in varying degrees and are thus directly or indirectly associated with the inequalities in the performances of their students.

The Focus Group Discussions (FGDs) undertaken to collect the views/perceptions of the parents (as a part of the Studies on Student Performance in SLC, 2005) on the causes of low performances have revealed the following views. The two paragraphs below summarize what the parents said in the FGDs.

“The public schools had never regular classes due to various reasons (bandas, absenteeism of teachers, subject teachers not being available, etc). Again, due to household poverty, our children are used in assisting household works or family’s income-generating activities which prevent them from being regular in the school and we even cannot compensate the loss of school studies through other means, like private tuitions or coaching as other rich people do. The schools, where our children, study do not have enough furniture, lack science equipments/ other learning aids and a conducive learning environment.”

“The teachers (specially having affiliated with political parties) of the Government schools come late in the school and go home earlier and indirectly push students for private tuitions. Even if they teach in the classrooms, they never give attention to the weaker students for remedial help to further their academic pursuits as well as to those students who cannot afford private tuitions.”

The FGD with low performing students revealed that their poor SLC result was not surprising to them. In this regard, they said that the major reasons for poor performance in SLC were the lack of regular classes/good learning environment in the schools, household poverty, and associated difficulties. They described their difficulties thus

“Being poor we are compelled to study in the public schools; in our schools we never have regular classes due to the long absenteeism of the teachers, frequent closures and inability to be regular in schools during the plantation /harvesting seasons, sickness of father/mother, etc. Our parents simply cannot afford for private tuitions/ coaching to compensate the loss; so for students like us, spending on items like private coaching and buying other learning materials is an extra financial burden for our family”.

These perceptions depict the flaws of the public school system in the country, which are the potential sources for the low SLC performances.

It is thus clear that private tuition/coaching is also one of the most influencing factors in SLC performance. Parents and students are willing to take these opportunities, though they are often not in a position to afford. In this regard, one of the research reports undertaken to study the learning environment of students at the schools of Doti and Humla districts has stated that except the Dalit households, other caste groups like Brahmans, Chhetris, and Newars provided private tutorial support to their children, that among the religious groups, Buddhists were ahead in providing extra-tutorial support, and from the language perspective, Bhotas and Nepali speaking households were at the forefront in such help to their children (Acharya et al., 2003).

Furthermore, the study (Determinants of Student Performance in the SLC Examinations: Evidence from Survey Data, 2005) has also confirmed that factors like type of school (private), school size, expenditure per student, regular home work, family’s annual expenditures have a statistically significant relationship with the aggregate SLC performance. Contrary to this, the study also showed that variables like delay in textbook delivery, school days missed, sex

(females), hours spent on household chores, and ethnicity (Janjaties) bear a negative relationship with the overall performance in SLC.

It is thus obvious that differing school and home environment place some at an advantage against others creating inequalities in outcome.

Regarding the differing gender roles at home studies have confirmed that girls in comparison to boys get less time to study at home or prepare for the exam due to their involvement in household chores. Furthermore, such differential treatments are more pronounced in the rural than in the urban areas. Thus, the age-old cultural taboos are seen to create a differential treatment in favor of boys starting from the family in both schooling and educating them in general.

For example, one study reveals that “Education was seen more as a preparation for economic empowerment for boys and for reproductive and survival roles for girls and parents view the value of educating their boys as a creation of support in old age, whereas their daughters’ education is perceived as a means of enhancing prospects of marriage in a good family” (KEF, 2000).

Thus all these differing perceptions about boys and girls starting at home place the boys at advantage and the girls at a disadvantages raising the question: Is the SLC examination a race among the unequals?

2.2 SLC examination and Equity concerns

In general, the overall practices/processes of public examinations of any country tend to be neutral. These examinations aim at creating and employing uniform ways and means of administration of the test, marking the answer copies, and publishing of results which indicate students’ achievements irrespective of gender, ethnicity/caste, or various levels of socio-economic conditions or situations.

Obviously, from the equity perspective, the main purpose of public examination lies in providing equal opportunity for all students to express their abilities and skills as demanded by the intents of the test papers. However, in reality, the entire system of public examinations favors some groups of students at the cost of others intentionally or unintentionally. For example, factors like requirement to pay the fees, examinations set in a language which favor some specific ethnic/caste groups students, unfamiliar examination situation, inadequate provisions for conducting examinations, use of culturally inappropriate test items in test papers, the practice and processes involved in the marking of answer copies, inadequate provision for students with special needs, malpractices in the administration of examinations, in one or another way, are often related to some forms of inequities to the students.

Such inequities either restrict some individuals' or groups' access to examination or place them at a disadvantage inhibiting them to demonstrate their ability that the exam intends to assess. Similarly, public examinations often lack uniform standards in marking/scrutinizing the answer copies, which leads to unreliability of the results, creating unfair indication of student achievement. The lack of standard processing of results intern creates other forms of injustices.

In the context of the SLC exam of our country, the overreaching theme of this exam practices and processes should be decreasing social inequality by making the entire SLC exam operation responsive towards equity concerns. By equity concerns, we mean that the SLC practices/procedures should aim at being fair to all by providing them equal opportunity to

perform and succeed irrespective of ethnicity/caste, gender, socio-economic conditions, language, locations, and disabilities.

In this section, an attempt has been made to analyze to what extent the various practices and processes of SLC exam have been responsive from the equity perspective.

In Nepal, by virtue of her pluralistic society with diverse ethnic/caste groups, various linguistic and cultural communities compounded with a high incidence of deep-rooted poverty, there is a high probability that SLC examination practices and processes place some groups of students at an advantage or disadvantage, though not intentionally. As a corollary to this, making the SLC exam equitable to all the examinees coming from diverse socio-economic and linguistic background is a very challenging task to OCE with its limited technical and financial capabilities. For the purpose of investigation in this regard, an attempt has been made to probe the situations or the causal factors that are directly or indirectly responsible in restricting access to examination (before the examination), placing the students in an unfavorable situation to show ones own ability that the exam purports to assess (while the examination is in process), and the processes involved for introducing bias/some form of injustice in providing a fair indication of student achievement (after the administration/ of the examination).

Factors Restricting Access to SLC

Fees

As per the rules and regulations of the respective schools of the districts and OCE, all the students at various stages starting from Grade 9 to the point of being eligible for appearing in the SLC exam are required to pay a certain amount of fees. The fees raised by the individual schools may vary depending upon the type and specific directives of the school such as fees for initial registration at Grade IX, for send-up exam at the termination of Grade X, and for filling up the application form for appearing SLC exam at Grade X, etc. Due to delegation of authority to the schools and the examination coordination committees in the respective districts by OCE, the overall amount a student paying the fees for send-up exam, registration fees, etc, varies from one school to another and from one district to another. For example, in the case of the fees to be collected for filling the application for SLC exam, the Guidebook on SLC examination (2061BS) states that students have to pay the amount as fixed by the examination committee (page 6). Apparently, the committees or the schools decide the amount, which will be the same rate for all students. Obviously, this approach places some students (for whom the total amount becomes unaffordable due to low family income) at a disadvantage, thus eventually restricting their entry/ access to exam. Interview with DEOs and OCE personnel revealed that no provisions have yet been made to waive the mandatory fees in the case of those who are suffering from financial crisis. Remarkably, respondents had also added that among such sufferers, mostly are girls from the disadvantaged communities though they could not indicate the exact number.

In the case of OCE, it has set a fixed amount of fees for SLC exam (at present, it is Rs. 200 per student) and the amount is fixed by the SLC Board and deposited in the Government revenue account. Interview with the Deputy Controller and senior officials of OCE revealed that no provision has yet been thought of in consideration of the students who are placed at disadvantage or could be placed at a disadvantage due to a mandatory fees and one-shot policy of OCE. Thus, the state policy to achieve equity and social inclusion by mainstreaming the poor and marginalized groups into the development process is yet to be operationalised in the area of SLC exam.

Send-up Examination

Another factor associated to access to SLC examination is the send-up examination result taken at the termination of Grade X. Traditionally, there is a common practice of the secondary schools to administer the send-up exam for screening the students appearing at SLC exam. The unsuccessful students in the send-up examinations are deprived from the opportunity to appear in the exam, wasting ten or more years of schooling time, expenses incurred, and valuable efforts to reach up to Grade X. Screening students on the basis of send-up exam results (many of which lack the qualities of a good test) and constraining them from the opportunity to participate in the exam restricts access to SLC exam and puts students not only in a disadvantage but also does injustice to the parents.

No research evidence has yet proved that the results of send-up examination correlate with the results of SLC. The general practice of the secondary schools to stop students from appearing in the SLC examination, based upon the results of send-up examination, is clearly unjustified. Debarred students might succeed in the SLC examination.

The policy of the Government in deducting the budget of the schools based upon the pass rate of the students also an impact upon the screening practices of schools in send-up examinations.

Test Development/ Moderation Modalities

It has been normal for OCE to ask experienced and qualified senior teachers of secondary schools to construct and moderate the test papers of all subjects used in the SLC examination, particularly to the teachers working in the secondary schools of Kathmandu valley only. Obviously, such a practice deprives a majority of secondary school teachers from the opportunity of getting involved in constructing test papers and moderating them irrespective at a disadvantage.

Test Administration

The common practice of administering the SLC examinations has been inside the secondary or primary schools located within specific examination centers. It is also true that the classrooms of these schools have not been constructed for conducting the public examinations such as the SLC examination. In practice, SLC examination is administered within the available physical conditions of the schools, which are normally of poor quality.

In most of the schools the desks and benches are joint. Classrooms are clumsy with very little space to move or stretch with legs while writing for three hours. In this regard, another study (Analysis of the Processes Involved in the Preparation and Execution of SLC Examinations 2005) has reported that, on an average, the space available to the examinees sitting on a bench was less than one square meter. In such a case, the students have to climb over the bench if they have to go out.

Observation of the exam sites in various areas of Kavre District like Dhulikhel and Panauti revealed that the sitting arrangements were far from satisfactory. The sittings arrangements are more inconvenient in exam centers are located in primary schools. The site observation at Indreswar Primary School (at Panauti) has also revealed that the SLC level students (15-16 years of age) had to sit on benches meant for the primary level students which posed inconvenience moving, stretching legs, and writing for hours.

Another testing condition in one of the schools of Kavre also revealed that there were two students seated in one long bench in the classroom of Grades IX and X and the exam

environment was relatively better. Such varying testing conditions naturally place some students at ease and others at disadvantage.

Thus, the lack of uniform exam conditions has obviously placed some group of students at an advantage and others at a disadvantage.

The on-going conflict of the country has further aggravated the problem of administering SLC exam in its own ways. In this regard, interview with some of the DEOs (Dolakha, Kapilbastu, Dang) revealed that due to worsening situation of the conflict (specially in the remote parts of the country), all the SLC exam centers (950) in this current year (2062 BS) have been concentrated in the district headquarters or at the periphery of the headquarters. Consequently, all the examinees have to be accommodated within the schools located in the district headquarters. The telling effect of this situation, as expressed by the DEOs was that they had to conduct the exam by keeping four or five students in one bench with military personnel patrolling inside the exam halls. The physical conditions of exam administration for all these students are thus far from being conducive and comfortable compared to the previous years (when the exam centers more scattered or located wide apart).

The presence of security personnel within the compound of exam centers, checks on students before entering the center, patrolling inside the classroom all makes the situation difficult for students, in general, and for girls in particular. Focus Group Discussion with students revealed that the heavy presence of security personnel inside and outside the exam halls made them panicky affecting their writing. The girl students said that, in the initial days of examinations, they were very much terrified and nervous which could damage their performance.

Clustering of the exam centers within the schools of the headquarters and in its periphery also affected the performance of students.

Administration of SLC examination for some groups of students at their home towns or familiar locations gives an advantage to them over other students who have to find their lodging and fooding locations in unfamiliar areas.

The focus group discussion with groups of students (girls only, boys only, and a mixed one) coming from Dapcha, Bhakundebesi, Fulbari, Patalekhel, etc, at Dhulikhel (headquarters of Kavre) who sat in the current year exam spoke about the gravity of the problem.

In this regard, the girl students said that they had to struggle to find a secure place to stay and struggle for collecting fuel (kerosene) to cook food. On an average, this incurred them to expenditure for fooding and lodging amounting, Rs. 3500-4000. They would be spared such amounts if they had centers near home. Another disturbing problem was that, most of the time they have to stay together in groups due to unfamiliarity of the locations and feeling of insecurity.

Similarly, they also complained discriminatory about and unfair behaviors inside the classrooms (helping some students or being liberal even in case of cheating and copying).

Site observation in some of the exam centers also revealed a big gap among the invigilators in dealing with the examinees: were some of them stern even in responding to questions asked. Similarly, discriminatory behaviors could be observed even among the security guards.

In one center visited (Kavre), the security guards did not allow supply of medicine to a girl student who was sick. Another instance was a live scene of the security personnel abusing a

student (boy) with dirty words and thrashing him; his fault was picking up the chit thrown in from outside the examination compound. The invigilators just watched the scene in silence.

It is evident that administration of SLC exam is far from fair and just to the students and the mission of administration of the public examination to provide equal opportunity to all students to show their abilities has yet to come into practice.

Marking and Scrutiny

The reliability of test results depends upon objectivity and uniformity in marking the answer copies. If one intention of the SLC exam is to provide equitable justice to all the examinees in marking/scoring their answerbooks, it should also ensure that all the copies are marked and scrutinized objectively employing an uniform standard. In this context, OCE used to provide brief orientation training to the markers on the processes of answerbook marking and using the marking schemes before the actual marking gets started.

In this regard, one study (Analysis of the Processes Involved in Preparation and Execution of SLC examinations, 2005) has reported that out of the total contacted persons, 65 percent of the markers were found to have participated in the orientation/ training program and that those who did not marked the answerbooks using the marking schemes and general instructions provided to them.

Furthermore, the study (based upon site observations of the researcher at the marking centers) reported that there was lack of conducive physical facilities to do marking conveniently at the marking center, less seriousness among the markers in using the marking scheme and following the instructions. A majority were even found marking in haste.

In this regard, the issue of having a favorable environment for marking (in the DDC of Siraha) could be cited as an example: adequate space available for marking and storing the answer copies of the different subjects and use of conference marking practiced there.

Nevertheless, site observations on marking in some centers (Kathmandu), revealed lack of uniformity amongst the markers. For instance, some were found doing the job seriously and others carelessly without following the instructions properly, some even working in haste to mark as many copies as possible. The marking of answer copies does not thus seem to be done equitably

It is clear that some of the markers have received orientation training and are at an advantage.

Secondly, due to the lack of consistency in marking there are chances that inter-scorer reliability will be low, contributing to unreliability of the test results.

Thirdly, the persisting unfavorable physical situations like groups of markers working in clumsy and dirty rooms with packets of answerbooks of varied subjects, inadequate space are potential sources for inconsistencies in marking.

Test Papers

Attempts were made to see if the test papers of SLC examinations (2003 and 2004) in the six core subjects were guided by the idea of providing equal opportunity for all students, male and females, representing various ethnic/caste groups, Nepali and non-Nepali speakers in terms of language used, and children with disabilities.

Gender Inequalities

Analysis in terms of gender shows, a common trend in all the test papers: a representation of males and females in naming, portraying, and projecting the various aspects of the intents/contents to be examined. It is also true that in most cases a higher proportion of representation of males. In many cases where female figures are represented, they are projected either in stereotypical/traditional roles or relatively in a lower profile. For example, in the case of the question sets of Compulsory English used in the five regions (2003 and 2004), a considerably higher proportion of the items represent males figures depicted as more knowledgeable persons, engaged in earning activity/ public works and intellectual exercises whereas females are depicted in the traditional roles or as weak students. Some of those items are cited below:

- Sumit studied hard.... he could get success (as/because/ so that)
- He earns Rs. 10,000.... month (a, an ,the)
- He is now reading a book.....(isn't he, hasn't he, wasn't he)
- He is.....MP (a/ an/the)
- She failed the exam.....her stupidity (because, because of, in spite of)
- She seldom does the homework.....? (doesn't she/don't she/dos she)

The question sets for Compulsory Nepali of 2003 and 2004 for the five Development Regions also reveal that though attempts have been made to include the male and female personalities, in reality the male proportions overshadow the female figures. For example, biography writing questions contained only male personalities despite the fact that the textbooks of this level had the examples of female personalities who have contributed to Nepali literature. Similarly, the story writing questions (from the given outlines) have also focused only upon male personalities, except in one case. Additionally, letter writing questions also deal upon only male figures. Thus from the gender perspective, a balance is missing in the use of male and female names and pronouns, in projecting the examples.

Analysis of the test papers in terms of the responsiveness of ethnic diversities, Janjati and children living in various regions reveals both positive and negative features, discussed below. In this regard, analysis of the question sets of the core subjects of the years 2003 and 2004 are presented here as examples.

Some of the questions e.g., questions 2,7,8 of Compulsory English of the Far-Western Region (E1 and question 2 of the same region E2) of 2003 seemed to be appropriate as they included a common topic, i.e., a simple poem about the weather which everybody talks about irrespective of gender, caste, ethnicity, disability, and diverse topography. Similarly, items, 1, 2, and 3 in the supplementary exam (SRE-501) of 2003 also appeared ok, as these items deal with the situations (games, physical health, discipline) occurring in both rural and urban settings.

Some of the items such as test item 5 of the Central Development Region (B2) and test item 6 of Western Development region (C) of 2004 included local situations in which the students are required to write essay on the rivers of Nepal and a city of Nepal. So is the case of test item 1 of Reading and Writing of the Mid-Western Development Region (D1) and 5 on Reading and writing for the Central Development Region (B2) of 2004 deal with tea production and forest in Nepal.

However, the lack of urban-rural balance creates bias. For example, question 3 of Far-Western Development Region (E1) of 2003 favors urban students: there people talk about the airline industry. Many vocabulary items used in the passage have a narrow range, found in very specific situations known only to those who fly in airplanes. Students who have no experience of flying on planes will find it difficult to visualize the situation contained in the item. Similarly, the test item 4 of the same set favors urban dwellers. The items in the writing section dealing with vacancy announcements also favor urban students. There are plenty of opportunities in the rural parts as well and at least one of the advertisements could have been given from the rural situation.

The lack of representation of persons/events from indigenous peoples, ethnic minorities, language groups and children from poor households/difficult circumstances pose another flaw in the test papers. Many of the names mentioned in the questions represent a particular community, i.e., high caste Brahmins with Nepali mother tongue. For example, the names of persons included in the test items were Shyam, Hari Kanta Sharma, Bharati Sharma, Laxmi Giri, etc. No diversity has been considered in selecting the names of persons in the test items.

Similar examples can be cited from the question sets of Compulsory Nepali of the same years (2003). There are many items that reflect excessive influence of one ethnic group, e.g., a Brahmin/Chhetri. For example, the biography writing items of Compulsory Nepali (in all five sets for the five Development Regions) highlight personalities belonging to the Brahmin and Chhetri groups, despite the fact that the textbook contained the representation of personalities from diverse ethnic groups and even from Janajatis who have contributed to Nepali literature.

Similar is the case with Compulsory Mathematics in representing the stereotypical names of one ethnic group (Brahmin/ Chhetri) like Shyam, Shankar, Damodar, Hari, Sita, etc.

The lack of maintaining political neutrality in the test papers is another source of injustice; for example,

- Give any three works done by Man Mohan Adhikari for the country (Compulsory Social Studies 2003).
- The leaders of the Nepali Congress Party and the Communist Party were united to bring the multi-party democracy in the country. Are they now united to develop the country? What drawbacks do you think they have? Give three suggestions to these leaders so that they can be more efficient in carrying out their duties and responsibilities (Compulsory Social Studies 2003).

Lack of items encouraging students with disabilities/ learning difficulties in the test papers is still another source of inequality. For example, question 1 of 2003, Reading and Writing Test for Far-Western Region (E1), which is a reading passage about a mentally retarded child and description of the difficulties faced by the child in the text is presented in a humorous mode and the child has been presented as a burden of the family.

Again from the positive side, it is worthwhile to note that there are new attempts at using pictures, figures, graphs in the question sets, which help comprehend the questions. The students' ability to associate the text with pictorial presentations can also be assessed. However, some instances of absurdities in this context in the Social Studies test papers can be noticed. For example,

- Write the names of the races given in the picture A, B and C.

- What is Lama and where it is found?
- What do you see in the picture?

From the perspective of responsiveness of the test items to the needs of children with disabilities (eye blindness), the use of graphs and pictorial items obviously places them at a disadvantage. Nevertheless, OCE has the system of allowing them to take the help of another person who has passed up to Grade VIII. Again, the question arises, what do these students do with the graphic or pictorial items or is there any choice to avoid them?

Test Papers and Language

The existing practice of OCE has been to use test items written in both Nepali and English except in the language papers (Nepali and English). Producing and presenting each item of the test papers in two languages certainly helps the students to comprehend the questions and write the answer. Nepali language, being the state language of the country, has been the main language of instruction in almost all the secondary schools of Nepal. Hence, it has been the normal practice in the country to be educated and examined in Nepali though it is the mother tongue for only about 48.61% of the population. Obviously, the second language for a majority of those students and English language becomes either the second or third language for the students. Thus, the usual practice of presenting questions in Nepali language naturally favors students with Nepali as their mother tongue and disfavors others.

Based on this reality, an attempt to undertake a semantic analysis of the test items was made that revealed serious problems. For instance, there are problems related to the heavy use of Sanskritized Nepali words in translating the technical terms from one language to another. Problems also exist related to Nepali and English versions of the same test item conveying different meanings and containing grammatical errors, use of unfamiliar words for students residing in the rural areas, use of the language favoring specific ethnic groups, etc. these are analyzed and briefly cited below.

Use of Sanskrit Words

The use of complex words like Samyujyata, Samtripta, Asamtripta, Avartan, Manibhikarniya, Bikrtijanaya Karya remains a common problem. These words disfavor students whose mother tongue is not Nepali.

Weaknesses of Test Items

Question (Physics 2001)

Show the difference between nuclear fusion and nuclear fission with an example of each. What is deuterium?

Problem with the question:

- The Nepali version does not include the second part of the item.

Question (Physics 2003)

At what height does one object reach after 5 sec. when it is thrown up from the surface of earth with the velocity 10m/sec. ($g=10\text{m/s}^2$)?

Problem:

- The question itself is wrong.

Question (Chemistry 2003)

State the octate rule. Explain Atoms are neutral

Problem:

- Incorrect spelling (octate)
- Use of irrelevant word (neutral)

Question (Biology 2003)

Which virus cause common cold and aids?

Why do you mean by complex tissue?

Problem:

- Ambiguous question (Q.1)
- Incorrectly stated (Q.2)

Questions (Compulsory Health, Population and Environment 2003)

Those who protect religion are protected by religion. Explain in brief.

How does pull and push factors affect migration? Write in brief.

Entamoeba Histolytica is the virus of which disease? (2004)

Problem:

- Ambiguous questions (Qs.1 and 2)
- Incorrect question (Q. 3)

Examples of urban-biased questions:

In what way do newspapers help to conserve the cultural heritages? (Compulsory Health, Population and Environment 2003)

Why is the shopkeeper benefited by mixing cheap colors in sweets? (Compulsory Health, Population and Environment 2003)

Problem:

- Student residing in the rural and remote parts of the country have little knowledge of the newspapers and mixing of colors in sweets.

3. FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS

This section presents the findings, conclusions, and recommendations under two main headings: Structural Inequalities and Responsiveness of SLC Examination and Equity Concerns.

3.1. Structural Inequalities

Findings and Conclusions

- The correlations of HDI values with SLC pass percentages were found positive. An analysis of this measure by eco-development region shows that the ranking of the 16 regions with the total pass rates and HDI values indicated a strong relationship. The rank

correlation between these two variables was 64. Similarly, a strong correlation between HDI and SLC pass percentage rate was found at the district level as well.

- Analysis of the correlations between students' SLC performance and HDI and literacy at the district level showed a positive relationship. Humla and Mugu districts having the lowest total pass percentage in SLC (0.8 and 4.8%, respectively) had the lowest literacy (27.1 and 28.0% respectively). Also, these districts have similar HDI values (0.367 and 0.304, respectively).
- Kathmandu district has the highest pass rate (76.3 %) in SLC and the highest literacy (77.2%). Female literacy (66.65%) has the highest HDI value (0.652).
- Some of the ethnic groups such as Tharu, Tamang, and Yadav with literacy below the national average had similar pass percentages in SLC examination.
- The gender gaps (males ahead of females) in literacy rates, NERs at all school levels and overall pass rates and the achievement level in SLC have been remarkable. The gender gap in the performance of SLC candidates by eco-zone ranged from 8.1 percentage points (Kathmandu) to 17.1 points (Western Tarai and Central Mountains). Also, the reference taken from other study findings (mentioned in the previous chapter) on disparities in performance by ethnic hierarchy and gender also reflect similar inequities.
- Based upon these findings, one can conclude that the low performing and failure students should not be blamed for their levels of performance. The presence of structural inequities among the regions/districts/locations in terms of deeply-rooted disparities in socio-economic conditions, literacy status of the district, disparities manifested between the genders and among the hierarchies of ethnicities, consequently help some groups of students and disfavor other groups in their examination performance.
- Education in a private school gives higher chances of success in SLC and with higher marks. On the contrary, education in a public school often leads to failure or low marks. Thus, the relatively weak public schooling system, economic inability of students to study in private schools or afford private coaching has again placed a great majority of students at disadvantage.

Recommendations

The recommendations made here are based on the idea that the SLC examination should not be a race/competition between unequal groups and individuals in an environment of structural inequities.

Obviously, failure in SLC has prevented students from entering higher education and the world of work. This eventually makes it difficult for them to make a way into the society as good and responsible adults. The huge mass of failure in SLC also obstructs economic development and social progress. Efforts therefore should be made at the national level to minimize/reduce the structural inequities.

- The locations (districts/regions) on the nation's lowest socio-economic and literacy profile should receive priority of the Government intervention programs. Particularly, the strategy should be to boost up the economy of the marginalized/ backward population groups with renewed emphasis on delivery of basic services/ economic

infrastructure. On the other side, literacy programs launched by non-government agencies should be concentrated in the locations of the country with the lowest literacy rates and lowest performance in SLC.

- To reduce the gender bias and caste/ethnicity disparities in SLC participation and performance, MOES/OCE should take measures to minimize the persisting inequities in NER (at all levels of school education) and in the learning achievements of the primary and lower secondary Grades.
- Since the public school system in the country is not doing justice to a great majority of students (especially the economically disadvantaged students and the girls students weak in studies) specific programs/strategies should be planned and operationalized. With a view to provide social justice to these students, schools and DEOs should either regularize school classes and improve the quality of education or provide remedial classes to the weak students. Special packages could be designed and implemented for this purpose.

3.2 Responsiveness of SLC Examination and Equity

Findings and Conclusions

- Though OCE has delegated authority to fix the amount of fees for registration, send-up exam, etc, to the respective examination committees of districts, the need to issue mandatory directives to waive the fees for the very poor students has been felt at the local level. One single policy approach on the requirement of paying a fixed amount of fees for applying for appearing in SLC exam is also seen as an insensitive approach towards the student groups afflicted by severe poverty.
- The existing practice of screening students on the basis of send-up examination results and restricting access to SLC exam (for those who fail the send-up exam) can be taken as an element of inequity. It signals a wastage of efforts of ten years or more and of resources.
- The practice of OCE to assign the construction and moderation of test papers to secondary teachers of Kathmandu Valley reflects non-inclusivity. This practice potentially renders most of the test items urban-biased.
- Lack of uniform and satisfactory testing conditions in exam centers, location of exam centers far for the students residing in the rural and remote parts of the country and the inconvenience posed for girl students, especially in the conflict areas all reflect the non-responsiveness of the SLC exam administration practices towards equity concerns.
- Likewise, concentrating all the exam centers in the schools located within the periphery of the district headquarters for security reasons has further worsened the environment of exam conditions. Heavy presence of military personnel inside the exam halls and their involvement in invigilating exam administration are potential sources for creating panic amongst students in general and girl students in particular. As most of the superintendents, invigilators, and security guards are males, the overall environment of SLC examination administration for the girl students is found to be intimidating.
- On the basis of above findings it can be concluded that the overall exam administration processes and exam situations are far from satisfactory and fair. As such, the chief

mission of a public exam administration like SLC exam, which should be to provide equal opportunity to all students, seems to be defeated in many ways.

- Poor physical facilities in the marking centers, lack of uniformity in marking answer copies among the markers, reluctance in following the marking schemes, inavailability of the orientation trainings for all markers, markings done in haste by some markers etc, constitute a stark reality of the day. The realities leading to the conclusion that there are higher chances of the test results of both the high and low performing students being unreliable or less reliable. It can also be concluded that it is not the students but the systemic flaws within the practices and processes of SLC exam that should be blamed for the outcome.
- From the perspective of gender balance, a common trend found in all the test papers of six compulsory subjects was that there was a relatively higher proportion of representation of male figures than the female figures (in naming, portraying, projecting, etc). The male figures are also found depicted in a high profile compared to the traditional /stereotypical or low profile roles ascribed to the female characters. Thus lack of vision in maintaining gender balance in preparing the test papers is vividly clear.
- No evidence was found in including the aspect of ethnic diversities of the country within the contents of the test items. Also, the entire test sets did not contain items to represent students from the indigenous groups, ethnic minorities, disadvantaged/ marginalized families and the students with disabilities.
- A lack of rural-urban balance within the test items was also obvious. Urban-biased items overshadow the entire test papers.
- The test papers favor the Nepali-speaking children and frequent use of Sanskritized words in the items further add to the semantic problem in the items.
- Problems associated with incorrectness and ambiguity were another flaw in some of the test items. It can thus be concluded that the test papers/items were not responsive towards the equity concerns.

Recommendations

The recommendations forwarded in this section are based on the vision that the entire SLC examination practices/ processes like the public examinations in other countries should be neutral or equitable to all, irrespective of gender, ethnicities, language groups, locations, etc. Surprisingly, the findings have revealed that the entire operations of SLC exam have been the potential sources of causing inequity in more than one way. Therefore the following recommendations have been forwarded:

- The manuals, directives, or guidelines on the entire SLC exam preparations and operations should be revised to make them more responsive towards equity concerns.
- The mandatory requirements of paying fixed amount of fees for registration and or applying for appearing in the SLC exam should be revised or waived for the groups of students representing very poor households or conflict-affected areas.
- The practice of assigning the task of setting up questions to the teachers of Kathmandu valley should be revised giving opportunity also to capable teachers working in the various parts of the country. The OCE should widen the groups of test makers and

scrutinizers by widening the representation of the concerned subject teachers. In doing so, the policy should be as inclusive as possible to ensure a balance of gender, location, ethnicity, type of school, etc.

- To minimize the inequities caused by the administration of examinations at the district headquarters or urban/ suburban areas of the country, the need to create home centers for students residing in the rural and remote areas has been suggested. At the same time, the practice of taking examinations in the primary schools/Grades should be abolished: it causes inconvenience to students participating in SLC exam and the environment makes copying easier.
- There remains a great need to improve the physical conditions of exam centers. For instance, in order to have satisfactory testing situations and make it equitable to all, MOES/OCE has to make concerted efforts to make provision for the adequacy of rooms, furniture, safe drinking water, first aid equipments, separate toilets for boys and girls, etc.
- To make the exam situations less intimidating to the students in general and the girl students in particular, unnecessary involvement or presence of security personnel inside the exam halls should be avoided.
- The need to make test papers responsive and encouraging to girl students, students from ethnic minorities and poor households, students with disabilities, etc, has been seriously felt. Therefore, necessary steps to urgently translate these things into action should be taken.
- An urban-rural balance in the test papers is strongly recommended.
- Portraying of the stereo-typical/low profile gender roles in the test items also should be avoided. For this to happen, all the concerned officials of OCE and all the test makers and scrutinizers should be oriented in making the test papers gender-friendly.
- Finally, efforts have to be directed toward making the test papers responsive in terms of the representation of high and low ethnic groups, Janjaties, etc.