Development and Perspectives:  
Towards New Challenges  
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Volume-V
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Pranab Kumar Chattopadhyay
Chair Professor

A.K. Dasgupta
Centre for Planning and Development, Visva-Bharati
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Pitfalls on the Path to Universal Education: A Study on Discontinuation of School Education in Sikkim

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Abstract

Student’s dropping out of school before completion has been a major challenge universally for educators, parents and governments. In spite of several government initiatives, the incidence of school dropouts in India has been a still an area of concern. The concept of dropouts reflects the internal insufficiency of the social, economical and school environment they live in. “When a student drops out of school, it is a great loss for a society, state and the nation as a whole. Indeed the school dropouts have been a serious economical, societal, and political effect on our nation”.

Despite decades of school improvement initiatives, many young people still do not cross the finishing line of secondary education. Thousands of young people give up on school and on themselves, or schools give up on them. Therefore, without an effective support from their schools, communities, and families, may risk at large that students fall through and eventually dropped out from school.

Therefore, education is the key indicator for economic growth as well as social transformation of a country. This will attain only when all the children will choose to getting education and decide not to quit their educational career until they have achieved a certain level of education.

Keywords: School dropouts, Socio – economic, Parental education, Per-capita Income.
Introduction

The word ‘school dropout’ is defined as “a child who enrolls in school but fails to complete the relevant level of the educational cycle”. Therefore, dropping out of school is a situation when a child is not getting an education or he/she totally forfeits the journey of education in his or her life. In short, dropping out from school is simply an early exit from school. A ‘dropout’ is a pupil who leaves school before the completion of a school stage or leaving at some intermediate or non-terminal point of a given level of education (school stage).

This term ‘dropout’ has been used in two senses. It may mean either: (a) one who has discontinued education before completing the last level of education for which he/she was enrolled or (b) one who has discontinued education before attaining a specific level. According to the first definition, for example, if a person has completed the upper primary level but does not enroll for higher education, he/she is not considered a dropout. It is considered as a case of discontinuation. However, if the person enrolls for the secondary level but does not complete it, then he/she is considered a dropout. According to the second definition, in either case the person would be considered a dropout, when, secondary level is considered as specific level. It is assumed that dropout rates are the converse of survival rates.

Student’s dropping out of school before completion has been a major challenge universally for educators, parents and governments. The number of school dropouts in India is not small. In a study in 2010, Reddy and Sinha stated that of the more than 27 million children in India, who joined in Class I in 1993, only 10 million reached Class X, which is only about 37% of those who entered the school system while in more than half the states, only 30% of children reached Class X. With the implementation of RTE and other praise worthy educational policies, of course, there has been a gradual decline in the annual average dropout
But the overall school dropout statistics show a declining trend in the last few decades which is evident from the table 1.

**Table 1: Drop-out rates of all categories of students 1999-2001 to 2009-2010 in India**

<table>
<thead>
<tr>
<th>Year</th>
<th>Primary(I-V)</th>
<th></th>
<th>Elementary (I-VIII)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Boys</td>
<td>Girls</td>
<td>Total</td>
<td>Boys</td>
</tr>
<tr>
<td>1999-00</td>
<td>39.8</td>
<td>41.0</td>
<td>40.3</td>
<td>53.3</td>
</tr>
<tr>
<td>2000-01</td>
<td>39.7</td>
<td>41.9</td>
<td>40.7</td>
<td>50.3</td>
</tr>
<tr>
<td>2002-03</td>
<td>38.4</td>
<td>39.9</td>
<td>39.0</td>
<td>52.9</td>
</tr>
<tr>
<td>2003-04</td>
<td>35.85</td>
<td>33.72</td>
<td>34.89</td>
<td>52.28</td>
</tr>
<tr>
<td>2004-05</td>
<td>33.74</td>
<td>28.57</td>
<td>31.47</td>
<td>51.85</td>
</tr>
<tr>
<td>2005-06</td>
<td>31.81</td>
<td>25.42</td>
<td>29.00</td>
<td>50.49</td>
</tr>
<tr>
<td>2009-10**</td>
<td>30.25</td>
<td>27.25</td>
<td>28.86</td>
<td>40.59</td>
</tr>
</tbody>
</table>

Source: Selected Educational Statistics 2007-08, Ministry of Human Resource Development, GOI, *DISE report. ***Combined dropout rate for India after consideration for all states and UTs. Source: Abstract of Selected Educational Statistics 2009-10; Ministry of Human Resources Development; GOI

Sikkim is a small state merged with Indian union on 15th April, 1975 as the 22nd state of the country. It is a landlocked Indian state located in the Himalayan’s mountains. It is India’s least populous state, with 607,688 inhabitants (as per 2011 census). During the last three decades, the State government has made considerable progress in educational sector and has been providing free education to the children through a wide network of government schools which is indeed a noteworthy effort for encouraging children to stay in the school and helps them in getting graduation degree and minimising school dropouts. During this period of ten years, Sikkim has improved to a great extent with regards to literacy rate with the average growth of 12%.
The following table shows the overall figures of the literacy rate in Sikkim.

**Table 2: District-wise figures on literacy rate in Sikkim: 2001 and 2011**

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Year</th>
<th>Item</th>
<th>North</th>
<th>South</th>
<th>West</th>
<th>East</th>
<th>Sikkim</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2001</td>
<td>Literacy Rate</td>
<td>67.21</td>
<td>67.31</td>
<td>58.80</td>
<td>74.67</td>
<td>69.68</td>
</tr>
<tr>
<td>2</td>
<td>2001</td>
<td>Literacy Rate</td>
<td>77.39</td>
<td>82.07</td>
<td>78.69</td>
<td>84.67</td>
<td>82.02</td>
</tr>
</tbody>
</table>

Source: A Statistical Profile 2002 & Census 2011

**Table 3: Dropout Rates in Classes I-V and I-VII and I-X in India (2009-10)**

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>States/UTs*</th>
<th>Classes I-V (6-11 years)</th>
<th>Classes I-VIII (6-14 yrs)</th>
<th>Classes I-X (6-16 yrs)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Boys</td>
<td>Girls</td>
<td>Total</td>
</tr>
<tr>
<td>1</td>
<td>Sikkim</td>
<td>24.57</td>
<td>11.98</td>
<td>18.58</td>
</tr>
<tr>
<td>2</td>
<td>India</td>
<td>30.25</td>
<td>27.25</td>
<td>28.86</td>
</tr>
</tbody>
</table>

Note:* Selected States have been taken by author for comparisons. Expected (-) sign denotes zero dropouts rates.

Source: Abstract of Selected educational Statistics 2009-10; Ministry of Human Development Report, GoI.

It is clear from the above table that dropout rate is still higher in Sikkim than the National average even if Sikkim literacy rate is higher than the national average.

**Review of Literature**

Factors related to students dropping out of school tend to fall into three categories, which are similar to the types of social capital: school-related, social-related, and family-related. School-related factors include school size, school climate, policies, practices, location, programs, teacher quality, curriculum, absenteeism rates, and grade retention rates. Social-related factors include
substance abuse, race, sex, and language. Family-related factors include socioeconomic status, mobility, family structure, parental education, and parental involvement.

**School-related factors**

Bryk and Thum (1989) completed an extensive study on the effects of structural and normative features of schools on absenteeism and dropping out of school using hierarchical linear model analysis. In their absenteeism model, Bryk and Thum found that the variability among schools’ absenteeism rates was in large part due to the type of school (Catholic versus Public), rather than the demographics of the students. Furthermore, they found that students from a low socioeconomic background with weak academic skills were more likely to be absent. Other qualities associated with high absenteeism included schools with higher incidences of disciplinary problems, schools where the administration reports problems with staff, schools with students who come from diverse socioeconomic backgrounds, and schools with diverse student academic experiences. On the contrary, schools that are perceived as being safe, having fair rules, emphasizing the importance of homework and grades, and perceived to have strong teachers with an interest in promoting academics were associated with having low absenteeism rates.

Pittman and Haughwout (1987) affirmed the effects of participation in school, attendance, and satisfaction with the school climate in their study, but their primary interest was in determining the influence of school size on the dropout rate. Pittman and Haughwout found that larger schools tended to have higher dropout rates \((r = .31)\), which was much higher than the correlation found in the Bryk and Thum study. Furthermore, they concluded that larger schools “appear to produce a less positive social environment, less social integration, and less identity with the school” (p. 343). They indicated that an increase of 400 students is associated with a 1% increase in the school’s dropout rate.
Roderick (1994) investigated the effect of grade retention on the tendency for students to drop out of school. She examined the interaction effects of age, school performance, and timing of retention with grade retention on the tendency to leave school early. Students, regardless of age, who were retained, were three times more likely to drop out of school than their non-retained counterparts.

**Social-related factors**

Mensch and Kandel (1988) examined the extent to which drug use contributes to dropping out of school. Mensch and Kandel used data from the National Longitudinal Study of Young Adults for their research and defined a dropout as an event dropout. They found that dropouts reported significantly higher rates of cigarette, marijuana, and other illicit drug usage than students who graduated from high school. In addition, they found that, for females in particular, the younger the child was when introduced to alcohol, cigarette, or drug usage, the more likely the student was to leave school early. Interestingly, dropouts who were using drugs were more likely to obtain a GED.

Krohn, Lizotte, and Perez (1997) confirmed the findings of Mensch and Kandel (1988). Krohn et al. focused on early illegal substance use and how it contributed to transitions into adulthood that are generally thought to be negative, which they termed precocious, including dropping out of school, moving out of the parental household, teenage pregnancy, and teenage parenting. They found substance use to be significantly correlated with all precocious transitions into adulthood, except for female teenage pregnancy. They also found that the precocious transitions were correlated with drug and alcohol use later in life (Krohn *et al.*).

Goldschmidt and Wang (1999) identified two main student-level factors for students leaving school early. At the middle school
level, race was a significant factor; African Americans were significantly less likely to drop out than whites (Goldschmidt & Wang). At both the middle and high school levels, females were found to be significantly more likely to drop out than males.

**Family-related factors**

Rumberger’s (1983) study focused on how family background affects the tendency for students to drop out of school, and how race and sex contributes to the effect of family background. Rumberger found that “widespread differences in dropout rates among [members of all race and sex groups], particularly between whites and minorities, can be explained mostly by differences in family origins” (p. 211). The most uniform indicator across race and sex groups of dropout behavior was cultural index, or the amount of reading material in the household. Rumberger found that more reading material in the household was correlated with a lower dropout rate. Higher socioeconomic status tended to be a factor for staying in school for white students only. The tendency for all females and African American males to stay in school increased as their mothers’ level of education increased, while the tendency for all males to stay in school increased as their fathers’ level of education increased. Rumberger found that an increased number of siblings correlated with increased dropout rates for white students only. Living outside of the United States until age 14 had different effects based on race; dropout rates increased for Hispanics, decreased for whites, and stayed the same for African Americans. Residence location, urban, suburban, or rural location, was also found to be significantly related to dropout rates for males. High levels of educational aspirations were associated with lower dropout rates for all race and sex groups. Teenage pregnancy and marriage tended to be an indicator of early school leaving. In all cases, students with lower socioeconomic status tended to drop out at higher rates than other students.
Astone and McLanahan (1991) focused on family structure and parental practices as factors for high school completion. They found that children in families with two birth parents receive more parental encouragement and attention with respect to educational activities than children from non-intact families. In addition, Astone and McLanahan found that children from single-parent and step-parent families are more likely to exhibit signs of school disengagement than children who live with both birth parents. Finally, differences in parenting practices between non-intact and intact families were found to be insignificant with respect to dropout rates; parenting practices accounted for less than 10% of the differences in graduation rates.

Statement of the Problem

No one really knows what causes students to drop out from school. Dropouts themselves have the underlying facts or reasons for leaving school, with marked differences reported by different social groups. According to Russell W. Rumberger in his study he has found that almost one half of all dropouts cited school-related reasons for leaving school, such as disliking school or being expelled or suspended. Forty percent of all dropouts cited economic reasons for leaving school and the rest reported personal reasons for leaving school, such as pregnancy or marriage. Thus thousands upon thousands of young people are being left behind and then abandoning school that have either failed them or failed to successfully extend a lifeline to help them recover once they fall off track from school.

Dropping out of school affects not only those who leave school but also society at large. Moreover, the social consequences go beyond the economic and psychological impacts that befall individual school dropouts. It is argued that dropping out of school often leads to ‘economic and social tragedy’. A high school dropout is far more deplorable than graduate to be unemployed, person to be in prison, people to be unmarried or divorced, and person living
in poverty. Perhaps, qualitative findings in the research have been lacking and there has been a failure to know the actual reasons behind students have dropping out from school. Surveys on school dropouts are carried out without precision in obtaining data and studies are simply carried out as per convenience. Researchers may be failing to draw the proper conclusions that can help to highlight the actual problems.

Dropout prevention and minimisation is the concern of every society, state and country as a whole. Government policies and schemes such as RMSA, RTE, SSA, and MDM etc are offered as commendable efforts made by the government. However, the quality aspect of education has so far remained a neglected area. As a result, the qualitative growth of education in India has suffered. India with its great human resource has the potential to be a leading knowledge power in the world. In spite of decades of school improvement initiatives, many young people still do not cross the finishing line of secondary education.

**Objectives of the Study**

1. To identify the major reasons behind the phenomenon of school dropouts in Sikkim.
2. To examine the district-wise comparison of the occurrence of school dropouts in Sikkim.
3. To compare the socio-economic conditions of dropouts in both rural and urban regions in Sikkim.
4. To study the functional relationship between the occurrence of dropouts and variables like parental education, per capita income, facilities in school, economic status of parents, and proportion of income spent on children’s education and Distance of School.

**Database and the Methodology**

The study was carried out by using both micro and macro-level data. The micro-level data was collected through household and
school level survey in all four districts of Sikkim. In each area the ultimate stage units has been chosen on the basis of multistage sampling technique for the collection of dropout data.

The samples were collected on the basis of convenience and purposive sampling methods. The total sample size being sampled from all four districts of Sikkim was 240 out of which 60 was the individual target from each district of Sikkim.

The collected data was analysed by using descriptive statistics and Gini coefficient. The Gini Coefficient model is given by,

$$G=\frac{1}{n^2}\sum\sum (x_i-x_j)f_i f_j \quad \text{.................(1)}$$

$$x_i>x_j$$

The reasons behind occurrence of school dropouts in Sikkim are studied by using Logit model. The model is given as,

$$L_i=\ln\left(\frac{P_i}{1-P_i}\right)=\beta_1+\beta_2X_{2i}+\beta_3X_{3i}+\beta_4X_{4i}+\beta_5X_{5i}+\beta_6X_{6i}+\beta_7X_{7i}+U_i \quad \text{.................(2)}$$

Where, $P_i = 1$ if a respondent has been dropped out from School
$= 0$ otherwise

$X_{2i} =$ Per capita income of a family, (PCI),
$X_{3i} =$ Economic status of parent, (ESP)
$X_{4i} =$ Parental education, (PE),
$X_{5i} =$ Proportion of Income spend on children’s education, (PISCE)
$X_{6i} =$ Facilities in school, (FS),
$X_{7i} =$ Distance of School, (Dos)
$U_i =$ Error term
<table>
<thead>
<tr>
<th>School Dropouts Indicator (Average)</th>
<th>Rage</th>
<th>RMn – Age</th>
<th>RMx – Age</th>
<th>MAge</th>
<th>FAge</th>
<th>MDp</th>
<th>FDp</th>
<th>DoS</th>
<th>PCI</th>
<th>PE</th>
<th>HNs</th>
<th>CHs</th>
<th>BHs</th>
<th>No. Rs</th>
</tr>
</thead>
<tbody>
<tr>
<td>School Dropouts</td>
<td>15.87</td>
<td>10</td>
<td>22</td>
<td>13.84</td>
<td>12.23</td>
<td>58.06 (54)*</td>
<td>41.93 (39)*</td>
<td>1.91</td>
<td>5768</td>
<td>5.33 (93)*</td>
<td>52.68 (49)*</td>
<td>21.50</td>
<td>29.03</td>
<td>39% (93*)</td>
</tr>
<tr>
<td>No School Dropouts</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>11523 (147*)</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>61% (147*)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>240*</td>
</tr>
</tbody>
</table>

Source: Author’s calculation on primary data.

Note:* Number of respondents.
### Development and Perspectives towards New Challenges

#### Table 1.1: Descriptive Statistics on School dropouts

<table>
<thead>
<tr>
<th>Variable</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>$R_{age}$</td>
<td>Respondent’s Age</td>
</tr>
<tr>
<td>$DoS$</td>
<td>Distance of School</td>
</tr>
<tr>
<td>$R_{min-age}$</td>
<td>Respondent’s Minimum Age</td>
</tr>
<tr>
<td>$PCI$</td>
<td>Per Capita Income</td>
</tr>
<tr>
<td>$R_{max-age}$</td>
<td>Respondent’s Maximum Age</td>
</tr>
<tr>
<td>$PE$</td>
<td>Parental Education</td>
</tr>
<tr>
<td>$Mage$</td>
<td>Age of Male Respondent</td>
</tr>
<tr>
<td>$HNs$</td>
<td>Hindu Respondents</td>
</tr>
<tr>
<td>$Fage$</td>
<td>Age of Female Respondent</td>
</tr>
<tr>
<td>$CHs$</td>
<td>Christian Respondents</td>
</tr>
<tr>
<td>$MDp$</td>
<td>Male Dropouts</td>
</tr>
<tr>
<td>$BHs$</td>
<td>Buddhist Respondents</td>
</tr>
<tr>
<td>$FDp$</td>
<td>Female Dropouts</td>
</tr>
<tr>
<td>$No. Rs$</td>
<td>Number of Respondents</td>
</tr>
</tbody>
</table>

#### Results and Discussions

From the table 1.1 it is apparent that the average of respondents who were not dropouts is 61% (147 respondents) while the average of respondents who has been dropouts from school is 39% (93 respondents). Therefore, the above result suggests that Sikkim is progressing in the fields of education while at the same time it is accomplishing in minimizing school dropouts rate in Sikkim.

The maximum and minimum age of respondents who have been dropped is 22 years and 10 years respectively. Therefore, average age of respondents who had been dropouts from school is approximately 16 years. The average age of male and female respondents who have been dropouts from school is 13.84 years and 12.23 years respectively. So from this we can say that the ages of 14 and 12 years have the maximum chances of dropping out from school in case of male and female students, respectively.

Similarly, the above table it is clear that religion-wise average
dropouts of Hindus, Buddhists and Christians are 53%, 29% and 22% respectively. The number of respondents that comprises school dropouts in case of Hindus, Buddhists and Christians are 49, 27, and 20 respectively. This result shows that most of the school dropouts belong from Hindus followed by Buddhists and Christians family. Generally Hindus comprise the larger population in Sikkim unlike Buddhist and Christian.

Again from the above table, it is noticeable that the average number of dropouts among males and females is 58.06% and 41.93 % respectively. Thus male students are more likely to drop out from schools compared to female students.

The study also tells us that average distance from school for students in Sikkim is about 1.91 Km or 2 km, which suggests that it is not too long for students to go to school. This may be the result of government initiatives for improving education.

Again the PCI for a family with dropouts and one without dropouts are ₹ 5768.34 and 11523.41 respectively on an average. The PE of dropout students is 5.33 (approximately around or up to class (V) while the PE of students who have not dropped out is 10.72 (approximately around or up to class XI).

From the below table (table 1.2) it is clear that members of Nepali community are much more likely to drop out of school than those of Bhutia and Lepcha community. This may be due to the facts that Nepali community comprises of different castes and the population is also higher unlike Bhutia and Lepcha community.

In our preceding literature, we have found a great number of factors related with family conditions and structures which are major contributors for school dropouts and the most important is socio-economic status. Several studies have found that dropout rates are higher for students from families with low socioeconomic status, no matter what particular factors are used for this purpose e.g. Rumberger, 1983.
### Table 1.2: Descriptive Statistic on Socio-Economic reasons for School Dropouts in Sikkim

<table>
<thead>
<tr>
<th>Reason Related to School Dropout</th>
<th>Males</th>
<th>Females</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Lepcha</td>
<td>Bhutia</td>
<td>Nepali*</td>
</tr>
<tr>
<td>School Related:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Poor Academic Performance</td>
<td>3</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Dislike School’s Environments</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Distance of School</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Economic Related:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Desired to Work</td>
<td>3</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Financial Constraint</td>
<td>3</td>
<td>5</td>
<td>9</td>
</tr>
<tr>
<td>Home Responsibilities</td>
<td>2</td>
<td>3</td>
<td>9</td>
</tr>
<tr>
<td>Personal Related:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Did not like to Study</td>
<td>2</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>Pregnancy and Marriage</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Peer Influence</td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>7</td>
<td>14</td>
<td>33</td>
</tr>
</tbody>
</table>

Note: * All the ethnic groups such as Rai, Thapa, Tamang, Chetttri, etc. Except Lepcha and Bhutia.

# Total number of dropout’s respondents in collected sample.

Source: Author calculation on Primary data.

School-related factors associated with dropping out have not received much attention unlike other factors which is clear from the above table. It is fairly documented that poor academic
performance in school such as grade retention, inability to understand, course difficulty and even a favorable school environment plays a crucial role in the dropping out of children. Most research on school-related factors has focused on students’ behaviors and performance in school. If a little attention had been given to increase the facilities in schools it could have helped to minimise the student dropouts. Yet many dropouts attend schools with very poor facilities and inadequate teaching staffs, conditions that could affect their performance in school and ultimately their decision to leave (Fine, 1986).

Economic factors also influence students’ decisions to leave school. It is clear from the above table that most of the dropouts are associated with economic factors like financial constraint, responsibility at home and desire to work. About 50% of dropouts have reported that they left school because they wanted to or felt they had to work to help out their families due to some vicious financial constraints in the family which is documented in above table (Table 1.1). In Sikkim most of the school dropouts reported that economic problem is the main factor which pushes them in the direction of dropping out.

Finally, many dropouts’ reported that personal factors like no interest in study, early marriage and pregnancy, and influence of peer’s groups are the main reasons that they leave school. In Sikkim, we have the shortage of counseling and orientation programmes in schools which aware them to take such decisions.

Therefore, it is clear from the above table, that economic and personal factors plays a crucial role in causing school dropouts in Sikkim, whereas school related factors are the least affecting factors. A good essential policies and effective intervention in this particular field could make some improvement and enhance the quality of education and will helping the students to retain in school.
Results and Analysis for measuring Income Inequality among the Respondents of the Study Area.

Table 2.1: Gini-Coefficient Estimates Income Inequality of Sikkim

<table>
<thead>
<tr>
<th>Location</th>
<th>Value of Gini-Coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rural</td>
<td>0.14</td>
</tr>
<tr>
<td>Urban</td>
<td>0.13</td>
</tr>
<tr>
<td>East</td>
<td>0.22</td>
</tr>
<tr>
<td>West</td>
<td>0.21</td>
</tr>
<tr>
<td>North</td>
<td>0.17</td>
</tr>
<tr>
<td>South</td>
<td>0.21</td>
</tr>
</tbody>
</table>

Source: Author’s Calculation on Primary Data

The income of a family is the most important way of getting an idea about the socio-economic condition of the people. Income can be connected with several other parameters like savings and income, educational level, assets or livestock holdings, occupational status and general living conditions. Hence by analysing the income levels of the surveyed respondents we can get an overall idea about the socio-economic structures they live in.

The lower the income inequality the greater will be the homogeneity among the respondents; otherwise there may be diverse viewpoints regarding the occurrence of dropouts. For this reason we have studied the socio-economic conditions using the Gini-Coefficient. We do so by examining whether there are any variations across districts or between rural and urban areas.

The values of the Gini coefficient G for rural and urban areas are 0.14 and 0.13 respectively. This study suggests that there is no such strong income inequality between these two regions. This can be due to government initiatives for providing proper infrastructure in rural areas, job orientation programmes, and employment opportunities in the private sector, all of which have enabled the rural folk to raise their standard of living. However,
if we examine the value of G carefully then the income inequality is comparatively higher in case of rural areas, suggesting the variation of income earning in rural areas of Sikkim.

The study also estimated the income inequality among the four districts of Sikkim, the values of G for East, West, North and South being 0.22, 0.21, 0.17, and 0.21 respectively. Thus the values are more or less similar except for East Sikkim which has relatively higher income inequality compared to the remaining districts. The possible reason may be heterogeneity in the occupation of people of East Sikkim.

Results and Analysis of the Causes of Dropouts in terms of Logit Model.

\[
\text{ScDp}_{ij} = \beta_0 + \beta_2 PCI_i + \beta_3 ESP_i + \beta_4 PE_i + \beta_5 PISCE_i + \beta_6 FS_i + \beta_7 DoS_i + \varepsilon_i
\]  

(3)

\[
\text{ScDp}_i = \beta_0 + \beta_2 PCI_i + \beta_3 ESP_i + \beta_4 PE_i + \beta_5 PISCE_i + \beta_6 FS_i + \beta_7 DoS_i + \beta_8 DNorth_i + \beta_9 DWest_i + \beta_{10} DSouth_i + \varepsilon_i
\]  

(4)

\[
\text{ScDp}_i = \alpha + \beta_2 PCI_i + \beta_3 ESP_i + \beta_4 PE_i + \beta_5 PISCE_i + \beta_6 FS_i + \beta_7 DoS_i + \beta_8 DRural_i + \varepsilon_i
\]  

(5)

**Table 2.2: Logit Estimates of School dropouts**
### Explanatory variables

<table>
<thead>
<tr>
<th>Explanatory variables</th>
<th>Estimated Coefficients</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Combined</td>
</tr>
<tr>
<td>PCI</td>
<td>-0.0025*** (-5.478)</td>
</tr>
<tr>
<td>ESP</td>
<td>-0.1037 (-0.177)</td>
</tr>
<tr>
<td>PE</td>
<td>-0.307*** (-2.950)</td>
</tr>
<tr>
<td>PISCE</td>
<td>-4.024** (-1.859)</td>
</tr>
<tr>
<td>FS</td>
<td>-0.4531 (-0.415)</td>
</tr>
<tr>
<td>DoS</td>
<td>-0.469 (-1.880)</td>
</tr>
<tr>
<td>Dnorth</td>
<td>3.554*** (3.464)</td>
</tr>
<tr>
<td>Dwest</td>
<td>4.617*** (3.791)</td>
</tr>
<tr>
<td>Dsouth</td>
<td>2.282** (2.489)</td>
</tr>
<tr>
<td>Drural</td>
<td>$0.666^{**}$</td>
</tr>
<tr>
<td>--------</td>
<td>-------------</td>
</tr>
<tr>
<td>Constant (C)</td>
<td>10.834***</td>
</tr>
<tr>
<td>Observations</td>
<td>240</td>
</tr>
<tr>
<td>Mc Fadden $R^2$</td>
<td>0.712</td>
</tr>
<tr>
<td>Prob (LR statistic):</td>
<td>0.000</td>
</tr>
</tbody>
</table>

Note: ***, ** and * indicates the significance at 1%, 5% and 10% level respectively. Figures within the brackets represent the z-statistics.

Note: \(\beta_0\) is the intercept term of eqn 4 and \(\alpha\) is the intercept term of eqn 5, or (benchmark intercept).

Table 2.2 shows the estimated coefficients for equations (3), (4) and (5) for Sikkim as a whole and for urban and rural areas. Column 3, 4, 5, 6, 7 and 8 shows the estimated coefficients estimated using equation (3).
Column 1 shows the estimated coefficients from equation (4) while Column 2 shows the estimated coefficients from equation (5). The estimated coefficients of the Logit model show the direction of the relationship between the dependent and the independent or explanatory variables.

From these results for the estimated coefficients of the combined sample, we get to know that variables like per capita income (PCI), parental education (PE), proportionate income spent on children’s education (PISCE) and facilities in school (FS) are found to be significant whereas other variables like economic status of parents (ESP) and distance of school (DoS) are found insignificant.

The PCI is individually found to be significant for all four districts, the combined sample as well as rural and urban areas of Sikkim. It is also found to be significant for the combined samples of all four districts as well as rural and urban parts of Sikkim with the expected signs. An increase in the PCI will raise the family incomes and in turn increases the spending to their children for the facilities like good coaching for difficult subjects, competent schools for study and also fulfill all their requirements in school. Therefore, families with higher incomes will be able to meet the expenses of their children and to provide proper care for their child. For this reason it is expected to increase the tendency to send children to school while reducing the chances of children dropping out. Thus PCI is a very important variable for determining the occurrence of dropouts.

The coefficient for economic status of parents is significant only in case of North District with the expected sign which implies a negative correlation with the dependent variable. Thus an increase in the ESP for the respondents from the North district will reduce the probability of incidence of school dropouts in North district. The significance of this coefficient would suggest that the higher the economic status of parents the lesser will be the chances of their children following the path of the dropouts and higher will
be the possibility of their completing school in the North district. Parental education (PE) is significant for the combined sample as well as rural and urban samples with a negative sign. Parental education is also important; because if in a family parents are well educated then they can lay more emphasis on their children’s education and also encourage them for the betterment for their future. Therefore the more the parents are educated lesser will be the chances of their children dropping out from school.

Another variable which plays a very pivotal role in minimising school dropouts is the proportion of income spent on children’s education (PISCE). It is also individually significant in all cases like, district-wise sample and rural and urban regions in Sikkim with the expected sign, suggesting that it is negatively correlated with the dependent variable. Thus it clarifies that the families with higher amount of PISCE will enable their children to complete school compared to the families with lower amount of PISCE. The proportion of income spent on children’s education ensures the provision of facilities for the children, particularly for the fulfillment of their physical requirements, in addition to their monetary needs, ensuring that there is no shortage of necessities in their learning process. The higher the PISCE lower will be the chances of dropouts. It also supports the effect of PCI. Hence the results for PISCE tend to reinforce those for PCI.

Facilities in school are found significant only for the West District. This means that facilities provided in West district schools’ are comparatively lower level unlike the rests of the districts. Therefore, a possible policy imperative could be the fact that provision of additional facilities like mid-day meals and other recreational activities like games and sports, cultural activities etc. could help draw children to schools and retain them there.

In order to distinguish the effects in the four districts viz – East, North, West and South on the chances of the occurrence of school dropouts, we have used three dummy variables, DNorth, DWest,
DSouth, respectively while the effect of East is captured by the intercept term $\beta_0$. From the above result, it clarifies that there exist significant differences among the four districts of Sikkim on the probability of the occurrence of school dropouts. The odds ratio in favour of school dropouts for the East districts is captured by $\beta_0$ and the value is 10.83. In case of the West district the odds ratio in favour of school dropouts is higher by 4.62 while their actual value is 15.45 ($=10.83+4.62$). Similarly for South district the odds ratio in favour of school dropouts is higher by 2.28 and their actual value is 13.11 ($=10.83+2.28$). Again for North district, the odds ratio in favour of school dropout is higher by 3.55 and their actual value is 14.38 ($=10.83+3.55$). Therefore, from the above analysis we can infer that the odds ratio in favour of school dropouts in the West, South and North districts is higher than that of East district, which in turn implies that the probability of school dropouts in West, South and North is higher than that of East district. Since, all the differential intercepts are statistically significant and their p values are low.

Similarly, in order to distinguish between the effects on the probability of the occurrence of school dropouts in the urban and rural regions in Sikkim, we have used one dummy variable i.e. DRural while the effect of Urban areas is captured by the intercept term $\alpha$. The intercept value represents the odds ratio in favour of school dropouts in urban regions and the value is 3.33. Similarly, if we compare its value with the odds ratio in favour of school dropouts for rural regions then the value of rural regions is higher by about 0.67 while the actual value is about 4.00. Therefore, the value of odd ratio in favour of school dropouts between these two regions shows that the probability of school dropouts in rural regions is higher as comparing to urban regions. The coefficients of both rural and urban areas are statistically significant since their p-values are very small.

The goodness of fit of the model is measured by the LR statistic. As the p-value is very small for all the categories so the model has
Summary of Findings

The major findings of the study are as follows:

- Out of 240 samples, 61 percent (147 respondents) are not found in the involvement in the school dropouts while 39 percent (93 respondents) are found in the involvement in the school dropouts.

- Occurrence of school dropouts is much higher in case of men than that of women, approximately 58.06 percent and 41.93 percent respectively.

- Religion-wise comparison of incidence of school dropouts is much higher in Hindu followed by Buddhist and Christian with its respective percentage are 53%, 29% and 22 % (approx) respectively

- Prevalence of school dropouts in terms of ethnic groups of Sikkim, Nepali community has the highest percentage of school dropouts followed by Bhutias and Lepchas.

- Per capita Income, Proportionate Income Spend on Children’s Education, Parental Education are the most significant variables/factors for affecting school dropouts in Sikkim.

Conclusion

Dropping out of school is considered to be an important educational and social problem. As such, it has commanded the attention of researchers, policy-makers, and educators who are trying both to better understand the nature of the problem and to do something about it. Leaving school prior to completion of education will severely limit the economic and social well-being of the affected individuals throughout their adult lives. So the purpose of this study was to record and analyse students’, parents’ and teachers experiences regarding the children’s dropping out of
school within a social capital framework. The study has utilised qualitative and quantitative methods to analyse the experience of students who dropped out of school. This part will discuss the conclusions of the study.

Social networks among parents, educators, and community members are crucial to the success of each child. School social capital, family social capital, and community social capital develop as a result of participation in social networks. Therefore, if these networks are properly formed then it will improve the children’s behaviour towards study while also enhancing the chances of the students completing school.

The general views given by many of the dropouts, parents and the teachers lead to the conclusion that the problem of school dropouts is not only viewed from the educational aspects but also through social, economic and psychological viewpoints as well. So the dropout problem is unlikely to ever go away. But concerted and cooperative efforts by educators, policymakers, and educational researchers can improve our understanding of the problem and help to reduce this incidence.

The preceding result indicates that out of a sample of 240, 61 percent are not involved in the occurrence of dropouts whereas the remaining 39 percent have had an incident of dropout. The occurrence of school dropouts is higher in case of males than for females. Approximately 67 percent males are involved in the occurrence of school dropouts while in case of females is 33 percent. Therefore, male students are more likely to drop out of school compared to female students. The study also found that average age of the respondents who have dropped out in general is approximately 14 years in case of male respondents and 12 years for female respondents respectively.

From the preceding result, we have determined the socio-economic differences among the rural and urban respondents as well as district-wise respondents. The values of the Gini coefficient suggest that there is homogeneity with respect to income earning
between the rural and urban areas; however rural regions have comparatively greater degree of heterogeneity in their income earning. In case of individual districts, the extent of income inequality is almost similar in all four districts except the East district which has demonstrated a greater degree of heterogeneity in income earning of the respondents compared to the remaining districts.

The survey revealed that economic, social and school related reasons are the major contributing factors behind occurrence of dropouts. Family background such as low socio-economic status of the parents are significantly correlated with the phenomenon of dropping out and in case of more than 60 percent of the sample, we have found that children dropped out due to financial constraints in the family. It was also observed that in many cases older siblings quit their school in order to send their younger brothers or sisters to school. Households have reported that they could not bear the expenditure involved in sending children to school. It has been argued that the lower educational level of the parents is also an important drawback, because parents with low level of education will not understand the meaning of education.

Apart from these reasons, there are some school related factors which causes the students to drop out of school. These factors include difficulties in learning, especially on subjects like mathematics and science, grade retention, mistreatment from the teachers, absenteeism and unfavourable school environment. Many of the dropout students revealed that they have been misjudged by teachers and students themselves have no interest in studies and also grade retention due to their absenteeism.

Many of students, teachers and parents have also identified social factors among those responsible for students discontinuing their education. Such factors include the effect of their friends circle, early marriage, use of drugs and others harmful substances, political influences, lucrative career options etc. Many aged and the experienced people of Sikkim share the views that at present
many students have become a victim of these chronic factors and as a result sooner or later they drop out from school.

**Policy Prescriptions**

Not all the students can or should be expected to finish school stage. Yet many students want to finish school and could be helped through effective policy interventions. Without such interventions the dropout rate could easily increase due to the rising population and greater academic requirements for completion of school.

Since independence, the government and educational policies makers are trying to make concerted efforts for finding and promoting solutions to the dropout problem throughout the India. Many individual states including Sikkim, especially those with large at-risk populations, have introduced a variety of programs designed to reduce the incidence of dropouts. Therefore, many new studies need to be undertaken to identify successful dropout programs around the country.

The study suggested that students drop out for different reasons. Some are related to problems in school (lack of interest or poor performance, grade retention and unfavorable school climate); others are related to factors outside the school such as economic problems in a family (desire to work, helping hands for the family and financial constraints) and some are related with personal issues (early marriage, pregnancy issues and peer influence). Thus, a comprehensive strategy will be needed for addressing all of these factors, providing programmes for different children with different needs.

Each of these major facets – the incidence of the problem, its causes, consequences, and remedies requires attention. This necessitates a broad interdisciplinary approach that acknowledges not only the educational aspects of the problem, but the social, economic and psychological factors as well. The dropout problem is unlikely to ever go away. But concerted and cooperative efforts
by educators, policymakers, and educational researchers can improve the understanding of this problem and help in reducing its incidence.

- The government should take major steps for raising the standard of living of the people in Sikkim by introducing new employment schemes especially in rural areas. Therefore, if we uplift the socio economic conditions of poor families then it could help in minimising school dropouts.

- The government as well NGOs should provide new programmes and opportunities for manpower planning, counselling programs for students stressing on the importance of education, awareness camps against early marriage as well as drug and other harmful substances etc. which also contribute to children dropping out of school.

- The government should be able to generate more employment programs and job opportunities for the educated so that it could create awareness among the school going youth and motivate them to get educated.

- Every school in Sikkim should provide a favourable environment for students to pursue their education. Schools should also encourage participation in co-curricular activities like sports and games, music and cultural programmes, essays and poetry, art and painting etc.

- The home is an important place where a child spends most its time with the family. So the family should create a favourable environment for the child and handle it with love, affection and care. In Sikkim, parents probably do not spend sufficient time with their children, nor do they check the progress of their children in their study or counsel them on their future prospects.

- Government, parents as well as teachers should encourage dropout students to resume their normal
schooling. Specifically the government should provide on-the-job training and others career counseling programmes which can help them to sustain their livelihood.

- In Sikkim, most of the students are poor especially in mathematics and science subjects which are another important cause for dropping out from school. Therefore, good coaching facilities for these subjects may be introduced throughout the state.

- Lastly, parents, elders and teachers should make their children aware about the importance of education. It will also be fruitful when students should take a personal interest in their studies as a means towards a better future.

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Abstract

The study seeks to examine the causal relationship, if any, between India’s services trade and economic growth, in a Vector Auto Regressive (VAR) framework during the post-liberalization period. A simple regression model is used to predict whether services trade influences economic growth for the time period 1996-97: Q1 to 2014-15:Q2. In order to examine the causal linkages between the variables, the Granger Causality Test has been conducted. Service trade plays a crucial role in developing countries where proportionately higher services export are characteristics of high-growth countries while excessive dependency on imported services is characteristic of low growth countries. Effective development planning must include strengthening of both domestic and international service sectors to reduce relative dependency on imported services while providing incentives for services exports.

Keywords: Trade in Services, Economic Growth, Vector Auto Regressive Framework, Granger Causality.

Introduction

The rapid expansion of trade in services contributes significantly to economic growth, both in developed and in developing economies (OECD, 2003). If liberalizing trade in goods, which typically
accounts for less than half of the GDP in most countries and even less than a third of output in the industrial economies, can affect *economy-wide* growth, then there should be comparable gains from liberalizing services that are becoming increasingly tradable and that account for a larger and growing share of output in most countries. The competitiveness of firms in open economies is increasingly determined by access to low-cost and high quality producer services – telecommunications, transport and distribution services, financial intermediation, etc. The role of services in economic growth is immense and more emphasis is needed on channels through which openness to trade in services may increase productivity at the level of the economy as a whole, industries and the firm. Growth in services trade is driven by numerous factors including liberalization of goods trade, deregulation of services, advances in information and communication technologies (as in e-commerce and telecommunications services) and increasing reliance on outsourcing by multinational corporations (MNCs). Services are heterogeneous and span a wide range of economic activities. Conceptually, this diversity marks a fundamental function that many services (which are inputs into production) perform in relation to overall economic growth. One dimension of this ‘input function’ is that services facilitate transactions through space (transport, telecommunications) or time (financial services) (*Melvin*, 1989). Another dimension is that services are frequently direct inputs into economic activities, and thus determinants of productivity of the ‘fundamental’ factors of production – labour and capital – that generate knowledge, goods and other services. Education, R&D and health services are examples of inputs into the production of human capital.

As firm size increases and labour specializes, more activity needs to be devoted to coordinating and organizing the core businesses of companies. This additional activity is partly outsourced to external service providers. The “producer services” that are demanded and supplied as part of this process are not just differentiated
inputs into production. Those play an important distinct role in coordinating the production processes needed to generate even more differentiated goods and to realize scale economies. The associated organizational innovations and expansion of “logistics” (network) services yield productivity gains that in turn should affect economy-wide growth performance. The integration of countries through flows of goods and services, financial assets, technology and cultural interaction has reached unprecedented levels (Stern, 2001). As the world is becoming more integrated, the trade in goods and services are crossing borders in line with globalization and regionalization processes.

**Literature Review**

Economic theory postulates that aggregate growth is a function of increases in the quantity and productivity of capital and labour inputs with long-run (steady state) growth being driven by technological progress. Goldsmith (1969) stresses the role of financial services in channelling investment funds to their most productive uses, thereby promoting growth of output and income. Subsequent works have shown that financial services can affect economic growth through enhanced capital accumulation and/or technical innovation. Francois (1990a) notes that the growth of intermediation services is an important determinant of overall economic growth and development because it allows specialization to occur. Some of the theoretical models treat services as goods and producer services and are modelled as intermediate goods (Robinson et al., 1999, Dee and Hanslow, 2000, Brown, Deardorff and Stern 2002) and show that multilateral trade liberalisation of services will increase global income and welfare. Banga and Goldar (2004) empirically determine the impact of trade liberalisation and find that trade liberalisation and development of the services sector in the 1990s had a significant impact on use of services in the Indian industry, which has further contributed to industrial output and productivity growth.
King and Levine (1993) postulate that financial services can affect growth through enhanced capital accumulation and/or technical innovation. They systematically control for other factors affecting long-run growth and construct additional measures of financial sector development such as the ratio of liabilities of the financial system to GDP and the ratio of gross claims on the private sector to GDP, which they use in growth regressions. Francois and Reinert (1996) have documented that the importance of services for export performance rises with per capita income; business, distribution, and communications services become the most important sectoral elements of overall exports in terms of inter-industry linkages. Mattoo, Rathindran and Subramanian (2006) find that, controlling for other determinants of growth, countries with open financial and telecommunications sectors grew, on an average, about 1 percentage point faster than other countries. Bayraktar and Wang (2006) show that the asset share of foreign banks has an economically and statistically significant positive effect on the growth rate of GDP per capita, after controlling for other determinants of growth, indicating a direct link between the two variables. Francois and Manchin (2007) conclude that infrastructure is a significant determinant not only of export levels but also of the likelihood exports that will take place at all. They found that basic infrastructure (communications and transportation) explains substantially more of the overall sample variation in exports than do the trade barriers faced by developing countries.

**Objective**

The study seeks to examine the causal relationship, if any, between India’s services trade and economic growth, in a Vector Auto Regressive (VAR) framework during the post-liberalization period.

**Data**
Quarter-wise data from 1996-97:Q1 to 2014-15:Q2 (comprising 58 observations) are taken for GDP at 1999-00 market prices and also for services trade to study the causal relationship between services trade and economic growth. The data are taken from Handbook of Statistics, Reserve Bank of India.

**Methodology**

The bivariate Vector Autoregressive (VAR) framework has been used to test the Granger causality between services trade and economic growth for the time period 1996-97: Q1 to 2014-15: Q2 (Figure 1). Regression Analysis is also done for the same time period with the same data set. Two methods are used.

1. Statistical Method
2. Econometric method

Statistical Method

A simple regression model is used to predict whether services trade influences economic growth for the time period 1996-97: Q1 to 2014-15:Q2.
\[ \text{LnGDP} = \alpha_1 + \beta_1 \text{LnSERTRADE} + \epsilon_1 \]  
\[ \text{...(1)} \]

where in equation (1) \( \alpha_1 \) is the constant term, LnGDP represents logarithmic value of GDP and LnSERTRADE represents logarithmic value of services trade and \( \epsilon_1 \) is the error term.

2. Econometric Method

Tests for Stationarity

The first step in the methodology is to test the stationarity of the variables (used as regressors in the model). Augmented Dickey Fuller (ADF) [1979], Phillips-Perron (PP) [1988] and Kwiatkowski, Phillips, Schmidt and Shin (KPSS) [1992] Tests have been conducted to investigate into the stationarity property of the series.

Tests for Cointegration

After examining the stationarity of the variables involved in the study, an attempt is made to figure out the level of cointegration between the examined variables, i.e., those tied in a long-run relationship. In this study, the Error-correction Cointegration technique of Johansen (1988) and Johansen and Juselius (1990) has been applied to identify the cointegration relationship between the variables. According to Johansen (1988), a p-dimensional VAR model, involving up to k-lags, can be specified as below.

\[ Z_t = \alpha + \Pi_1 Z_{t-1} + \Pi_2 Z_{t-2} + \ldots \ldots \Pi_k Z_{t-k} + \epsilon_t \]  
\[ \text{...(2)} \]

where \( \Pi_i \) is a \((p \times 1)\) vector of \( p \) potential endogenous variables and each of the \( \Pi_i \) is a \((p \times p)\) matrix of parameters and \( \epsilon_t \) is the white noise term. Equation (2) can be formulated into an Error Correction Model (ECM) form as below.

\[ \Delta Z_t = \alpha + \Pi_k Z_{t-k} + \sum_{i=1}^{k-1} \theta_i \Delta Z_{t-i} + \epsilon_t \]  
\[ \text{...(3)} \]
where $\Delta$ is the first difference operator, and $\Pi$ and $\theta$ are $p$ by $p$ matrices of unknown parameters and $k$ is the order of the VAR translated into a lag of $k-1$ in the ECM and $\varepsilon_t$ is the white noise term. Evidence of the existence of cointegration is the same as evidence of the rank ($r$) for the $\Pi$ matrix. The rank of $\Pi$ can be zero. This takes place when all the elements in the matrix $\Pi$ are zero. This means that the sequences are unit root processes and there is no cointegration. The variables do not share common trends or move together over time. In this case, the appropriate model is a VAR in first differences involving no long-run elements.

Johansen and Juselius (1990) have developed two Likelihood Ratio Tests. The first test is the Likelihood Ratio Test based on the maximal Eigen value which evaluates the null hypothesis of ‘$r$’ cointegrating vector(s) against the alternative of ‘$r+1$’ cointegrating vectors. The second test is the Likelihood Ratio Test based on the Trace Test which evaluates the null hypothesis of, at most, ‘$r$’ cointegrating vector(s) against the alternative hypothesis of more than ‘$r$’ cointegrating vectors. If the two variables are I(1), but cointegrated, the Granger Causality Test will be applied in the framework of ECM in which long-run components of the variables obey equilibrium constraints while the short-run components have a flexible dynamic specification.

**Tests for Granger Causality**

In order to examine the causal linkages between the variables, the Granger Causality Test has been conducted. The direction of the impact of each of the variables is also determined from the analysis. In order to capture the impact of variables observed in the past time period in explaining the future performance, the optimal lag length $p$ (which is 4 in the present study) is chosen (see table 1) and the criteria used in selecting the VAR model and optimal lag length require the combination of information criterion (minimum of AIC or SBIC or HQIC or FPE value).
Table 1: VAR Lag Order Selection [D(LnSETTRADE), D(LnGDP)]

<table>
<thead>
<tr>
<th>Lag</th>
<th>LL</th>
<th>LR</th>
<th>FPE</th>
<th>AIC</th>
<th>SIC</th>
<th>HQIC</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>74.41239</td>
<td>NA</td>
<td>0.000178</td>
<td>-2.955608</td>
<td>-2.878391</td>
<td>-2.926312</td>
</tr>
<tr>
<td>1</td>
<td>81.23648</td>
<td>12.81257</td>
<td>0.000159</td>
<td>-3.070877</td>
<td>-2.839225</td>
<td>-2.982988</td>
</tr>
<tr>
<td>2</td>
<td>121.5593</td>
<td>72.41650</td>
<td>3.62e-05</td>
<td>-4.553441</td>
<td>-4.167355</td>
<td>-4.406961</td>
</tr>
<tr>
<td>3</td>
<td>155.9177</td>
<td>58.90018</td>
<td>1.05e-05</td>
<td>-5.792561</td>
<td>-5.252041</td>
<td>-5.587488</td>
</tr>
<tr>
<td>4</td>
<td>178.5539</td>
<td>36.95693</td>
<td>4.93e-06*</td>
<td>-6.553219*</td>
<td>-5.858265*</td>
<td>-6.289554*</td>
</tr>
</tbody>
</table>

*Indicates lag order selected by the criterion.

- LL: Log Likelihood
- LR: Sequential Modified LR Test Statistic (each test at the 5% level of significance)
- FPE: Final Prediction Error
- AIC: Akaike Information Criterion
- SIC: Schwarz Information Criterion
- HQIC: Hannan-Quinn Information Criterion
- D: represents the first difference of logarithmic values of the concerned variables

The model used for testing Granger causality in a VAR framework at first difference form:

\[ \Delta \text{LnGDP}_t = \sum_{j=1}^{p} \alpha_{11,j} \Delta \text{LnGDP}_{t-j} + \sum_{j=1}^{p} \alpha_{12,j} \Delta \text{LnSERTRADE}_{t-j} + \epsilon_{1t} \quad \ldots(4) \]

\[ \Delta \text{LnSERTRADE}_t = \sum_{j=1}^{p} \alpha_{21,j} \Delta \text{LnSERTRADE}_{t-j} + \sum_{j=1}^{p} \alpha_{22,j} \Delta \text{LnGDP}_{t-j} + \epsilon_{2t} \quad \ldots(5) \]

where LnGDP and LnSERTRADE are the time series of GDP and Services trade respectively which are in the logarithmic and first difference form. \( \epsilon_{1t} \) and \( \epsilon_{2t} \) are white noise. \( p \) is the lag length of VAR and \( \Delta \) the first difference operator.

**Parameter Stability Tests**
CUSUM test and CUSUM of squares (CUSUMSQ) test are used to check whether the parameters of the model are stable or not. The CUSUM test (Brown, Durbin and Evans, 1975) is based on the cumulative sum of the recursive residuals. This option plots the cumulative sum together with the 5% critical lines. The test finds parameter instability if the cumulative sum goes outside the area between the two critical lines. In case of CUSUM of squares test, similar to CUSUM test, movement outside the critical lines is suggestive of parameter or variance instability. If the cumulative sum of squares is outside the 5% significance lines, it would suggest that the residual variance is somewhat unstable.

**Impulse Response Analysis**

Impulse responses are the changes in the future predicted values due to a change in the current period values. Instead of static interpretation of the effects of changes in any of the variables in the system, Impulse Responses (IR) provide a dynamic response curve that depicts the effects of a change in one of the variables, considering the effects of the other variables in the system. IR analysis is a dynamic multiplier analysis among the variables in the VAR system, measuring how a standard deviation shock to a variable in the system is transmitted to others over time. The IR function can trace the response of the endogenous variables to a shock in another variable. In the present study, the orthogonalized IR analysis is done by changing the order of the equations to see whether any change in the IR function is revealed.

**Findings**

**Time Series Properties of the Variables**

TABLE 2 reports the results of the ADF and PP Tests of unit root by lag length chosen based on SIC. The tests are performed on both the level and the first difference of the lagged variables.
### Table 2: Test of Unit Root Test Hypothesis (1996-97: Q1 – 2009-10: Q2) without trend

<table>
<thead>
<tr>
<th>Series</th>
<th>ADF Statistic</th>
<th>PP Test</th>
<th>KPSS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Test Statistic</td>
<td>Lags</td>
<td>Test Statistic</td>
</tr>
<tr>
<td>LnGDP</td>
<td>Level</td>
<td>0.688338</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>First Difference</td>
<td>-2.765359*</td>
<td>3</td>
</tr>
<tr>
<td>LnSERTRADE</td>
<td>Level</td>
<td>1.333826</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>First Difference</td>
<td>-6.751363***</td>
<td>2</td>
</tr>
</tbody>
</table>

(a) The critical values are those of McKinnon (1991).

1 % ADF-critical values = – 3.571310, 5% ADF-Critical values = – 2.922449, 10% ADF-Critical values = – 2.599224 in case of LnGDP (logarithmic value of Gross Domestic Product) and first difference of LnGDP

1 % ADF-critical values = – 3.568308, 5% ADF-Critical values = – 2.921175, 10% ADF-Critical values = – 2.598551 in case of LnSERTRADE (logarithmic value of services trade) and first difference of LnSERTRAD.

1 % PP-Critical value = – 3.560019, 5% PP-critical value = -2.917650, 10% PP-critical value = – 2.596689 in case of LnGDP and LnSERTRADE

1 % PP-Critical value = – 3.562669, 5% PP-critical value = -2.918778, 10% PP-critical value =– 2.597285 in case of first difference of LnGDP and LnSERTRADE

1 % KPSS – critical values = 0.739, 5% KPSS-Critical values = 0.463, 10% KPSS-Critical values = 0.347 in case of LnGDP and LnSERTRADE and first difference of LnGDP and LnSERTRADE

(b)***, ** and * represents the rejection of null hypothesis at 1%, 5% and 10% levels of significance respectively.
The variables economic growth and services trade are I(1) processes according to ADF, PP and KPSS tests.

**Table 3: Johansen – Juselius Cointegration Test Results [no deterministic trend (restricted constant)]**

<table>
<thead>
<tr>
<th>$H_0$</th>
<th>$H_1$</th>
<th>$\lambda_{\text{trace}}$</th>
<th>$CV_{(\text{trace, }5%)}$</th>
<th>Prob.**</th>
</tr>
</thead>
<tbody>
<tr>
<td>$r = 2$</td>
<td>$r \geq 1$</td>
<td>15.73734</td>
<td>20.26184</td>
<td>0.1870</td>
</tr>
<tr>
<td>$r \leq 1$</td>
<td>$r \geq 2$</td>
<td>5.334333</td>
<td>9.164546</td>
<td>0.2487</td>
</tr>
<tr>
<td>$H_0$</td>
<td>$H_1$</td>
<td>$\lambda_{\text{max}}$</td>
<td>$CV_{(\text{max, }5%)}$</td>
<td>Prob.**</td>
</tr>
<tr>
<td>$r = 0$</td>
<td>$r = 1$</td>
<td>10.40301</td>
<td>15.89210</td>
<td>0.2991</td>
</tr>
<tr>
<td>$\leq$</td>
<td>$r = 2$</td>
<td>5.334333</td>
<td>9.164546</td>
<td>0.2487</td>
</tr>
</tbody>
</table>

(a) $r$ is the number of cointegrating vectors.
(b) Trace test indicates no cointegrating equations at the 5% level of significance.
(c) Max-Eigen value test indicates no cointegrating equation at the 5% level of significance.
(d)** denotes rejection of the null hypothesis at the 5% level of significance.
(e) The critical values (i.e., CVs) are taken from Mackinnon-Haug-Michelis (1999).

**Johansen Cointegration Test**

Johansen Cointegration Test results for the cointegration rank $r$ have been presented in Table 3. Going by the results of the PP Test and the KPSS Test, it has been observed that the variables have the same order of integration, i.e., I(1) and the Johansen Cointegration Test has been employed to find out the cointegration rank and the number of cointegrating vectors. The null hypothesis of $r = 0$ (i.e., there is no cointegration) cannot be rejected against the alternative hypothesis of $r = 1$ at the 5% level of significance in case of the Max-Eigen value statistic. Again the null hypothesis of $r \leq 1$ cannot be rejected against the alternative hypothesis of $r = 2$ at the 5% level of significance in case of Max-Eigen value statistic. Similarly, going by the result of the Trace statistic, the null hypothesis of $r = 0$ cannot be rejected against the alternative hypothesis of $r \geq 1$. Again the null hypothesis of $r \leq 1$ cannot be rejected against the alternative hypothesis of $r \geq 2$ at the 5% level of significance. The results suggest that there is no long-run
relationship among the variables considered for the study.

**Granger-Causality Test**

Although it has been concluded that there is no cointegration between GDP and services trade, it does not mean absence of causality or relationship in the short run. In cases where GDP and services trade do not move together in the long run (i.e., there is no cointegration), it is possible for the variables to affect each other in the short run. The null hypothesis is accepted or rejected based on $F$ statistic to determine the joint significance of the restrictions under the null hypothesis. A unidirectional causality is observed from services trade to economic growth.

**Table 4: Granger Causality Test (Time Period: 1996-97: Q1 to 2009-10:Q2)**

<table>
<thead>
<tr>
<th>Null Hypothesis</th>
<th>Obser</th>
<th>F-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>D(LnSERTRADE) does not Granger Cause D(LnGDP)</td>
<td>49</td>
<td>2.14079</td>
<td>0.0935*</td>
</tr>
<tr>
<td>D(LnGDP) does not Granger cause D(LnSERTRADE)</td>
<td></td>
<td>1.43097</td>
<td>0.2415</td>
</tr>
</tbody>
</table>

*D denotes rejection of the null hypothesis at 10% level of significance.*

**Parameter Stability Tests**

The null hypothesis of parameter stability cannot be rejected at the 5% level of significance as the cumulated sum stays inside the 95% confidence band in case of both CUSUM and CUSUMSQ tests. The CUSUM test indicates stability in the equation during the sample period because the line (blue) lies within the 5% critical lines (Figure 2). The CUSUMSQ test shows that the cumulative sum of the squares is within the 5% significance lines, suggesting that the residual variance is stable (Figure 3).
**Impulse Response Analysis**

The Impulse Response function for the VAR system is calculated in the order – GDP and services trade (Figure 4). The VAR is estimated at the levels of the variables and the optimal lag length is chosen to be 5. Thus, IR functions are computed to give an...
indication of the system’s dynamic behaviour. The response of GDP to a unit shock in services trade is positive and increases over the quarters with a slight fall in the third and seventh quarter. The response of services trade to a unit shock in GDP is positive over the quarters. The Impulse Response Analysis is done by changing the order of the equations to see whether any change in the Impulse Response Function is revealed at the levels of the variables. The results of the impulse response functions are consistent with the t-statistics of the variables in estimated coefficients.

Fig. 4: Impulse Response Analysis of the Variables
B. Statistical Analysis

Table 5: OLS estimates for the time period 1996-97:Q1 to 2014-15:Q2

<table>
<thead>
<tr>
<th></th>
<th>Constant</th>
<th>LnSERTRADE</th>
<th>$R^2$</th>
<th>$R^2$</th>
<th>F Statistic</th>
</tr>
</thead>
<tbody>
<tr>
<td>LnGDP</td>
<td>9.884408</td>
<td>0.314039</td>
<td>0.9319</td>
<td>0.9306</td>
<td>712.3022</td>
</tr>
<tr>
<td></td>
<td>(0.128148)</td>
<td>(0.011767)</td>
<td></td>
<td></td>
<td>(p-value = 0.00001)</td>
</tr>
<tr>
<td></td>
<td>[77.13301]***</td>
<td>[26.68899]***</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*** indicates significant at 1% level.

The results reveal that LnSERTRADE is significant at 1% level in explaining LnGDP. The $R^2$ value (0.9319) measures the goodness of fit of the regression model and the small p value (0.00001) of the F statistic reveals that the regression is significant.

Conclusion

The growth in the service sector is supported by two main factors. Those are technological innovation and increased tradability of services. The role of transnational corporations in this regard is important as FDI is an important channel for capital flows and transfer of technology. There is a beneficial economic effect of investments in services, particularly producer services like finance, distribution and research and development and these services raise economic growth and performance and, when such services are in short supply, all enterprises – both manufacturing and non-manufacturing – will be at a disadvantage.

Service trade plays a crucial role in developing countries where proportionately higher services export are characteristics of high-growth countries while excessive dependency on imported services is characteristic of low growth countries. Effective development planning must include strengthening of both domestic and international service sectors to reduce relative dependency on imported services while providing incentives for services exports. With markets becoming increasingly globalized, comparative
advantage theory loses its significance with respect to trade in services since it is valid only if there is no mobility of factors of production. Services such as telefax, electronic mail, aligned databases and data processing in general must be interconnected with a proper telecommunications infrastructure to be marketed internationally. Development in the telecommunications sector is therefore of utmost importance with respect to trade in services. Development of a good infrastructure with adequate transportation facilities and state of the art telecommunications facilities will not only enhance the country’s attractiveness to foreign investment but will also improve competitiveness of domestic investment. Services trade draws FDI inflows into the country and further liberalisation of FDI and services trade flows could lead to higher growth and further economic development. In contrast, barriers to FDI or restrictions on cross-border services trade by foreign firms, whether motivated by economic, political, social and cultural reasons, could have a direct negative impact on the economic performance and prospects for development of India. Such market interventions would also distort the allocation of capital between foreign and domestic investment. This could result not only in more costly services but also in less consumer choice, lower productivity and perhaps slower technology transfer.

Services liberalization is different from trade in goods because the former necessarily involves factor mobility and leads to scale effects that are distinctive though not unique. Together these can have important positive effects on long run economic growth. It is possible to construct policy-based rather than outcome-based measures of openness for the services sectors that capture these differences. Unlike in trade in goods, where the policy openness measure needs to capture only the openness to foreign supply, in the case of services, policy openness measures must capture both openness towards inward flows of foreign factors and measures that promote domestic competition. There is some econometric evidence that openness in financial and telecommunications
sectors and trade in services in those sectors influence long run growth performance.

References


Organic Farming in Sikkim: A Study into the Socio-Economic Impact of an Unconventional Agricultural Technique

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Abstract

Organic agriculture includes all agricultural systems that promote the environmentally, socially and economically sound production of food and fibers. These systems take local soil fertility as a key to successful production. By respecting the natural capacity of plants, animals and the landscape, it aims to optimise quality in all aspects of agriculture and the environment.

Organic farming is being practiced in almost all the countries of the world for its better socio-economic advantages. With its suitable climatic conditions, Sikkim has adopted the technique of organic farming for more than a decade and it has become a basic source of livelihood for those who belong to the rural areas of the state. The present study revealed that there have been substantial changes in the socio-economic profile of the cultivators after adopting such farming techniques. Increasing demand for and supply of organic products have led to better living standards, infrastructural development, better health, better cohesion among the people within a village or society, etc. In case of the group-based growers, most of the groups were dominated by female participants. This suggests that organic farming can provide an effective means for empowering women by making them economically stronger.

Keywords: Organic farming, socio-economic.
Introduction

The term ‘organic’ is best thought of as referring not to the type of inputs used in agriculture, but to the concept of the farm as an organism, in which all the components — the soil minerals, organic matter, microorganisms, insects, plants, animals and humans — interact to create a coherent, self-regulating and stable whole. Reliance on external inputs, whether chemical or organic, is reduced as far as possible.

Organic agriculture includes all agricultural systems that promote the environmentally, socially and economically sound production of food and fibres. These systems take local soil fertility as a key to successful production. By respecting the natural capacity of plants, animals and the landscape, it aims to optimise quality in all aspects of agriculture and the environment. Organic agriculture dramatically reduces external inputs by refraining from the use of chemo-synthetic fertilisers, pesticides, and pharmaceuticals. Instead it allows the powerful laws of nature to increase both agricultural yields and disease resistance. Organic agriculture adheres to globally accepted principles, which are implemented within local socio-economic, climatic and cultural settings. As a logical consequence, the International Federation of Organic Agriculture Movements (IFOAM) stresses and supports the development of self-supporting systems at local and regional levels. (IFOAM, 2000).

Organic farming is gradually gaining in popularity as a movement across the world. The growing awareness of health and environmental issues in agriculture has led to the demand for production of organic food which is emerging as an attractive source of income generation. (Sukla et al. 2013). It is now being practiced in more than 130 countries with a total area of 30.4 million hectares, about 0.65% of the total agricultural land of the world (Willer et al., 2008). With respect to the area under organic agriculture, Australia occupies the prime position followed by China, Argentina, USA, Italy and many other countries (Willer et al., 2008).
Currently, India ranks 10th among the top ten countries in terms of cultivable land under organic certification. The certified area includes 10% cultivable area with 0.50 million hectares while the remaining 90% (4.71 million hectares) is forest and wild area for collection of minor forest produce. The total area under organic certification is 5.21 million hectares (APEDA, 2013). India produced around 1.34 million metric tonnes of certified organic products which includes all varieties of food products namely sugarcane, cotton, basmati rice, pulses, tea, spices, coffee, oil seeds, fruits and their value added products. The production is not limited to the edible sector but also extends to organic cotton fibres, functional food products etc (APEDA, 2013). Among all the states, Madhya Pradesh has the largest area under organic certification followed by Rajasthan and Uttar Pradesh. In terms of area Madhya Pradesh has highest area under organic farming (1.1 mha or 52%), Maharashtra is second (0.96 mha or 33.6%) and Orissa ranks third (0.67 mha or 9.7%) while Uttrakhand and Sikkim are organic States.

The state of Sikkim is now moving towards the organic mission by producing such crops with high demand in both domestic as well as foreign markets, such as cardamom, ginger, oranges, medicinal plants, etc. As of 2010 almost 60% of the total cultivable land had been brought under organic farming. The total area under organic certification in case of Sikkim was 1,391.04 hectares. The total area under certified organic cultivation in the state was 1,726.34 hectares while the total organic production was 5174.44 tonnes (Yadav 2012). The contribution of the agricultural sector to the state gross domestic product (SGDP) was 7.4 per cent (CSO, 2012-2013). The Government of Sikkim has already set up a broad target of making the state largely organic by 2015. The cultivators have been encouraged to use bio-fertilisers for their farming activities. The practitioners are mostly supported by the government through the provision of different kinds of training relating to farming practices along with the provision of costly input materials for free for almost all the practitioners at the initial level.
Review of Literature

It would be relevant to consider some of the recent literature in this area.

Van Mansvelt et al. (1993) argue that the potentials of organic types of agriculture make them valuable options for a sustainable agriculture and rural development. This obvious connection between organic farming and sustainable rural development has been progressively acknowledged. Author found that for sustainable livelihood organic farming would be the best option and consider way to adopt for rural development.

Pugliese (2001) explains the spreading of organic farming methods and initiatives of sustainable rural development are both crucial processes underway in many agricultural areas. It is suggested that organic farming systems can effectively contribute the basic aspects of sustainable rural development, i.e. innovation, conservation, participation, and integration.

Reddy (2010) has been argued that Organic agriculture has been neglected in the agricultural policy, and therefore there is less government assistance for the promotion of organic agriculture, as it exists for the conventional agriculture in the form of subsidies, agricultural extension services and official research. He mention that by Giving proper encouragement, organic farming will progress tremendously in India, especially in the dry land regions of the country, taking advantage of the diverse soil and climatic conditions.

Datta and Sing (2011) have worked on the issue of the recent evolution of the concept of livelihood diversification in developing countries in general and India in particular. They have found that the diversification is basically governed by the extent of alternative non-farm opportunity in the neighbourhood, socio-economic features of villages, and their access to credit, assets and government benefit schemes.
Siddaraju and Indira (2013) contributed the study where they have tried to highlight economic performance of organic and modern agriculture. They found that the performance of organic agriculture was more economically profitable comparing with the modern agricultural system and the income generated from organic agriculture is greater than that of modern agriculture.

Pandey and Singh (2012) have worked on issues related to organic farming of the Indian agriculture sector and they found that, the growth of such type of farming is relatively slower. Despite of this there are a number of constrain has been seen especially to small farm holder adopting organic farming. The non availability of sufficient amount of organic supplements, bio fertilizers and local market for organic produce could be considers as the main constraints of organic farming in India.

Archana (2013) has carried out the study on the role of Indian Government for the development of organic agriculture. The author argued that, for enhancing organic agriculture government interference is much needed in Indian Agricultural sector particularly in organic farming. By providing more subsidies and providing knowledge based on adverse effects of chemical based agriculture sector, organic agriculture can be encouraged.

**Statement of the Problem**

Despite of the economic boom in the last few decades, India is also witnessing some important and interrelated issues in the agriculture sector such as improving food production in the face of continuously shrinking land resources, rapid degradation of land, size of land holdings and water resources and environmental and health related issues. The growth of organic farming in India is relatively slower and there are a number of constraints impeding Indian farmers – especially small farm holders – from adopting organic farming.

As of 2010 almost 60% of the total cultivable land of Sikkim had been brought under organic farming. The total area under organic
certification in Sikkim was 1,391.04 hectares. The total area under certified organic cultivation in the state was 1,726.34 hectares while the total organic production was 5,174.44 tonnes (Yadav 2012). The contribution of the agricultural sector to the state gross domestic product (SGDP) was 7.4 per cent (CSO, 2012-2013).

The non-availability of sufficient amount of organic supplements, bio-fertilisers and a local market for organic produce, lack of access to guidelines and size of land holding could be considered as the main constraints for the growth and development of organic farming in the state. Additionally low participation of the total workforce in such farming practices, better alternatives as employment opportunities, difficult geographical area and insufficient infrastructure facilities for promoting or enhancing organic products, can also be mentioned as discouraging factors in this regard.

**Objectives of the Study**

1. To analyse whether organic farming provides a means for a sustainable livelihood.
2. To investigate whether the facilities provided by the government for organic farming are being utilised effectively by the people of Sikkim.
3. To examine whether the community based organic farming is enhancing the socio-economic status of cultivators as well as the status of women in Sikkim.

**Database and Methodology**

The study was carried out in different villages across the four districts of Sikkim. Respondents were chosen on the basis of both multistage and convenience sampling. The procedure of multistage sampling involves several stages like first stage unit, second state unit, and third stage unit and so on, until we reach the ultimate units. After selecting the ultimate stage units the samples from these units were collected on the basis of both convenience
as well as purposive sampling (for conducting the household survey). The preferred sample size consists of 30 respondents each in two different villages spread across the four districts of Sikkim and hence the total estimated sample size is around 260.

The analytical tools which have been used for the study consist of the following:

(i) Gini-Coefficient

The Gini Coefficient, which is used for measuring income inequality, is determined as follows:

\[ G = \frac{1}{n^2 \mu} \sum \sum (x_i - x_j) f_i f_j \quad x_i > x_j \]

In case of a set of \( n \) values of \( X \) say \( x_1, x_2, x_3, \ldots, x_n \) with frequencies \( f_1, f_2, f_3, \ldots, f_n \), where, \( \mu \) is the mean of the \( X \) values and \( x_1, x_2, \ldots, x_n \) are the per capita incomes of the respondents with the corresponding frequencies \( f_1, f_2, \ldots, f_n \) of the distribution.

(ii) Hirchman-Herfindahl (HH) Index

\[ HH_i = \alpha_0 + \alpha_1 (WM)_i + \alpha_2 (AAGF)_i + \alpha_3 (EDN)_i + \varepsilon_i \]

Where \( HH_i \) represent Herfindahl-Hirschman Index for Livelihood Diversification, \( WM_i \), \( AAGF_i \) and \( EDN_i \) are number of working members, average age and educational qualification of the individual household respectively.

(iii) Ordinary Least Squares Method

\[ PCI_i = \beta_1 + \beta_2 (EDN)_i + \beta_3 (EXPR)_i + \beta_4 (UGF)_i + \alpha_1 D_i + u_i \]

Where \( PCI_i \) denotes per-capita income of the respondent, \( EDN_i \) is average educational qualification of the family, \(EXPR_i\) represents total year of experience in particular occupation of the household, \( D_i \) is dummy in case of group based as well as individual growers. Where \( D_i = 1 \) for utilisation of government facilities for both individual and group-based growers and \( D_i = 0 \) for non-utilisation of government facilities, \( u_i \) is the stochastic disturbance term, and the suffix \( i \) refer to the \( i \)th observation.
(iv) Standard Normal Test Statistic (z Test)

This is proposed to be utilised for investigating the economic conditions of those participating in group based organic farming activities before and after joining the group. In this connection, aspects like utilisation of bank loans, households saving, etc. has been taken into consideration.

Result and Discussion

**Table 1: Descriptive Statistics of the Study (individual cultivators)**

<table>
<thead>
<tr>
<th>District</th>
<th>Total household surveyed</th>
<th>Average family size</th>
<th>Average age of the workers</th>
<th>Average Education level of the workers</th>
<th>Percentage share of farm to total income</th>
<th>Percentage share of no-farm activities to total income</th>
</tr>
</thead>
<tbody>
<tr>
<td>East</td>
<td>60</td>
<td>4.86</td>
<td>40.10</td>
<td>8.02</td>
<td>29.51</td>
<td>70.49</td>
</tr>
<tr>
<td>West</td>
<td>60</td>
<td>5.00</td>
<td>39.95</td>
<td>8.27</td>
<td>34.54</td>
<td>65.46</td>
</tr>
<tr>
<td>North</td>
<td>60</td>
<td>4.01</td>
<td>42.45</td>
<td>6.27</td>
<td>40.68</td>
<td>59.32</td>
</tr>
<tr>
<td>South</td>
<td>60</td>
<td>4.54</td>
<td>37.42</td>
<td>6.31</td>
<td>42.29</td>
<td>57.71</td>
</tr>
</tbody>
</table>

Source: Author’s Calculation

**Table 2: Descriptive Variables of the Study (group-based cultivators)**

<table>
<thead>
<tr>
<th>District</th>
<th>Total group surveyed</th>
<th>Average age of the member</th>
<th>Average Per-capita income</th>
<th>Average educational qualification</th>
<th>Percentage of female members</th>
<th>Percentage of male members</th>
</tr>
</thead>
<tbody>
<tr>
<td>East</td>
<td>4</td>
<td>39.80</td>
<td>8333.33</td>
<td>7.55</td>
<td>79.16</td>
<td>20.84</td>
</tr>
<tr>
<td>West</td>
<td>1</td>
<td>42.55</td>
<td>5500.00</td>
<td>3.36</td>
<td>100</td>
<td>000</td>
</tr>
<tr>
<td>North</td>
<td>1</td>
<td>40.43</td>
<td>7500.00</td>
<td>2.33</td>
<td>000</td>
<td>100</td>
</tr>
<tr>
<td>South</td>
<td>1</td>
<td>44.60</td>
<td>7272.72</td>
<td>6.81</td>
<td>000</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Author’s Calculation

From the above table 1, it is clear that the percentage share of non-farm activities to total income of the households remain higher than that of the share of farm activities for all the four districts of Sikkim. In case of East district, the share of non-farm activities is
much higher than farm activities, with the values being 70.49 and 29.51 respectively.

Again, from the table 2, we can conclude that in case of the group-based organic cultivators, most of the groups are dominated by female participants; alternatively it may be that the female members are much more interested in carrying out these kinds of activities. In case of the East district, most of the women participants who were part of this study were leading their groups and became more successful through organic farming.

**Results and Analysis of Socio-Economic Conditions of the Respondents of the Study in terms of Gini-Coefficient**

<table>
<thead>
<tr>
<th>District</th>
<th>Gini-Coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>East District</td>
<td>0.143</td>
</tr>
<tr>
<td>West District</td>
<td>0.177</td>
</tr>
<tr>
<td>North District</td>
<td>0.178</td>
</tr>
<tr>
<td>South District</td>
<td>0.158</td>
</tr>
</tbody>
</table>

It would be pertinent to examine the extent of income homogeneity among the respondents, as it can be reasonably assumed that those coming from similar socio-economic backgrounds will harbour similar sentiments towards organic farming. The Gini coefficient is the most appropriate tool for measuring income inequality. In the present case the Gini coefficient has been used to evaluate the extent of income inequality among the respondents from the different districts of Sikkim. Table 3 reflects the value of Gini Coefficient of income inequality (G) among the respondents from the four districts of Sikkim. A consideration of the value of G makes it clear that in terms of the income inequality the four districts are quite similar to each other; this implies there is no such strong income inequality between them. Furthermore, careful observation of the value of G reveals that the income inequality is comparatively higher in the West and North districts of Sikkim.

Results and Analysis of study of the group-based organic farming
activities using the Standard Normal Test Statistic.

**Analysis of the Change in Family Income of the Respondents**

Let the null hypothesis be that there is no significance difference in the average family income of the respondent before and after joining the group, so that the alternative hypothesis is that the mean family income of the respondent before joining the group is lower than that after joining the group. This can be symbolically represented as.

\[ H_0: \mu_1 = \mu_2 \text{ against alternative, i.e., } H_1: \mu_1' < \mu_2' \]

<table>
<thead>
<tr>
<th>Particulars</th>
<th>Before joining</th>
<th>After joining</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean (in ₹)</td>
<td>3624.324</td>
<td>7371.622</td>
</tr>
<tr>
<td>Standard Deviation (in ₹)</td>
<td>2897.557</td>
<td>5083.59</td>
</tr>
<tr>
<td>Sample size</td>
<td>74</td>
<td>74</td>
</tr>
</tbody>
</table>

Source: Author’s Calculation

The above table 4, the calculated value of \(|Z| = 5.509\) is greater than critical value of 1.64 at 5 % level of significance. Hence the null hypothesis is rejected. Thus we can conclude that there is a significant difference in the family income before and after joining the group. This also indicates that the mean income of the respondent has increased after joining the group. This could be because of proper utilisation of available resources like governmental facilities (financial assistance, training or workshop, high quality seeds, bio-fertilisers, vermi compost, polyhouse, etc), homemade manure or compost; especially cow dung/urine, and other low cost inputs, which lead to better productivity in quantity as well as quality.

**Analysis of the Change in Bank Savings of the Respondents**
Let the null hypothesis be that there is no significance difference between bank savings of the respondent before and after joining the group, with the alternative hypothesis being that the mean savings of the respondent before joining the group is less compared to the mean savings after joining the group. The symbolic representation would be

\[ H_0 : \mu_1 = \mu_2 \text{ against alternative, i.e., } H_1 : \mu_3 < \mu_4 \]

**Table 5: Calculation for Mean and Standard Deviation of the Respondent**

<table>
<thead>
<tr>
<th>Particulars</th>
<th>Before joining</th>
<th>After joining</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean (in ₹)</td>
<td>445.9459</td>
<td>2247.297</td>
</tr>
<tr>
<td>Standard Deviation (in ₹)</td>
<td>752.0181</td>
<td>1662.497</td>
</tr>
<tr>
<td>Sample size</td>
<td>74</td>
<td>74</td>
</tr>
</tbody>
</table>

Source: Author’s Calculation

Since the calculated value of \(|Z| = 8.492\) is greater than the tabulated value of 1.64 at 5 % level of significance, the null hypothesis is rejected. This means that there is significance difference in the savings and also suggests that the mean savings of the respondents has increased after joining the group. The savings of the members can be attributed to better banking facilities.

Results and Analysis of the Livelihood Diversification through HH Index.

Securing the basic necessities of life and the capacity to acquire those necessities by working either individually or as a group while exploring different avenues for earning can lead livelihood to diversify. To analyse the issue of livelihood diversification, we categorise the households into two broad categories, viz. – (i) households that are completely dependent on farming and (ii) households that adopt both farm and non-farm activities.

To examine these, let us first consider the following table.
Table 6: Percentage of Household Engaged on Farm and Non-Farm Activity

<table>
<thead>
<tr>
<th>Name of the Sample Districts of Sikkim</th>
<th>East District</th>
<th>West District</th>
<th>North District</th>
<th>South District</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percentage of households engaged on only farming activity</td>
<td>10</td>
<td>30</td>
<td>24</td>
<td>12</td>
</tr>
<tr>
<td>Percentage of households engaged on farming and one more occupation</td>
<td>56</td>
<td>36</td>
<td>60</td>
<td>58</td>
</tr>
<tr>
<td>Percentage of households engaged on farming and two more occupation</td>
<td>24</td>
<td>28</td>
<td>14</td>
<td>22</td>
</tr>
<tr>
<td>Percentage of households engaged on farming and three more occupation</td>
<td>10</td>
<td>6</td>
<td>2</td>
<td>8</td>
</tr>
</tbody>
</table>

From table 6, we can conclude that, farming is considered as the primary source of livelihood because almost all the households are engaged in farming activities. However a substantial dependence on non-farm activities is still evident. About 80%, 70%, 76%, and 88 % of the sample households of East, West, North and South district are dependent on non-farm activities. This implies that the income generated from farming is insufficient for fulfilling the increasing necessities of the people of Sikkim.

Let us now consider the following model for studying the impact of different explanatory variables on livelihood diversification through OLS.

\[ HH_i = \alpha_0 + \alpha_1 (WM)_i + \alpha_2 (AAGF)_i + \alpha_3 (EDN)_i + \varepsilon_i \]
Table 7: Livelihood Diversification – Regression Results

<table>
<thead>
<tr>
<th>Explanatory Variables</th>
<th>Estimated Coefficient (Marginal Effects)</th>
</tr>
</thead>
<tbody>
<tr>
<td>WM</td>
<td>0.120** (2.05)</td>
</tr>
<tr>
<td>EXPR</td>
<td>0.003 (0.54)</td>
</tr>
<tr>
<td>EDN</td>
<td>0.005 (0.02)</td>
</tr>
<tr>
<td>CONS</td>
<td>1.140*** (6.60)</td>
</tr>
<tr>
<td>Observations</td>
<td>240</td>
</tr>
<tr>
<td>R-Squared</td>
<td>0.030</td>
</tr>
<tr>
<td>Adjusted R-Squared</td>
<td>0.122</td>
</tr>
<tr>
<td>F-Statistics</td>
<td>1.820</td>
</tr>
<tr>
<td>P-Value</td>
<td>0.145</td>
</tr>
</tbody>
</table>

Note: ***, ** and * indicates the significance at 1%, 5% and 10% level respectively. Figures within the brackets represents the t-statistics.

The above estimated coefficient result from above equation suggests that all variables except WM (working member) are found to be insignificant. The coefficient is positive; about 27% variation of dependent variable (HH) is explained by independent variable (WM). This implies that the increase in the number of working members leads to greater livelihood diversification. It seems 1 unit change in working variable leads to 27 units change in livelihood diversification. It also implies that, the greater the number of working family members the greater would be the diversification. This could be due to the fact that members of the same household engage in different activities in search of better earnings or better alternative source of earning. Factors like urbanisation, development of infrastructure, transport facilities and communications, growth in employment opportunities, etc, or change in governmental policies may also have further encouraged such livelihood diversification.
Results and Analysis of the Effect of the Diverse Variables on the Household Diversification Indices through Multiple Regression Analysis

With a view to examining the effects of variables like educational qualifications, experience and utilisation of government facilities on the per capita income (PCI) of both individual growers and group based growers; we have employed the following model;

\[ PCI_i = \beta_1 + \beta_2 (EDN)_i + \beta_3 (EXPR)_i + \beta_4 (UGF)_i \times D_i + u_i \]

Table 8: Results of OLS method on the Impact of Different Explanatory Variables for increasing Per Capita Income

<table>
<thead>
<tr>
<th>Explanatory variables</th>
<th>Estimated Coefficients</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Combined</td>
</tr>
<tr>
<td>EDN</td>
<td>548.683*** (10.13)</td>
</tr>
<tr>
<td>EXPR</td>
<td>193.652** (2.06)</td>
</tr>
<tr>
<td>UGF</td>
<td>23.778 (0.31)</td>
</tr>
<tr>
<td>D_i</td>
<td>4906.98** (10.97)</td>
</tr>
<tr>
<td>CONS</td>
<td>-1632.470** (-2.38)</td>
</tr>
</tbody>
</table>

Observations 240 60 60 60 60
R-Squared 0.4789 0.4393 0.1002 0.3437 0.0768
F – Statistics 61.59 11.752 1.671 7.856 1.248
P – value 0.0000*** 0.0000*** 0.1866 0.0002*** 0.303

Note: ***, ** and * indicates the significance at 1%, 5% and 10% level respectively. Figures within the brackets represents the t-statistics.

Source: Author’s Calculation.

The estimated coefficients from above equation for Sikkim as a whole are shown in column 1 of Table 8, while in case of the
four districts, the estimated coefficients from the same equation are shown in column 2, 3, 4 and 5. In order to examine linear relationship through ordinary least square method, we have considered per capita income (PCI) as a dependent variable and educational qualification (EDN), experiences and utilisation of government facilities (UGF) as independent variables. Apart from this, we have introduced the dummy variable ($D_i$) for utilisation of government facilities for both the individual as well as group-based cultivators. Where $D_i = 1$ for utilisation of government facilities group-based growers and $D_i = 0$ for individual cultivators. From the value of dummy variable ($D_i$) it is clear that, the utilisation of government facilities (UGF) is found to be significant at 5% level of significance. Furthermore, we can conclude that increase in the government facilities leads to increase in per-capita income of the respondents and from the value of intercept, – 1632.470, it is clear that the mean per capita income of the individual growers is less than that of group based growers by 3274.14.

The value of the estimated coefficients for educational qualifications and experiences in case of respondents from the combined sample are found to be statistically significant at 1 % and 5 % level of significance. This implies that the higher the level of education and greater will be the chance of increasing per capita income of the household. The years of experience also has the same impact on the per capita income of the respondents. Further, in case of all the sampled districts except North and East, the impact of these two variables (EDN and EXPR) is found to be insignificant.

For district wise comparison, the utilisation of governmental facilities is found to be significant at 10 % in case of the East district and highly significant at 1 % level of significance in North district, which means that optimum utilisation of facilities leads to a rise in the per capita income of the respondents.

**Concluding Observations**

The foregoing study reveals that the percentage share of non-farm
activities to total income of the households remain higher than that of share of farm activities for all the four districts of Sikkim and in case of East district, the share of non-farm activities is much more higher than farm activities. This may be due to better alternative employment opportunities and since east district is consider to being one of urbanised district among other three district of the state. Most of the government offices, schools, hospitals, hotels/resort, business organisation, and other private sector institution are located in the district itself. After considering the group-based organic cultivators, most of the groups are dominated by female participant or we can say that the female members are much more interested to perform community based organic farming.

The study revealed that there are substantial changes in socio-economic profile of the cultivators after adopting such type of farming technique. As we have witnessed the increasing demand and supply of organic product consequently witnessing the better living standard, infrastructural development, better health, better cohesion among the people within a village or society, etc. while considering the group-based growers, most of the group was dominated by female participant, which suggest that organic farming can be one of the basic way for empowering the women by making them economically stronger.

As from the result of ordinary least square, with an increase in educational qualification, experiences and government facilities on organic farming, the per capita income of the respondent has been increasing significantly. By promoting these types of variable, in near future, we may witness the better socio-economic condition of the people of Sikkim.

The study was mostly carried out in rural areas of the four district of Sikkim, where we have found that after introducing such farming by the government in 2003, not only the farm activities has improved but there is growth and development of other non-farm activities. This may be due to consequences of different
governmental policies on organic farming. By promoting organic farming in Sikkim not only the agricultural sector but the entire economic sector would be benefited and it would have direct impact on improving socio-economic condition of the people in general and farming class at the particular.

**Policy Prescription**

Government support is necessary for those who are unable to access the basic requirement to promote organic cultivation in Sikkim, which there should be a proper distribution of government facilities among the organic cultivators, so that they can improve their quality as well as quantity of their organic production as consequences there is a chance for extending of organic marketing within a state or abroad.

The basic governmental facilities is needed to the local cultivators, like increasing the level of education, that would be possible only by increasing number of school, colleges and establishing professional institution, especially agricultural institution, and increasing number of seats in private institution for the local students, providing scholarship and other educational scheme.

Most of the cultivators were finding difficulties to sell their organic products, it is due to lack of availability of local market, and so more attention is needed in this regard. Government should provide more space for organic products than that of in organic products importing other places.

The study suggested that, the concept of organic should be clearly define to every individual, households, society of the state, so that the more preference will be giving than that of inorganic products. By doing so the market structure for agricultural product; particularly for organic product would increase in near coming future. Further, export of inorganic product from other part of India will decline and it would be benefited not only to producer but also the consumer and it may help the government to make
Sikkim as a fully organic state.

The government should motivate the cultivators who are already following an organic technique, by giving regular training, demonstration and providing proper inputs, so that they can increase the quality as well as quantity of the production. The state government should also be more flexible to promote or invite all the organisation as well group-based growers by providing more inputs required in farming, financial assistance, market facilities, etc.

The proper road connection or transport facilities are needed for both organic producer as well as consumer of the state. These would help the producer to get proper value for their produce and at the same time consumer will gets fresh farm product at cost effective price. To achieve this, government should be more conscious and should focus on rural areas having lack of roads facilities.

References


As Women and As Dalit: A Dalit Feminist Perspective

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*Dept of Philosophy & Religion, Visva Bharati, Santiniketan.

Abstract

In the total context of the country the status of the Dalit women was and still is the worst compared to others. A suffocating patriarchal shadow hangs over the lives of women throughout India. From all sections, castes and classes of society, women are victim of its repressive, controlling effects. Those subjected to the heaviest burden of discrimination are from the Dalit or “Scheduled Castes”, known in less liberal democratic times as the “Untouchables”. The name may have been banned but pervasive negative attitudes of mind remain, as do the extreme levels of abuse and servitude experienced by Dalit women. They experience multiple levels of discrimination and exploitation, much of which is barbaric, degrading, appallingly violent and totally inhumane. The divisive caste system – in operation throughout India, “Old” and “New” – together with inequitable gender attitudes, sits at the heart of the wide-ranging human rights abuses experienced by Dalit or “outcaste” women. Indian feminism failed in studying women in the light of caste and it could be called exclusivist feminism.

The Paper argue on how Dalit women, ignored by mainstream feminism – which they claimed focussed usually on urban issues, and took up the occasional high profile dalit rape case as a token – started the dalit feminist movement in the 1990s. This paper sets out to explore the significance of Dalit gender and its construction. An attempt is made in this paper to study the evolution of Dalit gender as a separate entity that demands its own autonomy in terms of literature, culture and political domains. The paper also explore Ambedkar’s ideology as the right solution for the emancipation of women in the Indian context.

Key words: Dalit Women, Dalit feminism, Gender, Construction, Ideology
Introduction:

The terms “sex”, “gender” and “feminism” need to be qualified to understand them in the present context. Sex refers to the biological aspect; gender indicates the culture of sociological and political dominance over women; feminism, as a theory questions the gender dominance based on sex. Subordination of women had been fundamentally justified on the grounds of the biological differences between men and women. The subordination of women needs to be theorized for it helps in challenging, subverting and expending not only other (male) theories but its own positions and agenda. In the West, feminism undoubtedly played a liberating role for women, feminism evolved from women’s own struggles against oppressive power structures which excluded them from equal participation in many aspects of the economic, social and political life of their society. The Western feminist theory questioned the dominance of gender. Indian feminist critics like Kamla Bhasin and Nishat Said Khan opine that feminism is based on historically and culturally concentrate realities and levels of consciousness, perceptions and action. In India, new opportunities were made available for a small number of western educated women who gravitated towards feminism. Indian feminism is Western imported and failed in studying the sociological problems that come across sex and gender dominance. Indian feminism failed in studying women in the light of caste and it could be called exclusivist feminism. Dalit women have the right to be seen as subjects and not as objects, which played an active role for the betterment of not only their family but also for their whole community. Their voices have been muted and kept in silence. Hence need arise to articulate their vision and build their own praxis and theory. Therefore, it was required to have a development of Dalit feminist theory and to define this state of being through Dalit female language.

Method:

Secondary data collected from Government documents,
newspapers, published papers, books and speeches delivered by Dr. Ambedkar in Parliament, various conferences and meetings in pre and post independent India.

**Status of Dalit Women:**

The reality of Dalit women and girls is one of exclusion and marginalization. They are often victims of civil, political, economic, social and cultural rights violations, including sexual abuse and violence. They are often displaced; pushed into forced and/or bonded labour, prostitution and trafficking. They are often trapped in highly patriarchal societies. The severe discrimination they face from being both a Dalit and a woman, makes them a key target of violence and systematically denies them choices and freedoms in all spheres of life. This endemic intersection of gender-and-caste discrimination is the outcome of severely imbalanced social, economic and political power equations. Dalit women suffer from severe limitations in access to justice and there is widespread impunity in cases where the perpetrator is a member of a dominant caste, above the Dalits in the caste system. Dalit women are therefore considered easy targets for sexual violence and other crimes, because the perpetrators almost always get away with it. For example, in India, studies show that the conviction rate for rapes against Dalit women is under 2% compared to a conviction rate of 25% in rape cases against all women in India. Sanctioned impunity on behalf of the offenders is a key problem. Police often neglect or deny the Dalit women of their right to seek legal and judicial aid. In many cases, the judiciary fails to enforce the laws that protect Dalit women from discrimination.

Caste and gender discrimination in the delivery of education health care, water, sanitation and other basic services are also major obstacles for Dalit women severely impacting on their welfare and opportunities. This discrimination has been documented repeatedly by UN agencies and major international human rights and development NGOS.
Dalit women often work in modern slavery and are key targets for trafficking. They are often used as debt slaves in brick kilns, garment industries and agriculture. 98% of those forced into the dehumanising work of manual scavenging, removing human waste by hand, are also Dalit women. Dalit women may also be born into temple prostitution as ‘Devadasis’ (sex slaves) in India or be branded prostitutes in Nepal due to their caste status.

During last 4 decades, women from marginalized sections, Dalit & tribal, workers and agricultural labourers, poor women in urban and rural areas have mobilised against violence against women in the community and in the family, witch-hunting of female headed households, mass rape of tribal and dalit women, dowry murders and alcoholism. The members of new women’s groups believe in fight against all forms of sexual oppression and consider women as an oppressed sex. They believe, like casteism and communalism, sexism is also one of the most effective weapons utilized by the ruling class to divide masses. Hence, they believe in fighting against caste system, religious chauvinism and sexism simultaneously.

**Babasaheb Ambedkar and Dalit Feminism:**

Sharmila Rege, director, Krantijyoti Savitribai Phule Women's Studies Centre at Pune University and a leading feminist sociologist, said during the 6th Ambedkar Memorial Lecture she delivered at the Tata Institute of Social Science (TISS), ‘a thriving corpus of literature and music pertaining to Babasaheb Ambedkar’s thought has been integral to the Ambedkarite or Dalit movement in Maharashtra. “Dalit feminism” has drawn copiously from this pool. However, feminist discourse at large has remained ignorant of the rich and complex interpretations of caste and gender as conceptualized by the architect of the Constitution’.

“There is urgency for feminist discourse to turn to Ambedkar. A category of women undifferentiated by caste does not exist for feminists to mobilize. Now the pressure is not to talk about
gender in isolation, but to include class, caste and other factors. Therefore, there is a need to reclaim Dr. Ambedkar’s writings as feminist classics,” she said.

Ms. Rege said though feminist academics had been late in turning to Ambedkar, a culture of booklets and music of Dalit movement has had a much longer history.

The inseparability of caste and gender in Dr. Ambedkar’s conceptualization and his interpretations of history and the place and role of marriage in social construction of graded inequality, provided an important understanding of the issue of women’s emancipation in the Indian context. “As Ambedkar said, Caste is endogamy and endogamy is caste. He also brought out how the origin and reproduction of caste rested on gendered violence.”

Giving a real-life example in recent times, Dr. Rege referred to a Brahmin Parishad held in Pune last year. It passed a resolution to marry within the caste in “nation interest.”

The Hindu Code Bill, as conceived by Dr. Ambedkar, and the intense opposition to it also offered a great deal of insight into the governing forces and ideas at play in the wake of struggles for women’s emancipation.

Dr. Rege pointed to a political design of belittling Dr. Ambedkar’s scholarship as a historian, by terming him a political leader and avoiding any reference to his theories in academics, even though later sociologists had arrived at similar conclusions. “I have learnt about Ambedkar not through academics, but by my interactions with the Phule-Ambedkarites,” she said.

The operations of caste both at the systemic level and at the functioning of patriarchy, the growing caste / class divide in feminist political discourse makes Ambedkar’s view on women’s oppression, social democracy, caste and Hindu
social order and philosophy, significant to modern Indian feminist thinking. Although Ambedkar proved, himself to be a genius and was known as a great thinker, philosopher, revolutionary, jurist – par excellence, prolific writer, social activist and critic and strode like a colossus in the Indian sociopolitical scene unto his death, his thoughts never received adequate attention in the generality of Indian society just because he was born as an untouchable. However, the contemporary social realities warrant close examination of the wide range of his topics, the width of his vision, the depth of his analysis, and the rationality of his outlook and there essential humanity of his suggestions for practical action. Hence, for Indian women’s movement Ambedkar provides a powerful source of inspiration to formulate a feminist political agenda which simultaneously addresses the issues of class, caste and gender in the contemporary sociopolitical set up, which still keeps conservative and reactionary values in many respects, particularly on gender relations. The writings and Speeches of Ambedkar show what values India should develop and how they would modernize its social and political institutions. Ambedkar saw women as the victims of the oppressive, caste- based and rigid hierarchical social system.

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The writings and Speeches of Ambedkar show what values India should develop and how they would modernize its social and political institutions. Ambedkar saw women as the victims of the oppressive, caste- based and rigid hierarchical social system.

Dr. Ambedkar tried an adequate inclusion of women’s right in the political vocabulary and constitution of India i.e

Article 14 Equal rights and opportunities in political, economic and social spheres.

Article 15 prohibits discrimination on the ground of sex.

Article 15(3) enables affirmative discrimination in favour of women.

Article 39 Equal means of livelihood and equal pay for equal work.

Article 42 Human conditions of work and maternity relief.

Article 51 (A) (C) Fundamental duties to renounce practices, derogatory to the dignity of women.

Article 46 The state to promote with special care, the educational and economic interests of weaker section of people and to protect them from social injustice and all forms of exploitation.
Article 47 The state to raise the level of nutrition and standard of living of its people and the improvement of public health and soon.


B.R. Ambedkar constructed his theory based on the teachings of Buddha, Kabir and Phule. He identified caste and patriarchy as the twin forces that arrest the progression of Dalit women. The contribution of Ambedkar in educating Dalit women is unforgettable. Ambedkar dealt with the human relations on one hand and highlighted the need for co-ordination between male and female: Dr. Ambedkar the determined fighter and a deep scholar has made significant efforts to lead the society on the path of Liberty, Equality and Fraternity. He was first Indian to break down the barriers in the way of advancement of women in India.

Conclusion:

In the total context of the country the status of the Dalit women was and still is the worst compared to others. Thus, even among women, she is perceived as ‘Other’. She belongs to the ‘lowest’ category manifested in her condition of social, physical, economic, and political vulnerability. Professor Gopal Guru in “Theoretical Brahmin and Empirical Shudra” said: “This exclusion of Dalit women from the mainstream women’s movement is not such a bad thing after all: it has caused them to start building their own praxis, identity, and agency”. (Basu 145) Dalit women were actively participating in the Ambedkar led movement in the pre independence period. Today we see no protests against the so-called 30% reservations for women in the local self government which further denies the possibility of dalit women getting any representation. This universalistic vision can be realized only with the analytical tools that Dalit feminisms provide with. They aim at actively participating in eradicating all
forms of violence, intolerance, hierarchy and discrimination in the society. An effective way of achieving this ideal is to take “difference” seriously and engage with the politics of difference. At the end I appeal to young Dalit women not to get subsumed in the relatively macro-identities of mainstream progressive movements such as the male Dalit movement or the upper-caste feminist movement. It is only by retaining our unique voice within these movements that we can contribute meaningfully to these movements and benefit from them. Giving ourselves a separate space does not mean we want a complete break with these movements.

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Violence against Women in India: An Enquiry into Domestic Violence, Cruelty, Rape and Other Traditional Practices.

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Abstract

The problem of violence against women is a worldwide phenomenon. The issue needs serious attention. Violence against women can be referred to as an act that is primarily committed against them mainly because they are women. It is taking place in different forms, like cruelty, murder, rape, child marriage, domestic violence, female genital mutilation, etc. The paper limits itself to understanding the nature of violence against women, its types and causes. It also examines the incidents of rape, domestic violence and some traditional practices of abuse against them and tries to answer to what extent the legal system is accessible to them and what could be done to overcome such a complex problem in our country.

Keywords: Violence, Cruelty, Empowerment

Introduction

The UN Declaration on the Elimination of Violence against Women states, “Violence against women is a manifestation of historically unequal power relations between men and women.”
The violence against women is one of the crucial social plight by which women are forced into a position which is subordinate to than of men (Declaration on the Elimination of Violence against Women, n.d.). The Council of European Convention on Preventing and Combating Violence against Women and Domestic Violence, also known as the Istanbul Convention, provides the following definition of violence against women: “violence against women is understood as a violation of rights and a form of discrimination against women and shall mean all acts of gender-based violence that result in, or are likely to result in, physical, sexual, psychological or economic harm or suffering to women, including threats of such acts, coercion or arbitrary deprivation of liberty, whether occurring in public or in private life” (Convention on Preventing and Combating Violence against Women and Domestic Violence, n.d.). Although the 1979 Convention on the Elimination of All Forms of Discrimination against Women (CEDAW) includes in its General Recommendations 12 and 19, and the Vienna Declaration and Programme of Action mentions at paragraph 18, it was the 1993 United Nations General Assembly Resolution on the Declaration on the Elimination of Violence against Women which became the first international instrument to explicitly define this subject. Other definitions on this subject are provided by the 1994 Inter-American Convention on the Prevention, Punishment, and Eradication of Violence against Women and by the 2003 Mapatu Protocol (Maputu Protocol, n.d., Convention on the Elimination of All Forms of Discrimination Against Women, n.d., Vienna Declaration and Programme of Action, n.d.) . In addition, the term gender-based violence refers to any acts or threats of acts intended to hurt or make women suffer physically, sexually or psychologically, and which affect women because they are women or affect women disproportionately. The definition of gender-based violence is most often used interchangeably with violence against women», moreover, the definition stated by the 1993 Declaration on the Elimination of Violence against Women also supports the
notion that violence is rooted in the inequality between men and women when the term violence is used together with the term ‘gender-based’. But why does violence occur against women? Is it that they are to be blamed for being victims all the time? Feminists and social workers working on women’s issues have long been working on this question. The most obvious answer to this is patriarchy which says that women fall prey to violence because men control women and bestow an authority of male rule. Women when subjected to this male ruling cannot escape the situation, as they, too from their childhood, have learnt to obey the authority. Let us take an example, as a girl child, the daughter is always taught to obey norms diligently along with her brother. But the brother is supported to walk free and involve in scuffles with other boys because those are considered to be attributes of a boy. In similar terms, a girl will never be allowed to walk in the street in the evenings and involve in scuffles with other girls or boys. She will not be allowed to roam around with other girls of her age without a parent or a guardian because it is not considered ‘womanly’ enough on her part. She is socialized to be able to express her feminine qualities and to carry the honour of her family and community. So, from early childhood women are vulnerable in society, dependent for recognition and support from men to be able to do whatever she wants to. This vulnerability adds to insecurity in her public and private life. She is exposed to violence as a deterrent, a threat not to cross her limits of femininity set by patriarchal standards. Before coming into an elaborate observation on the point, let us try to understand the nature and pattern of violence taking place against women in India.

**Nature of Violence against Women**

There are various forms of violence against women in India. Sometimes, it begins even before their birth, sometimes in their adulthood and other phases of life. In the Indian society, the position of women is always perceived in relation to man from birth onwards to every stage of life. She is dependent on him.
This perception has given birth to various gender-biased social customs and practices. Some traditional practices and other forms of violence against women are narrated below.

**Sati (self-immolation)**

One important manifestation of these customs and practices has been that of *sati* (self-immolation). This custom of self-immolation of the widow on her husband’s pyre was an age-old practice in some parts of the country. The popular belief runs that the goddess enters into the body of the woman who resolves to become a *sati*. The practice of *sati* has been abolished by law with the pioneering initiative of Raja Ram Mohan Roy (1772-1833) in the early decades of the 19th century. However, there has been a significant revival of the practice in the last few decades. Indeed, Rajasthan has been the focal point for this practice in recent years. Therefore, the act of Commission of Sati had to be passed by Government of India. The act of *sati* or widow burning is not legally allowed as *The Commission of Sati (Prevention) Act, 1992* was passed just after the case of Roop Kanwar was observed in 1987. Has Rajasthan finally won the war against practice of *sati* or still the case could be reported in newspapers as happened in very recent incident of Sharbati Bai!

**Jauhar (voluntary immolation)**

*Jauhar* is another voluntary immolation of all wives and daughters of defeated warriors in order to avoid capture and consequent molestation by the enemy. The practice was followed by the wives of Rajput rulers, who are known to place a high premium on honour. It curtails women’s right to interact freely and it is a symbol of their subordination. In modern era some practices are more common in nature, and it is a serious violence against women.

**Debdasis (temple prostitution)**

The other traditional of practice of abuse like *devadasis* is observed in some parts of Southern India, in which women were married to a
deity or temple. In the later period, the illegitimate sexual exploitation of the devadasi's became a norm in some part of the country.

**Violence in Modern Times**

The violence against women in modern times can fit into several broad categories, some of the forms of violence perpetrated by individuals are domestic violence, rape, sexual harassment, female infanticide, prenatal sex selection, harmful customary or traditional practices such as honor-killing, dowry related violence, female genital mutilation, marriage by abduction and forced marriage; violence perpetrated or condoned by the state such as wartime rape, sexual slavery during conflict, forced sterilization, violence by the police and authoritative personnel; trafficking in women and forced prostitution are often perpetrated by organized criminal networks (Violence against Women, n.d., honor-killing, n.d., Compulsory Sterilization, n.d.).

**Domestic Violence**

Domestic violence is a violation of a woman’s right to physical integrity, liberty and all too often to her right to life itself. When the state fails to take the basic steps needed to protect women from domestic violence or allow these crimes to be committed with impunity, it is the state’s failing in its obligation to protect women from torture.

Wife-beating and abuse by husband are the common violence done against women which are never or hardly publicly reported and acknowledged. Dowry related death comes under domestic violence also. But an Indian woman always tries to conceal it, as she is ashamed of talking about it in public. Interference of in-laws and extra-marital affairs of the husband are the another cause of such violence. Women are unwilling to go to court because of lack of alternative support system. Thus, all these acts of violence done against women raise the question mark that how the rights and legal system given to women are helping them? What are the benefits of framing laws for women’s rights? Are they really
helping them? Will women really be given an equal status to men in coming days? All these questions are still unanswered. There is still a long way to go for finding right answers to such questions. Domestic violence is currently defined in India by the Protection of Women from Domestic Violence Act of 2005. According to Section 3 of the Act, “any act, omission or commission or conduct of the respondent shall constitute domestic violence in case it harms or injures or endangers the health, safety, life, limb or well-being whether mental or physical of the aggrieved person or tend to do so and includes causing physical abuse, sexual abuse, verbal and emotional abuse and economic abuse or has the effect of threatening the aggrieved person related to her by any conduct mentioned in clause (a) or clause (b) or otherwise injures or cause harm, whether physical or mental, to the aggrieved person”

**Dowry Death**

Dowry related deaths in India are not limited to any specific religion, it is found among Hindus, Muslims, Sikhs and others as well. The Dowry Prohibition Act 1961, prohibits request, payment or acceptance of a dowry, «as consideration for the marriage», where «dowry» is defined as a gift demanded or given as a precondition for marriage. Gifts given without a precondition are not considered dowry, and are legal. Asking for, or giving of, dowry can be punished by an imprisonment of up to six months, or a fine. It replaced several pieces of anti-dowry legislation that had been enacted by various Indian states. Murder and suicide under compulsion are addressed by India’s Criminal Penal Code. The law was made more stringent with the Section 498A of the Indian Penal Code (enacted in 1983). Under the Protection of Women from Domestic Violence Act 2005 (PWDVA), a woman can seek help against dowry harassment by approaching a domestic violence protection officer. But despite of such law, the cases relating to domestic violence are on the rise.

According to the report of Indian National Crime Records Bureau (2012), 8,233 dowry related death cases were reported across
India (The Indian Express, July 31, 2015). Dowry issues cause 1.4 deaths per year per 100,000 women in India. For contextual reference, the United Nations reports a worldwide average female homicide rate is 3.6 per 100,000 women, and an average of 1.6 homicides per 100,000 women for Northern Europe in 2012. Although India’s dowry related death rate per 100,000 is lower than that of Pakistan and Bangladesh. But it is a significant social issue in India. It is unfortunate that a total of 24,771 dowry related deaths have been reported in the country in the past three years with maximum of them occurring in Uttar Pradesh with 7,048 deaths. In a reply in the Lok Sabha, Women and Child Development Minister Maneka Gandhi said that 8,233, 8,083, and 8,455 cases were registered under Section 304B of the Indian Penal Code (Dowry Death) in the country in 2012, 2013 and 2014 respectively. Uttar Pradesh is followed by Bihar and Madhya Pradesh with 3,830 and 2,252 deaths during the same period. As per National Crime Records Bureau data, the country has recorded 3.48 lakh cases of cruelty by husbands or their relatives and West Bengal tops the chart with 61,259 such cases in the past three years, followed by Rajasthan (44,311) and Andhra Pradesh (34,835), as reported (Indian Express, July 31, 2015).

**Cruelty and Rape**

Crimes along with their nature as found in the data of the National Crime Records Bureau are given in Table-1. The table shows that cruelty, violence, rape, dowry death cases are growing in India.

**Table 1: Crime against women in India**

<table>
<thead>
<tr>
<th>Year</th>
<th>Type of violence</th>
<th>Reported violence</th>
<th>Rape</th>
<th>Cruelty by husband</th>
<th>Dowry death</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008</td>
<td></td>
<td>195856</td>
<td>21467</td>
<td>81344</td>
<td>8172</td>
</tr>
<tr>
<td>2012</td>
<td></td>
<td>244270</td>
<td>24923</td>
<td>1065527</td>
<td>8233</td>
</tr>
</tbody>
</table>

In 2008, there were 21467 rape cases, 81344 cruelties by husband or relatives and the total cases of violence reported against women are 195856. In 2012, rape cases have increased to 24923, cruelty cases to 106527 and total cases of violence to 244270. The way the instant cases are growing is really a question that needs serious thinking. These are happening despite of all IPC, CrPc and Personal laws prevailing in our society and provisions are provided to safeguard women in our society. So, one can say that mere legislation alone cannot solve the problem of violence, crime, discrimination against women unless the state initiate steps for raising public consciousness about the issue, and realizing that women can get rights and dignity as like men and they can stand against wrong doers. Let us examine the nature and pattern of other forms of violence against women in India.

Rape

Young girls in India often are the victims of rape. The law against rape is unchanged from 120 years until the case of Nirbhaya incident in Delhi. In a rape case, it is unfortunate that the victim has to prove that she has been raped. First let us understand what rules say about Rape. The word ‘rape’ itself has evoked terror and fear among not only women but also people in general, yet the society did not give serious attention to it until the case of Nirbhaya. The body of woman is exploited and she goes through shock, anger and shame, yet it is shame and unfortunate that there was no single piece of legislation to deal the issue comprehensively as a special category of offence. Women have to seek common law IPC under Section 376, which identifies rape as sexual intercourse under any of the following grounds:

- Against her will
- Without consent
- Consent under threat
- Consent but in time of unsound mind
- Consent without full knowledge in case of minor girls
• Consent with cheating or false promise of marriage or with a believe man as her husband.

Simply a man has said to have committed rape if he has sexual intercourse with a woman other than his wife, and being wife-below the age of 15 years, or by force or threat of force. It may be noted that Section 375 of IPC, “sexual intercourse by a man with his wife, not being under 15 years of age is not a rape” on the other hand, CrPc states that ‘it is a rape if the girl is not the wife and is below 16 years of age.

Case of Nirbhaya

The Delhi gang rape case involved rape and fatal assault that occurred on 16 December 2012 in Munirika, a neighbourhood in South Delhi. The incident took place when a 23-year old female physiotherapy intern, Jyoti Singh was beaten and gang raped and tortured in a private bus in which she was travelling with her friend, Awindra Pratap Pandey. There were six others in the bus, including the driver, all of whom raped the woman and beat her friend. On 19 December 2012, Jyoti underwent her fifth surgery, removing most of her remaining intestine. Doctors reported that she was in “stable but critical” condition with life support. Thirteen days after the assault, she was transferred to a hospital in Singapore for emergency treatment, but died from her injuries two days later. Because India does not allow the press to publicise a rape victim’s name, the victim has become widely known as Nirbhaya, meaning “fearless”, and her life and death have come to symbolise women’s struggle to end rape. One of the accused, Ram Singh, died in police custody from possible suicide on 11 March 2013 in the Tihar Central Jail. The rest of the accused went on trial in a fast-track court; the prosecution finished presenting its evidence on 8 July 2013. The juvenile was convicted of rape and murder and given the maximum sentence of three years’ imprisonment in a reformed facility. On 10 September 2013, the four remaining adult defendants were found guilty of rape and murder and three days later were sentenced to death by
hanging. In 2013, the Criminal Law (Amendment) Ordinance, 2013 was promulgated by His Excellency the President of India Sri Pranab Mukherjee, several new laws were passed, and six new fast-track courts were created to hear rape cases. Before 2013 rape was not considered as a major crime. The highest degree of punishment that could be given to rapist was 7 years. But after Nirbhaya incident, the Parliament awarding 20 years of rigorous imprisonment to the person, the other acts like sexual harassment, molestation, acid attack etc are liable for stringent punishment. Out of six accused in horrific Nirbhaya rape case on December 2012, four were awarded death sentence.

**Rape against Dalit Women**

Dalit women are one of the largest socially segregated groups in India. They are discriminated against three times over: they are poor, they are women, and they are dalits. Certain kinds of violence are traditionally reserved for them: extreme filthy verbal abuse and naked parading, murder after proclaiming witchcraft, are only experienced by dalit women. dalit women are threatened by rape as part of collective violence by people belonging to the so-called “higher castes”. Sometime the practices of traditional social system are also forcing women to become temple-prostitutes. For example, the *devadasi* system or temple-prostitution is the most extreme form of exploitation of dalit women. Atrocities against dalit women, especially rape and murder, are given below:

**Table 2: Offences against dalit women**

<table>
<thead>
<tr>
<th>Nature of offence</th>
<th>1981</th>
<th>2001</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rape</td>
<td>604</td>
<td>1331</td>
<td>1349</td>
</tr>
<tr>
<td>Murder</td>
<td>493</td>
<td>739</td>
<td>570</td>
</tr>
</tbody>
</table>

Source: NCPR 1981 to 2010, Government of India; and National Commission for Scheduled Castes

According to NCPR, it is observed that the crime against dalits is increasing over the years. It has been reported that rape cases registered 604 in 1981 rose to 1331 in 2001 and 1349 in 2010. So,
the law on Scheduled Castes and Scheduled Tribes (Prevention of Atrocities) Act 1989 did not help much to curb atrocities against dalits. The lack of law enforcement makes many dalit women unable to approach the legal system for redressal. Women are often also unaware of the laws and their ignorance is exploited by their culprits, by the police, and by the judiciary system without support from civil societies. Thus, they are unable to put an end to the structural discrimination and exclusion against them.

This can be very well reflected once we analyse cases, for example, as reported (Case No. 2731/96-97/NHRC) by the National Human Rights Commission. The Commission took a suo-motu cognizance of news item entitled “Girls paraded naked by the police” on the basis of a report in a newspaper on 21 June 1996 and called for a report from the Director General of Police, Uttar Pradesh. In his report, the Director General of Police mentioned that a case No.49/96 under the relevant Sections of the Indian Penal Code and the Scheduled Castes and Scheduled Tribes (Prevention of Atrocities) Act, 1989 had been registered against the accused Forest Officer and four Forest Guards. Upon preliminary investigation, the charges had been proved against all the five accused persons and the State Government had been requested to sanction the prosecution of these persons. The report of the Superintendent of Police, Banda indicated that the accused Forest Officer had taken two ladies into his custody. He had later apprehended two more women. The four women were disrobed and later beaten up by the Forest Sub-Inspector. They were released only after they had agreed to pay a sum of Rs.1000 and give honey to the Forest Department officials. The Commission recommended the payment of a sum of Rs.50,000 as interim compensation to each of the four women (NHRC, 1994).

It is more serious issue when protector themselves indulge in atrocities. The case of rape and killing of women by some reckless soldiers is a glaring example happened in the Northeast Indian state Manipur. The action follows violent protests by women in
Manipur after the bullet-riddled body of 32-year-old Thangjam Manorama was found on July 10, 2014. Witnesses allege Manorama was picked up by soldiers of the paramilitary Assam Rifles from her home on alleged charges of her links with separatist rebels. Hundreds of women had stormed the Assam Rifles headquarters in Imphal, with at least 40 women parading themselves naked and holding placards that read: “Indian Army rape us” and “Indian Army takes our flesh.” Human rights groups also reported that “The number of cases of rights violations, torture and rape by security forces has increased manifold. The Special Powers Armed Forces Act prevalent here gives security forces unlimited powers and impunity against rights violations.” The army instituted a court of inquiry, but the findings were never made public. Justice J.S. Verma Committee looking into legal reforms related to violence against women called for a review of the Armed Forces (Special Powers) Act 1958 AFSPA. It is recommended by the Committee that Sexual violence against women by members of the armed forces or uniformed personnel must be brought under the purview of ordinary criminal law(Krishnan, 2016). It noted that “impunity for systematic or isolated sexual violence in the process of internal security duties is being legitimised by the Armed Forces (Special Powers) Act 1958 (AFSPA)” and women in conflict areas are entitled to all the security and dignity that is afforded to citizens in any other part of our country. The committee also recommended that “special care must also be taken for the safety of complainants and witnesses in cases of sexual assault by armed personnel”.

But while the Central Government adopted many of the Verma Committee recommendations in a subsequent anti-rape bill, it left out those related to the AFSPA. Criminals must be brought to justice but at the same time there is also need of law that allows armed forces to effectively combat forces threatening national security and integrity.

**Failure to Prosecute Rape Cases**

Reported crimes against women in India increased by 25.2%. At
the same time, the National Crime Records Bureau’s (1994) report reveals that convictions for crimes against women were minimal. Out of the total (rape) cases in which trials were completed, 41.5% ended in conviction during 1990, 34.2% in 1991 and 33.8% in 1992 and 30.3% in 1993. Thus the acquittal percentage is showing an upward trend over the years. The rate of disposal of cases in courts was 23.9% in 1992 and 16.8% in 1993. On an average, 80% of the cases remained pending for trial (NCRB, 1992).

Why such legislations failed to check violence?

1. One reason as to why the violence against women continues to increase is that there is hardly any deterrent action and the culprits feel that they can get away with their crimes.

2. Legal remedies alone cannot cope with regressive socio-economic set up, poor people get it difficult to go for justice, as justice is a costly matter now a days.

3. Long delays in the law and court are responsible for a spurt of crimes.

4. Public response to violence against women is casual.

It is observed that many dalit women unable to approach the legal system. Even when cases are registered, the lack of appropriate investigation, or the judge’s own caste and gender biases, can lead to acquittal, regardless of the availability of evidence or witnesses. The failure to successfully prosecute cases of rape also allows for crimes against women to continue unabated, and in the caste context, encourages the use of rape as a tool to punish and silence dalit communities, dalit women in particular.

**How to check Violence against Women?**

Some attempts to address in combating violence against women and children have taken various forms including legislative interventions followed by judicial interpretations of the same. As said, the law and the legal system alone may not be sufficient to combat violence against women and children, for instances where cases are brought
forward, the legal system needs to be well-equipped to deal with each of those cases in a sensitive and expeditious manner. Today violence against women is a human rights issue and identified as an international concern for women all over the world. In addressing violence against women, the foremost thing necessary is that the government and other actors should promote and active role to make policies and programmes mainstreaming gender perspective in all policies and programmes. The other requirement is that it is necessary to give a stress on the areas or building mechanisms that a society needs to set up to combat violence will have to take into account the varying ways in which violence is being perpetrated. Women and girls experience and fear various types of sexual violence in public spaces, from unwanted sexual remarks and touching to rape and femicide. It happens on streets, in and around public transportation, schools and workplaces, in public sanitation facilities, water and food distribution sites and parks (Elizabeth Villagómez, n.d).

The ongoing reality of dowry-related violence is an example of what can happen when women are treated as property. Brides unable to pay the high “price” to marry are punished by violence and often death at the hands of their in-laws or their own husbands. There are strong links between domestic violence and dowry. This practice continues even today in India although banned by law since 1961, and in recent years dowry amounts have risen dramatically. Some newly married brides suffer domestic violence in the form of harassment, physical abuse or death when they are thought to have not brought enough dowry with marriage. Some cases end up in suicide by hanging, self-poisoning or by fire. In dowry death, the groom’s family is the perpetrator of murder or suicide (Lawmantra, n.d).

This reality reduces women’s and girls’ freedom of movement. It reduces their ability to participate in school, work and public life. It limits their access to essential services and their enjoyment of cultural and recreational opportunities. It also negatively impacts their health and well-being.
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Although violence in the private domain is now widely recognized as a human rights violation, violence against women and girls, especially sexual harassment in public spaces, remains a largely neglected issue, with few laws or policies in place to prevent and address it. It needs immediate steps to prevent further violence, social boycotts, and other forms of discrimination against dalits and to investigate and punish those responsible for attacks and acts of discrimination in affected districts by setting up special courts and trial of offenders. Any officials or members of the police who fail to respond to repeated calls of women for protection from offenders or to prosecute the accused of violence or discrimination against women should also be prosecuted.

There is a need to ensure prompt investigations of complaints of violence against women and inclusion of women investigators from the concerned communities. It is the call of the hour that all government and registered private hospitals/medical centres are made accessible to the victims of rape and violence for medical examinations/gathering evidence without any restrictions.

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