Analysing the Dropout of Rural Tribal School Girls in Rajasthan

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Abstract: *The experience of developed countries of the world shows that a country which possess skilled labour, can achieve the high level of economic development without much resources. Most of the economist describes the importance of education in different terms. Nobel laureate Prof. Amartya Sen says that in recent time any country cannot get sustainable socio-economic level of development without proper education. Prof. Thiodor Schultz finds in his research that the expenditure on education improves the skill of labour and teachers which increase the production ultimately. Prof. Gunnar Myrdal writes in his book 'Asian Drama' that the success of any programme depends on peoples cooperation for which the people have to be aware and this awareness comes with education only. The present paper tries to analyse the dropout in school education especially rural tribal girls in Rajasthan.*

Key words: *Dropout, tribal girls, school education, literacy.*

1. INTRODUCTION:

It is a universal fact that if a country wants to develop than it has to develop its labour forces first, which will be prepared with education. But it is also observed that a country which is gradually progressing in education those disparities will be take place in that, generally many disparities takes place in education i.e. gender or regional. The fact of gender disparities has been traced out by many nations and international institutions. World Development Report (2005) says that education provides the capacity and level of thinking. Understanding and living with awareness to women's is a good investment. University Grant Commission (1948) also says that if the availability of education is limited that it should be given to females so the further generation can be taught. The fact of regional variation in educational development has been revealed in various educational reports. According to the Evaluation of quality improvement programme in education (1998), the rural students are not going to the school since a long timer for livelihood and domestic works. The public report on Basic Education (1999) shows that the child's are still for from primary education in rural areas.   There is another social aspect of disparities in educational development, in which we find both regional and gender disparities especially in rural tribe girl's education. The dropout rate is high in these tribal areas. There are many causes of this problem. Kundu, M. says that the absence of proper knowledge of tribal culture and language, lack of reference books on tribes and the negative attitude of teachers towards students are the main causes. Subramaniyam, S. says that the main cause of this dropout is the lack of adjustment with modern education system, negative attitude of rural tribal girls for education and social customs. Nayyer, U. says that the education level of parents, social status, economic condition and gender and school facilities also affects this dropout ratio. In the present study an attempt has been made to trace out the causes and effects of g ender and regional disparities, among school education in Rajasthan.

2. OBJECTIVES OF THE STUDY:

The main objectives of the present study are:
- To study the development process of school education and analyse the regional and gender disparities in school education in Rajasthan.
- To find out the causes of dropout of rural tribe girls from school education.

3. RESEARCH METHODOLOGY:

To analyse the development of school education and gender disparities and regional disparities in Rajasthan, 27 major districts of the state has been included in the study. The expenditure on education since 1951, educational

institutes, enrolment and teachers and literacy has been intensely analyses in the study. The secondary data related to these indicators were collected from different government publications, statistical abstracts, and district statistical outline and from education department.

To measure the development of school in state, the education institute, enrollment and numbers of teacher's etc. indicators has been chosen. To find out the growth in these indicators decadal and exponential growth rate has been calculated. The gender and regional disparities in education among rural tribe girls has been analysed through enrolment ratio, female teachers, male and female literacy etc. To study the dropout among rural tripe school girls the Udaipur districts has been purposively selected. The analysis of dropout in school education among tribal girls at primary, middle and higher secondary level has been done. Multiple regression model has been used to determine cause and affects relationship between the dropout rate and its determinant. The dropout has been used as an unexplained variable which is explained by three variables i.e. infrastructure index, gross enrollment ratio and teacher student ratio.

4. RESULTS AND DISCUSSION:

Table 1 shows the development of school education and gender disparity since 1951.

Table 1 : Progress of school education & gender disparities in Rajasthan (1951-2011)

Year	No. of Schools		Enrollment		Teachers	
	Total	Girls	Total	Girls	Total	Girls
1950-51	5243	564 (10.75)	424244	67691 (15.95)	18714	2298 (12.27)
1960-61	16501	885 (5.36)	1300549	250882 (19.29)	54304	6691 (12.32)
1970-71	22406	1479 (6.60)	2375683	483206 (20.33)	89391	14543 (16.26)
1980-81	30177	1998 (6.62)	4091258	939882 (22.97)	131390	26920 (20.48)
1990-91	42971	3500 (8.14)	6963651	1941876 (27.88)	214644	53446 (24.89)
2000-01	71319	6040 (8.46)	11467136	4389293 (38.27)	336352	88741 (26.38)
2010-11	89422	8048 (9.00)	17774060	7998327 (45.00)	485450	145635 (30.00)
Expo. Gr rate	**4.80**	**4.50**	**6.40**	**8.20**	**8.00**	**10.40**

Source: Progress Report, Primary and Middle Education Department Bikaner, Rajasthan.

Rajasthan is the largest state in India. The total population of the state is 5.5 percent of the national population. 77.12 per cent population of the state lives in rural areas. In 2011, literacy rate was 67.06 percent in which male and female literacy rate was 77.49 and 46.25 percent. About two third population of the state engaged in primary sector therefore agriculture plays an important role in NSDP and employment generation. The hard geographical situation of the state, deficiency of resources, backwardness of agriculture and industry, low level of per capita income, unemployment, socio-economic backwardness and drought directly affects the educational states of the status. It is clear from the data of table 1 that girl's schools are less than 10 percent of the total schools in the state. In these schools girls enrollment and the percentage of female teachers in total teachers is found to be very low. The low percentage of girl's schools, enrollment and female teachers depicts the gender disparities.

1. Disparities in School Education

Disparities in school education in Rajasthan can be analyses in two parts; one is gender disparities and another is regional disparities.

Gender Disparities in School Education: Human Development Report Rajasthan (1999), states that the main cause of low literacy and disparities is historical events, large desert, hilly area, high population growth, underdeveloped educational infrastructure, lack of female teachers and financial barriers. As a result we find gender and regional disparities in educational development of the state; table 2 shows the status of literacy in the state.

Table 2 : Gender Disparities in School Education in Rajasthan (2011).

Literacy Level	Gender Disparities	
	Male	**Female**
High (> 70 percent)	All the districts of the state except Pratapgarh & Sirohi	Nil
Medium (55-70 percent)	Pratapgarh & Sirohi Districts	Gangangar & Jhunjhunun Districts
Low (< 55 percent)	Nil	All the districts of the state except Ganganagar & Jhunjhunun Districts

Source: Progress Report, Primary and Middle Education Department Bikaner, Rajasthan.

If we see the gender disparities in literacy rate in Rajasthan than we find that male literacy is high in most of the districts of the state except Pratapgarh and Sirohi districts, while the situation of female literacy is very doubtful. All the districts of the state except Ganganagar and Jhunjhunun districts have low level of female literacy rate. This shows that there is a high gender disparity in literacy in the state.

Regional Disparities in School Education: The literacy rate of Rajasthan in 2011 is presented in table 3 given below.

Table 3 : Regional Disparities in Education in Rajasthan (2011).

Literacy level	Regional disparities	
	Rural	**Urban**
High (>70 percent)	Sikar and Jhunjhunun Districts of the state	All the districts of the state
Medium (55-70 percent)	Ajmer, Alwar, Baran, Barmer, Bharatpur, Dausa, Dholpur, Dungarpur, Jaipur, Ganganagar, Hanumangarh, Jodhpur, Karauli, Kota, Nagaur, Pali, Rajsamand, Swai Madhopur, Tonk and Udaipur.	Nil
Low (Less than 55 percent)	Sirohi, Pratapgarh, Jalore, Jaisalmer and Banswara districts of the state	Nil

Source: Progress Report, Primary and Middle Education Department Bikaner, Rajasthan.

It is clear from the data all the districts of the state have high level of urban literacy while most of the districts of the state except Jhunjhunun and Sikar districts have medium and low level of rural literacy. This fact shows the regional disparities in Literacy in the state.

Dropout in Schedule Casts and Schedule Tribe Girls:

Generally Schedule Caste and Schedule Tribe families enrolled their girl child in school for education so the gross enrollment ratio is high at primary level. But as time goes and level of school ups, the gross enrollment ratio starts declining gradually. As the girls of SC and ST families moves towards middle and higher classes for education, for many reasons; social and economic causes, their dropout rate always increases. Table 4 shows the dropout rate of girls at primary, middle and higher secondary level.

Table 4 : Dropout Rates of Schedule Caste and Schedule Tribe Girls (2004-2005).

Level of Education	Primary (I-V) (Age: 6-11 Years)		Primary (VI -VIII) (Age: 11-14 Years)		Sec. & Higher Sec. (IX-XII) (Age: 14-18 Years)	
Social Grade	**Girls**	**Total**	**Girls**	**Total**	**Girls**	**Total**
Schedule Casts	5759	55.83	78.05	71.97	86.72	80.74
Schedule Tribes	59.51	56.52	73.74	69.14	83.80	75.30
Total	**52.90**	**56.59**	**71.33**	**60.34**	**80.72**	**93.87**

Source: Selected Educational Statistics 2006, Ministry of Human Resource Development, New Delhi.

Three facts arise from the analysis of the above table:

First, As the level of education increases from primary to upper primary and secondary to higher secondary, the dropout rate of rural tribal girls increases so it is conclude that as the age and level of education increases, the dropout rate increases for individual, social and economic causes.

Second, the dropout rate among SC and ST students at primary, upper primary and secondary and higher secondary level, is high than the total average dropout of the state.

Third, the dropout rate of girls at primary, upper primary, secondary and higher secondary is high than the boys.

Regression Model: Multiple regression has been calculated to determine the functional relationship between dropout and the factors affecting it. Dropout has been taken as unexplained variable, whose explanation has been done by total schools, percentage of S.C. and S.T. population in total population, gross enrollment, infrastructural index, total teachers, population density, literacy rate, teachers student ratio, urbanization, per capita expenditure, number of school's per thousand population and gross enrollment ratio. Estimating the model by taking these variable we find that most of the coefficient are not insignificant at 5 per cent level (i.e. $F_{0.05}$ = 2.172, d.f., 3, 23). By taking only three explanatory variables; Basic Infrastructural Index (BIF), Gross Enrollment Ratio (GER) and Teacher-Student ratio (T-S) we estimated the model.

The model equation is as follows:

$$Y_i = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + U_i$$

Where,
Y_i = Dropout rate of student
β_0 = Constant
βi = Coefficients (β_1, β_2, β_3)
X_1 = Basic Infrastructural Index (BIF)
X_2 = Gross Enrollment Ratio (GER)
X_3 = Teachers–Student Ratio (T-S ratio).

Conclusions of the Model: Here, we assume that random disturbance term (U_i) confirms all the assumptions, the conclusion of OLS model is presented in table 5.

Table 5 : Results of the Regression Model

Coefficient Value	Variables			R^2	Adjusted R^2	F-Ratio
	BIF	GER	T-S Ratio			
'β' Coefficients	(-) 0.465	(-) 0.361	(-) 0.250	0.663	0.642	6.604*
't' Value	(-) 3.566*	(-) 2.162*	(-) 1.634			

*Significant at 5 percent level.

In the model the coefficient of BIF and GER are found to be negative and significant at 5 percent level while the coefficient of T-S ratio is negative but not significant.

(i) Model Equation: The model equation has been explained as follows:

$$Y_i = 106.628 + (-) 0.465 (BIF) + (-) 0.361 (GER) + (-) 0250 (T\text{-}S \ ratio)$$

(ii) Correlation Matrix: The correlation matrix of the three variables; infrastructural index, gross enrollment ratio and T-S ratio has been presented in table 6.

Table 6 : Correlation Matrix of the Model

Variables	DOR	BIF	GER	T-S ratio
DOR	1			
BIF	(-) 0.563*	1		
GER	(-) 0.327*	0.068	1	
T-S Ratio	(-) 0.228	(-) 0.015	(-) 0.015)	1

*Significant at 5 percent level.

(iii) Coefficient of Determination (R^2): The value of the R^2 is 0.663 i.e. 66.3 percent variation in dropout is explained by the three variables named; infrastructural index, gross enrollment ratio and teacher–student ratio.

(iv) Adjusted Coefficient of Determination (Adjusted R^2): The value of adjusted R^2 is 0.642 so the high value of adjusted R^2 proves that our model is best fitted and it is able in explaining the variations in dropout rate.

(v) Variance Ratio (F): The calculated value of F is 6.604 which is higher than the table value at 5 per cent ($F_{0.05} = 4.60$; $V_1 = 3$, $V_2 = 23$) so it is proved that all the three explanatory variables are the causes of variation in dropout.

The above analysis concludes that there is high regional and gender disparities among school education in the state. The dropout rate is very high in rural areas of the state especially tribal school girls which have to be cut down. Some suggestions based on the above analysis are given below.

5. SUGGESTIONS:
Following are some suggestions to reduce the gender and regional disparities among school education and girl's dropout in the state:

- There is a need of better management of education related government schemes and government should promote rural women's participation.
- There is a need of establishing the girl's school and other infrastructure like staff and other facilities in rural tribal areas of the state.
- The promotion of awareness of parents about girl's education is must in now a day which will improve the girl's enrollment in the state.
- There is a need of providing alternate sources of employment to the people and government should control the old customs like child marriages.
- A policy should be framed to promote the women education in the state especially for the tribal areas of the state.

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