EDUCATIONAL DEVELOPMENT AND WASTAGE IN TRIPURA

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Education is the backbone of a country. Not only it plays a vital role in the life of every human being but also occupies an important place in the development process of a country, its growth and welfare. Even it is considered as one of the most important indicators of development in a country according to quality-of-life approach. It has become very crucial perhaps never more so in man's history than today. In India the importance of education has been highlighted in the Constitution {Article 29(2), 45 and 46} which provide for free and compulsory education for all the children belonging to different sections of the society including scheduled caste, scheduled tribe and other backward communities. To fulfill this objective enshrined in the Constitution both the Central Government and the State Governments have taken keen interest in increasing the literacy rate in the country. As a result a considerable progress has been made over the last five decades. The present paper in this regard is an attempt to focus and analyze the rate of educational development in the State of Tripura and the wastage involved therein. For the purpose of analysis both primary and secondary data are used in this paper.

To evaluate the general educational scene in Tripura three commonly known indicators such as literacy rate, enrolment ratio and wastage rate are used as yardsticks in the present study.

The available information on educational statistics from various census reports revealed that the overall literacy rate in India increased from 18 percent in 1951 to 52 percent in 1991 (Table 1). One of the most striking features was that in the post independence period the gap between male and female literacy rates was getting more and more pronounced till 1981 after which it showed a reverse trend in the 1991 census. The concerted effort on the part of the government could bring the male literacy rate in India to 64 percent in 1991 as against the female literacy rate of 39 percent. But it is a

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matter of grave concern that Tripura is yet to achieve a breakthrough in this regard. Comparison of literacy rate of India with that of Tripura revealed that it was always lower in Tripura beginning from 1951 till 1981. A dramatic change was noticed only in 1991 when it suddenly increased to 60 percent leaving national average behind 8 percent of the State literacy rate.

Literacy rates in different sections of the society in India as shown in Table 2 indicated that in 1991 census when overall literacy rate was 52 percent it was only 37 percent in case of scheduled caste population and 29.6 percent in scheduled tribe. But in the State of Tripura, though a similar trend was observed, the corresponding figures were altogether different. Overall literacy rate was worked out to be 60.4 percent as compared to 56.7 percent in scheduled caste and 40.4 percent in scheduled tribe. Thus the tribal people were observed to be all along lagging behind as compared to other sections of the society both at the national level and in the State of Tripura. But their positions were much better in Tripura than that of the country as a whole. Besides, there had been a widespread rural-urban disparity in the literacy rates in Tripura. Literacy rate was estimated to be as low as 56 percent in rural areas in sharp contrast to a figure of 83 percent in urban areas. There had also been wide disparity in the literacy rates among the three districts in Tripura. It was found to be highest (65 percent) in West Tripura district and lowest (51 percent) in South Tripura district.

Another indicator of educational development is enrollment ratio. To show the magnitude and trend of enrolment of students in different levels/stages of education in schools the relevant are presented in Table 3. The figures in the table clearly indicated that the total enrolment in primary classes had increased from 192 lakhs in 1950-51 to 991 lakhs in 1990-91 thereby showing a 416 percent increase in enrolment during the last four decades. In upper primary classes it was only 31 lakhs in 1950-51 and as much as 333 lakhs in 1990-91. Thus a 974 percent increase in enrolment in upper primary level of education had been witnessed. The corresponding figures for High/Higher Secondary education were worked out to be merely 15 lakhs in 1950-51 but 209 lakhs in 1990-91. This showed a 1293 percent increase in enrolment. Thus these figures suggested that the enrolment rate at lower level of education was quite satisfactory but the rate of enrolment tended to decline rather drastically at higher levels of education. As far as the growth of

enrollment of students over time was concerned we found that it was highest in the secondary level and lowest in the primary level of education. Moreover, enrollment of boys had always been higher than that of the girls in all the levels of school education. But due to non-availability of data a trend analysis on enrollment of students in school education in Tripura could not be made in the present study. However, if we compare the enrollment ratios of students belonging to different levels of school education in different categories of population of the State of Tripura with that of India as a whole we find that Tripura faired better than India both in the case of boys and girls. Tripura also faired better than India as regards enrollment of tribal students. Besides, scheduled caste ranked first in respect of enrollment ratio among all the sections of the society in the State in different levels of school education. But if we consider enrollment of male students in primary education it was highest among the tribal students.

As far as educational wastage is concerned it occurs in two forms- one in the form of dropout and the other in repetitions of classes (stagnation). When a pupil leaves the school before completing the course it is termed as dropout whereas failing once or more before gaining promotion to the next higher class falls under the category of repetition of classes. The definition of dropouts, however, raises an important issue. There are two viewpoints on the definition of dropouts which form the basis of two definitions to the concept. According to the first view wastage is related to the objectives of education whereas the second definition is based on the concept of incremental gains in learning outcomes. The Hartog Committee of the Government of India was the first to highlight the problem of wastage in India. Subsequently a number of research studies were undertaken in India by different authors and organizations (Sharma and Sapra, Gadgil and Dandekar, Chikermane, Choudhury, UNESCO, Veda Prakash etc). The continued research in this line helped the experts to devise the following three different methods to measure educational wastage (Sapra, C.L):

1. Apparent Cohort Method (ACM);

2. Reconstructed Cohort Method (RCM); and

3. True Cohort Method (TCM).

The Apparent Cohort Method can be used to measure educational wastage in schools either by using cross-sectional or time series data. While using cross section data, enrollment in Class I in a given year is considered as cohort and the same is compared with the enrollment figures in all other classes in the same year. Any diminution from one class to another is regarded as evidence of wastage. But this method provides only a rough estimate of educational wastage because of the following few reasons: Firstly, enrollment in Class II in a given year is not the result of enrollment in Class I in the same year but in the previous year. Secondly, enrollment Class II also includes repeaters of the same year and possibly some newly admitted pupils who dropped out earlier or of those who might have migrated from other schools.

The ACM while using time series data considers enrollment in Class I in a base year as Cohort and determines the relationship through diagonal analysis between cohort enrollments in successive classes in successive years. The formula used under this method is as follows:

$$W = \frac{EC_{t+1}}{EC_t} \times 100$$

where EC_{t+1} stands for enrollment in Class C+1 in the year t+1 and EC_t stands for enrollment in Class C in the year t. This method is also not free from limitations when it uses time series data as it does take into account the element of repetition in a Class.

The Reconstructed Cohort Method which was used by UNESCO in a worldwide survey during 1969 uses successive year class-wise data on enrollment and repeaters. From these data the number of promoters (P) for each Class is derived first by subtracting the given number of repeaters (R) from total number of enrollment (E) in the Class as follows:

$$P = E - R$$

Then the number of dropouts (D) is estimated as the residual factor in the following way:

$$D = E - (P + R\ )$$

The RCM also fails in taking into account the pupils who do not repeat but dropout from the school and get promoted to the higher Class in some other school.

In the case of True Cohort Method a particular group of pupils entering the beginning of the class is followed up in subsequent years till they reach the final class of

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the course. This requires the longitudinal studies which help in identifying the number of pupils leaving school at different points of time, i.e., the number of pupils migrating to other schools, the number of pupils repeating classes and their frequency, the number of pupils getting promotion and the number of pupils rejoining school after dropping out etc. The TCM is considered to be the most scientific one among the available methods though it involves the use of cumulative record cards of time consuming nature.

Available data on dropouts for the year 1989-90 revealed existence of educational wastage both at the State and national level. At the primary stage dropout rate was estimated to be 48 percent for general category of pupils, 50 percent for scheduled caste and as high as 67 percent for scheduled tribes at the all India level (Table 5). Same trends were also observed in the middle and secondary stages. This, no doubt was a dangerous signal about the precarious conditions of the tribal communities in India. In this regard Tripura was found to be no exception. Dropout rates of tribal pupils at different stages were always higher in Tripura than that of India as a whole. Similar pattern was revealed for the scheduled caste and general category of pupils. Data also revealed that dropout rates were always higher in case of girl students as compared to boy students both in Tripura and at the national level.

To summarize the results obtained from the secondary sources of data, it can be said that literacy rates and enrollment of students were simultaneously rising both in Tripura and India but at a slower rate during the period from 1950-51 to 1990-91. However, Tripura was found to be in better position in comparison to India as a whole during the period. The girl students were always lagging behind the boy students. Similarly tribal students were lagging behind in comparison to students in other communities. However, enrollment rate tribal students were found to be more than that of other students in Tripura. Educational wastage was higher in girl students as compared boy students. Similarly educational wastage was more pronounced among tribal students in comparison to other students. Though Tripura was well ahead of India in respects of literacy and enrollment rates, her position was precarious as regards educational wastage.

In order to strengthen the above mentioned conclusion derived from analysis of secondary data an attempt was made to collect primary data from one school, namely Madhupur School at Madhupur in the south Sadar Sub-Division of Tripura which is

located 20 kms away from the State capital, Agartala. In order to study the dropout rate in the said school the students numbering 85 in Class I who were admitted in the year 1989-90 were considered as cohort. Out of these 85 students 38 failed, 7 dropped out and the rest 40 were promoted and enrolled in the next higher class in 1990-91. Among these 40 students, how many failed, how many dropped out and how many transferred etc were traced in the attendance registers of the school in the subsequent years. While calculating wastage rate by the True Cohort Method the students who were transferred to other schools were not taken into consideration and omitted from the cohort. The data were accordingly processed and presented in Table 6 which revealed that enrollment of girls were always higher than that of the boys. The overall wastage rate in the primary education in the school was 81.3 percent. In contradiction to the result obtained from secondary data percentage of wastage in boys (86.1%) was more that in girls (76.9%). It further revealed that wastage was more acute in tribal students (89.5%) than in non-tribal students (76.8%).

In order to study the reasons for this wastage, parents of eleven dropped out students from the same village were contacted on random basis. It was found that 72 percent of those families belonged to lower income group having income below Rs.1000 per month. Approximately 64 percent of those households were large families. It was significant to note that 50 percent of the parents of dropped out students were illiterate.

In conclusion it can be said that though a good progress has been achieved in literacy and enrollment rates in Tripura high dropout rates among tribal students has been a matter of great concern for the State. It is high time for the Government of Tripura to think and come forward to minimize the wastage in school education through some incentive measures in the form of mid-day meals, supply of free books and school dresses, etc.

Table 1

TREND OF LITERACY RATES IN TRIPURA AND INDIA

State/Country	Year	Male	Female	Total	Male-Female Gap
Tripura	1951	22.3	8.0	15.5	14.3
	1961	29.6	10.2	20.2	19.4
	1971	40.2	21.2	30.9	19.0
	1981	51.7	32.0	42.1	19.7
	1991	70.1	50.0	60.4	20.1
India	1951	27.2	8.9	18.3	18.3
	1961	40.4	15.3	28.1	25.1
	1971	45.9	21.9	34.4	23.9
	1981	56.5	29.8	43.7	26.6
	1991	64.2	39.2	52.2	25.0

Source: Census Reports of corresponding years.

Note: Literacy rates for the years 1951, 1961 and 1971 relate to population aged 5 years and above but for 1981 and 1991 it is 7 years and above.

Table 2

CASTE AND DISTRICT-WISE LITERACY RATES IN 1991

State/Country	Category	Male	Female	Total
Tripura	General	70.6	49.6	60.4
	S.C.	67.2	45.4	56.7
	S.T.	52.9	27.3	40.4
	Rural	*66.7*	*44.3*	*56.1*
	Urban	*93.0*	*76.9*	*83.1*
	West Tripura District	75.9	55.1	65.8
	North Tripura District	69.7	50.3	60.4
	South Tripura District	62.3	39.7	51.3
All India	General	64.2	39.2	52.2
	S.C.	49.9	23.8	37.4
	S.T.	40.6	18.2	29.6

Source: Census Report 1991.

Table 3

SEX-WISE TREND OF ENROLLMENT OF PUPILS IN INDIA

Year	Primary			Upper Primary			High/Higher Secondary		
	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
1950-51	138	54	192	26	5	31	13	2	15
1960-61	236	114	350	51	16	67	27	7	34
1970-71	357	213	570	94	39	133	49	17	66
1980-81	453	285	738	139	68	207	76	32	108
1990-91 (P)	581	410	991	209	124	333	140	69	209

Source: Annual Report 1993-94, Ministry of Human Resource Development, Government of India, New Delhi.

Note: P stands for provisional figures.

Table 4

ENROLLMENT RATIO IN SCHOOLS IN TRIPURA AND INDIA
(1992-93)

State/ Country	Category	Classes I-V (Age 6-11 years)			Classes VI-VIII (Age 11-14 years)		
		Boys	Girls	Total	Boys	Girls	Total
Tripura	General	143.3	119.7	131.7	94.5	73.4	84.2
	S.C.	170.5	146.6	158.7	100.0	74.6	87.9
	S.T.	174.7	130.3	152.7	100.4	52.8	77.2
India	General	118.1	92.7	105.7	80.5	53.8	67.5
	S.C.	127.9	92.2	110.6	75.1	44.0	59.9
	S.T.	126.7	88.6	108.2	58.5	32.0	45.6

Source: Annual Report 1993-94, Ministry of Human Resource Development, Government of India, New Delhi.

Table 5

SEX AND CASTE-WISE DROPOUT RATES IN TRIPURA AND INDIA
(1989-90)

Classes	Sex	Tripura			India		
		General	S.C.	S.T.	General	S.C.	S.T.
I-IV	Boys	58.9	58.2	71.9	46.5	47.2	64.5
	Girls	59.8	63.1	76.5	50.3	55.0	70.2
	Total	59.3	60.5	73.9	48.1	50.3	66.7
I-VIII	Boys	74.1	75.9	85.5	61.0	65.1	79.4
	Girls	75.9	81.8	88.2	68.7	74.1	84.9
	Total	74.9	78.6	86.6	64.1	68.5	81.4
I-X	Boys	82.9	86.9	90.5	71.9	77.3	86.7
	Girls	84.5	90.2	93.2	78.3	85.1	90.9
	Total	83.6	88.4	91.6	74.5	80.2	88.2

Source: Annual Report 1993-94, Ministry of Human Resource Development,
Government of India, New Delhi.

Table 6

ENROLLMENT OF PUPILS IN PRIMARY CLASSES IN MADHUPUR SCHOOL

Class	Number of Pupils			Percentage of Pupils Enrolled				
	Enrolled	Trans-ferred	Success-ful	Boys	Girls	Total	Tribal	Non-Tribal
I	85	7	75	100.0	100.0	100.0	100.0	100.0
II	40	2	37	41.7	58.9	49.3	26.3	57.1
III	30	1	29	10.7	38.5	38.7	21.0	44.6
IV	17	0	17	22.7	23.1	22.7	15.7	25.0
V	14	0	14	13.9	23.1	18.7	10.5	21.4

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