

AN ANALYSIS OF PRIMARY EDUCATION IN KOLKATA

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PREFACE

The term education comes from the Latin *educare*, which literally means to *bring up*, and is connected with the verb *educere*, which means to *bring forth*. Education in one way or the other is a necessary and universal feature of society by which every generation transmits to the next its social heritage; it is basically an agency of social control both in its conservative and innovative aspects. The influence that education exerts on society and society on education, can lead us to believe that one of the most effective ways to discovering the goals and ideals of society is to study its educational system. Though education of students concerns society yet it is the duty of the state to help, supervise and co-ordinate. It is only by the concerted action of all that illiteracy can be wiped out.

In India, elementary education is neither compulsory nor free for all. Though considerable gains in literacy and education have been achieved since independence yet we still have a long way to go as far as achieving the goal of universal elementary education. The adult literacy rate (15 years and above) in India was 61.3 percent in 2001 according to UNDP, Human Development Report 2004 and in spite of 82.4 percent children in the 6-14 age- group enrolled in schools in 2001-2002, the educational scenario bears a dismal look when compared to that of the developed countries. In the same vein, it must be said that the dismal state of primary education in Kolkata is no great exception.

Elementary education is a key ingredient in human resource development in so far as its significant effect on quality of human life is concerned by way of its effect on life expectancy, infant mortality, nutritional status and environmental awareness among several other indices. It can thus be identified as one of the essential pre-requisites for economic development. In this project my endeavour has been to find out the per capita expenditure of the Government of West Bengal on primary education in Kolkata, which can be, used an indicator of the state of education. Though paucity of the necessary data has been a problem all throughout yet I have tried my level best to make as much sensible conclusions as possible as well as see through the missing links so as to be able to give shape to the final report and hope that the findings will bring to light some realities which are otherwise existent but widely ignored.

I would like to take this opportunity to thank *Centre for Civil Society* for making me a part of their summer research internship programme and providing me with such a motivating project work that is of so great relevance in today's perspective. I will also express my sincerest gratitude to Sushmita Pratihast for all her kind assistance and feedbacks consistently throughout the internship period. This has definitely been a great enriching experience for me for having had the opportunity and exposure to work on such a reality driven analysis of a practical problem that has been ailing this country quite some time now.

Last but not the least I would like to mention that I will be immensely indebted and thankful to all the officials of various ranks of the Directorate of Education, Government of West Bengal; Bureau of Applied Economics and Statistics, Government of West Bengal; Kolkata Municipal Corporation and Kolkata District Primary School Council. Without the cooperation of all the aforementioned individuals my project would have remained incomplete. I hope that despite the bindings imposed by the shortage of time and unavailability of data this project will stand to be of some relevance and will go on to provide some insight into the problems plaguing the delivery of primary education by the various state run machineries in Kolkata.

Ausmita Ghosh

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INTRODUCTION

In his book, "On Education", Bertrand Russell said ".....the educational system we must aim at producing in the future is one which gives to every boy and girl an opportunity for the best that exists." This is something, which is very agreeable to most of us, and yet such a scenario seldom meets our eye when it comes to the state of education in India. It is undeniable that education plays a crucial role in improving the welfare of a society. According to the World Bank, 2003, 8 out of 10 of the world's children live in developing countries that are characterized by poor quality of human capital and population pressures among a host of other problems. India being a developing country exhibits these characteristics and as such offers policy questions of huge relevance.

The importance of focusing on education as a vehicle of empowerment is highlighted by the United Nations Millennium Summit in September 2000 where 2 out of the 8 Millennium Development Goals (MDGs) focused on education: first, all children to complete primary education by 2015, and second, to achieve gender equality all levels of education by 2015. But in spite of this global acknowledgement about the pressing need for education, public expenditure on elementary education in India has still not reached the desired levels of adequacy as the percentage of elementary education expenditure to GDP has never really exceeded beyond 2.06% which was the official figure for the fiscal year 2000-2001¹. For the fiscal years of 2001-2002 and 2002-2003 it was 1.91% and 1.93% respectively. The Constitution talks of primary education as a concurrent subject and states that its execution lies with the state government.

The purpose of this present paper is to narrow down our focus to the state of education in West Bengal and further down to the city of Kolkata, which is the capital city. Kolkata is one of the major urban agglomerations of this country and exhibits a myriad of problems that are typical of any mega-city in developing countries so the objective of this paper is to find out the per capita expenditure incurred by Government of West Bengal on primary education in Kolkata and hence analyse the state of primary education in this city. In this context it is noteworthy that the Pratiche Educational Report, 2002 compiled by Kumar Rana et al opened a Pandora's box of the ailments plaguing the educational scenario of some of the districts of this state.

The emphasis on the per capita expenditure in this paper can be explained by the fact that education and economics are largely interdependent and per capita expenditure is an economic variable that has pronounced effect on education. Figures relating to this help us understand what government is providing us and what at cost. The quality of education which is quite deplorable in most schools can be justified in the light of the immense amount of money that is being spent on such provision and also it compels us to think about alternative mechanisms of providing better quality education something that is being done by thousands of private schools in the country at affordable prices and most of the low-income class people are using it as alternatives for acquiring Although higher education including secondary, higher secondary and college/university are very significant determinants of the educational scenario, yet due to paucity of time they have been kept out the bounds of analysis of the present paper.

¹ According to the report of Census,2001.

SECTION I

1.1. Primary Education in Kolkata

To begin with it must be said that West Bengal is the most densely populated state in the country with a population density of 904 persons per sq. km. in 2001². Various historical, sociological and economic factors can be credited for such high population density which makes provision of basic infrastructure such as health and education a very challenging task since high population tends to affect per capita resource allocation which in turn affects the effectiveness and efficacy of the use to which this allocated resource is put.

The focus for this present analysis is exclusively on Kolkata, one of the 19 districts of West Bengal, is quite different from the rest as it has the highest population density among all the districts with 23783 persons per sq. km., has the lowest annual population growth rate of 0.4%³ and is dominantly urban. This district has the highest literacy rate of 81.31% and per capita income among all the districts in the state and 1.46% of the total children in the age group of 6+ to 15+ are not attending schools⁴. Spread over an area of 187 sq. km., this city has one municipal corporation—the Kolkata Municipal Corporation (KMC) and is divided into 141 wards. Besides there are administrative areas by name of 'boroughs' which are generally clusters of 9 to 20 wards. There are 15 such boroughs. Again, as far as management of dissipation of primary/ elementary education is concerned, there is another clustering of wards that are known as 'circles'. At present there are 23 such primary education circles each of which are a group of 3 to 14 wards. This clustering has been clearly demonstrated the following table.

Table 1. Composition of Educational Circles in Kolkata

Circle Name/ Number	Wards in Circle	Total Number of Wards
1	2,3,4,5	4
2	1,6,7	3
3	10,11,17,18	4
4	21,22,23,25,42	5
5	12,13,15,16,28	5
6	25,26,39,41,43,47	6
7	27,28,29,30,33,34,35	7
8	36,37,38,39,40,45,46,47,48,49,50,51,52,53	14
9	54,59,60,61,62,64,65,66,67	9
10	75,76,77,78,79,80	6
11	63,69,70,71,72,73,84,85,86,87	10
12	86,89,90,92,93,94,96,97	8
13	96,98,99,100,102	5
14	89,91,92,95,96,97,98,103	8
15	14,31,32	3
16	36,55,56,57,58,59	6

² Census of India, 2001.

³ Census of India, 2001.

⁴ According to Bureau of Applied Economics and Statistics, Government of West Bengal and Census of India, 2001.

17	65,67,68,69,91,92	6
18	74,81,82,83,88	5
19	8,9,19,20,24	5
BEHALA	115-124	10
BEHALA WEST	125-132	8
ALIPORE	133-141	9
TOLLYGUNJE	57,58,101-114	12

Source: District Primary School Council, Kolkata.

1.2. Types of Schools: An Overview

Broadly speaking, there are mainly four types of schools in Kolkata which are: privately run schools, state government run schools, state government aided/ sponsored schools, union government run schools and union government aided/ sponsored schools. In so far as primary education is concerned, apart from the privately run schools and union government run/ aided/ sponsored schools, there are the government schools that are run by the West Bengal Board of Primary Education (WBBPE) which is the organ of the state government concerned with the dissipation and management of elementary education in the state and the Kolkata Municipal Corporation Primary (KMCP) schools, which are run by the Kolkata Municipal Corporation (KMC).

In case of primary education, there is no difference in the government run, aided and sponsored schools since the management and funding of all these schools is the responsibility of the West Bengal Board Of Primary Education. Though in higher levels i.e., in case of junior high/middle schools, secondary schools and higher secondary schools there is a difference between these types. At these levels, the government run schools are those which are run entirely by the government implying that the funding and management are all in the hands of the government. The government aided schools are those in which the funding of schools' expenses i.e., the salaries of all the teaching and non-teaching staff, expenditure on schools textbooks, expenditure on provision of school uniform (if any such scheme is in place) and expenditure on development of school infrastructure are all borne by the government but the management of the schools are the discretion of the respective schools' without any interference of the government. The scenario of the government-sponsored schools used to be pretty much similar though of late due to some changes they are enjoying the same status as the government run schools as the state government has taken up the responsibility of funding of these schools. Again, in case of the KMCP schools, the funding and management is the responsibility of the KMC. The syllabus structures in these two types are different as the respective regulatory authority formulates them.

In this state, elementary or primary education comprises classes I to V, upper primary education classes VI to VIII, secondary education classes IX and X and Classes XI and XII make up the higher secondary level of education. Thus school education comprises of the four aforementioned levels. But there exists a dichotomy in so far as primary education is concerned. Although primary education includes classes I to V, yet most classes of standard V are being held in the upper primary or secondary section. So, basically primary education in Kolkata comprises classes I to V.

The following table summarises the figures of the total number of each of these abovementioned types of elementary schools in the city for the years 1999-2000. The figures of the privately run schools reflect those schools that are recognised and not those that are not recognised though such schools do exist in Kolkata.

Table 2. Total Number of West Bengal Board of Primary Education Run Primary Schools, KMCP Schools and Privately Run Primary Schools in Kolkata Including ICSE/ CBSE/ Anglo-Indian Missionaries' Schools⁵ in Kolkata.

Year	WBBPE Run Schools	KMCP Schools	Privately Run Schools
1999-2000	1450	NA	NA
2000-2001	1323	296	NA
2001-2002	1323	296	92
2002-2003	1323	239	92
2003-2004	1296	242	107
2004-2005	1277	242	NA
2005-2006	NA	242	NA

Source: Bureau of Applied Economics and Statistics, Kolkata ⁵

1.3. Organisational Setup of Administration of Primary Education

Primary education in the schools run by the West Bengal Board of Primary Education i.e. the state government run schools and the Kolkata Municipal Corporation Primary (KMCP) schools, which are run by the Kolkata Municipal Corporation (KMC) provide education for free which implies that the students of these schools do not pay any school tuition fee as well as are provided with free school textbooks. The concept of free primary school education in Kolkata was introduced in 1924 by the then Mayor Deshbandhu Chittaranjan Das. At that point of time only 19 free primary schools catered to the need of 2468 students, which has now been increased to 242 schools catering to 32,439 students. Almost all these schools are located in slums and cater to the most under privileged sections of the society⁶.

The apex body in the organizational set-up is the School Education Department of the Government of West Bengal under which among other organs are the West Bengal Board of Primary Education and Directorate of School Education. The West Bengal Education Act, 1973, right from its promulgation and through all subsequent Amendments, vests in the West Bengal Board of Primary Education the development, management, supervision and control of the entire primary education in West Bengal. To meet the requirements of all the districts of the state, there are 19 District Primary School Councils (DPSC) in the districts that work for primary education under the aegis of the Board. The Directorate of School Education implements the policy of the government through Inspectorate and Inspectors located in districts, sub-divisions and circle/block levels.

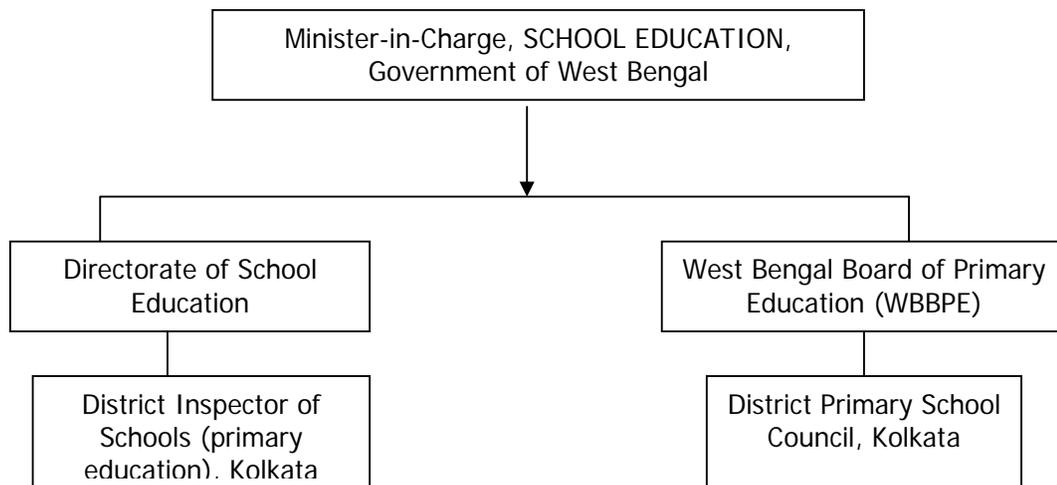
In case of the KMCP schools, Department of Education of the KMC is in charge of their overall administration and management. Elementary education consists of five years of schooling from class-I to class-V followed by upper primary education from class-VI to class-VIII and then by secondary and higher secondary education. A child enters the educational system at the age of 5+ in class I. In a bid to universalise elementary education, primary schooling is free for all children in this state in the age group of 5 to 9.

Figure 1.

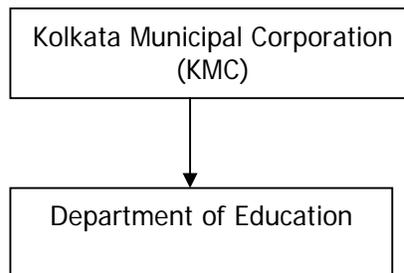
⁵ NA indicates that the statistic corresponding to that particular year is Not Available.

⁶ According to an official document of KMC.

Hierarchy of Primary Education Management System for the State Government Run Primary Schools in Kolkata



Hierarchy of Primary Education Management System for the Kolkata Municipal Corporation Primary Schools



1.4. Various Incentive Schemes Offered

There are various incentive programmes initiated by the Government of West Bengal such as provision of funds for providing encouragement to school sports activities, provision of school dress and free text books in some schools. For the fiscal year 2004-2005, the School Education Directorate (Primary Branch) sanctioned a total of Rs.1,49,625 for conducting sports and physical activities in Kolkata. There is also a scheme in place by the name of Employment Guarantee Scheme (EGS) under which a programme by the name of *Sishu Siksha Prakalpa* (SSP) is run with the aim of providing primary schooling access to children in the urban habitations. The SSP is a special primary component of EGS programme under Alternative Schooling is run by the Municipal Affairs Department, Government of West Bengal. It is a community based and community initiated and managed primary education programme. This supplementary effort addresses the out of school children (children of the deprived urban community) living in the urban areas/slums/squatters who are not properly served through the

existing formal primary school. At present, the KMC runs 100 such SSPs in Kolkata, which began in 2001 in the first phase with 50 schools, and subsequently in the second phase 50 more were added.

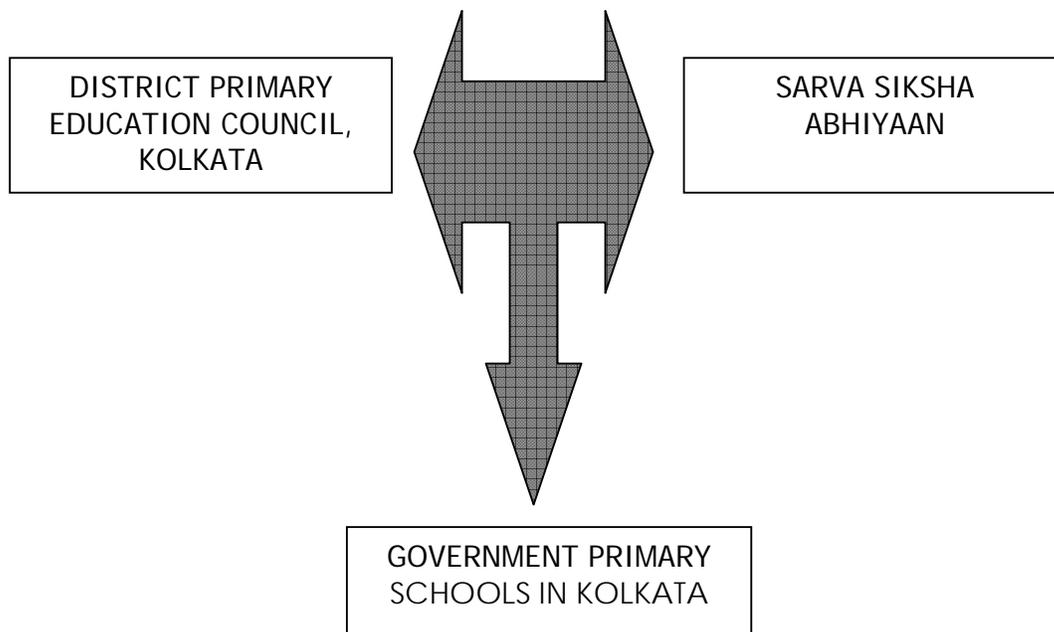
SECTION II

2.1. Expenditure Pattern of Government Agencies On the Primary Schools

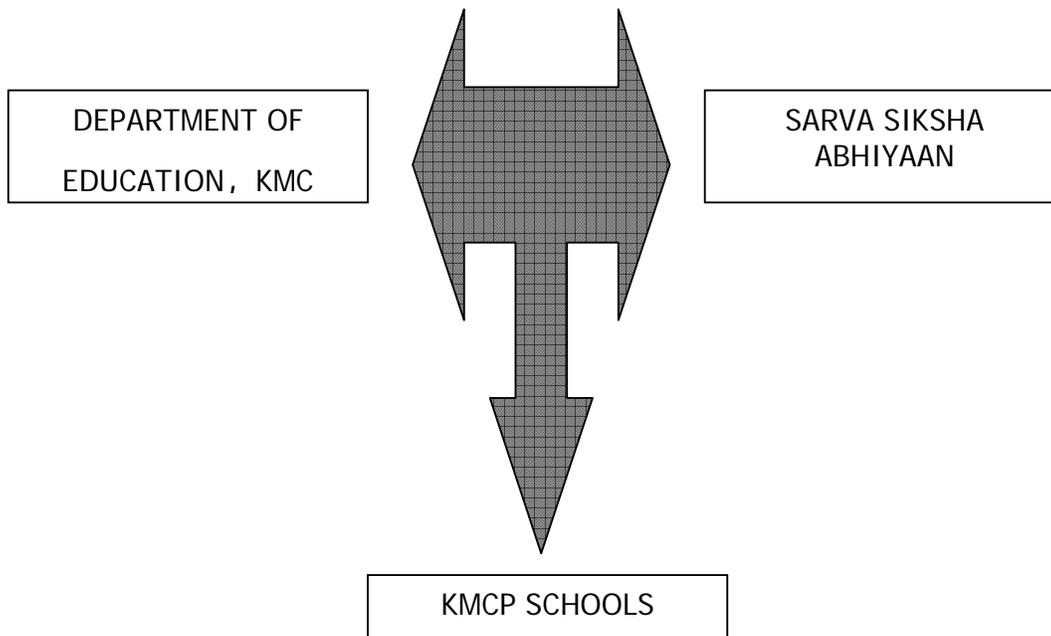
The Government of India in a bid to bring the children of age group 5 to 14 years under the purview of elementary education in this country by 2010 according to the Millennium Development Goals (MDGs) has taken up 2 programmes, the District Primary Education Programme (DPEP) and the Sarva Siksha Abhiyaan (SSA) introduced in the years 1997 and 2000 respectively. The Government of West Bengal has implemented the DPEP in 10 districts since then and it has become a part of the SSA from 2001-2002 in all the districts of the state. Till 2001-2002, the SSA programme was being funded with 75% contribution by the Government of India and 25% by the Government of West Bengal. For the plan period 2002-2007 this sharing has been on a 1:1 basis while for the next plan period i.e., 2007-2012 it will be on a 1:3 basis where the share of Government of India's contribution will be 25% and that of the Government of West Bengal will be 75%. In Kolkata, the SSA has been at work from 2003-2004 onwards. But Kolkata is a non-DPEP district.

In Kolkata, the funds flow into the government primary schools from the District Primary Schools Council (DPSC), Kolkata and as part of the SSA programme. Though mid-day meals are not provided in the state run i.e. the WBBPE run schools but in the KMCP schools mid-day meals are being provided from November 2005 onwards in phases where in the first phase mid-day meals were being provided in only 10 schools and progressively in the subsequent phases more and more schools are being brought under this scheme. In the KMCP schools, funding takes place through the KMC and through the SSA scheme.

Figure 2. Flow of Funds Into The Government Run Primary Schools



Flow of Funds Into The KMCP Schools



2.2. Per Capita Expenditure In the Primary Schools

In this section, the focus will be on the analysis of the annual per capita or per student expenditure of the respective regulatory government bodies in the primary schools of Kolkata. These per capita values have been calculated on the basis of the data the total flow of funds in all the primary schools of each of the two aforementioned types through the various government administrative bodies in a particular financial year and the respective total enrolment figures of these schools. The per capita expenditure of the government on primary education can be viewed as the level of government's contribution and participation in its pledge towards the provision of educational facilities and opportunities to the children. This is quite a significant indicator since despite liberalisation spreading its roots into various spheres of the economy in India post 1991, and notwithstanding the government's obvious inefficiency in delivering quality education over the years especially in case of elementary education, education still remains largely in the hands of the government.

Various studies all over the world have shown that there exist very strong empirical regularities between educational attainment of populations and their productivity and performance in both market and non-market production activities. Several microeconomic studies have thrown up similar results by way of showing that more educated men and women receive more earnings and produce more output than the less educated in various activities. In view of these results, it is quite logical to deduce that education enhances productivity and earnings of labour and thus explains why governments expend a substantial fraction of national income on public education. The motivation of governments to supply resources for producing schooling services could be on the expectation that the rate of return warrants the investment. As such per capita expenditure on primary education gains fundamental importance in order to study the state of primary education in any country or state or district or city.

The following tables will show the annual per capita expenditures incurred by the government bodies on primary education in the primary schools in Kolkata in the last 4 or 5 years. As already mentioned before, the DPSC and the SSA program of Central government are the two sources that pump money into the primary schools in Kolkata that are run by the West Bengal Board of Primary Education. Again, in the KMCP schools the Department of Education, KMC and the SSA are the bodies that fund them.

The SSA has been in operation in Kolkata from the fiscal year 2003-2004 onwards and though the figures of its expenditures on the state government primary schools are available but those pertaining to its expenditures on the KMCP schools are not. Hence an estimate of that expenditure has been made on the basis of the following information. Each year SSA grants funds to the KMCP schools as School Grant and TLM (Teaching-Learning-Material) Grant. The school grant consists of Rs.2, 000 per school per year and the TLM grant is made on the form of Rs.500 per teacher per year in all the KMCP schools. The figures of the total expenditure on primary education in the WBBPE run schools as well as in the KMCP schools as will be shown in the following tables includes the funds from the SSA scheme.

Thus, the annual SSA grants to the KMCP schools in the last 2 or 3 years can be calculated by using the formula: (total number of schools * Rs.2000) + (total number of teachers * Rs.500).

Table 3. Total Expenditure of DPSC (including SSA funds) on the WBBPE Run Primary Schools

Year	Actual Expenditure (in Rs)
2001-2002	425,150,445
2002-2003	409,641,068
2003-2004	412,528,050
2004-2005	429,469,914

Source: DPSC, Kolkata

Table 4. Expenditure of Department of Education, KMC (including SSA funds) on Primary Education in the KMCP Schools

Year	Estimated Expenditure (in Rs)	Revised Estimated Expenditure (in Rs)	Actual Expenditure (in Rs)
1998-1999	NA	NA	115,866,000
1999-2000	NA	137,840,000	100,561,000
2000-2001	160,664,000	157,527,000	147,283,000
2001-2002	179,745,000	138,750,000	131,910,000
2002-2003	172,442,000	130,785,000	122,183,000
2003-2004	161,588,000	115,647,000	115,647,000
2004-2005	162,976,000	134,650,000	120,365,000
2005-2006	163,635,000	113,713,000	NA
2006-2007	156,340,000	NA	NA

Source: Department of Education, KMC

Most importantly, the annual per capita expenditures of the state government on primary education i.e. on the WBBPE run schools in Kolkata in the last 5 years have been calculated using the formula:

(total expenditure on the WBBPE run primary schools) / (total enrolment in primary schools).

Similarly, the annual per capita expenditures on primary education in the KMCP schools in the last 4 years have been calculated on the basis of the following formula:
 (total actual expenditure on the KMCP schools) / (total enrolment in the KMCP schools).

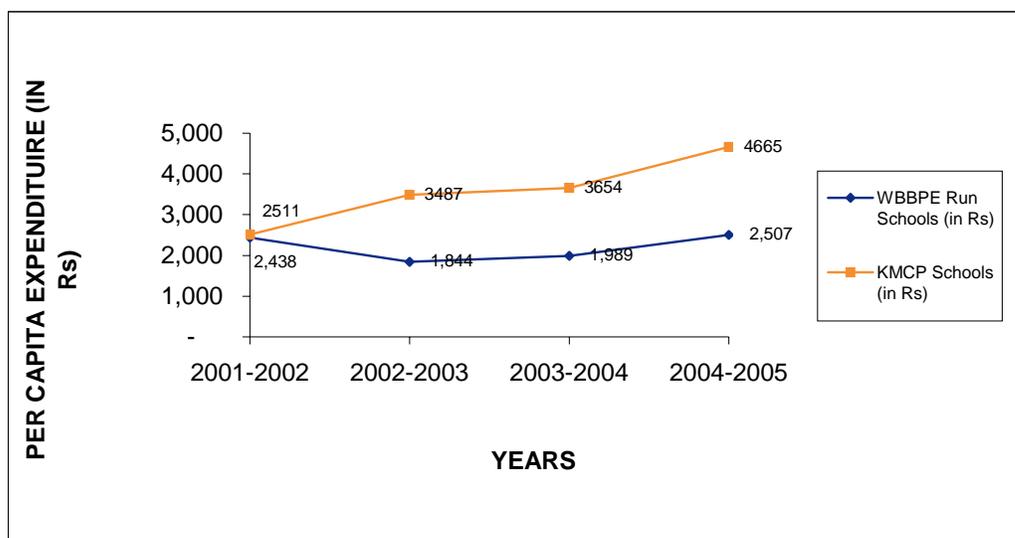
Table 5: Total Enrolments in the WBBPE Run Primary Schools and the KMCP Schools

Year	WBBPE Run Schools	KMCP Schools
1999-2000	135384	NA
2000-2001	184562	56901
2001-2002	174402	52538
2002-2003	222120	35036
2003-2004	207420	31646
2004-2005	171323	25802
2005-2006	205376	21967

Table 6. A Comparison of the Per Capita Actual Expenditure on the WBBPE Run Schools and the KMCP Schools by the DPSC and KMC Respectively

WBBPE				KMC			
Year	Exp	Enrol	per capita	Year	Exp	Enrol	per capita
2001-02	425,150,445	174402	2438	2001-02	131,910,000	52538	2511
2002-03	409,641,068	222120	1844	2002-03	122,183,000	35036	3487
2003-04	412,528,050	207420	1989	2003-04	115,647,000	31646	3654
2004-05	429,469,914	171323	2507	2004-05	120,365,000	25802	4665

Chart 1. A Comparison of the Per Capita Actual Expenditure on the WBBPE Run Schools and the KMCP Schools by the DPSC and KMC Respectively



The following tables will show the share of the actual total expenditure of KMC on primary education in the KMCP schools as a percentage of the actual total expenditures of the KMC on all accounts in the last 5 years.

Table 7. Financial Analysis of KMC Expenditure on Primary Education (in Rs)

Year	Actual Expenditure (KMC)	Actual exp on primary education by KMC	% of primary education exp to actual expenditure
1998-1999	4,391,636,000	115,866,000	2.64
1999-2000	5,060,956,000	100,561,000	1.99
2000-2001	6,081,359,000	147,283,000	2.42
2001-2002	5,347,626,000	131,910,000	2.47
2002-2003	5,581,165,000	122,183,000	2.19
2003-2004	6,083,449,000	115,647,000	1.90
2004-2005	7,424,219,000	120,365,000	1.62
2005-2006	NA	NA	-
2006-2007	NA	NA	-

Source: Department of Education, KMC

SECTION III

3.1. Quality of Primary Education in the Schools

The literacy rate in West Bengal has always been higher than the national average and presently ranks sixth among the major states in this regard with a literacy rate of 69.22% which showed that a quarter of men in India and almost half the women in this country were illiterate. Kolkata with a literacy rate of 81.31% ranks first among all the 19 districts in the state as far as literacy rates are concerned according to Census, 2001. The above section clearly pointed out that though the government has been attempting to reach the MDGs yet it still remains far from attaining them since there has been a decline, though in leaps and bounds and not monotonically in per capita as well as the total expenditures on primary education in all the types of the government schools. This of course raises a lot of questions about whether the government's intentions and actions go hand in hand or not.

Quality of education imparted in schools can be defined with the help of several parameters such as net enrolment, drop-out rates, school infrastructure (includes number of schools, availability of electricity connection, drinking water facility, separate toilets for girls and availability of school buildings as well as sufficient number of classrooms), number of teachers, attendance of teachers and students as well, frequency of inspection of schools so as to keep a check on the accountability of teachers, head- teachers and school authorities and dependence on private tuition as poor quality of teaching in the schools coupled with high rates of teacher absenteeism can act as a deterrent for children attending schools so that they eventually seek recourse in private tuition. In this project, however, due to the constraints imposed by shortage of time, only some of these parameters have been used to analyse the quality of education and they are—total enrolments, total number of schools and the total number of teachers in the primary schools.

3.1.1. Total Enrolments in the Primary Schools

The following tables and graphs will depict that the enrolments in the government primary schools are following a somewhat declining trend which is of course contradictory to the governments efforts to bring more and more children under the fold of the universal primary

education programme and especially those belonging to the financially backward sections of the society who cannot afford to go to the privately run schools.

Table 9. Total Enrolments in the WBBPE Run Schools

Year	Male	Female	Total
1999-2000	81007	54377	135384
2000-2001	92743	91819	184562
2001-2002	84664	89378	174402
2002-2003	109350	112770	222120
2003-2004	102261	105159	207420
2004-2005	NA	NA	171323
2005-2006	NA	NA	205376

Source: Bureau of Applied Economics and Statistics (BAES), Government of West Bengal, Kolkata

Table 10. Total enrolments in the KMCP Schools

Year	Male	Female	Total
1999-2000	NA	NA	NA
2000-2001	38688	18213	56901
2001-2002	35428	17110	52538
2002-2003	17086	17950	35036
2003-2004	15240	16226	31646
2004-2005	NA	NA	25802
2005-2006	NA	NA	21967

Source: Bureau of Applied Economics and Statistics (BAES), Government of West Bengal, Kolkata

Observing the above two tables reveals that over the years the enrolments of girls have increased so as to have eventually taken over that of the boys so much so that while initially in 1999-2000 in both the WBBPE run primary schools and the KMCP schools the enrolments of females were significantly lower than that of the males. But 3 years down the we get a different picture where the enrolments of the females have exceeded that of the males. This fact can be attributed to the theory prevalent in some literatures of economics of education that elasticity of demand for schooling is higher in case of girls than boys so that sometimes policies and programmes that are not specifically aimed at girls may end up increasing school participation of girls at higher rates than that of the boys. Such a phenomenon can be said to have happened here too considering that the government has implemented the *Sarva Siksha Abhiyaan* (SSA) in the various types of government primary schools in Kolkata and the Government of West Bengal also from time to time takes up the task of distributing free school uniforms among under-privileged girl children from some of the government primary schools in the city.

What is also obvious is that though the enrolments in the WBBPE run schools have increased in leaps and bounds though not monotonically over the given time frame, that of the KMCP schools has steadily declined over time. This bears testimony to the deplorable condition of the infrastructure as well as the quality of the education in the KMCP schools. A casual primary research work among a handful of these schools has revealed that most of these schools are plagued by some of the most basic infrastructural problems such as no electricity, no water supply, no separate toilet facilities for girls and few teachers with most of the schools having an average of 3 to 4 teachers.

The total enrolment in the primary schools i.e. the enrolments in the WBBPE run and KMC run schools taken together throws up an interesting observation as shown below. According to population projections, the total number of children in the age bracket of 5+ to 8+ in Kolkata was 5.17 lacs as on March 2004 i.e. those children who were eligible to attend primary school from class I to class III. Observation of the tables above and subsequent calculation reveals that the total enrolment of children in Kolkata at all levels of primary schooling including the 49870 students enrolled in the privately run primary schools in Kolkata as will be shown in the next sub-section in the fiscal year 2003-2004 was 2,88,936 i.e. approximately 2.9 lacs which is far below the actual number of eligible children and this too includes children in the age bracket of 9+. So if proper figures of the number of children belonging to this age bracket were available and subsequently deducted from the total enrolment figures then the resultant statistic would have surely been lesser than 2.9 lacs, which only adds fuel to the fact that the government is really miles away from its aim of achieving universal primary education by 2015. The present statistics clearly show that actual enrolment is even lesser than 50%. Very surprisingly the gross enrolment rate for this fiscal year, according to the state government's estimates as per its annual reports was 100.26% while the net enrolment rate was reportedly 98.72%. This is clearly an instance of over-reporting by the government as is often the case in the developing economies and India is no exception.

Theoretically too this disparity can be explained. In educational literatures it is widely acknowledged that the net enrolment rates are always a better and reliable index compared to the gross enrolment rates. It is also widely believed and accepted that the government reports of these enrolment rates are often prone to manipulation as the following excerpt from a path-breaking article on the economics of education will reveal:

Gross enrollment rates above 100 percent do *not* imply all school-age children are in school. First, grade repetition raises gross enrollment rates. For example, in a school system with 6 years of primary education, a 100 percent gross enrollment rate is consistent with 75 percent of children taking 8 years to complete primary school (because each child repeats two grades) and 25 percent of children never attending school. Second, gross enrollment rates are typically computed by comparing census data on the school-age population with Ministry of Education data on school enrollment, obtained from school principal's reports. In many countries, principals and teachers have incentives to exaggerate the number of students enrolled (PROBE Team, 1999). An example of this is from India; the official primary gross enrollment rate in 1993 was 104.5 percent, but household survey data for 1993 show a rate of 95.9 percent (World Bank, 1997). Both overreporting and grade repetition can cause reported gross enrollment rates to reach or exceed 100 percent even when many children never enroll in school. An alternative measure of progress toward universal primary education is *net enrollment rates*, the number of children enrolled in a particular level of schooling *who are of the age associated with that level of schooling*, divided by all children of the age associated with that level of schooling. Net enrollment rates can never exceed 100 percent, and they remove the upward bias in gross enrollment rates cause by the enrollment of "overage" children in a given level (due to repetition or delayed enrollment). They do not, however, address overreporting in official data. Net enrollment rates are much lower than gross enrollment rates for low- and middle-income countries. The

lower net rates for low- and middle-income countries reflect higher repetition of grades in those countries (Glewwe, P., Michael Kremmer2005, p. 4).

There is even more evidence on this matter as the following excerpt from a newspaper article about a UNICEF funded study conducted by a team of academicians from the Indian Institute of Management, Calcutta (IIMC) the findings of which was supposed to have been denied and subsequently hushed up by the Government of West Bengal only goes on to confirm this belief:

It states that the enrolment rate is lower than that shown in official statistics. In Kolkata, enrolment was found to be 50.7 per cent at the primary level and 25.7 per cent at the pre-primary level. The main reason for non-enrolment in the city was “the scarcity of schools or seats”. According to the report, available data also indicated a high dropout rate in schools after standard IV. “We strongly believe, on the basis of our field experience, that once parents put their children into schools, they seldom withdraw their wards before at least Class IV. There is a substantial dropout between Class IV and Class V because of the non-availability of schools with Class V onwards in the vicinity,” the report continues³.

3.1.2. Total Number of Primary Schools

The following tables will show the total number of each type of school in the city and will hence help us in analysing the trend of the numbers of schools. It can thus be used to find out if the government is actually inching towards the achievement of its goal of providing universal primary education or not.

Table 11. Total Number of WBBPE Run Primary Schools and KMCP Schools in Kolkata

Year	DI (primary + junior basic)	KMC
1999-2000	1450	NA
2000-2001	1323	296
2001-2002	1323	296
2002-2003	1323	239
2003-2004	1296	242
2004-2005	1277	242

Source: Bureau of Applied Economics and Statistics (BAES), Government of West Bengal, Kolkata

A decrease in the number of schools definitely does not paint a good picture about the quality of education as in order to keep pace with increasing population along with universalising primary education, the number of schools is very crucial as in order to attract more and more children into the scheme of things and accommodating them. In several pockets, especially in slum areas, it can be observed that parents prefer to send their children to the local or nearby government schools due to disproportionately large transportation costs compared to the family income incurred in order to attend schools in some other area or locality.

³ Source: *The Telegraph*, January 21, 2002.

It is very evident from the abovementioned tables and charts that numbers of both the types of the government schools have declined in the given time frame. That should be compensated by free private enterprise and also help provision of education to people who are assumed will not pay for private education. It is also apparent that while the fall in the number of the WBBPE run schools is still falling, that of the KMCP schools have hit a floor. Besides the number of schools, another aspect about the infrastructure which is also equally important as the presence of schools in the vicinity of place of residence is the number of rooms in the schools that already exist. A major problem of some of the government schools is that the number of classrooms is few which impose a restriction on the number of classes that are being held at a time. It has sometimes come to light that there exist some primary schools which function with only one or two classrooms. This suggests that all the primary classes are taught together in one room which is definitely not desirable since multi-grade classrooms are clearly less conducive to learning and can end up becoming major sources of distraction.

3.1.3. Total Number of Primary School Teachers

Now, the numbers of teachers in these schools is another important aspect, which must also be looked into. The following tables will do just that. A casual primary investigation has revealed that most of the KMCP schools have on average 3 to 4 teachers that again imply that multi-grade simultaneous classes are a norm in these schools. This obviously explains a high student-teacher ratio in these schools.

Table 12. Total Number of Teachers in the WBBPE and KMCP Run Schools

Year	DI (primary + junior basic)	KMC
1999-2000	5320	NA
2000-2001	4761	1760
2001-2002	4923	1736
2002-2003	4496	767
2003-2004	4497	735
2004-05	NA	820

Source: Bureau of Applied Economics and Statistics (BAES), Government of West Bengal, Kolkata

It is quite evident from the figures presented so far that, quite contrarily to the picture that the government wants to paint regarding its pursuit of achieving the aim of universalisation of elementary education by announcing and launching various schemes, at the ground level reality is painting quite a different picture altogether. The scenario in case of number of primary school teachers too bears an uncanny resemblance to the scenario observed in case of the total number of government primary schools and the total enrolments in these primary schools. The number of primary school teachers has fallen in the given time frame i.e. in the last 5 years in both the WBBPE run and KMCP schools.

The PROBE report (1999), based on in-depth surveys in five Indian states, pointed out that a key factor in low school participation is the low quality (unmotivated teacher incentives, weak curriculums, inadequate physical facilities) of available schools. Several retrospective studies examine the impact of both distance to school (often measured by travel time) and school quality on the quantity of schooling. A study has come up with several interesting observations in this respect:

According to the study findings, years of schooling were reasonably responsive to school quality. The estimates indicate that years of

completed schooling could increase by 2 to 2.5 years by raising average teacher experience (from 2 years to 10 years), repairing leaking roofs, reducing travel time (from 2 hours to a few minutes), or providing blackboards to schools without them. Since repairing roofs and providing

Blackboards is much less expensive than building new schools, these results suggest that repairing classrooms in Ghana is a more cost-effective means of increasing the quantity of schooling than building new schools to reduce travel time (Glewwe, P., Michael Kremmer 2005, p.21).

3.1.4. Student-Teacher Ratio in the Primary Schools

Another important parameter in the analysis of quality of education is said to be the student-teacher ratio. It measures the number of students per teacher or the number of students that are being taught/ attended to by a single teacher on an average. This is crucial as the student-teacher ratio is a very important indicator of the quality of education imparted since a high ratio will imply that the effectiveness of education is low which is a very logical conclusion following from the fact that a single teacher when teaching a large number of students may not be able to attend to the needs and requirements of each and every student in a class which may be otherwise possible with a small class size and vice versa. The formula used for calculating the student-teacher ratio is total number of students in a particular type of school in a fiscal year divided by the total number of teachers in the respective type of school in the respective fiscal year. In reality this is not actually the method of calculating student-teacher ratio. It is conventionally done by using the strength/ class size of each class or sections in the schools and then drawing up an average figure from those statistics. But this modus operandi requires extensive field research, which was impinged upon by the shortage of time. Hence, though quite abstracted from reality, I have for the sake of simplicity, used the following formula for calculating the student-teacher ratio in both types of the government primary schools:

Student-teacher ratio =

(Total enrolments in the primary schools for a particular year) / (Total number of teachers in the primary schools in the respective year).

Several studies on economics of education have shown that class size has a negative effect on the number of years of schooling of both boys and girls which in other words implies that as the class size declines, the quality of schooling improves and as a direct fall out of these improvements the number of years of schooling of these children increases. The following tables will show the student-teacher ratios in the different types of government primary schools in Kolkata which have been calculated on the basis of the data presented in the tables 9, 10 and 20.

Table 14. Student-teacher Ratios in the WBBPE Run Primary Schools and in the KMCP Schools

Year	DI(Primary + Junior basic)	KMC
1999-2000	25.45:1	NA
2000-2001	38.77:1	32.33:1
2001-2002	35.43:1	30.26:1
2002-2003	49.40:1	45.68:1
2003-2004	46.12:1	43.06:1

What is clearly evident from the charts and tables presented above is that the student-teacher ratio in both the WBBPE run and KMC run primary schools has increased rapidly over the last 4 or 5 years which indeed is a very retrogressive trend. A similar opinion has been voiced by Professor Amartya Sen in his recent claim in a newspaper article based on actual primary investigations in the primary schools of Kolkata where he has said that on an average, the student-teacher ratio in most of the government schools is 54:1 which is a staggering piece of statistic indeed and speaks volumes about the deteriorating condition of primary education in the government schools in the city and more so about the failure of the government in its duty of providing quality education.

3.2. Analysis of the Per Capita Expenditure Levels

A quick comparison of the figures in the tables and the graphs in the previous sub-section reveals that though the per capita expenditure in both the two types of schools have increased in leaps and bounds over time yet there are disparities in these levels of per capita expenditures. Apart from the glaring fact that the per capita annual expenditures are abysmally low what is obvious is that the per capita expenditures in the West Bengal Board of Primary Education run schools have been consistently lesser than that in the KMCP schools in the years 2001-2002, 2002-2003 and 2003-2004. Such low levels of expenditure go on to explain the poor condition of primary education in the government run schools in Kolkata. So we have abysmally low per capita expenditure and yet lesser number of children in schools with a high teacher student ratio which definitely points at a serious loophole in the scenario of primary education in Kolkata. Notwithstanding, it may be mentioned here that even though the expenditure in these schools have been really low, but its not always necessary that a good quality of education is ensured if there is more money pumping just as there have been several such studies confirming this theory.

Similarly, studies have proved that the private enterprise and their initiatives have also done a good job of providing education to the poor. Many people show their concern about mushrooming of the private schools, however, these schools are more widespread, preferred by people, per student cost is lesser, higher teacher commitment, and people have more satisfaction than other types of schools.

In this context, low spending on primary education in developing countries often implies that households bear much of the cost of that education. It has often been observed that parents, rather than the school or ministry of education, are responsible for providing many basic school inputs such as textbooks, chairs, and even the school building itself. Some of these costs are the collective responsibility of parents, but some are passed on to parents through official or unofficial school fees or by requiring parents to purchase uniforms and textbooks for their children though more often than not such data are unavailable. This can go a long way in deterring children from attending schools especially those from low-income groups directly because of disproportionately high education costs when compared to their family income levels.

Similar opinion has been echoed by Professor Amartya Sen:

The economic circumstances of the families often make it very hard for them to send their children to school, particularly when there are fees or other charges to be paid. In Pratichi Trust's latest study — that of primary education in the city of Calcutta — this has emerged as a discouraging factor in those publicly-funded schools in which some

payments are demanded (though we have been assured by those involved in educational planning in the Government of West Bengal that this problem will be eliminated as the delivery of primary education in Calcutta is comprehensively re-examined and reconstructed). Free elementary education is the right of all Indian children, and ways and means for making that a reality have to be found and guaranteed (The Little Magazine 2005, p. 14).

Again, indirectly low public spending can decrease enrolments considering the fact that low per capita public expenditure on education implies less funds available for development of basic infrastructures in the schools as well as poor incentives for teachers to teach in the schools arising from factors like low salaries to poor working conditions as well as absence of proper monitoring so as to have a reward or punishment strategy by way of efficient inspection of schools at proper intervals. These various dynamics affect the quality of education thus imparted and that in turn has an impact on the enrolment rates and the dropout rates.

Apart from all these factors there is another issue—which is that low expenditure on education can be viewed as a reason for few or in some cases no new schools being built in areas where there are no schools within a radius of 10 km from residence. In such cases where large distances or transportation costs act as barriers act as bottlenecks for some children in their way of gaining education, greater allocation and utilization of funds for elementary education. At this stage it is worth mentioning that there exists a trade off between investing in the construction of new schools and investing in improvements in the quality of existing schools, which would make these schools more attractive to students which must be judiciously determined before embarking on any expansion of allocation of resources.

3.3. Scenario In the Privately Run Primary Schools

Besides the state government run schools and KMCP schools, there are also a number of other primary schools as well that are run privately and can be classified as schools that are run by Anglo-Indian Missionaries or as those that are affiliated to ICSE or CBSE boards. It is a well known reality that in Kolkata, that number of schools affiliated to the ICSE boards is pretty high and over the last few years there has been a proliferation in the number of these schools. This section has been devoted to presenting some of the statistics about these schools which have earlier been dealt with in respect of the government schools so that there emerges a level platform for comparison of the government schools and the private schools. The following tables will do just that.

Table 25. Total Number of Privately Run Primary Schools

Year	Number of Schools	Number of Students	Number of Teachers	Student -Teacher Ratio
2001-2002	92	43334	1771	24.47:1
2002-2003	92	44469	1814	24.51:1
2003-2004	107	49870	2123	23.39:1

Source: Bureau of Applied Economics and Statistics, Government of West Bengal, Kolkata.

What comes out clear from the figures is that while the number of the privately run primary schools, number of teachers in these schools and the enrolments have steadily increased over the three years—2001-2002, 2002-2003 and 2003-2004 and the student-teacher ratio too has fallen in these schools though the fall is not very numerically significant. It is noteworthy that

the student-teacher ratio in these schools is significantly lower than that of the government run primary where in case of the WBBPE run schools and in the KMCP schools it was found to be much higher in all the years considered here.

CONCLUSION

The need for basic or elementary education has more or less been universally acknowledged all across the globe as have several literatures on the economics of education that wax eloquent on the inter-linkages between universalisation of primary education and economic growth as well as economic development. Not just in theory, but historically too, the world has witnessed the process of economic development of several nations stemming from the exclusive focus of the state on universalisation of primary education such as Japan, which achieved almost complete literacy by 1910: followed by success stories of South Korea, China, Taiwan, Hong Kong, Singapore, Thailand and several other East and Southeast Asian countries in the late twentieth century.

Basic education is of fundamental importance as it opens up avenues of employment; increases awareness among people about human rights, legal protection and democratic rights; helps in sensitising people regarding health issues coupled with its power of bridging the gender disparities of various dimensions. These various elements impose high costs of acquiring education compared to the family income acts as a major deterrent among many families and has a direct negative impact on the enrolments. So increasing the amount of budgetary allocations on primary education is very important keeping in mind these issues.

But government funding is not the sole factor responsible for the sorry state of affairs here. The various difficulties faced by households on account of low levels of expenditure of the government as stated above are indeed true coupled with the fact that large proportion of this expenditure is spent on the salaries of the teachers which leaves little scope for sufficient funds being left for the development of infrastructure. Here again lies a trade off between use of funds on building of schools in areas where there are no schools in the vicinity or whether the funds should be utilised for the purpose of improving the quality of education in the already existing schools by way of improving and expanding the school buildings, providing teachers' training facilities, providing incentive schemes for the teachers as well as improving the inspection mechanism in order to increase teachers' accountability so that in either way more and more children are drawn into the folds of the universal primary education. The quality of education too plays a very important role since high rates of teacher absenteeism or despite being physically present teachers being inattentive in their work or lacking the dedication all go on to contribute to the outcome of the children learning nothing at all or very little from attending schools in which cases parents of these children may withdraw them from the schools altogether. The educational system must thus try to tackle these problems with an iron hands by putting in place proper reward-punishment schemes in order to improve teachers' accountability. The educational system must aim to strengthen ties between teachers' pay and students' performance or introduce the system of educational vouchers so as to enable exercise of greater social choice as well as decentralize the educational system.

Apart from these schemes, the government can also seek recourse in schemes like paying students for attending schools in the form of cash grants or mid-day meals. The case for mid-day meals is stronger since it is well that responsiveness of children to education decreases in case of being afflicted with hunger and malnutrition. In such cases mid-day meals can go a long ways in wooing children from the under-privileged sections of the society especially in the slum areas of the city. Paying cash grants to the children or parents conditional on their children's school attendance and participation in preventative health measures is another viable option. Poor health is also known to limit school participation so launching mass medical

treatment drives in the schools at properly spaced out intervals is another alternative scheme for increasing the enrolment in the primary schools.

But it must be kept in mind that assuming the political process to be more or less democratic, in the sense that politicians seek 'election' as a determinant to deliver efficiently the public goods and services and the associated tax burden that taken together command the support of a majority of voter which ultimately decides which of these schemes, if any, actually come into effect.

Yet of late there have been quite a number of instances, both in theory and in practice, which suggest that the state i.e. the government could do away from the provision of primary education and allow for private provision. It is undeniable that the last decade has witnessed a 'mushrooming' of private unrecognised as well recognised schools in urban and rural India. The very existence coupled with the steady proliferation in the number of these schools definitely challenges the popular belief that private education serves the needs of the small minority of the rich and the middle class. Dreze and Sen (2002) and The Probe Team (1999) while carrying on a research in four north Indian states reported similar findings. The Oxfam Education Report said that alongside the government schools, increasingly "a lower cost private sector has emerged to meet the demands of the poor households" (Watkins, 2000).

Thus far keeping the scenario of state sponsored primary education delivery system in the urban agglomeration of Kolkata in mind, as has been done in all the preceding sections of this project report, the policy implication is rather written on the wall. The jacking up of public expenditure on education is the need of the hour keeping in mind the abysmally low annual per capita expenditures of the different government bodies on primary education in the West Bengal Board of Primary Education run primary schools and the Kolkata Municipal Corporation run primary schools i.e. the KMCP schools. As has already been shown, there has been a steady proliferation in the number of privately run primary schools in Kolkata as well as talked about in the literature of education as Nambissan (2003) noted in a study the fact that there has been a "mushrooming of privately managed unregulated pre-primary and primary schools" for the poor in Kolkata. Several studies conducted on various parts of India as well as on some of the developing countries have shown that the triggering factor responsible for this phenomenon could be the one of the main reasons low-income parents send their children to the private schools is the perceived low quality of education provided in the government run schools.

While the common doubts about the quality of education in the private schools being 'suspect' remain, a study conducted by Tooley and Dixon (2005) in one of the poorest pockets of Delhi—the slums of North Shahdara came up with several interesting findings such as the number of private schools in that area was higher than the number of government schools; the average monthly fees in these schools was quite low compared to that in the government schools; a greater number of the private schools teachers were found to be actually teaching when visited unannounced than that in the government schools; children from the private schools responded better than their government schools counterparts to tests conducted on mathematics, English, Hindi and IQ abilities; the private school teachers being not less satisfied than their government school counterparts with salaries, holidays and social standing in the community; children in the private unaided schools being more satisfied than their government counterparts with a range of school inputs such as condition of school buildings, provision of facilities and extracurricular activities and teacher punctuality; and more efficient monitoring of the teachers by head-teachers in the private schools than in the government schools. Parallely such research was conducted in low-income areas of Ghana and Nigeria where similar results were obtained.

Such success stories can lead us to believe, as Tooley and Dixon have opined, that "...because there are many unrecognised private schools that do not appear in the government statistics, achieving universal basic education – the United Nations' Millennium Development Goal of 'education for all' – may be easier to achieve than is currently believed". Private players should thus be allowed and encouraged as far as dissemination of primary education is concerned by way of providing them financial assistance such as by creating revolving loan programmes for investment on infrastructure or by providing education vouchers so that the children from the low income groups can access schools and receive elementary education.

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