



European Union State Partnership Programme Chhattisgarh

Assisted by:



School Education in Chhattisgarh

Report on

Medium Term Expenditure Framework

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LIST OF ACRONYMS

ARSE Annual Report of the Department of School Education

BE Budget Estimate

CS Central Schemes

CSS Centrally Sponsored Schemes

DIET District Institute for Education training

DPI Department of Public Instruction

EC-SPP European Commission State Partnership Programme

GER Gross Enrolment Ratio

GSDP Gross State Domestic Product

INR Indian Rupees

KGVB Kasturba Gandhi Balika Vidyalaya

MTEF Medium Term Expenditure Framework

NPEGEL National Program of Education of Girls at Elementary Level

PHED Public Health Engineering Department

RE Revised estimate

RGI Registrar General of India

RGSM Rajiv Gandhi Siksha Mission

SBSE State Board for Secondary Education

SC Schedule Caste

SCERT State Council for Education Research and Training

SSA Sarva Siksha Abigyan

ST Schedule Tribe

EXECUTIVE SUMMARY

Chhattisgarh is a recently formed state, carved out from the erstwhile state of Madhya Pradesh. The state government has been making efforts to reduce poverty and improve human development. Efforts towards the same have been constrained by the lack of systematic planning and budgeting based on a robust Medium Term Fiscal Framework (MTFF) and Medium Term Expenditure Framework (MTEF). European Commission State partnership Program (EC-SPP) has been supporting Chhattisgarh Government through providing budget support especially in the areas of education, Health, minor forest Produce and decentralization of development activities. The purpose of providing Technical Assistance (TA) in the preparation of MTEF is to strengthen linkages between policy, planning and budgeting to allow for more effective use of public resources. Though significant progress has been made to improve literacy in the state there are still areas where significant progress has to be made especially in the areas of reducing drop out rates, bringing student teacher ratio to the desired levels, increasing the availability of schools and in improving the quality of education.

School Education in Chhattisgarh is handled mainly by two departments namely the Department of Education and the Department of Tribal Welfare. The Department of School Education works with the State Council for Education Research and Training (SCERT) that is responsible for the development of curricula and also the development and recommendation of text books to be adopted by the educational institutions. The District Institute for Educational Training (DIET) is responsible for training of Teachers. The State Board for Secondary Education is responsible for secondary education and examinations in the state.

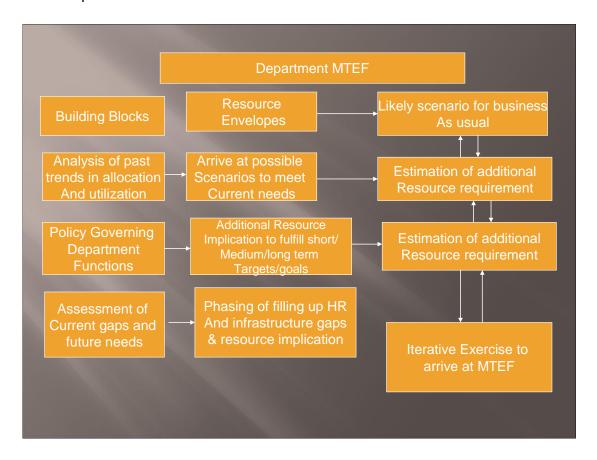
Department of School Education is responsible for training of teachers, curricula development, development of text-books, standards of instructions, evaluation, examination and certification and research in the area of primary, upper primary and secondary education. It is responsible for the development of policy, strategy, setting goals, and programmes for implementation. It also manages government schools and oversees the performance of schools supported by government funds.

The purpose of developing MTEF is to estimate the financial requirements for a particular Department/sector of the government for a period of 3-5 years in the future. The MTEF not only provides the requirement of resources but also examines the feasibility of availability of resources by comparing the requirements with past

allocations, overall government expenditure, economic growth of the state and the overall revenue generation.

MTEF has the feature of linking up the goals set out in the national and state policies and examines the requirement of resources required to achieve the goals within the time frame set out. It examines the current status of the indicators as set out in the policies and calculates the gap and examines the possibility of attaining the goals and the constraints that are impacting the achievement of the goals.

The process of developing MTEF has been carried out in close coordination and discussion with the Department of School Education and targets in terms of enrolment, provision of infrastructure, the training and recruitment of teachers for filling the existing gaps have been arrived at through these interactions. These have been taken into account in the preparation of MTEF. The methodology for developing MTEF is provided in the flow chart below:



Expenditure on primary, upper primary and secondary education has been steadily increasing since the formation of the State, except in the year 2004-05, when it was less than the previous year. It has fluctuated between 14 to 16 percent of the total budgetary expenditure. The plan allocations have been very high especially during the last few years reflected in the year-on-year growth in the allocations.

State's resources in the education sector are derived from the allocations of the state, EC-SPP resources which have a component of education and allocation from the Central Government on account of the centrally Sponsored Schemes and Central Government schemes.

The plan part of the revenue expenditure has been showing an increasing trend and the share of the plan and non-plan expenditure has almost become equal. The central assistance has also increased considerably especially in the later years and has almost an equal share as that of plan and non-plan expenditure.

The capital expenditure by its very nature will fall entirely in the plan category. The share of the central government on capital account has been fluctuating in the earlier years but has increased steadily to form a significant share in the capital expenditure of the state.

The components of expenditure clearly indicate that salaries form a significant part of overall expenditure in elementary as well as secondary education. Elementary education accounts for 70-72 percent of the overall expenditure while secondary education accounts for about 20 percent of the expenditure. The other 8 percent is accounted for by adult education, language development, general education, youth and sports activities, art and culture development and capital expenditure.

The State of Chhattisgarh formulated and adopted a comprehensive policy on education providing for all round development of the personality of the student population. The school education in the state is governed by the state policy. Universal access to primary education is the first step towards universal access to upper primary education. Unless this is achieved, universal access to upper primary education, the target of achieving this by 2010, will not be possible. The State is far behind the realisation of this goal, in the age group of 6-11 which is identified as the group for primary education. According to 2001 census, Chhattisgarh had a population of around 4.7 million in the age group of 6-14. Of these almost half the population was female. The ST component of the population was 1.52 million with 0.75 million girls. The SC population was 0.58 million with around 0.28 million girls. The state has taken a number of initiatives towards universal access of primary education by way of incentives, and meeting the cost, which would normally be met by the parents of children going to the primary schools. These have financial implications, and if these have to be met by the State exchequer, it will require enhancement of budget and reordering of priorities.

From the analysis of the policy the following have been taken into account for preparation of MTEF:

- Increasing enrolment of students and increasing retention at each level to achieve near universal primary education by steadily increasing enrolment as considered feasible
- Provision of mid-day meals to increase retention and provide nutrition
- Provision of free text books and incentives especially for girl students from disadvantaged sections of the population
- Phasing of recruitment of teachers over the next three years to achieve the desired student teacher ratio in each level
- Provision of infrastructure to schools in terms of class rooms, building and other facilities over the next three years

Based on the past trends and allocations the year on year growth rate has been estimated. The scenario of allocation in the future has been based on the above trendsand projected for the next three years. The different scenarios have been analyzed for their feasibility through the following criteria:

- The representative nature as a percentage of the overall state budgetary expenditure allocation
- Its representative nature as a percentage of the state's Gross Domestic
 Product
- Its proximity to allocations in the recent past.

Based on the above it has been derived that the growth scenario of 25 percent every year over the preceding year would be most appropriate. This has been used to arrive at the projection of overall resource envelope and then breaking it down to the details required for budgetary allocations. The estimated requirements are as follows:

(INR 00000)

Year	Total Projected resource Envelope for education (Revenue)	Plan	Non-Plan	Central Share
2011-12	406041	122043	168892	115106
2012-13	505421	151966	209426	144029
2013-14	626986	188651	259688	178647
	Total Projected resource envelope for education (Capital)	Plan	Non-Plan	Central Share
2011-12	66656	63016	0	3640
2012-13	74058	69544	0	4514
2013-14	80640	75043	0	5597

1. INTRODUCTION AND BACKGROUND

1.1. Background

School Education in Chhattisgarh is handled mainly by two departments namely the Department of Education and the Department of Tribal Welfare. The Department of School Education works with the State Council for Education Research and Training (SCERT) that is responsible for the development of curricula and also the development and recommendation of text books to be adopted by the educational institutions. The District Institute for Educational Training (DIET) is responsible for training of Teachers. The State Board for Secondary Education is responsible for secondary education and examinations in the State.

Department of School Education is responsible for training of teachers, curricula development, development of text-books, standards of instructions, evaluation, examination and certification and research in the area of primary, upper primary and secondary education. It is responsible for the development of policy, strategy, setting goals, and programmes for implementation. It also manages government schools and oversees the performance of schools supported by government funds.

The Rajiv Gandhi Siksha Mission (RGSM) is responsible for implementing the Sarva Siksha Abigyan (SSA) the universal access to primary education. Under this scheme of the central government the RGSM works closely with the Department of Public Instruction. This scheme opens schools where required and also appoints Siksha Karmis (teachers) as necessary.

Similar scheme for the universal access to upper primary education is known as the Rashtriya Madhyamik Siksha Abigyan. This is being implemented by a separate structure.

Chhattisgarh Board of Secondary Education is responsible for secondary education in the state and conducts examination at the secondary level.

Chhattisgarh Text Book Corporation is responsible for publication of text books and its distribution in the state.

Department of Tribal Welfare has the responsibility for management of schools established and funded under its budget for the tribal areas of the State.

The school education can be divided into elementary education consisting of primary, upper primary (Classes I-VIII), high school consisting of class IX & X and higher secondary education consisting of classes XI and XII.

A number of departments are responsible for education in the State of Chhattisgarh, especially at the level of professionally oriented higher education. Department of Higher Education is responsible for non professional higher education and management of universities, other than those excluded by assignment of jurisdiction to another department. Higher education in the domain of agriculture, veterinary, medicine, nursing, and engineering is the responsibility of respective functional departments.

Responsibility for allocations and expenditure is divided within the government, as each head of Grants is managed by a different department, which may not be responsible for the implementation of the state and national policy on elementary and secondary education. The budget of school education department provides for expenditure on management of government run and assisted schools and their expansion, training of teachers, research and other related areas; the budget allocated to Department of Tribal Welfare is for the management of government schools, which include residential schools.

1.2. Education in Chhattisgarh

Chhattisgarh is a newly formed state carved out from erstwhile Madhya Pradesh and has come into existence from 1st Nov 2000. The enrolment and number of schools have grown over time but is yet to reach closer to the target of elementary education to all.

The number of schools in Chhattisgarh as at end of 2009-10 under different managements is provided below in Table 1:

TABLE 1: Number of Schools under different management in Chhattisgarh

Standar d	Educatio n	Tribal	SSA	EDN Grante d	Tribal Grant ed	Madarsa s	Privat e	Communit y Participate d	Total
Primary	12869	11394	9277	178	65	208	2741	0	36732
Upper Primary	3341	2837	7525	57	41	21	1926	0	15748
High School	718	463	0	0	10	0	733	284	2208
Higher Second ary	845	546	0	78	20	20	1007	128	2644
	17773	15240	16802	313	136	249	6407	412	57332

Source: Annual reports of the Department 2009-10

1.3. Dropout from system

The dropout rate in primary education over the three years is provided in Table 2

TABLE 2 : Overall dropout rate at primary level

Year	Total			
	М	F	Т	
2006-07	11.92	11.34	11.65	
2007-08	7.53	8.47	7.99	
2008-09	10.54	11.61	11.05	

Source: Annual Report of the Department, 08-09, 07-08 & 06-07

The dropout rates are significant in the schedule caste and schedule tribes and it is observed that these are significantly higher. In 2007-08 the dropout rates are lower because the dropout rates in the schedule caste and schedule tribe are almost the same as that of the other regular students. Table 3 provides the dropout rates at the primary level among schedule caste and schedule tribe students.

TABLE 3: Dropout rates among Schedule Caste Students at Primary level

(Percent)

Year	SC				ST	
	М	F	Т	М	F	Т
2006-07	21.49	24.08	22.78	31.44	31.83	31.63
2007-08	6.58	8.19	7.36	9.89	10.94	10.4
2008-09	18.96	29.68	24.18	7	14.35	10.44

Source: Annual Report of the Department, 08-09, 07-08 & 06-07

The dropout rates in upper primary level is provided in Table 4

TABLE 4: Dropout rates at Upper primary level (Percent)

Upper Prim	ary								
	Total			SC			ST		
	М	F	Т	М	F	Т	М	F	Т
2006-07	9.31	5.09	7.45	15.13	10.34	13.03	20.93	20.97	20.94
2007-08	6.38	7.41	6.88	6.33	8.07	7.22	7.88	8.71	8.26
2008-09	10.14	5.00	7.12	11.48	13.95	12.60	3.00	30.00	13.00

Source: Annual Report of the Department, 08-09, 07-08 & 06-07

The significant contribution to the dropout rates is again from the scheduled caste and scheduled tribe student population at the upper primary levels. Hence, if the state has to reduce the overall rates of dropout at different levels of primary education then the drive needs to be among the SC/ST student population through special drives. The Department of tribal Welfare also needs to act towards reducing the dropout rates.

The following Table 5 provides the eligible student population and enrolment of students in different classes. The eligible student population has been calculated

from the projection of population in different years from the Registrar General of India, census population projection for different states. The enrolment has been taken from the statistics of enrolment in the year 2009-10 in different classes available with the Department of Education.

TABLE 5: Eligible Student population and Enrolment

	Eligible	Enrolment in	
Class	student	respective	Enrolment percent
	population	classes	
I	717870	758611	105.68
II	708000	672255	94.95
III	698070	645892	92.53
IV	688020	609135	88.53
V	677820	549017	81
VI	667530	489456	73.32
VII	657120	441785	67.23
VIII	646590	405715	62.75
IX	635910	286115	44.99
X	625020	250896	40.14
XI	618750	161075	26.03
XII	612570	141921	23.17

• The enrolment in Class 1 is more than 100percent as the enrolment from other age group also takes place.

Source: Population eligible for enrolment from RGI Projections & Enrolment from Statistics Maintained by DPI

It can be observed that the enrolment of the eligible population is more than 90percent in class's I-III while it drops significantly in the other levels of primary and upper primary classes. There is significant drop in the movement of students from upper primary to high school education. This drop is due to the following reasons:

- Dropout because of the board Exam being conducted at Class VIII
- Non-availability of separate school for girls at the high school level

Considering this dropout rate the government has decided to discontinue the conducting of board exams at the level of Standard VIII. Further, the government is also contemplating to build additional class rooms in the existing upper primary schools in order to encourage girl students to continue their education. These steps are expected to reduce the dropout rates at this level.

1.4 Expenditure on School Education

Expenditure on primary, upper primary and secondary education has been steadily increasing since the formation of the State, except in the year 2004-05, when it was less than the previous year. It has fluctuated between 14 to 16 percent of the total budgetary expenditure. The plan allocations have been very high especially during the last few years reflected in the year-on-year growth in the allocations. A significant aspect of the budgetary allocation has been the recognition of the needs of school education on capital account.

2. STATE'S POLICY ON EDUCATION

The State of Chhattisgarh formulated and adopted a comprehensive policy on education providing for all round development of the personality of the student population. The main features of this policy relating to school education sector can be stated as follows:

- 1. Free and compulsory education for children in the age group of 6 to 14.
- 2. Education for all without discrimination between different communities and gender.
- 3. Uniformity in primary education.
- 4. Development of community games.
- 5. Universal access to education to be made effective.
- 6. Providing access to education to children deprived of education facilities.
- 7. Construction of ashram schools in colonies where workers/labour reside.
- 8. Improving the implementation of mid-day meal and nutrition programmes.
- 9. Ensuring enrolment of students.
- 10. Spreading consciousness about education among the guardians.

The policy document indicates the action that would be required to be taken for the implementation of the policy. Some of the points listed for action have financial implications, the full impact need to be worked out to fix priorities for action.

2.1 Universal access to Primary and Upper Primary Education

Universal access to primary education is the first step towards universal access to upper primary education. Unless this is achieved, universal access to upper primary education, the target of achieving this by 2010, will not be possible. The State is far behind the realisation of this goal, in the age group of 6-11 which is identified as the group for primary education. According to 2001 census, Chhattisgarh had a population of around 4.7 million in the age group of 6-14. Of these almost half the population was female. The ST component of the population was 1.52 million with 0.75 million girls. The SC population was 0.58 million with around 0.28 million girls. The state has taken a number of initiatives towards universal access of primary education by way of incentives, and meeting the cost, which would normally be met by the parents of children going to the primary schools. These have financial implications, and if these have to be met by the State exchequer, it will require enhancement of budget and reordering of priorities.

The State, in its education policy, has set the goal of universal access to upper primary education by the year 2010. The present level of enrolment (2008-09) in class VI is 0.516 million. This has to be seen in the context of the student population in the age group of 11 to 14. This would mean additional enrolment at class VI level by at least another 20 percent. If one looks to the enrolment figures of class I for the last three years, and the decline in numbers in each class in subsequent year, and if this is arrested, there would be need to create facilities for the upper primary level by at least 60 percent, as also for each class after class I in an appropriate manner. Apart from the provision of teachers, school space and teaching learning manner, there will be need for provision of funds for other support given to children.

The areas requiring attention are stated below:

a. Enrolment of students

A significant point to note is that the figures of enrolment of children at the primary level is gradually coming down while it should be the other way around. Children in the age group of 6-11 were around 3 million in the year 2001. Going by the normal rate of growth as reported in the 2001 census for the State, there would be

around 3.5 to 3.6 million children in this group who should be in the primary school. The system will have to provide for the schooling of children who are still out of the school, as well as the annual addition. This would require a provision in the budget for opening of new schools, or providing additional teachers to teach the new entrants every year.

b. Dropout Rate

Dropout rate has been fluctuating. From a little over 11 per cent in 2006-07, it came down to a little over 7 per cent in 2007-08 and then again crossed the figure of 11 per cent. What is significant is that while the high figure reported for 2006-07 was on account of the high drop-out rate among the SC/ST. In 2008-09, it has been due to SC which has been reported and also due to general category candidates as the dropout among the tribal children is below the reported average. But what is significant is that if these children remain in the primary schools, there would be extra cost on various counts. The dropout rate at the upper primary level has been hovering around 7 per cent.

c. Mid-day Meals

Mid-day meals are provided to children studying in primary and upper primary schools in the State. The cost is shared between the Centre and the State. In the case of primary schools, the cost of the mid-day meal per child is fixed at INR. 3.60 Per day; Centre provides INR.2.38 while State's share is INR. 1.22 In the case of upper primary school, the cost of the meal per child has been fixed at INR. 4.00 Per child; Centre provides INR. 3.02 While the state bears the remaining cost of Rs.0.98 for which provision is made in the State budget. Budgetary provisions are spread over different heads. In addition, the Centre also funds for the construction of kitchens. The cost is shared between the centre and the state governments. If the enrolment of students done at class I level is retained at subsequent classes, as also at the upper primary level, budgetary support will need to be enhanced by 60 to 70 per cent.

d. Free Supply of Books

Students of class I to VIII are provided books free of cost. In the year 2008-09, 3.244 million students were enrolled at the primary classes and 14.07 at upper primary classes. In the same year, the provision for books was only INR. 320.4 million in the budget. The average cost of the books per candidate was INR 147

at the primary level, and INR 258 at the upper primary level. At this rate, provision of INR 840 million should have been made in the budget. There is a provision for supply of free school books to primary and upper primary students under the state schemes, and the requirements over and above the state budget is met every year from the SSA budget.

e. Free Supply of Uniforms

Girl students of class I to V belonging to the schedule caste and scheduled tribe community are provided free school uniform. The total number of SC/ST students enrolled at the primary level in 2008-09 is 1.471 million. The amount provided in the state budget for uniforms was only INR 80 million. If the cost of uniform is taken at INR 250 per student, the amount required would be around INR.370 million. And if the dropout level is reduced and the retention of the students getting admission at class I level is maintained in the higher primary classes, funds required will be much more.

f. Teacher -Student Ratio

There has been a wide fluctuation in the number of teachers during the last three years resulting in the fluctuation in teacher-student ratio. Teacher-student ratio came down from 1:50 in the primary schools and 1:43 in the upper primary schools in 2006-07 to 1:38 and 1:30 respectively in 2007-08. It increased to 1:44 at the primary and 1:34 at the upper primary level in 2008-09, largely because of a fall in the number of teachers at both levels. It may also be mentioned that number of students enrolled at the primary and upper primary level has also gone down. If the norms laid down at the national level are to be adhered to, more teachers would be required. If the goal of universal access to primary and upper is to be attained, and enrolment level of class I is maintained in higher classes, the number of teachers required for teaching will have to be significantly increased and provided for in the budget. The reason for this high ratio may be due to the large number of promotions from the primary to the upper levels.

g. Teaching of English

The State Policy on Education states that the teaching of English language will be made compulsory from class I. Arrangements will be made for content based training for them. This would require teachers competent to teach English as a language. Provision for training of existing teachers and recruitment of new

teachers capable of teaching English as a language will require budgetary support. The number of ELTI and DCE are being increased with funds from the Central Government.

h. Training of Teachers and Improvement in the Quality of Education

An important goal set by the State in its policy on education is to ensure uniformity in standards of attainment level of children getting primary education through different stream i.e. non-formal, education guarantee, and different types of schools. The quality of education has to be up-graded at national level. Improvement in the quality of education involves the induction of teachers who have good and up to date knowledge of the subject and state of the art pedagogical skills with capability to build rapport with the children. It would also involve better teacher-student ration than what exists at present.

Training of teachers is another area for action highlighted in the State policy. Only 56 per cent of the teachers at the primary and upper primary level are trained. Since schools have to be run and teaching has to be done, a programme needs to be drawn up to send teachers for training in a phased manner. State has to ensure that in future only trained candidates are appointed as teachers, and in case it is not possible, appointed untrained persons are sent for training in a phased manner. Training of teachers has to be provided for in the state budget in accordance with a previously approved programme that ensures completion of the process in a reasonable period of time. Currently 20 days of training to each teacher is being provided under the state budget. Further, in house training is being sought for.

Apart from training of untrained teachers, teachers have also to be sent for inhouse training to improve their pedagogical skills and up-date their knowledge of the subject. Provision has to be made for this also to ensure that all teachers have exposure after a certain interval of time. This would also require provision of funds from the state budget. Under RMSA the training of teachers is being planned for.

Secondary Education

State Policy on Education provides for strengthening of the secondary education, and improvement in its quality. At present (2008-09) only 29 per cent children enrolled in class I and 47 per cent in class VI are able to reach up to the level of class IX. It is still less at class XI level; only 15 per cent of those enrolled in class I,

24 percent of those enrolled VI, and 51 percent of those enrolled in class IX are able to find a place at that level. With improvement in the retention at the primary and upper primary level, and attainment of the target of universal access by 2010, the number of students seeking admission at class IX and class XII will also go up requiring opening of more schools every year. In any expenditure planning, this aspect has to be kept in view, as it would be difficult for a student to find gainful employment at 14+ ages when he/she leaves the upper primary system.

A number of areas have been identified for action; more important ones having large financial implications are indicated below:

a. Training of Teachers

A large number of untrained teachers are teaching at the High School (27 per cent) and Higher Secondary (33 percent) level in 2008-09. Provision has to be made for training of these teachers in a phased manner. This has financial implication and has to be provided for in the budget. The Rashtriya Madhayamik Siksha Abigyan is planning for training teachers at the high school level.

b. Up-grading Skills in English, Mathematics and Science.

The State Policy on Education has listed the up-grading of the skills of the teachers in Mathematics, English and Science by organizing programmes for inservice training. This has financial implication has to be provided for in the budget. Up-grading of the skills is important for improving the quality of education and attaining national level standards.

c. Cycles for the High School ST students in Tribal Blocks

State Policy on Education provides for free distribution of cycles in tribal blocks to tribal girls studying in high school. Cycles have to be provided to new entrants every year at class IX. This has financial implication and has to be provided for in the budget.

d. Vocalization of Education

State Policy for Education emphasises the need for employment oriented secondary education. Vocational education related to forest produce, medicinal plants, computer education, sewing, soap manufacturing, basket making, agarbatti manufacturing have been specifically mentioned. The State has yet to

start work on the vocalisation of education. This will have financial implication and has to be provided for in the budget.

e. Career Guidance and Counselling

Career guidance and counselling have been given importance in the State Policy on Education. Students at the High School and Higher Secondary level need to be suitably guided about job opportunities as well as assessment of their aptitude for vocations and higher education. This is a specialised job and requires specialists in the school who could be available for providing suitable guidance. Teachers from the existing system have to be trained for this purpose, who apart from normal teaching, could take up this responsibility. This has financial implication.

State Policy on Education identifies a lot more areas for action in the school education sector. These include strengthening of SCERT, setting up of SIEMAT, constitution of Board of Secondary Education, scholarship for meritorious students, sports facilities at the school level, adult education, library, up-grading of College of Education, pre-primary education etc. All these have financial implications and looking to the availability of resources, have to be provided for and prioritised.

Eleventh Five Year Plan and Elementary Education

The Eleventh Five Year Plan, at the national level, has laid down the following targets for attainment:

- a. Universal enrolment of 6-14 age group children including hard to reach segment.
- b. Substantial improvement in quality and standards with the ultimate objective to achieve standards of Kendriya Vidyalayas (KVs) under the Central Board of Secondary Education (CBSE) pattern.
- c. All gender, social, and regional gaps in enrolments to be eliminated by 2011-12.
- d. One year pre-school education (PSE) for children entering primary school.
- e. Dropout at the primary level to be eliminated and the dropout rate at the elementary level to be reduced from over 50 per cent to 20 per cent by 2011-12.

- f. Universalised MDMS at elementary level by 2008-09.
- g. Universal coverage of ICT at UPS by 2011-12.
- h. Significant improvement in learning conditions with emphasis on learning basic skills, verbal and quantitative.
- i. All EGS centres to be converted into regular primary schools.
- j. All States/UT to adopt NCERT Monitoring Tools.

State Policy on Education already contains some of the salient features of the targets set for attainment during the Eleventh Five Year Plan.

Secondary Education and the Eleventh Five Year Plan

The targets for the secondary sector set in the national document on the Eleventh Five Year Plan are stated below:

- a. Raise the minimum levels of education to class X and universalize access to secondary education.
- b. Ensure good quality secondary education with focus on Science, Mathematics and English.
- c. Major reduction in gender, social and regional gaps in enrolments, dropouts, and school retention.
- d. Provide a secondary school within five km of every habitation.
- e. Provide secondary school within 7-8 km of every habitation.
- f. Gross enrolment ratio (GER) to increase from 52 per cent in 2004-05 to 75 per cent by 2011-12 at the secondary level.
- g. The combined GER at the secondary and senior secondary level to increase from 40 per cent to 65 per cent during the same period

State has to go a long way towards access to secondary and senior secondary education both in terms of numbers and quality of education.

Availability of Schools

A primary school has to be available within a distance of 1 km and an upper primary school has to be available within a distance of three km. to the children. In the case

of High School, the norm is 7-8 km. During the last two years, not many primary and upper primary schools have been opened in the state. The State has been concentrating in opening new High School and Higher Secondary Schools.

Sarva Shiksha Abhiyan (SSA)

Sarva Shiksha Abhiyan, a centrally sponsored scheme, is implemented by the Rajiv Gandhi Shiksha Mission in Chhattisgarh. Funds are placed at its disposal directly by the Centre and the State. The objectives of SSA are:

- a. Access to education to all children in the age group of 6-14.
- b. Enrolment and retention of all children up to class VIII.
- c. Elimination of gender, social and regional gaps in the access to primary education by 2007 and to upper primary education by 2010.
- d. Universal retention by 2010.

The scheme has been under implementation since 2002-03. Contribution made by the Centre is a net addition to the resources of the State; the State' contribution is already accounted for in the state's expenditure on school education. These funds have been used for opening new primary and upper primary schools, recruitment of teachers and construction of class rooms and schools.

Sarva Shiksha Abhiyan is expected to meet the needs and targets set for universal access to primary and upper primary education in the State, but are the resources made available are adequate? Looking to the position of expenditure under the SSA, another area of concern is whether adequate institutional arrangements have been created to spend the funds and provide the necessary withal for achieving the targets and goals set in the State Policy on Education and the National goals set in the Eleventh Five Year Plan.

3. DIFFERENT SCHEMES IN EDUCATION PROGRAM OF THE STATE

3.1 Establishment of Madarasa Board

To make Urudu learning effective and to popularize it, the Board has been established. The institution along with their religious development is engaged in school teaching. This has been recognized and is provided a onetime grant.

3.2 Establishment of Sanskrit Board

To make Sanskrit learning effective and to popularize it, this Board has been established. The Board will be entrusted with the development of Sanskrit learning and will be provided grant for infrastructure and meeting its recurring cost.

3.3 Chhattisgarhi Bhasha Parishad

Chhattisgarh Academy has been established for the development of Chhattisgarh dialect and is provided grants.

3.4 Award for Teachers

The teachers with extraordinary calibre in the field of education are recognized and are awarded for this. One teacher from each district is chosen and is rewarded.

3.5 Formation of Typing Board

Typing Board is working in the state and is engaged in conducting examination in Hindi and English typing and short hand in Hindi and English.

3.6 National Fitness Core

School Education department has been concerned with the physical fitness of the students and therefore is providing for gymnasium in the school campus.

3.7 European Commission

The Government of Chhattisgarh under partnership program with EC under the SPP program is providing support to ongoing schemes and in a few schemes for primary and higher secondary level education.

3.8 State Literacy Program

A state level office is being established for this purpose.

3.9 Adult Education and Literacy Program

Under this program the illiterates and neo-literates in the age group 15-35 is targeted. This is run by the district level offices established.

3.10 Sakshar Bharat Yojna

This is a centrally sponsored scheme for illiterates and AEC.

3.11 Child Education Centre

The state has 757 child education centres. There are approximately 9500 children engaged in learning at these centres.

3.12 Primary Education

The state government has always accorded a high priority for the development of education. Primary education forms the base of the educational pyramid. Considerable importance has been given for enrolment and retention of children in primary education to achieve 100percent retention by 2012. In order to achieve this enrolment drive is carried out every year. The expenditure is proposed for quantitative improvement of education, infrastructure and payment of salaries and allowances in the tenth five year plan and annual plan for achieving universal access to primary education.

3.13 Grant for Community participation in Schools

The state has attached importance to community participation in primary education. 178 primary schools and 57 middle schools are being run by Education Committees. The cost of these schools is met by the government.

3.14 Supply of Free Text Books in primary schools

The scheme of providing free text books to students studying in class I to VII has been continued from the tenth plan. This is being done to encourage enrolment and retention.

3.15 Uniform to girl students

In order to reduce the dropout rate of girl children and to increase enrolment of girl students especially in SC/ST/OBC the girl students from this category studying in class I to V are provided free uniform.

3.16 Increasing Middle schools

In the state the ratio of primary to upper primary schools under the management of the Department of Education is 1:2.44. This is still below the SSA norm of 1:2. There could be new schools in the upper primary and these will be funded under this scheme.

3.17 Training of Teachers for English teaching in Primary Schools

The government is aiming to improve the quality of English education in primary schools. In order to improve the quality provision of in-service training of teachers in teaching methodology is provided for.

3.18 Student Accident Insurance Policy

This is being carried out annually and the government in the past two years has targeted 6,500,000 students.

3.19 Mid Day Meal Scheme for Primary Schools

This scheme is implemented for providing hot cooked meal to school children of classes I to V in primary schools run by state government. The scheme is run for at least 230 days per year. The cost per child is INR 3.30 per child. INR 1.28 is the share of the state government and the balance is provided by the Central Government.

3.20 Mid Day Meal Scheme for Middle School

The mid day meal scheme is implemented for providing hot cooked meal to school children of classes 6 to 8 in middle schools run by state government. The program is run at least for 246 days per year. The cost per child is INR 4.00 per day with a state share of INR0.98.

3.21 Sarva Shiksha Abhiyan/NPE GEL/ KGAVY

The scheme for SSA was started in 2001-02 with the objective of providing universal access to elementary education. The objectives of this scheme are to provide useful and relevant elementary education to all eligible children in the age group 6 to 14 years by the year 2010.

The national Program for Education of Girls at Elementary Level (NPEGEL) as a component of the scheme of SSA was started in 2003-04. The main objectives are to provide access and to facilitate retention of girls and ensure greater participation of women and girls in the field of education and to improve the quality of education through various interventions and stress upon the relevance and quality of girls education for their empowerment.

The Government of India has approved Kasturba Gandhi Balika Vidyalaya (KGVB) scheme with the objective of reducing the gender disparities in rural areas and among disadvantaged communities.

3.22 Other Schemes

- Grant to sainik school
- Training of Yoga
- Grants to local body for primary school
- Strengthening DIETS
- Government Library
- Grant pay to Shiksha Karmi Class I to VIII
- Re-construction of middle school building
- Re-construction of Primary School building
- Government High School and Higher secondary school establishment expenditure
- Streamlining of SCERT
- Grant to community participated high school and higher secondary schools
- Pusthakalaya Yojna for High/Higher Secondary schools
- Grant to local body for higher secondary school
- Chhattisgarh Suchna Shakti Yojna
- Distribution of bicycles to girls
- Establishment of Sainik School

- Formation of Simat
- English Language teaching improvement
- District Centres for English
- Supply of free text books in high schools for SC/ST students studying in government high schools
- Merit scholarship for class 10 to 12
- Provision of High/Higher secondary school repair work
- Satellite based education
- Conduct of national exam
- Use of ICT
- Scholarship to middle school students
- Grant pa y to shiksha Karmis class 9 to 12
- Construction of high/higher secondary school buildings
- Construction of girls hostel
- Establishment of model school

The above are illustrative list of schemes and are not an exhaustive list and the department may wish to add to this list every year to make it exhaustive.

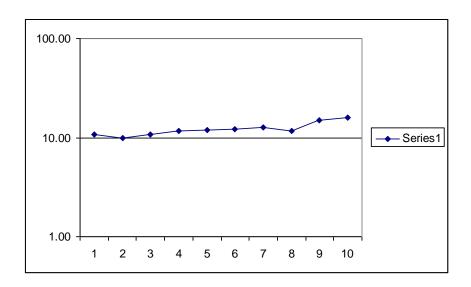
4. ANALYSIS OF BUDGET ALLOCATION AND COMPONENTS IN THE PAST

4.1 Expenditure on Education

Education, including school education, is a spending department of the government. With the commitment for free and compulsory education to every child in the age group of 6-14, no income or resource can be generated to finance expenditure. Even at the secondary level, it is difficult to make students pay for it when the target is near universal access of education at the High School level during the Eleventh Five Year Plan. Income of a large segment of population is at below the poverty line, and a still large segment of population lives at the margin of poverty. Education, at the school level, cannot be expected to generate resources to meet even a small percentage of the expenditure incurred every year.

State's resources in the education sector are derived from provisions in the budget, support from the European Commission State Partnership Programme (EC-SPP) which has a component for education, and funds flowing from the Centre under the centrally sponsored schemes (CSS) and central sector schemes. Centre's contribution in three centrally sponsored schemes, namely, Sarva Shiksha Abhiyan (SSA), Kasturba Gandhi Balika Vidyalaya Scheme (KGBVS), and National Programme for Education of Girls at Elementary Level (NPEGEL) goes direct to the RGSM; the flow of funds under other CSS/CS and European Commission forms part of the budgetary resources of the State. Centre's contribution to RGSM is a net additional resource to the education sector over and above the budgetary provisions. RGSM is responsible for the implementation of the two special schemes for the education of girls Kasturba Gandhi Balika Vidyalaya (KGBV) and the National programme for Girls at Elementary Level (NPEGEL), apart from SSA.

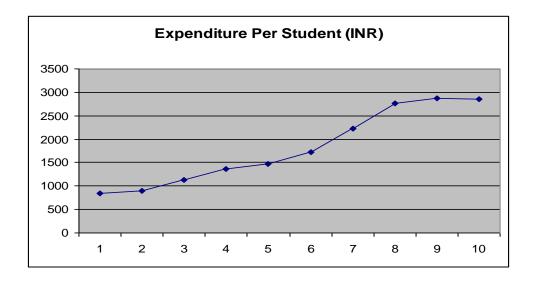
The expenditure on state education as a percentage of the total government expenditure has been increasing steadily over the years. It was about 10.74percent in 2001-02 but has increased up to 11.6percent in 2008-09. However it has further increased to 14.82percent in 2009-10 if the Revised Estimate is taken and it stands at 15.9percent if the Budget estimates are taken for 2010-11. This clearly indicates that education is a priority in the state government agenda. The following graph provides the growth in Expenditure in Education as a percentage of Total Expenditure.



If the expenditure on education is considered as a percentage of Gross State Domestic product a similar trend of increase is observed.

4.2 Expenditure per student

The expenditure student has also been showing an increasing trend over the past years. The following graph shows the trend in expenditure per student:



The above has been derived by dividing the total eligible student population by the total expenditure on education. However, this needs to be adjusted for enrolment in the education institutions of the government and exclude the number of students enrolled in the private schools. These adjustments will only increase the expenditure per student.

Chhattisgarh ranks closely with other states in terms of its percentage allocation of overall budgetary allocation to education though being a new state. The following Table provides the comparative allocations and per-capita spending on education:

Comparative allocation of expenditure to Education to the overall expenditure of the state

State	2000-01	2004-05
Andhra Pradesh	17.4percent	18.3percent
Tamil Nadu	22.5percent	20percent
Gujarat	18.7percent	20.6percent
Madhya Pradesh	33.7percent	15.2percent
Kerala	24.2percent	24.2percent
Chhattisgarh	-	11.67percent

Source: Budget documents of different states

Comparative per-capita annual expenditure of different states (INR)

State	2007-08
Andhra Pradesh	137.3
Tamil Nadu	107.31
Gujarat	89.09
Madhya Pradesh	77.73
Kerala	138.65
Chhattisgarh	94.50

Source: National Sample Survey Organization

4.3 Plan and non-plan revenue expenditure

State's budgetary expenditure is divided in two parts, non-plan and plan. Non-plan expenditure is basically devoted to the maintenance of existing level of activities in a sector, while plan expenditure is basically devoted to expansion of activities in a sector during a plan period. But not all plan expenditure is devoted to expansion of activities; expenditure incurred on revenue account, i.e. on salaries, uniforms, mid-

day meals etc. on plan account creates a commitment for meeting that expenditure in the subsequent years of a plan period as activities taken up in the previous years under the plan have to be kept at that level in subsequent years. Expenditure incurred on the maintenance of these activities, included in the plan expenditure, does not lead to any expansion. Sometimes, expenditure incurred in the previous plan continues to be financed in the subsequent plan as plan expenditure. A high revenue component in the plan expenditure, even though the plan may be large, reduces the space for taking up new activities.

The plan part of the revenue expenditure has been showing an increasing trend indicating that new schemes and projects have been included over a period of time and this is quite encouraging that the state has been experimenting with including new schemes as part of its plan for the school education. The states share in Plan and Non-Plan aspect of the budget has almost become equal.

However, if the Central share in the school education is examined it has been showing a steady increasing trend especially in the later years and has almost an equal share as that of the state plan and non-plan expenditure. This can be attributed to the contribution of the central government in terms of the mid-day meal scheme and also through the SSA scheme. This dependence needs to be carefully weighed and sustainability of these schemes carefully examined. The following Table provides the share of different aspects of allocation in percentage terms:

TABLE 6: Revenue Expenditure on Education (Percentage)

Years	Plan	Non-Plan	Central Share	Total
2001-02	14.16	82.72	3.12	100
2002-03	23.09	76.79	0.15	100
2003-04	30.36	64.03	5.61	100
2004-05	33.60	54.17	12.23	100
2005-06	28.28	54.21	17.51	100
2006-07	28.01	46.75	25.24	100
2007-08	29.50	40.97	29.53	100
2008-09	28.16	33.48	28.36	100

Source: Finance Accounts of Various Years

4.4 Plan, non-plan capital expenditure

The capital expenditure by its very nature will fall entirely in the plan category. The share of the centre was fluctuating in the earlier years but has increased steadily to form a significant share in the capital expenditure of the state.

The following Table indicates the relative share of the plan and central government shares:

TABLE 7: Capital Expenditure on Education (Percentage)

Years	Plan	Non-Plan	Central Share	Total
2001-02	93.3	0.00	6.70	100
2002-03	100	0.00	0	100
2003-04	67.75	0.00	32.25	100
2004-05	91.86	0.00	8.14	100
2005-06	93.07	0.00	6.03	100
2006-07	89.95	0.00	10.95	100
2007-08	79.79	0.00	20.21	100
2008-09	87.50	0.00	12.42	100

Source: Finance accounts of Various Years

4.5 Share of Revenue and Capital expenditure

The share of capital expenditure has been below 10percent in all the nine years for which the actual expenditure incurred in the school education. This clearly shows that there has been very limited investment in the education infrastructure by the state government. The following Table provides the share of revenue and capital expenditure in percentage terms of the total expenditure in school education:

TABLE 8 : Percentage of Revenue and Capital Expenditure of Expenditure on Education

	Revenue	Capital	Total
2001-02	99.78	0.22	100
2002-03	99.19	0.81	100
2003-04	96.06	3.94	100
2004-05	95.90	4.10	100
2005-06	94.62	5.38	100
2006-07	91.85	8.15	100
2007-08	90.95	9.05	100
2008-09	91.75	8.23	100

Source: Derived from Finance Accounts of various Years

4.6 Components of revenue Expenditure

The expenditure of the school expenditure department has some important features to be kept in view in any exercise for the preparation of the MTEF.

- More than 90 per cent of the budgetary expenditure is on revenue account though in recent years, it has come down from more than 98 per cent to around 91 per cent
- Non-plan expenditure is entirely on revenue account; there is no provision in the capital account for renovation and up-gradation of existing capital assets or their replacement.
- The component of expenditure on salary is very high, though it is coming down
 as percentage of revenue expenditure largely due to increase in expenditure on
 mid-day meals and teachers training. This applies to non-plan and plan
 expenditure alike
- Though year on year budgetary expenditure of the school education department has been increasing, the extent of the rate of growth has been quite volatile. It has ranged between 15 to 47 per cent.
- Non-plan expenditure as a percentage of total budgetary expenditure has been coming down in recent years.
- The state's contribution to RGSM for its contribution on account of the three CSSs implemented forms part of the plan expenditure. To that extent, the amount available to State for fixing its own priorities gets reduced.
- Due to high component of expenditure on revenue account for which commitments continue to the next year, the space available for planning the medium term expenditure framework is very small. It can only be with regard to additional budgetary provisions over and above the expenditure committed in the previous year on revenue account. Even this additional provision has to provide for inflation to ensure that services are maintained at previous year's level as also the usual increments to the salaried staff of the department.

The relative share of the different components is provided in the following Table:

TABLE 9: Component wise expenditure as a percentage of Total Expenditure on General Education Year wise

Components of	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09
Expenditure								
Salary	73.44	71.94	59.20	54.69	52.33	46.40	34.19	44.15
Direction and Administration	2.03	2.01	1.67	1.81	1.36	1.17	0.85	0.91
Text Books	0.38	0.20	0.13	0.03	0.09	0.82	0.45	0.75
Mid Day Meal	0.00	0.00	0.00	0.00	0.00	2.17	9.38	13.07
Teachers Training	0.13	0.16	0.12	0.11	0.49	0.08	0.40	0.14
Education to All	0.00	0.00	0.00	0.00	0.00	5.17	14.89	5.09
Special Component Plan for SC	0.57	1.44	14.20	2.87	2.28	5.19	3.99	0.51
Tribal Sub Plan	1.21	2.21	0.65	16.43	16.74	12.55	7.22	6.37
Other	1.09	0.87	0.60	0.90	73.30	0.35	1.03	0.54
TOTAL Elementary	78.84	78.83	76.57	76.82	74.65	73.91	72.42	71.53
Education								
Salary	19.07	19.28	15.02	13.26	13.17	11.56	10.10	13.20
Direction and Administration	0.02	0.00	0.00	0.00	0.00	0.12	0.10	0.08
Text Books	0.00	0.00	0.00	0.00	0.07	0.06	0.07	0.06
Teachers Training	0.52	0.13	0.08	0.07	0.13	0.14	0.09	0.15

Components of	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09
Expenditure								
Special Component Plan for	0.17	0.25	1.46	2.53	2.09	2.19	1.65	1.30
SC								
Tribal Sub Plan	0.45	0.33	2.49	5.30	5.41	4.62	4.80	4.37
Other	0.28	0.11	1.06	0.17	0.05	0.20	1.73	0.21
Total Secondary	20.47	20.11	20.10	21.32	20.93	18.88	18.53	19.35
Adult Education	0.15	0.00	0.11	0.06	0.05	0.08	0.09	0.06
Language Development	0.15	0.00	0.11	0.06	0.05	0.08	0.09	0.06
General Education	0.25	0.26	0.23	0.19	0.19	0.31	0.98	2.36
Sports and Youth	0.78	0.89	0.75	0.74	0.74	0.74	0.62	0.59
Art and Culture	0.47	0.61	0.73	1.01	0.63	1.04	0.73	0.74
Capital Exp.	0.22	0.81	3.95	4.11	5.38	6.37	7.13	6.97
Total School Education	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Expenditure								

Source: Derived from Finance Accounts for Education, GOC

5. CONSIDERATIONS FOR MTEF AND PROJECTIONS OF ADDITIONAL EXPENDITURE

5.1 Students Enrolment

This is the basic projection that needs to be carried out in order to ascertain the adequacy of number of schools at the different levels as well as calculate the sufficiency of the number of teachers.

According to the Annual Report of the Department of School Education (ARSE), the total intake in class I in 2008-09 was 844673 students, while there were only 525433 students enrolled in class V, a drop of nearly 38 percent. What is important for the MTEF is not the number of students who do not go to the next higher class in the primary system at present, but what will need to be provided for if every child enrolled in class I is retained in the next higher class for the next four years. The present rate of induction in class I have been assumed for the next four years as also for the upper primary and high school system for discussion later. Implicit in this is the assumption that all children in the age group of 6+ are enrolled in class I and that no one is left out, and that the present rate of growth in the population is maintained.

The enrolment for 2009-10 has been collected from the Department of Education and has been used as the basis for projection of population of students in each class from class I to class 8 and certain norms have been used for high school and higher secondary school enrolment.

In order to commence the enrolment in Class 1 the number of eligible children in the age group for that year has been taken as the basis. The projections for different age groups have been made by the Registrar General of Census and the same has been taken for use. The eligible population in the four years has been taken as the basis for enrolment in class 1 in that particular year. It has been assumed that the retention will be 100percent in the subsequent years as the children progress in education.

The following table provides the projection of students in the different classes in the four years to follow:

TABLE 10: Projection of Enrolment of Children

	2010-11	2011-12	2012-13	2013-14
Class 1	727740	737550	747270	756960
Class 2	720680	727740	737550	747270
Class 3	638642	720680	727740	737550
Class 4	666834	638642	720680	727740
Class 5	643536	680170	638642	720680
Class 6	582908	675712	680170	638642
Class 7	523347	612053	720680	680170
Class 8	475161	549514	642655	720680
Class 9	237581	274757	321328	360340
Class 10	249460	237581	274751	321328
Class 11	261933	249460	237581	274751
Class 12	275029	261933	249460	237581

The above Table provides the number of students in all schools including those enrolled in private schools. These have been used to derive the number of students in the Government Schools. The following assumptions have been made to derive the student population in the government schools:

- 85 percent of the students in Class 1-5 will be in government schools
- 85 percent of the students in Class 6-8 will be in government schools
- 50 percent of the students in classes 9-10 and in classes 11-12 will be in

Government schools

These assumptions have to be made because the segregated statistics of enrolment of students in the government schools in each class is separately not available.

The derivation of number of students in different classes based on the above assumptions is provided in the following Table:

TABLE 11: Projected Students enrolment and students' enrolment in Government Schools

	2010-11	2011-12	2012-13	2013-14
Total students in Class 1-5	3281857	3531409	3598509	3690200
Total students in Class 1-5 in Government Schools	2789579	3001698	3058733	3136670
Total Students in Class 6-8	1386820	1605225	1857928	1972780
Total Students in Class 6-8 in Government Schools	1178797	1364441	1579239	1676863
Total students in Class 9-10	642060	728481	827175	944913
Total Students in Class 9-10 in Government Schools	321030	364240	413587	472456
Total students in Class 11-12	470302	417339	473512	539422
Total Students in Class 11-12 in Government Schools	235151	208670	236750	269711

The above projection will be used to calculate the following:

- Cost of midday meal scheme for 1-8
- Cost of text book supply
- Additional requirement of teachers and schools/or classrooms
- Provision of uniforms

Since the dropout rate is steep between classes 5 and 6 the government may be considering the construction of additional class rooms in the existing elementary girls' school in order to make available middle schools separately for girls. The implication for the number of teachers will also be worked out and taken for MTEF. The additional enrolment expected due to the lifting of the Board exam has been already factored into the projections.

5.2 Estimation of Requirement of Teachers

Currently the total number of teachers/lecturers in government schools is separately not available in a compiled form. It is available for all schools in the state together. Therefore it has been necessary to carry out an exercise of working out the number of teachers currently in position at the different schools under the government.

The number of schools that are there in the state has been split up by using the following assumptions:

- 85percent of the schools in the primary and upper primary in the state will be government schools
- 50percent of the schools in the high school and higher secondary schools will be government schools.

The following are the number of schools in the different levels in the state managed by the education department and tribal welfare department:

TABLE 12: Number of Government Schools

Primary	33540
Upper Primary	13703
High School	1181
Higher Secondary	1391

The Department of Finance vide its instruction Endorsement #/Plan/B-03/Set Up/08/178 dated29/05/2008 has spelt out the pattern of teaching staff at different levels of schools and the additional requirements beyond a specified number of students in a school. Using this norm the number of teachers required has been worked out. In order to estimate the requirement of teachers the following assumptions have been position made:

 70 percent of the schools in the primary and upper primary level will be normal student load schools and 90 percent of the schools in the high and higher secondary levels will be normal student load schools

The requirement of teachers and gap in the number of teachers is provided in the following Table:

TABLE 13: Requirement of Teachers as per norms and estimated gap

Level of school	Number of schools	Number of Teachers	Total Teacher	Teachers In Position	Gap in teacher availability	
		sanctioned	Requirement			
Primary-normal load	23478	3	70434	00000	24.402	
Primary-high load	10062	5	50310	89282	31462	
Upper Primary- Normal Load	9592	5	47960	45005		
Upper Primary High Load	4111	7	28776	45895	29841	
High School- Normal Load	1063	8	8504	0400		
High School- High Load	118	12	1416	6103	3817	
Higher Secondary- Normal Load	1252	16	20032			
Higher Secondary- High Load	139	25	3475	14152	11070	
Vocational and Computer Teachers			1715			

It is estimated that there is a huge gap of teachers that needs to be filled up over a period of time. The same was discussed with the department and it was informed that 25percent of the gap will be filled up by 2011-12 and another 40percent of the gap will be filled in 2012-13 and the balance 35percent will be filled up by 2013-14. Accordingly the requirement of additional salary requirements and teachers training has been taken into account.

If the gap is filled then the following will be the student teacher ratio in different years in the state:

TABLE 14: Projected positions of teachers and student teacher ratio

	2010-11	2011-12	2012-13	2013-14
Number of students in Primary School	2789579	3001698	3058733	3136670
Number of Teachers in Primary	89282	97147	111305	122317
Student Teacher Ratio	31:01:00	31:01:00	28:01:00	26:01:00
Number of students in Upper Primary School	1178797	1364441	1579239	1676863
Number of Teachers in Upper Primary	45895	53355	65291	75735
Student Teacher Ratio	26:01:00	26:01:00	25:01:00	23:01
Number of students in High School	321030	364240	413587	472456
Number of Teachers in High School	6103	7057	8583	9918
Student Teacher Ratio	52:01:00	51:01:00	48:01:00	47:01:00
Number of students in Higher Secondary School	235151	208670	236750	269711
Number of Teachers in Higher Secondary School	14152	16920	21348	25222
Student Teacher Ratio	17:01	12:01	11:01	11:01

The above analysis shows that if the department is able to fill the gap of the required number of teachers then there is no additional requirement of teachers in the next 5 years even if the enrolment were to substantially increase in the higher secondary level. However, at the high school level the number of Teachers will require increase. In the case of primary and upper primary levels the teachers will be adequate over the next five years but will have to be reviewed based on the enrolment. At the high school level if separate school for girls were to be provided then additional teachers will be required to teach at these schools. However, this

has not been taken into account in the current MTEF. It is expected that reallocation of teachers can be initially carried out and the position reviewed later.

5.3 Infrastructure Facilities required over MTEF Period

The statistics available with the department clearly indicate that the following will be the infrastructure required:

- Sanitation facility in the different schools
- Boundary wall for the schools
- Building for school in the high school and higher secondary schools
- Schools in the primary/upper primary level whose building are in very bad status
- Schools in the primary and upper primary level whose building require repair
- New class room for separate school for girls

The number required in each category is provided below:

TABLE 15: Schools requiring different infrastructure

	Primary	Upper Primary	High school	Higher secondary School
Building	Nil	Nil	374	154
Toilets	6324	1866	268	179
Drinking water	1907	1315	225	82
Very bad status building	1210	140	5	27
Buildings requiring repair	240	60	1	15
Boundary wall	6490	2887	266	273
Additional Rooms Required	0	0	650	750

Source: Statistics of DPI

The above requirements will be phased out over the next three years as discussed with the department. The requirement of new buildings in the high school and higher secondary schools will be phased over a three year period. The sanitation facility will be provided by

Public Health Engineering Department over the next two years and this will have no implication of resources for the department. The facility for drinking water will be phased out over the next three years. The buildings in critically bad condition will be replaced with new building in the next one year. The boundary wall will be provided to all schools requiring the same by three years time. Additional rooms required in the different levels of schools will be provided in the first year of MTEF.

6. MTEF PROJECTIONS AND RESOURCE REQUIREMENTS

Planning for MTEF requires an assessment of the likely availability of resources from all sources and the goals envisaged in the policy document which have to be achieved in a given frame of time. An analysis of the budgetary and non-budgetary resources made available in the past few years for school education has been done in the preceding paragraphs. A few salient features of the state policy on education in so far it relates to elementary and secondary education as also the goals set in the national Eleventh Five year Plan document have been described. The goals, *inter alia*, set are universal access tofu primary education by 2007, upper primary education by 2010, higher education by the end of Eleventh Five Year Plan with retention of students up to 75 per cent in upper primary School and a retention of 65 per cent for High and Higher Secondary School combined. It would be seen that the state has to go a long way for achievement of these goals within the stipulated frame of time.

Education, especially school education, unlike many other areas, has an intrinsic time frame in which goals can be achieved, even if adequate resources are made available. A child cannot be made to jump the classes or do two or three classes in a year for realisation of the goal of universal access of primary, upper primary or secondary education. He has to traverse a path; students in class II will come from students enrolled in class I or students in class VI will come from those who pass out from class V. However, it has been planned that the students will be provided bridge course in order that the children of the appropriate age group are admitted into the classes relevant for their age. Those who are out of the school cannot be put in an appropriate class on the basis of age because switching over from one class to another class also involves a learning process. The Eleventh Five year Plan document also stipulates that students getting under schooling system, education guarantee, alternate school, non-formal etc., will be brought into the formal schooling system during the plan period.

A plan for universal access to school education up to primary, upper primary or high school level necessarily involves a comprehensive planning for five, eight and ten years, which could

form the basis for allocation of financial resources. It also involves a great degree of physical planning requiring identification of areas where schools have to be opened according to norms, teachers, subject-wise, who need to be recruited, training which needs to be imparted to them, construction of classes and school buildings, preparation of learning material including text books, incentives to students where children are economically deprived, and socially barred by circumstances to avail the facilities under the existing environment. No comprehensive report has been made available which addresses these issues in the context of universal access in a comprehensive manner. Data available in the Annual Reports of the Department has formed the basis for developing a framework for the achievement of goals set for the realisation of universal access to primary, upper primary and high school education. It has necessarily to cover a period of ten years, but for the purpose of MTEF a shorter period of five years could be taken as the basis for allocation of resources and fixation of targets. Other areas indicated in the state policy or the national Eleventh Plan document has not specifically been included in this exercise, though they could remain a part of the budgeting.

Priorities of the State

State of Chhattisgarh has indicated a very high priority for the realisation of the goal of universal access to primary; upper primary and secondary education over all other goals and objectives set in the National Policy on Education, State Policy on Education, and the Five year Plans. However, as indicated earlier, mere provision of required funds and infra-structure will not shorten the period which is necessary for the realisation of this goal; children move from one class to another class after the completion of an academic year. Keeping this in view, the requirements of funds have been worked out on the assumption that children in one class will be retained in the next class in the next academic year. If this is maintained, universal access to primary education in the next four years, upper primary education in seven years and secondary education in nine to eleven years can be achieved. However, it should be noted that funds are the only one of the main constraints in the attainment of this all important goal; a movement will have to be built for the children in the school after their initial enrolment in class I.

6.1 Analysis of Trend in Education expenditure

Resource Envelope

State has been giving a very high priority to the school education in recent years. It has reflected in the budgetary allocations made in the last four years' showing an annual increase of over 20 per cent in the allocations. Even in the budget estimates for the year 2010-11, an increase of 19percent per cent is contemplated. The availability of funds should therefore not

be a problem for the goals of universal access set by the State Government. Apart from the budgetary allocations by the State, central funding is also available through the Centrally Supported Schemes for primary and upper primary education. A new CSS on the secondary education is in the offing and will be operational in the current year.

The first step is to analyse the trends of past expenditure on education in the state and examine the growth as well as the share that it gets in the overall expenditure of the government as well as growth with respect to Gross State Domestic product.

The following Table indicates the growth of Education Expenditure in the state over the last 10 years:

TABLE 16: School Education Expenditure in the State of Chhattisgarh

	Total Exp	EXP on Education	Year on Year Growth in Education expenditure	GSDP	Exp on Education as percent of total Gov Exp	Exp on education as percent of GSDP
2001-02	542062	58797.39	-	2953935	10.85	1.99
2002-03	634979	63375.74	8percent	3249265	9.98	1.95
2003-04	761591	81884.36	29percent	3380209	10.75	2.42
2004-05	838263	97841.88	19percent	4358904	11.67	2.24
2005-06	895405	107183.98	10percent	5099654	11.97	2.1
2006-07	1100054	132787.55	24percent	6470628	12.07	2.05
2007-08	1397055	176706.85	33percent	7941350	12.65	2.23
2008-09	1967402	228159.52	29percent	9620419	11.6	2.37
2009- 10RE	2171667	321835.38	41percent	10784823	14.82	2.98
2010- 11BE	2373427	379221.96	18percent	12003508	15.98	3.16

Source: Finance Accounts and budget document of the State

It is clear that there has been considerable growth in allocation to the education sector over the years and it can be expected to grow at anywhere in the range of 22percent to 28percent and the scenario for the different growth rates have been presented in the following Table:

TABLE 17: Scenarios of growth in Expenditure on school education in Chhattisgarh

Growth	22%	23%	24%	25%	26%	27%	28%
Rates							
2009-10	278354.6	280636.21	282918	285199.4	287481	289762.6	292044
2010-11	339592.6	345182.54	350818	353647.26	362226.05	367998.5	373817
2011-12	414303	424574.52	435014	438522.6	456404.83	467358.1	478485
2012-13	505449.7	522226.66	539418	543768.02	575070.08	593544.8	612461
2013-14	616648.6	642338.79	668878	674272.35	724588.3	753801.9	783950

The above projections were analyzed with the following criteria:

- Share of the projected allocations as part of the projected expenditures of the state as calculated in the Macro-Economic report
- Share of the projected allocations as part of the projected GSDP –obtained by projecting GSDP at 11.4percent annually that has been realized by the state

The analysis of the same is presented in the Table below:

TABLE 18: Projected Scenarios of Expenditure on School Education as percentage of Total Government Expenditure in Chhattisgarh

Education as percent of Total Government Expenditure						INR 00	0000	
Growth	Projected	22	23	24	25	26	27	28
rate	Government Expenditure	percent						
2009-10	2036701	13.67	13.78	13.89	14	14.12	14.23	14.34
2010-11	2424279	14.01	14.24	14.47	14.59	14.94	15.18	15.42
2011-12	2906442	14.25	14.61	14.97	15.09	15.7	16.08	16.46
2012-13	3511533	14.39	14.87	15.36	15.49	16.38	16.9	17.44
2013-14	4278030	14.41	15.01	15.64	15.76	16.94	17.62	18.33

TABLE 19 : Projected Scenarios of Expenditure on School Education as a percentage of GSDP in Chhattisgarh

	Education expenditure as percent of GSDP								
	GSDP	22perc	23perc	24perc	25perc	26perc	27perc	28perc	
	Projected	ent							
2008-09	10784823	2.58	2.6	2.62	2.64	2.67	2.69	2.71	
2009-10	12014293	2.83	2.87	2.92	2.94	3.01	3.06	3.11	
2010-11	13383922	3.1	3.17	3.25	3.28	3.41	3.49	3.58	
2011-12	14909689	3.39	3.5	3.62	3.65	3.86	3.98	4.11	
2013-14	16609394	3.71	3.87	4.03	4.06	4.36	4.54	4.72	

From the above scenarios the scenario projected with 25 percent growth seems to fit within the overall framework of the trends of expenditure and is more representative considering that the Budget Estimate for 2010-11 has indicated an allocation of about 15percent for education. The scenario with 25 percent growth year on year provides a slow growth to about 15.76percent of the overall government expenditure by 2013-14. Hence, this is the preferred scenario and all other projections of plan and non-plan and different components will be projected based on this.

TABLE 20: Resource Envelopes for School Education

There the resource envelope for the School Education will be:						
	INR (00000)					
2009-10	285199 (Actual)					
2010-11	353647 (Actual)					
2011-12	438522 (Estimate)					
2012-13	543768 (Estimate)					
2013-14	674272 (Estimate)					

6.2 Projection of details under different Heads

The analysis has been carried out for analysis of composition of budget expenditure over the years and the percentages have been worked out for the different components of budget for elementary education and secondary education and for other components such as Adult Education, Language Development, Art and Culture and Sports and Youth. The capital expenditure will be projected as a separate line item. The projections are provided in the following Table.

TABLE 21 : Projection of different components of expenditure on School Education

Components of Expenditure		2011-12	2012-13	2013-14
Elementary Education				
Salary	49percent	214876	266446	330393
Direction and Administration	1.25percent	5482	6797	8428
Text Books	0.75percent	3289	4078	5057
Mid Day Meal	10percent	43852	54377	67427
Teachers Training	0.50percent	2193	2719	3371
Education to All	5percent	21926	27188	33714
Special Component Plan for SC	1percent	4385	5438	6743
Tribal Sub Plan	5percent	21926	27188	33714
Other	1percent	4385	5438	6743
TOTAL Elementary	73.50percent	322314	399669	495590
Secondary Education				
Salary	10percent	43852	54377	67427
Direction and Administration	0.10percent	439	544	674
Text Books	0.10percent	439	544	674
Teachers Training	0.30percent	1316	1631	2023
Special Component Plan for SC	1percent	4385	5438	6743
Tribal Sub Plan	4percent	17541	21751	26971
Other	0.20percent	877	1088	1349
Total Secondary	15.70percent	68849	85373	105861
Adult Education	0.10percent	439	544	674
Language Development	0.10percent	439	544	674
General Education	1percent	4385	5438	6743
Sports and Youth	0.60percent	2631	3263	4046
Art and Culture	0.70percent	3070	3806	4720
Capital Exp.	8.30percent	36397	45133	55965
Total School Education Expenditure		438524	543770	674273

6.3 Projection details of Plan and non-Plan Expenditure

Out of the resources projected above it can be stated that the composition will be as follows:

TABLE 22 : Projection of Plan, Non-Plan and Central Share of expenditure on School Education in Chhattisgarh

Year	Total Projected resource Envelope for education (Revenue)	Plan	Non-Plan	Central Share
2009-10	261527	78458	109841	73228
2010-11	324296	97289	136204	90803
2011-12	402125	120637	168892	112596
2012-13	498635	149590	209426	139619
2013-14	618307	185492	259688	173127
Year	Total Projected resource envelope for education (Capital)	Plan	Non-Plan	Central Share
2009-10	23672	21304	0	2368
2009-10 2010-11	23672 29353	21304 26417	0	2368 2936
2010-11	29353	26417	0	2936

6.4 Calculation of additional resource requirements

Additional Teachers

The additional number of teachers that will be added at the different levels have been worked out for the next three years commencing from 2011-12 to 2013-14.

TABLE 23 : Projection of additional teacher requirement

	Primary	Upper Primary	High School	Higher secondary	Total
2011-12	7865	7460	1526	2768	19619
2012-13	14158	11936	1526	1335	32048
2013-14	11012	10444	1335	3874	26665

The implication on resource requirement:

 TABLE 24 : Additional Resource Requirements

Year	Additional resource requirement
2011-12	235
2012-13	384
2013-14	319

Mid Day meals

Increase in enrolment:

TABLE 25: Increase in Enrolment

Year	Primary	Upper Primary	Total
2011-12	212119	185644	397763
2012-13	57035	214798	271833
2013-14	77937	97624	175561

The cost of mid day meal is taken at INR 3.60 per student per day for 230 days in a year. The requirement is divided into state share and central share for each year by taking the ratio of 1.28:2.32 for primary school. The same is taken at INR 4.00 per student per day at upper primary level with state: Centre at 0.98:3.02. The additional requirements are:

TABLE 26 : Additional Resource requirements for Mid-day Meals

Year	State Share	Central Share	Total
2011-12	1171	2510	3681
2012-13	1757	4410	6167
2013-14	2221	5520	7741

Text Books and Uniforms

The number of students that has been projected as increase has been taken as the basis and it has been worked out as 10percent more than in 2008-09 than in the budget. The additional requirement will be not significant and hence has not been separately considered.

Training of Teachers

This is also not a significant contributor to the overall expenditure of the department and hence has not been separately considered.

Expenditure on Capital Account for schools

The requirement of amenities in the different schools has been worked out and is provided in the Table below:

TABLE 27: Additional Requirements for Capital Expenditure

	2011-12	2012-13	2013-14
Buildings	12000	16000	14240
Drinking Water	15	25	40
Buildings that are critically bad reconstructed	8000	5400	2560
Repair of buildings	644	0	0
Boundary Wall	6000	6000	7836
Additional Class Rooms	3600	1500	0
Total	30259	28925	24675

6.5 Adjusted Resource Requirements taking into account additional Requirements

 TABLE 28: Resource Requirement after adjusting for additional Requirements

Year	Total Projected resource Envelope for education (Revenue)	Plan	Non-Plan	Central Share
2009-10	261527	78458	109841	73228
2010-11	324296	97289	136204	90803
2011-12	406041	122043	168892	115106
2012-13	505421	151966	209426	144029
2013-14	626986	188651	259688	178647
Year	Total Projected resource envelope for education (Capital)	Plan	Non-Plan	Central Share
2009-10	23672	21304	0	2368
2010-11	29353	26417	0	2936
2011-12	66656	63016	0	3640
2012-13	74058	69544	0	4514
2013-14	80640	75043	0	5597

7. SUGGESTIONS FOR SECTOR REFORM AND DATA FOR BETTER PROJECTIONS

7.1 Data base and MIS

The current data available with the different administrative divisions of the Directorate of Public Instruction especially the Government School Administrative Machinery, The SSA and the MSA do not tally. Therefore, it is suggested that a basic stocktaking is carried out and a baseline is created which will be reliable and robust and enable better planning. The data required in terms of current enrolment in different classes, number of teachers and actual status of the school in terms of infrastructure requirements, number of teachers trained and number requiring training etc. need to be collected. The gender desegregation also needs to be collected. If a week is devoted for this purpose using the teachers then the data base can be created.

A clear Management Information System will have to be designed and implemented in order that the routine MIS can provide the data required for monitoring and managing school education in the state. Considering the high volume of investment going into this area this has been suggested.

7.2 Bringing administration of school education under one department

The current management arrangement for the school education is fragmented within the state. There are a number of agencies that are responsible for these aspects. This is causing considerable difficulty in managing and administering the schools and also results in duplication of expenditure as well as flow of resources. Therefore it is suggested that he administration is streamlined and brought under a single agency. If it is not feasible to bring it under a single agency it may be necessary to constitute a high level coordination mechanism in order to overcome the issues that have been highlighted.

7.3 Analysis of schools for over/under staffing

In the execution of MTEF overall averages have been taken for projection and calculation purposes. Detailed analysis of each school in the different categories needs to be carried out in order to identify schools that have overstaffing as per norms and those schools that have staff below the norms. This needs to be carried out to improve the quality of teaching.

7.4 Human resource Planning

It is essential that over a period of the next year the Department carries out a detailed Human resource Planning Exercise to analyse the age pattern of the current teachers and the rates of retirement each year in order that the position based on the current staffing pattern can be arrived at for each year in the future. This will enable the department to identify any large scale retirements that will occur in any particular year and be able to plan for it much ahead of that.

7.5 Enrolment drives and crash courses

The state has been doing well in terms of drives to enrol students in Class 1. However, considering the age of the children it may be necessary to examine the age of the children and put them through a crash course or bridge course to enable them to be enrolled in the appropriate classes as per their age. This needs to be planned for if the universal access to primary education is to become a reality.

7.6 Investment in capital structure

The capital outlay on education has been low in the past ten years and it will be necessary to increase the investment in capital structures to increase the literacy rate and formation of human capital in the state. Further, the government can carry out investment planning in

order that a sinking fund can be created to meet the future needs of the education such as mid day meals, text books and uniforms through the return from these funds and also make the schemes sustainable if the centrally sponsored and shared schemes were to close in future.

7.7 Carrying out MTEF Periodically

It is necessary to carry out MTEF periodically every year in order that it can be rolled over for the next three years and the requirement of resources is estimated to meet the policy objectives in the area of education. This will provide a basis for negotiations with the finance department on the budget allocations and will also increase the commitment to this sector.

This has to be looked at in the context of the overall sect oral MTEF that needs to be carried out for the state.

7.8 Creation of an MTEF and MIS Cell

It is suggested that an MTEF and MIS cell be created within the Education department either by contracting staff or by deputing interested staff in order that the personnel can be trained and the exercise carried out regularly.