

Report

on

Process Standardisation and System Design for Primary Education: In Search of Good Governance

for
Quality Council of India
New Delhi

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Chapter 1

Why Need of the Study

1.1 Why Primary Education

In the emerging context of knowledge economy, education is perhaps the single most important means for individuals to improve personal endowments, build capability levels, overcome constraints and, in the process, enlarge their available set opportunities and choices for a sustained improvement. Better health status of families, empowerment of women application and adaptation of new technologies; lower fertility, infant and child morality rates; social mobility and political freedom, all have visible linkages with educational attainments of people. It is, undoubtedly, a basic component of human development (Planning Commission, 2001). It is not only a means to enhance human capital, productivity and, hence, the compensation to labour, but it is equally important for enabling the process of acquisition, assimilation and communication of information and knowledge, all of which augments a person's quality of life. There is evidence to substantiate it as shown by the Box below:

Box: 1.1
Benefits from Education

- Better technology transfer with education: In agriculture, for example, if a farmer had completed four years of elementary education, his / her productivity was on an average, 8.5 per cent higher than that of a farmer who had no education at all
- In case of India there is evidence that adoption and spread of 'green revolution', in the early years, was faster among the educated farmers
- In industry, most evidence suggests that at enterprise level educated workers are more productive
- More strikingly, the skill and knowledge intensive sectors have been the fastest growing service sector in India in recent years.
- Education increases equality as well
- The poor countries get much higher rates of return than the rich countries from investing in education
- In case of India, as per one study, the private rate of return per year of education increases as the level of education increases up to the secondary level
- For rural areas, there were higher returns for primary and secondary levels as well as for technical diploma, whereas returns for higher secondary and college education were higher in urban areas

Source: UNDP, Human Development Report, 1992

The vision of education for India is contained in article 45 of its Constitution: 'free and compulsory education for all children until they complete the age of 14'. It is further strengthened by 86th Constitutional Amendment Act, 2002 for free and compulsory education of all children in the age group of six to fourteen years as a

Fundamental Right under Article 21A of the Constitution; and subsequently Right to Education Bill, 2005.

Box: 1.2

Constitutional Measures

- Article 45 of Directive Principles of the Constitution has made it the duty of the State to provide free and compulsory education to all children up to age of fourteen
- 86th Constitutional Amendment Act 2002 has provided for free and compulsory education of all children in the age group of six to fourteen years as a Fundamental Right under Article 21A of the Constitution
- Right to Education Bill 2005: It puts into effect the Right to Free and Compulsory Education to All Children in the Age Group of Six to Fourteen Years

1.1.1 Quality in Education

“ Even the ancient Indian texts in Sanskrit indicate that ancient Indian education meant excellence.”

There has been eternal quest for quality through the ages of human history. It has been the driving force for all human endeavours. Quality is the inspiration for transcendence from the mundane to the higher realms of life. It is the source of craving behind the unfolding human civilization through ages immemorial (Mukhopadhyay, 2005).

The phenomenal expansion of education at all levels in the country, the management of quality has become a major challenge. Globalization has added a new dimension; for, it is not just the globalization of economy, but also the globalization of socio-cultural institutions including education. The challenge has narrowed down to global standards. Defining quality in education is a massive challenge since it deals with the most sensitive creation on earth – the human beings. No wonder then that the concept of quality in education has attracted scholarly attention in India as well as in the west (Mukhopadhyay, 2005).

High dropout rate and poor quality of teaching are poor reflection of education system in the country. Therefore, while striving to universalise elementary education by 2010 without compromising on quality, the policies and programmes must comprehensively reinforce the quality in the system. The strategy should be for quality primary education for all. From this angle, the quality management in education, is needed urgently.

1.1.2 Vital Statistics – National and International

Literacy rate, which is an indicator of status of primary education in any country, is 61 percent in India and is far below in comparison to several developing countries (like China, South Korea, Sri Lanka) and developed countries. Similar is the case with HDI and education index (see Table 1.1). The public expenditure on education is 3.3 percent of GDP (UNDP, 2006), which is far below that of developed countries (see Table 1.2).

Table: 1.1
Human Development Index

S.N.	Country	Human Development Index (HDI) value	Adult literacy rate (% ages 15 and older)	GDP per capita (PPP US\$)	Education Index
		2004	2004	2004	
1	2	3	4	5	6
Developed Countries					
1	USA	0.948	100	39,676	0.97
2	France	0.942	100	29,300	0.97
3	Germany	0.932	100	28,303	0.96
4	Japan	0.949	100	29,251	0.94
5	UK	0.94	100	30,821	0.97
Developing Countries					
6	India	0.611	61.00	3,139	0.61
7	Sri Lanka	0.755	90.70	4,390	0.81
8	Pakistan	0.539	49.90	2,225	0.46
9	Bangladesh	0.53	41.00	1,870	0.46
10	China	0.768	90.90	5,896	0.84
11	South Korea	0.912	98.00	20,499	0.98
12	Malaysia	0.805	88.70	10,276	0.84
13	Indonesia	0.711	90.40	3,609	0.83

Source: Human Development Report 2006, UNDP (p.283-285)

Table: 1.2
Commitment to Education: Public Spending

S.N.	Country	Public expenditure on education			
		As % of GDP		As % of total government expenditure	
		1991	2002-04	1991	2002-04
1	2	3	4	5	6
Developed Countries					
1	USA	5.10	5.90	12.30	-
2	France	5.60	6.00	-	-
3	Germany	-	4.80	-	-
4	Japan	-	3.70	-	-
5	UK	4.80	5.50	-	11.50
Developing Countries					
6	India	3.70	3.30	12.20	10.70
7	Sri Lanka	3.20	-	8.40	-
8	Pakistan	2.60	2.00	7.40	-
9	Bangladesh	1.50	2.20	10.30	15.50
10	China	2.20	-	12.70	-
11	South Korea	3.80	4.60	25.60	16.10
12	Malaysia	5.10	8.00	18.00	28.00
13	Indonesia	1.00	0.90	-	9.00

Source: Human Development Report 2006, UNDP (p.319-321)

The infrastructure status is indicated by Tables 1.5 to 1.7 for India, Rajasthan, Kerala and Jaipur. These tables indicate lack of vital facilities like schoolrooms, water, toilets, electricity and blackboards in the schools. The position of enrollment, dropout rate and retention rate is indicated by Tables 1.6 to 1.8. Low retention rate (58.11) is a poor reflection of internal efficiency. The internal efficiency is indicated by table 1.9.

Table: 1.3
Number of Primary Schools (All Managements) (2005)

S. N.	Place	Primary Only	Primary with Upper primary	Primary with Upper Primary & sec./H.Sec.	Total Primary Schools
1	India	6,93,030	1,79,094	23,723	8,95,847
2	Rajasthan	55,452	20,689	2,907	79,048
3	Jaipur	3,049	1,509	195	4,753

Source: NIEPA (2004-05) and Elementary education in India: Analytical Report, 2004-05

Table: 1.4
Basic Statistics (India)

S. N.	Item	Existing
1	Total number of children	12,58,98,231
2	Average number of schools required	8,95,847
3	Number of children enrolled	11,82,96,540
4	Number of classrooms	22,74,121
5	Number of teachers	26,35,204

Source: NIEPA (2004-05), Census (2001) and own analysis

Table: 1.5
School Infrastructure

S. N.	Facility	India	Rajasthan	Kerala	Jaipur
1	Without water	21.2	25.31	7.14	20.64
2	Without common toilet	58.54	57.78	21.63	44.53
3	Without electricity connectional	82.77	92.86	34.82	-
4	Without girl's toilet	75.73	82.52	42.83	69.31
5	Without Blackboard	7.07	13.81	2.50	6.31

Source: Elementary education in India: Analytical Report, 2004-05

Table: 1.6
Enrolment in Primary Classes: (2005)

S. N.	Classes I-V	India	Rajasthan	Kerala
1	Boys	6,20,78,344	41,25,673	10,52,310
2	Girls	5,62,18,196	35,86,494	10,23,221
3	Total	11,82,96,540	77,12,167	20,75,531
4	GPI*	0.91	0.87	0.97

Source: Elementary education in India: Analytical Report, 2004-05

*GPI: Gender Parity Index

Table: 1.7
Drop-out Rate: Cohort 2003-04

(Based on Common Schools for the years 2003-04 and 2004-05)

S. N.	State /UT	Class I	Class II	Class III	Class IV	Class V	Average of Primary Classes I-V	Cumulative drop-out for 5 years
1	India (All States)	12.17	6.01	6.76	7.27	22.87	10.64	53.2
2	Rajasthan	24.97	12.03	10.21	4.74	15.60	15.02	75.1
3	Kerala	2.8	2.45	2.18	3.91	0.75	2.30	11.5

Source: Elementary education in India: Analytical Report, 2004-05

Table: 1.8
Retention Rate (%) at the Primary Level: 2003-04 & 2004-05

State	Education Cycle	Year			
		2003-04		2004-05	
		Number of Districts	Retention Rate	Number of Districts	Retention Rate
Average of All District *	I-V	123	53.43	184	58.11

Source: Elementary education in India: Analytical Report, 2004-05

Table: 1.9
Indicators of Internal Efficiency: Cohorts 2002-03 & 2003-04

(Based on Common Schools for the years 2003-04 and 2004-05)

S. N.	State /UT	Co-efficient of efficiency		Years Input per Graduate		Input-Output Ratio	
		2002/03	2003/04	2002/03	2003/04	2002/03	2003/04
1	India (All States)	76.9	87.8	6.5	6.8	1.30	1.36
2	Rajasthan	45.1	59.5	11.1	10.1	2.22	2.02
3	Kerala	101.1	90.9	4.9	6.6	0.98	1.32

Source: Elementary education in India: Analytical Report, 2004-05

1.1.3 Objectives and Methodology

In this research study the attempt was made to diagnose the performance of schools with a specific focus on the following:

- How the school system has helped children in accessing the education? The specific issues examined included:
 - Key processes involved in the delivery of services concerning primary education
 - Quality of teaching
 - Parents' satisfaction
- Whether the school system has adequate capacity to deliver services efficiently? The specific issues examined included:
 - Infrastructure, teachers and teaching-aids under delivery mechanism
 - Work culture and workload
 - Transparency and accountability
 - Quality management of education
- Measures those are necessary to strengthen education system to provide quality education

1.2 Methodology

i. **System Approach:** It focuses on output and integrates the various administrative processes viz., planning, coordination, organisation, implementation, monitoring, control and evaluation in a logical way, or it can be defined as logical problem-solving process which is applied to identifying and resolving important development problems. The focal point of this approach is the 'system'. Here, the system is assumed to be having elements or parts which have dynamic relationships among themselves and with the whole, and each of these parts affect independently or in relation with other (one or more than one) influence the outcome (Kaufman, 1972).

Under this approach, a systematic thinking in terms of the whole problem and its interacting sub-parts is done. It involves model building and the development of conceptual frameworks (for the whole problem and its sub-parts) which help facilitate decision-making by providing a basis for sorting variables, and for showing relationship between and among variables and components. Or, in other words this approach helps in generation of intellectual maps with which we are better able to do problem solving and decision-making activities (Forojalla, 1993).

ii. **A Participatory Approach to Governance Evaluation:** Under the study, participatory methods were utilised to reach out to stakeholders – service department, functionaries, citizens and panchayat members. The methods included FGDs, case studies, interviews and field survey.

An important feature of a participatory approach is that, because it focuses on the process of evaluation, its methodology is easily adaptable to programming across the various components of governance. The following is a summary of what are seen to be the main features and strengths of a participatory approach to evaluating a range of governance activities (IDRC, 1999):

Participation expands the project / programme information base for governance evaluation. Identifying, defining and measuring results hinges on comprehensive information collection. Bringing together all project / programme stakeholders can help ensure that:

- a full and wide variety of information and knowledge held by stakeholders is identified, coordinated / linked;
- information on, and interests of, a diverse range of social groups, including disadvantaged or marginalised social groups (women, children, disabled people, aboriginal peoples, religious / cultural minorities, etc.), are integrated;

- quantitative information is complemented by qualitative information and descriptive statements, based on stakeholders' perceptions and judgements; the use of stakeholders / clients subjective assessment of change before, through and after the programme can help do away with the need to commission 'baseline studies'; and
- local knowledge and creativity, including 'home grown' cultural and socio-political practices and institutions, are incorporated.

iii. BPR

Business process reengineering (BPR) was attempted for key processes. It involved steps as shown in Figure 1.1. The broad steps followed were process mapping, identifying CTQs and critical control points, inputs for process improvement, and process standardisation.

iv. SERVQUAL model

This model indicates that customers form their perception of quality from different elements of the service (Mohanty and Lakhe, 2002) (see Figure 1.2).

It shows the vital activities of a service organisation that influence the perception of quality. In addition, the model shows the interactions between these activities and identifies the links between the key activities, which are pertinent to the delivery of a satisfactory level of service quality. The links are considered as gaps or discrepancies, a gap representing a significant hurdle to achieving a satisfactory level of service quality. Gap 5 is a service quality shortfall as seen by the customer, and gaps 1-4 are shortfalls within the service organisation. Thus, gaps 1-4 contribute to gap 5. The gaps are outlined below

- *Gap 1* is between expected service by consumers (citizens) and management perception of citizen expectations.
- *Gap 2* is between management perception of consumers (citizens) expectations and translation of perceptions into service quality specifications.
- *Gap 3* is between service quality specifications (of service provider) and service delivery.
- *Gap 4* is between service delivery and external communications to consumers (citizens).
- *Gap 5* is between perceived service and expected service by consumers (citizens).

1.3 Issues under Study

The study covered three aspects viz., i. processes of services delivery, ii. performance of delivery system, and iii. efficacy of delivery system

A brief description about the issues covered is given below (see Table 1.10):

Processes of Services Delivery

- Process mapping & BPR: The process mapping of important processes involved in service delivery was done to study about:
 - i. Number of activities in the process,
 - ii. Sequence of activities
 - iii. Critical control points
 - iv. Critical shortcomings
 - v. Time and cost incurred by citizens
 - vi. Citizen's satisfaction
 - vii. Measures for improving health system

The processes covered for the study are:

- Teaching
- MDM
- Distribution of books
- Scholarship
- Library

Note: While first three processes are studied through process mapping, the rest are done through FGDs and observations.

Performance of Delivery System

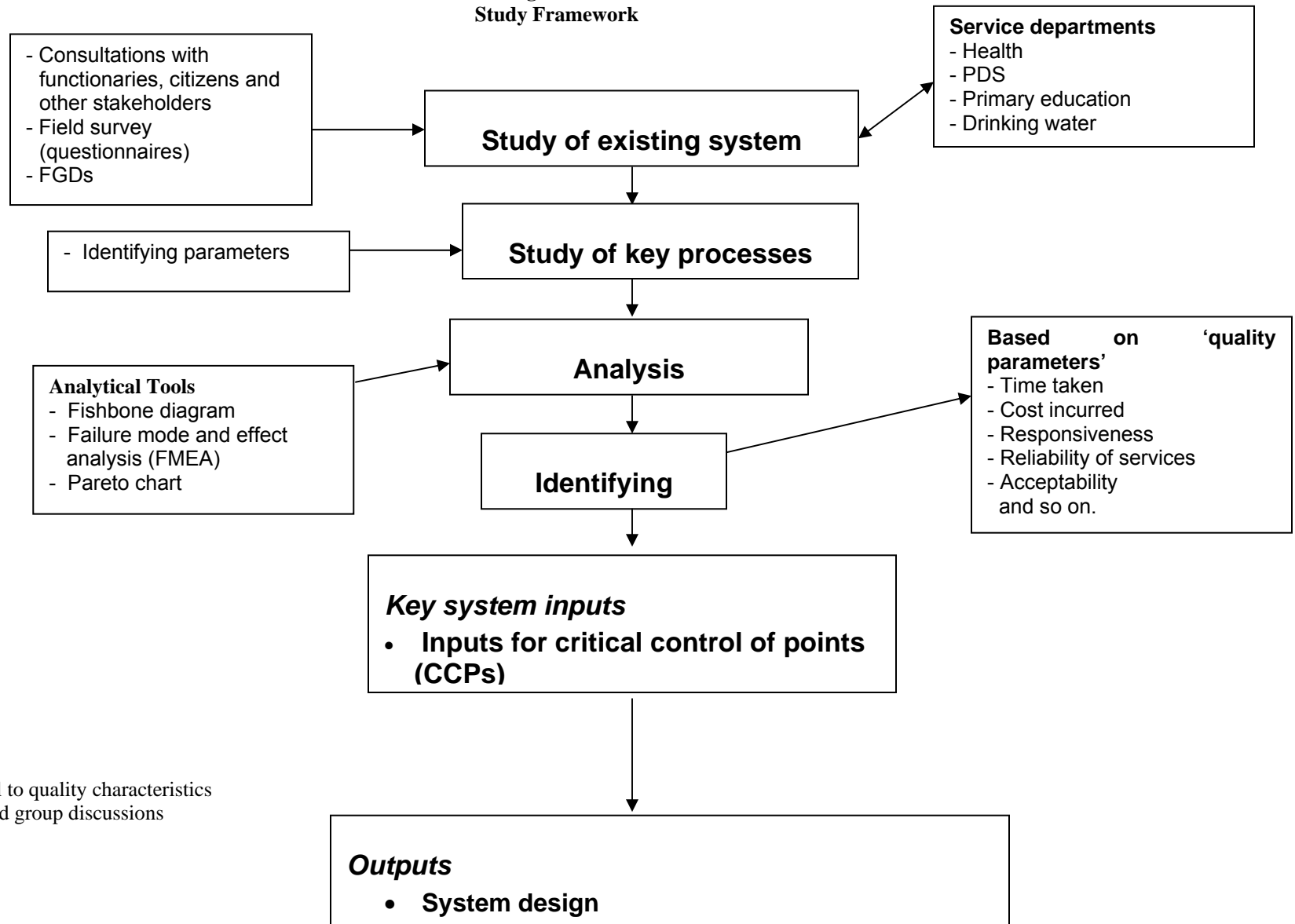
- Quality of services: The parameters considered for study are: availability, time, access, cost, reliability, behaviour, convenience, responsiveness, transparency, accountability and cleanliness

Efficacy of Delivery System

- Whether Education system has capacity to meet the requirement of quality education: The delivery of services can be done only by a sound delivery system. The issues covered include: infrastructure (classrooms, etc.), manpower (teachers), logistics (teaching-aids), monitoring (MIS)
- Organisational Behaviour: It included issues like motivation, work culture – responsiveness, behaviour, etc.

Under the above categories, the issues covered parameters for evaluation, methodology utilised, and models / tools for analysis are listed in Table 1.10.

Figure: 1.1
Study Framework



CTQs: Critical to quality characteristics
FGDs: Focused group discussions

Table: 1.10

Issues under Study for Education System

S. N.	Categories / aspects	Issues covered	Parameters for evaluation	Methodology	Models / tools for Analysis
1.	Key processes of services delivery	- Process mapping & process standardisation	- CTQs - Process efficiency - Process control points, tools and inputs required	- Process mapping - FGDs - Field survey	- FMEA - Fishbone diagram
2.	Performance of delivery system	- Quality of services	- Availability - Time and cost in availing services - Access - Reliability of services - Behaviour of teachers - Convenience - Responsiveness of teachers - Transparency in functioning - Accountability - Cleanliness	- Process mapping - FGDs - Field survey	- FMEA - Fishbone diagram
		- Services availed	- Number of services by citizens - Quality of services	- FGDs - Field survey	
3.	Efficacy of delivery system	- Whether delivery system has capacity to meet citizens' requirement	Existing state of: - Infrastructure (classrooms etc.) - Manpower - Logistics (teaching-aids) - Monitoring system (MIS) - Other support items	- FGDs - Field survey	- System approach - SERVQUAL model
		- Quality management system	- Quality policy - Quality standards - Quality planning and management - Quality control and assurance - Quality auditing	- FGDs	-
		- Organisational behaviour	- Motivation - Working conditions (work environment) - Work culture (responsiveness, behaviour)	- FGDs - Field survey	-

1.4 Study Framework

The study framework is depicted in Figure 1.1. It shows sequentially the following:

- Study of existing system
- Process mapping
- Analysis
- Identifying CTQs
- Key system inputs: inputs for critical control points (CCPs) and process standardisation
- Output: framework for 'system design' for delivering quality services

Study Area

The study of education system was covered in Chaksu Block of Jaipur District, Rajasthan. Under the study the following were covered as a sample:

Table: 1.11
Study Area

S. N.	Study area	Location
1.	Block Elementary Education office	Chaksu Block
2.	Govt. Upper Primary School	Shivdaspura
3.	Govt. Primary School	Dadan pura
4.	Citizen survey	Villages Dadanpura, Chandlai, Padampura, Teetriya, Deokishanpura, Shivdaspura

Under the study, the gram panchayats covered for field survey, case studies and FGDs were Shivdaspura, Chandlai, Kumhariyawas, Padampura, and Teetriya. Case studies covered issues like quality of service delivery, problem of access quality of education, etc.

Also, the specific domain issues covered under the studies are presented in Tables from 1.12 to 1.14. These are related to the following:

- Quality dimension from citizen perspective
- Component of education system
- Major education services

Figure: 1.2
SERVQUAL Model

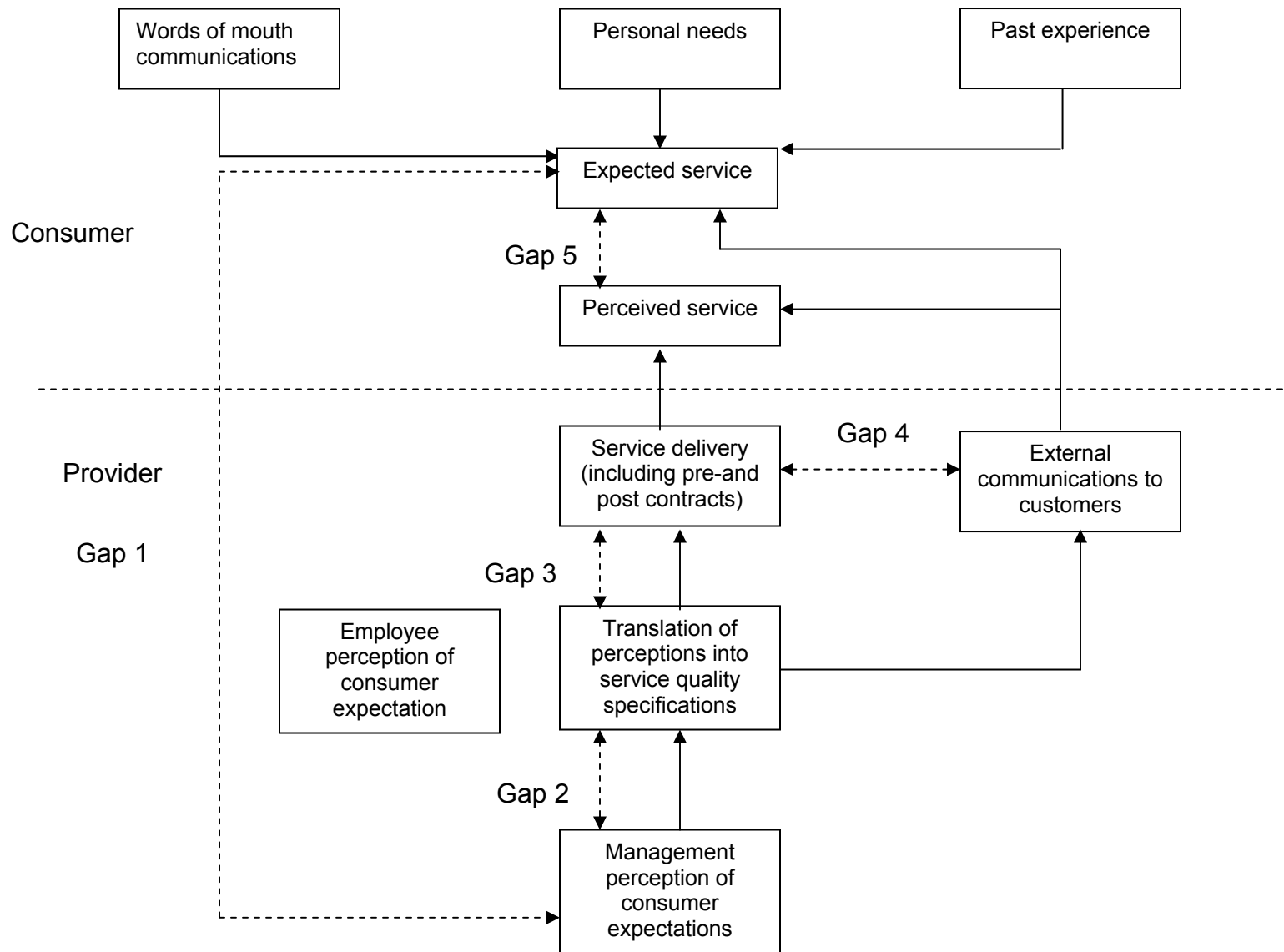


Table: 1.12
Quality Dimensions in Primary Education from Citizen Perspective

S. N.	Quality dimensions	Issues covered	S. N.	Quality dimensions	Issues covered
1	Availability	<ul style="list-style-type: none"> - Whether all the educational facilities are available - Whether teaching-aids are available 	8	Quality of teaching	<ul style="list-style-type: none"> - Whether class-wise, subject-wise curriculum design - Whether curriculum is followed - Whether teaching-aids are emplace in the schools - How is the pedagogy for imparting - Evaluation of children performance
			9	Reliability	<ul style="list-style-type: none"> - Whether the school is open every day - Whether teachers are present every day - Whether all the educational service are available always
2	Cost	<ul style="list-style-type: none"> - Cost of education 	10	Transparency	<ul style="list-style-type: none"> - Whether the records attendance are displayed - Whether the standards are defined - Display of citizen charter on notice board
3	Time	<ul style="list-style-type: none"> - Time to reach the school 	11	Accountability	<ul style="list-style-type: none"> - Whether teachers are accountable for teaching
4	Access	<ul style="list-style-type: none"> - Average distance to school 	12	Cleanliness	<ul style="list-style-type: none"> - Whether there is internal and external clean environment
			13	Monitoring	<ul style="list-style-type: none"> - Preparation of monitoring formats - Monitoring by BEEO - Monitoring by DEO - Monitoring by panchayats - Monitoring by other officers - Monitoring by parents
5	Convenience	<ul style="list-style-type: none"> - Whether there are facilities like drinking water, fans, chairs, etc. for children 	14	Citizen duty	<ul style="list-style-type: none"> - Whether citizens help in maintaining cleanliness - Whether parents participate in school meetings - Whether parents provide timely feedback
6	Behaviour	<ul style="list-style-type: none"> - Behaviour of teachers (friendliness , respect, courtesy, communication between teachers and parents) 	15	Panchyat's duty	<ul style="list-style-type: none"> - Whether panchayats help in maintaining cleanliness - Whether panchayats help in enrolment / reducing drop-out
7	Responsiveness	<ul style="list-style-type: none"> - Whether the teachers are sensitive to – parents' grievances 			<ul style="list-style-type: none"> - Whether panchayat members provide timely feedback

Table: 1.13
Issues Covered Under Various Components of Education System

S.N.	Components	Issues covered
1.	Infrastructure	- Accessibility to schools - Condition of schools buildings
2.	Manpower	- Teacher strength - Training of teachers
3.	Working conditions	- Availability of electricity - Availability of furniture, fans, etc. - Cleanliness - Availability of residential quarters
4.	Teaching –aids	- Availability of Teaching-aids
5	Accountability	- Transparency - MIS - Accountability mechanism
6	Quality management	- Quality control teams - Mechanism for quality assurance - Training about quality

Table: 1.14
Issues Covered Under Major Education Services

S.N.	Major services	Quality issues covered
1.	Teaching	- Access to schools - Reliability of teachers - Monitoring of performance - Transparency - Accountability for teaching
2.	Scholarship	- Access - Convenience to children - Monitoring
3.	Mid-day meal (MDM)	- Access - Reliability - Convenience - Quality of food
4.	Library	- Access - Reliability
5.	Distribution of books	- Access - Reliability - Convenience - Monitoring

Figure: 1.3

Components of Quality System (QS) for Quality Assurance (QA)

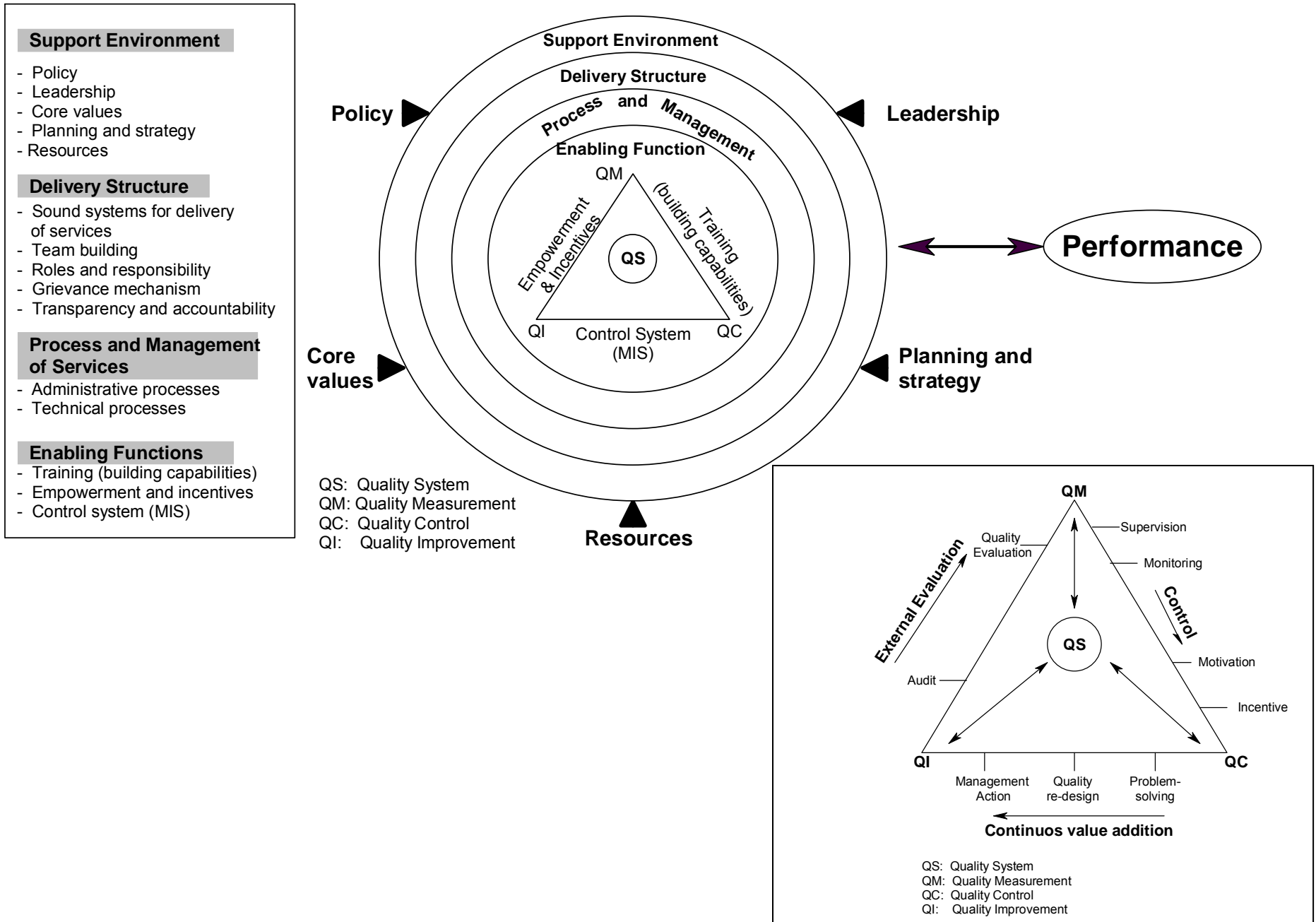


Table: 1.1.1
Percentage of Primary Schools (All Managements) (2005)

S. N.	Place	Primary Only	Primary with Upper primary	Primary with Upper Primary & sec./H.Sec.
1	India	77.35	19.99	2.65
2	Rajasthan	70.15	26.17	3.68
3	Jaipur	64.15	31.75	4.10

Source: Elementary education in India: Analytical Report, 2004-05

Table 1.1.2
Number of Primary Schools (All Government Managements) (2005)

S. N.	Place	Primary Only	Primary with Upper primary	Primary with Upper Primary & sec./H.Sec.	Total Schools
1	India	6,30,822.44	1,37,805.29	8,717.40	7,77,345.13
2	Rajasthan	51,539.97	13,517.83	950.18	66,007.984
3	Jaipur	2,897	821	76	3,794

Source: Elementary education in India: Analytical Report, 2004-05

Table: 1.1.3
Number of Primary Schools (All Private Managements) (2005)

S. N.	Place	Primary Only	Primary with Upper primary	Primary with Upper Primary & sec./H.Sec.	Total Schools
1	India	62,183.77	41,267.12	15,019.09	1,18,469.98
2	Rajasthan	3,913.59	7,169.08	1,954.10	13,036.76
3	Jaipur	152	688	119	959

Source: Elementary education in India: Analytical Report, 2004-05

Table: 1.1.4
Percentage of Primary Schools (All Government Managements) (2005)

S. N.	Place	Primary Only	Primary with Upper primary	Primary with Upper Primary & sec./H.Sec.
1	India	81.15	17.73	1.12
2	Rajasthan	78.08	20.48	1.44
3	Jaipur	76.36	21.64	2.00

Source: Elementary education in India: Analytical Report, 2004-05

Table: 1.1.5
Trends of social sector expenditure by General Government
(Centre and State Governments combined)

S. N.	Social service	2000-01 Actual	2005-06 BE
1	Centre & States	(Rs. In crore)	
	Total expenditure	5,91,300	9,79,800
	Expenditure on social sector	1,31,800	2,05,200
	Education	67,000	99,200
2	As a proportion of GDP	(In per cent)	
	Total expenditure	28.05	27.76
	Expenditure on social sector	6.25	5.81
	Education	3.17	2.81
3	As a proportion of total expenditure		
	Expenditure on social sector	22.3	20.9
	Education	11.3	10.1

4	As a proportion of social sector expenditure		
	Education	51	48
	Health	21	23

Source: Economic survey (2005-06)

Table: 1.1.6
Percentage Distribution of Schools by Status of Building (2005)

S. N.		India	Rajasthan	Kerala
1	Private	8.18	3.69	61.34
2	Rented	4.73	7.69	3.89
3	Government	79.75	74.44	33.89
4	Govt. School in Rent free Building	2.15	2.83	0.28
5	No Building	4.34	9.63	0.06
6	No Response	0.86	1.72	0.44

Source: Elementary education in India: Analytical Report, 2004-05

Table: 1.1.7
Number of Classrooms

S. N.	Place	Total number of classrooms at primary level	Ratio of classrooms to number of schools
1	India	2274121	2.54
2	Rajasthan	187240	2.37
3	Jaipur	15503	3.26

Table: 1.1.8
Plan Expenditure on Education (Centre + State)

(Rs. in cr.)

S.N	Sector	Ninth	Percent (%)
1	Elementary Education	26,107.42	57.06
2	Secondary Education	9,757.83	21.33
3	Adult Education	785.58	1.72
4	Univ. and Higher Education	3,994.21	8.73
5	Technical Education	3,721.96	8.14
6	Other Programs	1,385.14	3.03
	Total	45,752.14	100

Table: 1.1.9
Sector-wise Expenditure during 2006-07 (Central Government)

S.N.	Name of the Scheme	2006-07 Approved Outlay (Rs. in cr.)	
Department of Secondary & Higher			
1	Secondary Education	1,067.00	
2	University & Hr. Edn.	1,403.50	
3	Language Development	165.00	
4	Scholarships	13.00	
5	Book Promotion	27.00	
6	Planning and Admn.	12.00	
7	Technical Education	930.00	
Total Dept. of Sec. & Hr. Edu.		3,617.50	17.44%
Department of Elementary and Literacy			
1	Elementary Education	16,892.50	
2	Adult Education	235.50	
Total Dept. of Ele. Edu. & Lit.		17,128.00	82.56%
TOTAL EDUCATION		20,745.50	

Table: 1.1.10
DEPARTMENT OF ELEMENTARY EDUCATION & LITERACY
Proposed Scheme-wise Break-up of Annual Plan Allocation for 2005-06

(Rs. in cr.)

S.N.	Name of Scheme	Allocation proposed for 2005-06	
		Total	Of which, allocation to be earmarked for NE States
	I. ELEMENTARY EDUCATION		
	A. Other than Externally Aided Projects		
1	Sarva Siksha Abhiyan	6,440.00	644.00
2	National Program of Nutritional Support to Primary Education (MDM)	3,345.26	334.50
3	Others	460.00	46.00
	Sub Total - A (Other than EAPs)	10,245.26	1,024.50
	B. Externally Aided Projects		
1	Sarva Siksha Abhiyan - Externally Aided Component	1,360.00	--
2	District Primary Education Programme	600.00	--
3	Others	36.50	--
	Sub Total - B (EAPs)	1,996.50	--
	Total I - Elementary Education (A+B)	12,241.76	1,024.50
	II. ADULT EDUCATION	290	29.00
	TOTAL (I+II)	12,531.76	1,053.50

Mid-day Meal (MDM)

Nutritional Content	Norm as per NP-NSPE, 2004	Revised Norm as per NP-NSPE, 2006
Calories	300	450
Protein	8-12	12
Micronutrients	Not prescribed	Adequate quantities of micronutrients like iron, folic acid, vitamin-A etc.

Components and Norms for Central Assistance:

Under NP-NSPE, 2006, Central Government will provide w.e.f 16.6.06 the following assistance to State Governments/UT Administrations:

- (i) Supply of free food grains (wheat/rice) @100 grams per child per School Day from the nearest FCI godown;
- (ii) Reimburse the actual cost incurred in transportation of food grains from nearest FCI godown to the Primary School subject to the following ceiling:
 - (a) Rs.100 per Quintal for 11 special category States viz. Arunachal Pradesh, Assam, Meghalaya, Mizoram, Manipur, Nagaland, Tripura, Sikkim, J&K, Himachal Pradesh and Uttaranchal, and
 - (b) Rs.75 per quintal for all other States and UTs.
- (iii) Provide assistance for cooking cost at the following rates:-
 - (a) States in North-Eastern Region :- @Rs. 1.80 per child per school day, provided the State Govt. contributes a minimum of 20 paise
 - (b) For Other States & UTs :- @Rs. 1.50 per child per school day provided the State Govt./UT Admn. Contributes a minimum of 50 paise
- (iv) Provide assistance for cooked Mid-Day Meal during summer vacations to school children in areas declared by State Governments as "drought-affected".

- (v) Provide assistance to construct kitchen-cum-store in a phased manner up to a maximum of Rs. 60,000 per unit. However, as allocations under MDMS for construction of kitchen-cum-store for all schools in next 2-3 years may not be adequate, States would be expected to proactively pursue convergence with other development programmes for this purpose. (Also please see para 2.5 in this regard).
- (vi) Provide assistance in a phased manner for provisioning and replacement of kitchen devices at an average cost of Rs. 5,000 per school. States/ UT Administration will have the flexibility to incur expenditure on the items listed below on the basis of the actual requirements of the school (provided that the overall average for the State/ UT Administration remains Rs 5000 per school):
- Cooking devices (Stove, Chulha, etc)
 - Containers for storage of food grains and other ingredients
 - Utensils for cooking and serving.
- (vii) Provide assistance to States/ UTs for Management, Monitoring & Evaluation (MME) at the rate of 1.8% of total assistance on (a) free food grains, (b) transport cost and (c) cooking cost. Another 0.2% of the above amount will be utilized at the Central Government for management, monitoring and evaluation.

Sarva Shiksha Abhiyan (SSA)

Sarva Shiksha Abhiyan is a flagship programme of Government of India for achievement of universalization of elementary education in a time bound manner, as mandated by the 86th amendment to the Constitution of India making free and compulsory education to children of ages 6-14 (estimated to be 205 million in number in 2001) a fundamental right. The programme aims to achieve the goal of universalization of elementary education of satisfactory quality by 2010.

I. Major goals of SSA and focus on Quality

- All children in school, Education Guarantee Centre, Alternative School, 'Back to School' camp by 2003;
- All children complete five years of primary schooling by 2007;
- All children complete eight years of schooling by 2010;
- Focus on elementary education of satisfactory quality with emphasis on education for life;
- Bridge all gender and social category gaps at primary stage by 2007 and at elementary education level by 2010;
- Universal retention by 2010.

II. Major strategies for achieving the goals:

Strategies central to the SSA include the following activities that are attempted in a collective manner through series of interventions.

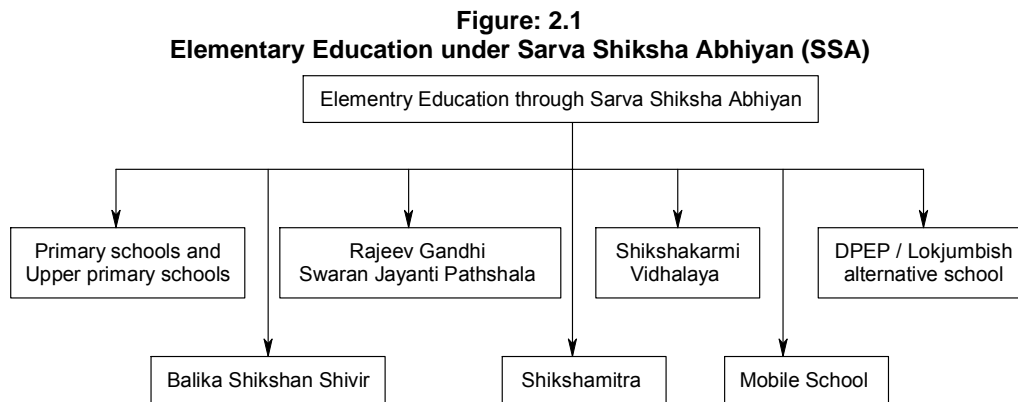
- Institutional reforms in the states' education systems;
- Sustainable financing through partnership between central and state governments;
- Improving mainstream educational administration through institutional development;
- Community-based monitoring with full transparency and accountability;
- Focus on girls, SC/ST, religious and linguistic minorities, disabled, and other disadvantaged groups;
- Focus on the development needs of teachers;
- Thrust on quality through improved curriculum and effective teaching methods;
- Elementary education plans in each district to reflect all investments being made in the elementary education sector.

Source: <http://education.nic.in/Elementary/elementary.asp>

Chapter 2

System Study: Critical Area of Concern

The study of primary education system was undertaken in Chaksu block of Jaipur district (Rajasthan). Chaksu Block is implementing Sarva Shiksha Abhiyan (SSA), which is an umbrella programme covering a number of primary schools and upper-primary schools besides there are DPEP, Rajiv Gandhi Pathshalas and Shiksha Karmi Vidhalaya (see Figure: 2.1).



For the purpose of detailed study, the following schools / institutions were covered (see Table: 2.1)

Table: 2.1
Study Area

S. N.	Study area	Location
5.	Block Elementary Education office	Chaksu Block
6.	Govt. Upper Primary School	Shivdaspura
7.	Govt. Primary School	Dadan pura
8.	Citizen survey	Villages Dadanpura, Chandlai, Padampura, Teetriya, Deokishanpura, Shivdaspura

Besides above, field survey was conducted in the four gram panchayats viz.; Shivdaspura, Kumhariyawas, Bara Padampura, Chandlai and Teetriya.

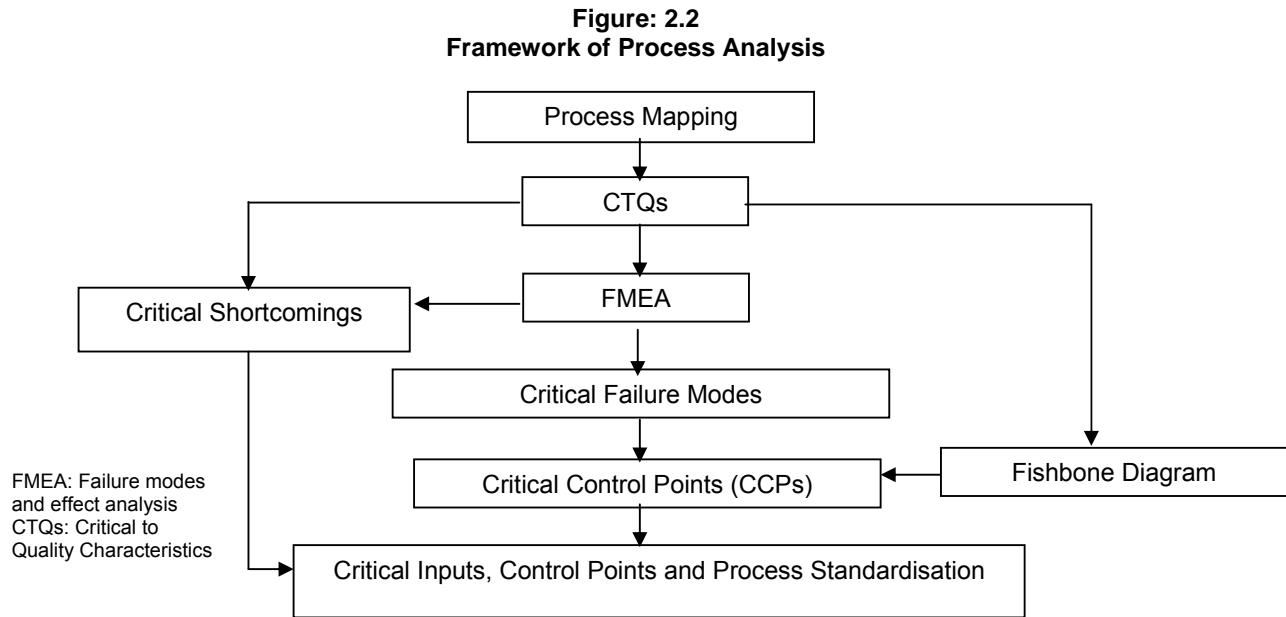
2.1 Study of Key Processes for BPR

In order to identify key processes, focused group discussions (FGDs) were held with stakeholders viz.; Block elementary education officer, teachers, students, citizens and panchayat members. Based on FGDs the following emerged as key processes:

- Teaching

- Mid-day meal
- Book distribution

The framework for process analysis is indicated by Figure 2.2



The flow diagrams (FDs) of above processes were prepared during the consultations with BEEO, students, parents and teachers. The FD for teaching, admission, and examination are given by Figures from 2.3 to 2.5 other FDs are represented in Figures 2.1.1 and 2.1.2 in Annexure 2.1.

2.1.1 Critical to Quality Characteristics (CTQs)

Based on the flow diagrams (FDs), the critical to quality characteristics (CTQs) were identified. The CTQs are:

- Activity in a process
- Frequency of service
- Access
- Time spent to reach the school
- Level of satisfaction (completely satisfactory % of respondents)
- Cost on availing services
- Teacher-student ratios in block
- Classroom student ratios
- Toilets facility
- Drinking water facility
- Vacant posts as per sectioned posts

Table: 2.2
Critical to Quality Characteristics (CTQs)

S. N.	Quantitative Indicators	Teaching	MDM	Free book distribution
1.	Activity in a process	13	20	11
2.	Frequency	Daily	Daily	Yearly
3.	Access (school)	Max	2 km	-
		Min	5 km	-
4.	Time spent to reach the school	15-30 minutes	-	-
5.	Level of satisfaction (completely satisfactory % of respondents)	47 %	34 %	78 %
6.	Cost	Free	Free	Free
7.	Teacher student ratios in block	1 : 38.08		
8.	Classroom student ratios	1:24		
9.	Toilet facility not available	29 %		
10.	DW facility not available	26 %		
11.	Vacant posts as per sanctioned posts	13 %		

Source: Based on FGDs with stakeholders, field survey and own analysis

2.1.2 Failure Modes and Effect Analysis (FMEA): For Teaching

Failure Modes and Effects Analysis (FMEA) is a set of guidelines, a process, and a form to identify and prioritise potential causes (leading to failures). Based on FGDs and field survey, FMEA has been prepared in Table 2.3. It indicates risk priority number (RPN) for various causes.

If we look at the cumulative RPN of causes under a particular activity-head, the maximum value comes under the following heads:

- A6: Classroom instruction / class work / classroom teaching
- A2 & A3: Beginning of the day and arrival of student at the school
- A7: Questions/Answers sessions
- A1: Enrollment and Admission of student
- A4: Morning prayer and announcements as required

Based on the FMEA, the Pareto chart is drawn as shown by Figure 2.6. The chart differentiates (causes) between 'vital few' and 'trivial many'. As per this chart, the 'vital few' causes of failures are (in descending order of RPN):

- C18: Teaching is not joyful, or lack of interest in students
- C:15 Communication problem (between teachers and students)
- C:20 Lack of discipline
- C:14 Lack of interest (commitment) of teachers
- C:19 An environment of fear amongst students
- C:17 Lack of proper teaching environment (improper ambience in classrooms)
- C:6 Teachers stay in Tehsil level towns (away from school HQs)
- C7: No mode of transportation available for teachers or students
- C1: Low awareness among citizens

Figure: 2.3
Process of Teaching

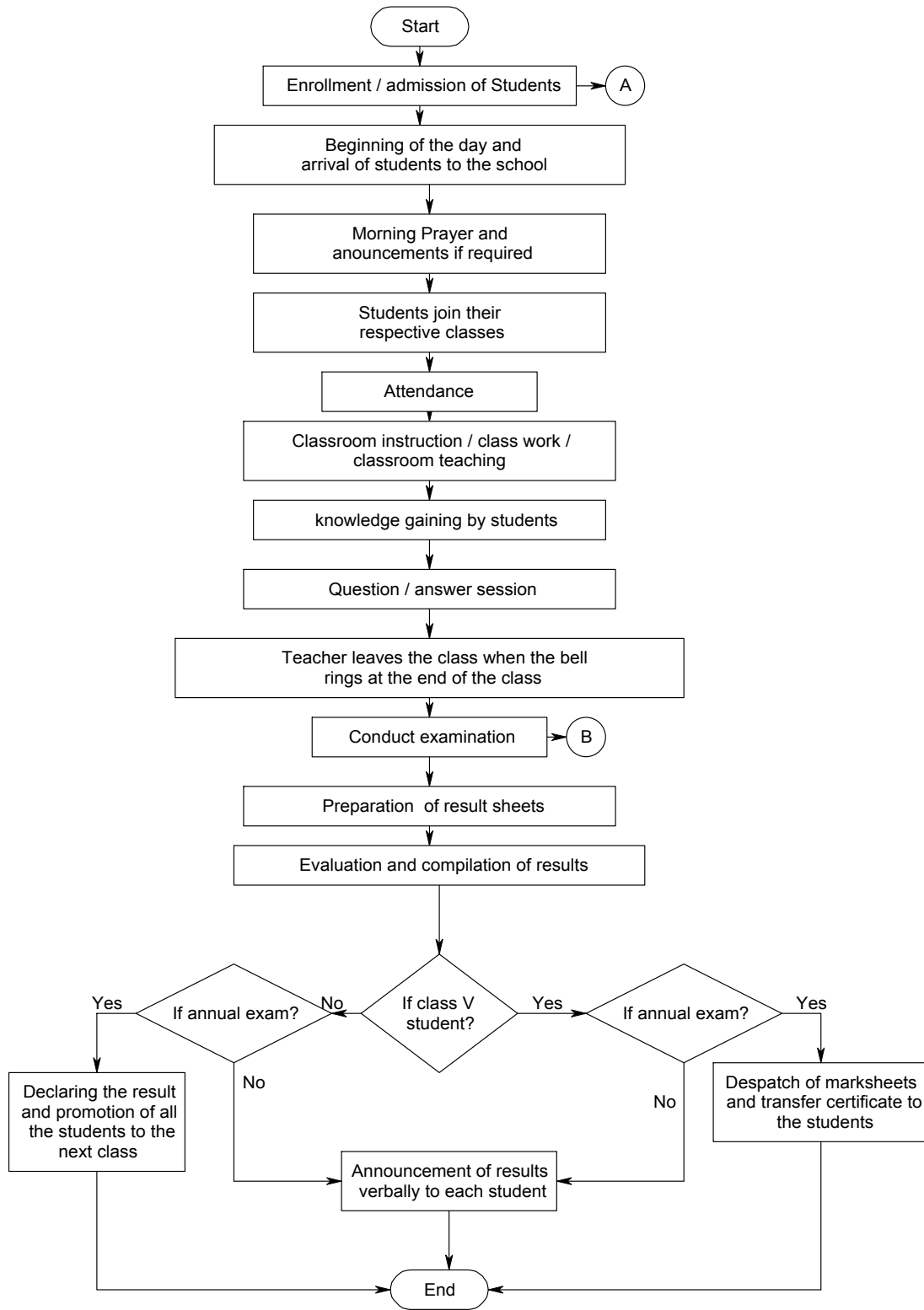


Figure: 2.4
Admission

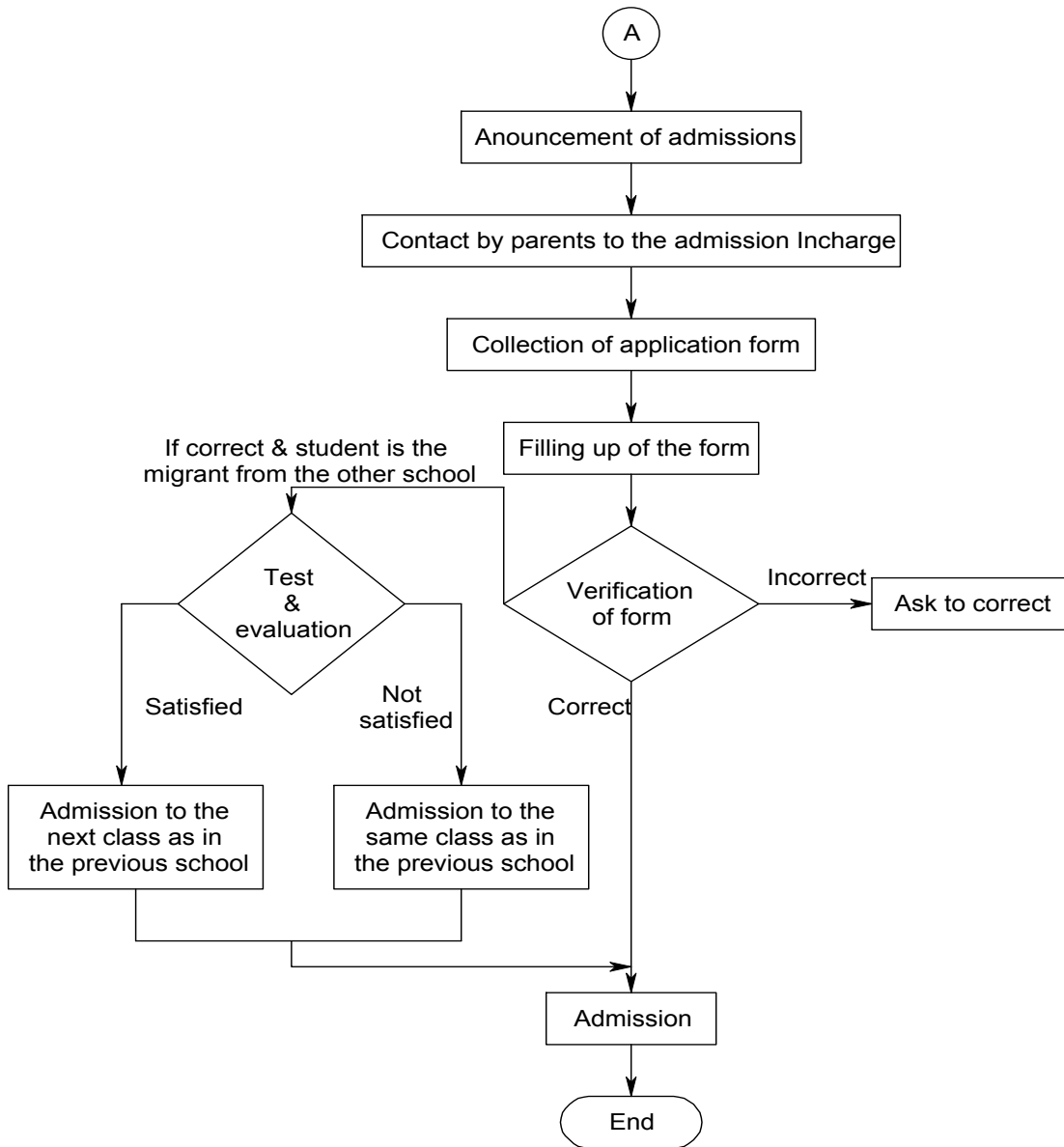
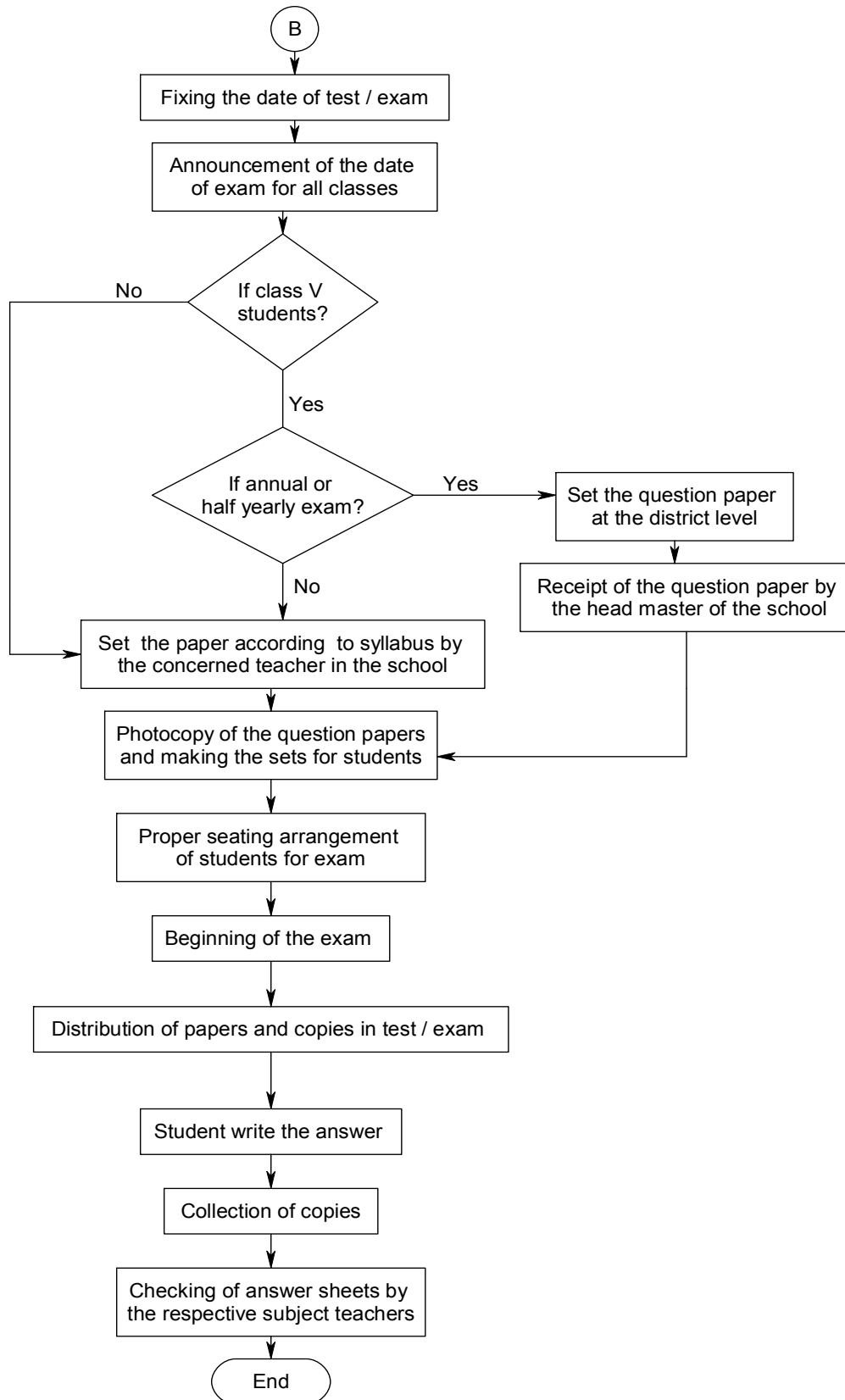


Figure: 2.5
Examination



- C3: Teachers not enthusiastic / lack of motivation
- C4: Parents' poor perception about the school
- C16: Lack of knowledge and behavioural skills among teachers
- C5: Culture of late coming
- C8: Schools are far away (for many students)

Similarly for other three processes; viz., examination (Figure: 2.5), mid-day meal and free book distribution (Figure: 2.1.1 and 2.1.2 in Annexure: 2.1), the FMEA and Pareto chart, are also prepared.

Table: 2.3
Failure Modes and Effect Analysis (FMEA) – Teaching

S N	Process/ Activity	Activity head	Potential failure mode	Potential effect of failure	Sev	Potential cause(s)/mechanism of failure	Cause Code	Occ	Detection Techniques	Det ection	R P N
1.	Enrollment and Admission of student	A1	Students are not joining schools	Illiteracy	7	Low awareness amongst citizens	C1	5	Comparison of enrollments of different villages compared with the population of villages	4	140
						Schools are far away.	C2	3			84
						Teachers not enthusiastic	C3	5			140
						Parents' poor perception about the school	C4	5			140
2.	Beginning of the day and arrival of student at the school	A2	Late arrival of teachers	Time mis-management. Classes start late and lead to loss of time because there is no teacher.	5	Culture of late coming	C5	5	Inspections	5	125
						Teachers stay in Tehsil level towns.	C6	7			175
						No mode of transportation available for teachers or students	C7	7			175
		Late arrival of students		5	Schools are far away.	C8	5	125			
3.	Students join respective classes	A3	--	--	--	--	C9	--	--	--	--
4.	Morning prayer and announcements as required	A4	Students fail to attend the morning prayer	Announcements not conveyed to students	3	Late arrival of students	C10	6	Inspections and visually observing the attendance of students	5	90
						Casualness amongst teachers	C1	7			105
						Teachers not present	C12	5			75
						Unwillingness of students to attend prayer	C13	5			75

S N	Process/ Activity	Activity head	Potential failure mode	Potential effect of failure	Sev	Potential cause(s)/mechanism of failure	Cause Code	Occ	Detection Techniques	Det ection	R P N	
5.	Attendance	A5	Improper attendance record	Wrong assessment of students based on attendance record	5	Casualness amongst teachers	C14	3	Visually observing and monitoring the attendance of students	5	75	
6.	Classroom instruction / class work / Classroom teaching	A6	Improper teaching Less knowledge gained by students	Higher dropouts Lower knowledge gained by students	7	Lack of interest of teachers.	C14	7	Teacher's appraisal	6	294	
						Communication language problems	C15	7				DEO / BEO / HM monitoring
						Lack of knowledge amongst teachers themselves	C16	3	Parents' Feedback		126	
						Improper ambience of classrooms	C17	5				Teacher's appraisal
						Teaching is not interesting or lack of interest in students	C18	8	Monitoring and supervision of school		336	
						An environment of fear amongst students	C19	6				252
						Lack of discipline	C20	7				294
7.	Questions / Answers sessions	A7	Students not able to answer questions No question answer session takes place	Knowledge not gained by students Monitoring of students knowledge does not take place	5	Students are not sincere about their studies.	C21	5	Monitoring and supervision of teachers by the HM	5	125	
						Communication problem between teachers and students	C22	7				175
						Teachers are not dedicated enough to teach properly	C23	7				175
						Teachers lack knowledge	C24	3				75
8.	End of classes and teacher leaves	A8	Teacher leaves early	Lesser knowledge gained by students	4	No dedication to work	C25	4	Monitoring and supervision of teachers	3	48	
						Teacher wants to catch an early bus	C26	5				60
9.	Examination		*Separate FMEA follows									

Figure: 2.6
Pareto Analysis - Teaching

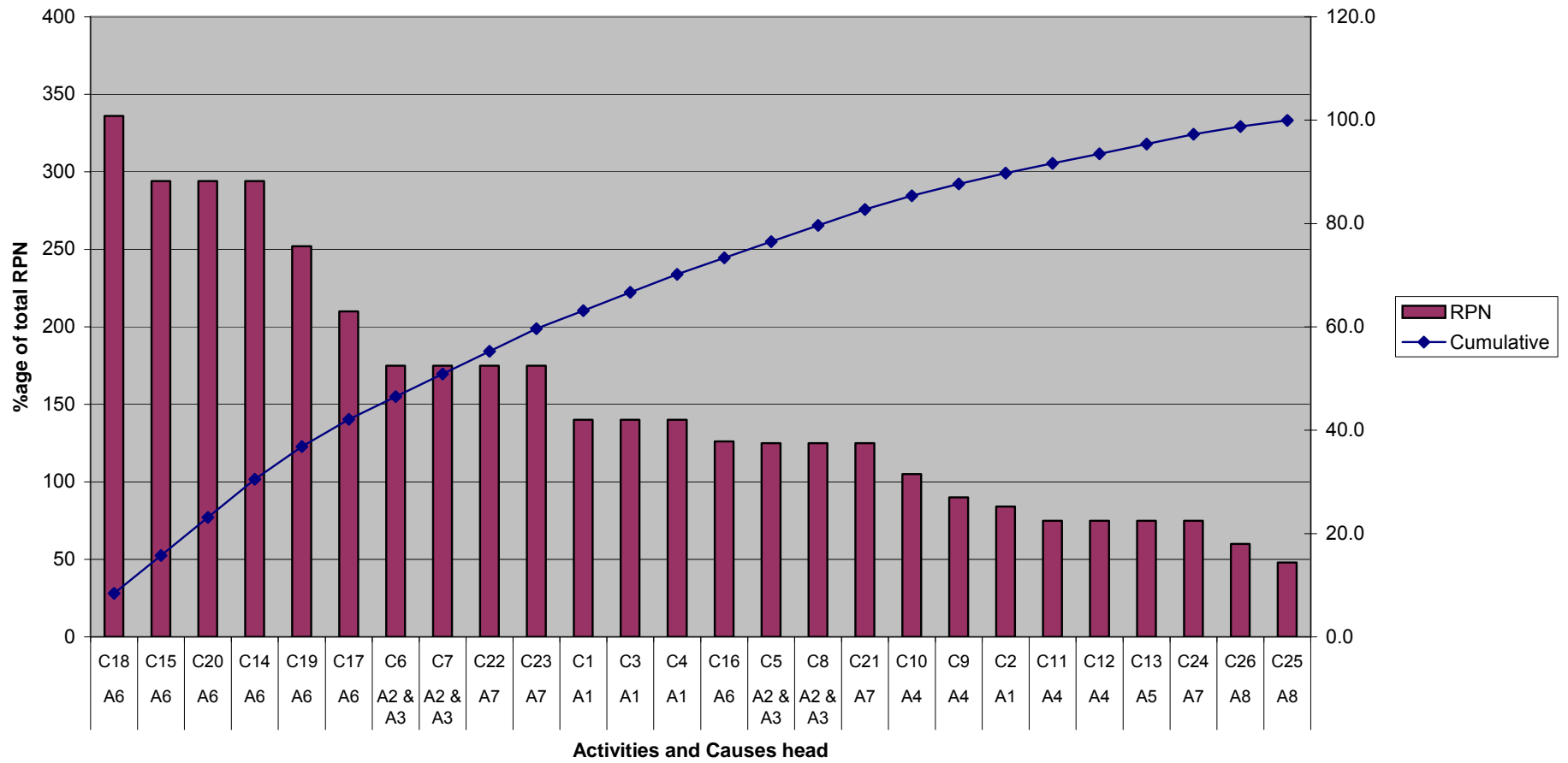


Table: 2.4
FMEA for Examination Processes

S N	Process Function/ Req	Activity Head	Potential failure mode	Potential effect of failure	Sev	Potential cause(s)/mechanism of failure	Cause code	O c c	Detection Techniques	Detect ion	R P N
1.	Fixing the date of test / Exam	A1	Exams not planned on proper times as per the schedule Prescribed by the government.	<ul style="list-style-type: none"> ▪ Improper monitoring of students ▪ Quality of education reducing. ▪ Loss of interest amongst students 	3	▪ Lack of control of government over the system	C1	5		5	75
						▪ Lack of sincerity among the staff	C2	5			75
						▪ Lethargy of government to conduct exams	C3	5			75
2.	Announcements of dates	A2	Government announces the dates of examination late	<ul style="list-style-type: none"> ▪ Students not tested properly for their learning. ▪ Teachers' performance not properly verified ▪ School curriculum and schedule gets disturbed ▪ Delayed procedures for the next year ▪ Increased load on teachers, students and parents 	4	Lack of control of government over the system	C4	5		2	40
						Lack of sincerity among the staff	C5	3			24
3.	Paper setting for students	A3	Paper out of syllabus Paper too tough. Paper too lenient or easy	Improper assessment of students and teachers De motivating to students	6	Indifference of paper setters.	C6	5	Rechecking of papers by higher authority once the paper is set	4	120
						Poor supervision	C7	6			Student feedback

S N	Process Function/ Req	Acti- vity Hea d	Potential failure mode	Potential effect of failure	Se v	Potential cause(s)/mechanism of failure	Ca- use co- de	O c c	Detection Techniques	Detect ion	R P N
				Unable to identify bright students Unfair to weaker students		Lack of knowledge amongst paper setters	C8	6	Monitoring by superiors		144
4.	Making copies of the paper for students	A4	Leakage of papers	Improper and unfair examinations	4	Students trying to find easy way out.	C9	5	Sudden increase in marks of some students	3	60
						Casual and improper behavior of staff	C10	3			36
5.	Arranging for the seating of students during the exams	A5	Seating not arranged Seating arrangements improper	Improper examinations	4	Insufficient space Insufficient facilities Insufficient staff	C11 C12 C13	5 5 5	Data on schools	5	100 100 100
6.	Begin Exam/ Distribute question papers and answer papers.	A6	Delay in beginning exams	Improper examinations	4	Insufficient staff Staff not enthusiastic	C14 C15	3 5		5	60 100
7.	Students write the answers	A7	Students unable to write the answer sheet Students copy	Improper assessment	5	Paper out of syllabus. Students do not know answers. Students not aware about the exam course. Lack of invigilation	C16 C17 C18 C19	4 7 5 3		5	100 175 125 75
8.	Collection of copies and	A8	Damage during storage	Incorrect results.	5	Improper storage facilities	C20	5	Number of times the answer	5	125

S N	Process Function/ Req	Acti- vity Hea d	Potential failure mode	Potential effect of failure	Se v	Potential cause(s)/mechanism of failure	Ca- use co- de	O c c	Detection Techniques	Detect ion	R P N
	storage		Pilferage of answer sheets			Students trying to find easy way out.	C21	3	sheets were damaged Sudden increase in marks of some students Monitoring by school staff		75
9.	Checking of the answer sheets and preparation of results	A9	Improper checking & wrong marking	Students not happy with the results. Unfair and improper assessment	6	Indifference of teachers	C22	4		5	120
						Low interest of teachers.	C23	5			150
						Teachers not aware about the answers	C24	3			90
						Lack of supervision by the teachers	C25	3			90
10	Compilation of results and evaluation	A10	Delay in announcement of results	Anxiety on part of students and parents.	5	Low interest of teachers.	C26	3		5	75
						Indifference of teachers work ethos	C27	5			125

2.1.3 Critical Control Points (CCPs)

Critical control points (CCPs) are defined as those points in service delivery where lack of control could lead to poor service standards due to inadequate system inputs. Based on the FMEA of teaching and mid-day meal, potential failure modes were identified which have causes with higher RPN as critical control points (see Table 2.3 of FMEA for teaching). Against these failure modes the critical causes (of failures modes) were identified as critical control points. The critical control points for processes of teaching and mid-day meal are identified as indicated by Tables 2.5 and 2.6.

**Table: 2.5
Critical Control Points (CCPs) for Teaching**

S. N.	Potential failure mode	Critical control points (CCPs) (in descending order of priority) based on RPN of FMEA
1.	Less knowledge gained by students	Teaching is not joyful or lack of interest in students Communication problems Lack of discipline
2.	Improper teaching	Lack of teachers (one teacher for 2-3 classes) Lack of commitment of teachers An environment of fear amongst students Poor environment in classrooms (lack of space, 2-3 classes in one classroom)
3.	Late arrival of teachers	Teachers stay in Tehsil level towns
4.	Late arrival of students	- Lack of transportation available for students (in some cases) - Lack of sincerity
5.	Students not able to answer questions	Communication problem between teachers and students
6.	No question-answer session takes place	Teachers are not dedicated enough to teach properly
7.	Students do not join schools	Low awareness amongst citizens Teachers not enthusiastic Parents' poor perception about the school

Source: FMEA Table 2.3 of Teaching

**Table: 2.6
Critical Control Points (CCPs) for Mid-day meal**

S.N.	Process activity	Possible* failure mode / Problem Area in descending order	Critical control points (CCPs) (in descending order of priority) based on RPN of FMEA
1.	Distribution of food to the school as per demand and storage of food	Food not as per the desired quality as per the norms of the government	Poor storage and kitchen facilities
2.	Cleaning of utensils	Cleaning improper	Insufficient resources (water supply, soap, etc.)
3.	Compilation of demand and arrangement of wheat	Delay in compilations and incorrect compilation	Delay in collection of demand and Casual attitude
4.	Distribution of food to the school as per demand and storage of food	Food quantity not as per the demand	Demand estimation incorrect.
5.	Distribution of food to students	Distribution not as per quantity	Improper measuring system
6.	Collection of Demands from the schools	Delay in collection of demand.	Incorrect flow of information from school authority
7.	Cooking the food	Food not properly cooked	Lethargy on part of teachers and cook. Insufficient resources
8.	Arrival of cook and calculation of food required.	Incorrect calculation of food required.	Attendances not taken properly
9.	Transport the food from nodal school	Loss in transit	Insincere contractors
10.	Issuing the ration from the stock	Incorrect amount of food issued to schools	Improper measuring system. Insufficient food in the stock

Source: FMEA Table: 2.1.3 of mid-day meal in Annexure: 2.1

2.1.4 Fishbone Diagrams

The purpose of drawing fishbone diagrams was to identify the root causes. Based on FGDs with citizens, teachers and officials, the diagrams are prepared for the following:

- Low quality of education through Govt. primary schools (see Table 2.7)
- Poor usage of Govt. primary (Table 2.8)

**Table: 2.7
Root causes – Low Quality of Education**

S. N.	Status of factors	Root causes
1.	Lack of concept of quality	- Lack of awareness about quality - Lack of expert manpower - Lack of culture of quality management
2.	Lack of regularity and punctuality	- Lack of monitoring - Teachers' come from outside - Lack of culture of regularity and punctuality
3.	Weightage to subjects (taught to children) are not proper	- Parents involvement is not there - Lack of research and development (R&D) - Lack of focus on outcome of primary education
4.	Lack of working condition for teachers	- Schools are there, but building, playground, etc. are not adequate (2-3 classes in one room)

S. N.	Status of factors	Root causes
		<ul style="list-style-type: none"> - Mostly schools are run by one or two teachers (who teach students of 2-3 classes in one room) - Blackboards not there / are in poor condition - Lack of teaching-aids - No availability of residential quarter near school - Busy with other work (survey, MDM, etc.) - Lack of basic facilities (health, drinking water, etc.) at village level
5.	Lack of awareness among citizen	<ul style="list-style-type: none"> - Lack of literacy - Lack of focus on education - Poor village environment
6.	Teaching is not joyful	<ul style="list-style-type: none"> - Teachers are not motivated - Lack of proper environment of teaching - Lack of proper teaching-aids
7.	Infrastructure problem	<ul style="list-style-type: none"> - Lack of funds - Lack of proper planning
8.	Lack of communication	<ul style="list-style-type: none"> - Lack of communication skills (especially behavioural) in teachers
9.	Lack of reliability	<ul style="list-style-type: none"> - Lack of focused approach - Lack of sincerity among students - Lack of commitment of teachers
10.	Poor home environment	<ul style="list-style-type: none"> - Parents are not literate - Lack of culture for education
11.	Low participation of local representatives	<ul style="list-style-type: none"> - Lack of commitment - Lack of training

Source: Figure 2.7 (Fishbone diagram – Low Quality of Education).

Figure: 2.7
Fishbone Diagram – Low Quality of Education

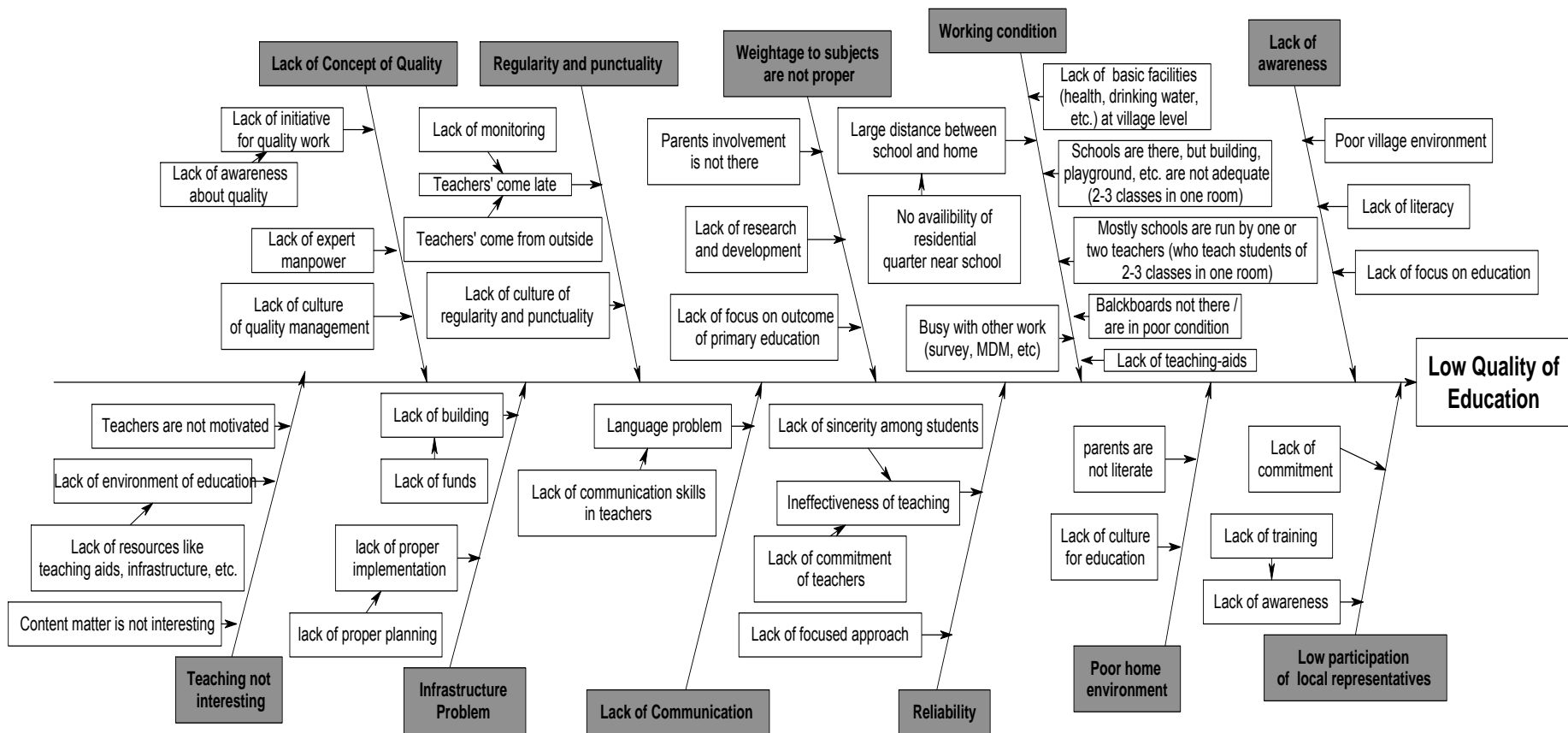


Table: 2.8
Root causes - Poor Usage of Govt. schools

S.N.	Status of factors	Root causes
1.	Lack of quality teaching	<ul style="list-style-type: none"> - Lack of focused approach - Lack of teaching-aids - Poor teaching environment - Lack of infrastructure
2.	Lack of teachers presence	<ul style="list-style-type: none"> - No residential quarter near school - Busy with other work (survey, MDM, etc.) - Lack of monitoring
3.	Lack of awareness	<ul style="list-style-type: none"> - Lack of environment in villages - Illiteracy
4.	Lack of teachers	<ul style="list-style-type: none"> - Vacancies are not filled - Lack of facilities in rural area
5.	Myths about Govt. school	<ul style="list-style-type: none"> - Education of Govt. school is not reliable
6.	Lack of system ownership	<ul style="list-style-type: none"> - No separate post of head master - Lack of awareness among local representatives - Lack of commitment of society / panchayats - Lack of commitment of teachers

Source: Figure 2.8 (Fishbone diagram – Poor Usage of Govt. schools)

Figure: 2.8
Fishbone Diagram – Poor Usage of Govt. schools

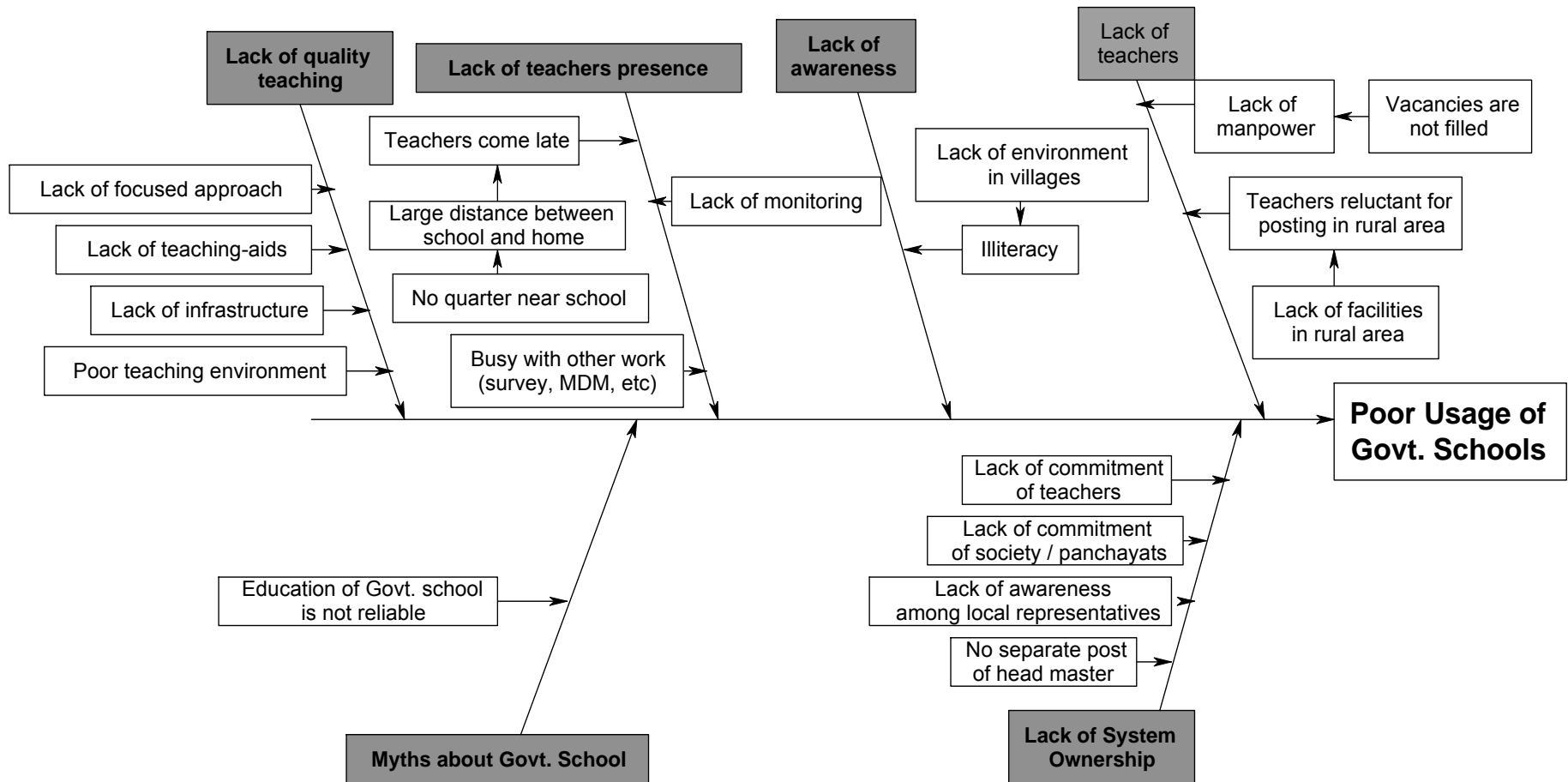


Table: 2.9
Factors Responsible for Poor Quality of Education

S. N.	Categories	Key factors	Description of factors
1.	Infrastructure	<ul style="list-style-type: none"> - Lack of adequate infrastructure (school building, toilets, drinking water, etc.) - Lack of residential building for teachers and support staff 	<ul style="list-style-type: none"> - Schools are there, but building, playground, etc. are not adequate (2-3 classes in one room) - As there is no facility of residential quarter at village level, teachers come late and leave early
2.	Manpower	<ul style="list-style-type: none"> - Inadequate number of teachers - Teachers are involved in many non-teaching activity - Lack of timely training programme 	<ul style="list-style-type: none"> - Mostly schools are run by one or two teachers (who teach students of 2-3 classes in one room)
3.	Working conditions	<ul style="list-style-type: none"> - Poor working conditions 	<ul style="list-style-type: none"> - Mostly schools have no electricity connection - Unclean internal environment and external surroundings - No basic facilities like drinking water, health care, etc. at village level
4.	Logistics	<ul style="list-style-type: none"> - Lack of logistics support 	<ul style="list-style-type: none"> - No vehicular support for BEEO (at Block) for monitoring of school
5.	Equipments	<ul style="list-style-type: none"> - Lack of teaching-aids 	<ul style="list-style-type: none"> - Funds for teaching-aids are not enough - Blackboards not there / are in poor condition
6.	Transparency and Accountability	<ul style="list-style-type: none"> - Lack of transparency - Lack of accountability mechanism 	<ul style="list-style-type: none"> - Lack of information about admission, parent-teacher meetings - Inadequacy of feedback mechanism - Lack of participation by panchayats and citizens in giving feedback
7.	Management (to provide quality services)	<ul style="list-style-type: none"> - Lack of concern for quality - Lack of focus on quality control and assurance 	<ul style="list-style-type: none"> - Primary education system is not designed from the requirements of providing 'quality' education to children

Source: FGDs and own analysis

2.2 Field Survey

An attempt was made to capture the response of students and parents about various issues concerning the primary education. The salient points are presented as follows:

2.2.1 Students' views

- **Response of students about teaching, regularity of teachers and behaviour of the teachers:** The majority of the students indicated that they do not enjoy teaching by the teachers in the school. It is primarily due to both lack of teaching-aids and environment. The response about the regularity of the teachers has not been also satisfactory as only 36% responded that teachers 'always' come regularly.

As regards the behaviour of the teachers most of them found it to be less than the average, indicating the lack of ability of teachers to put-up good behaviour to make students at ease and comfortable in the school (see Tables 2.10, 2.11 & 2.12 and Figures 2.9a & 2.9b).

2.2.2 Parents' views

- **Learning level of students:** The parents of most of the students were of the views that the level of learning by student is either 'very low' or 'low', reflecting clearly on the poor quality of teaching (see Table 2.13 and Figures 2.10a & 2.10b).
- **Surrounding and internal environment of the school:** The overwhelming response of parents has been that the surroundings of the school are either 'filthy' or 'dirty' (see Tables 2.14 & 2.15 and Figures 2.11a, 2.11b, 2.12a & 2.12b). Similarly, the internal environment of the school has been 'dirty' as 52 percent of the respondents indicated it so
- **Factors affecting quality of education:** The factors that affect quality education are listed in Table 2.16 (see Figure 2.13). As per the views of parents, there are three factors, which have significantly low level of present status. These are:
 - i. teachers' commitment
 - ii. environment in the school (water, toilet, cleanliness, playground)
 - iii. monitoring and control of school
- **Satisfaction level about quality of education:** The parents expressed very low level of satisfaction (1.32) with the present quality of education (see Table 2.17 and Figures 2.14a & 2.14b). The average value of satisfaction is far below the average satisfaction level (3.0).
- **Mid-day meal:** The response regarding the quality of mid-day meal has been towards negative sight as most of them inform that their children do not like to eat the meal. Only 4% of the respondents inform that their children go to the school due to MDM. And 95% of the respondents informed that they would like to send their children even if MDM is of poor quality or not given. Parents indicated that MDM is not prepared in

hygienic conditions. Both parents and teachers admitted that MDM is not able to improve quality of learning, due to many other problems (like lack of classrooms, teaching-aids, etc.)

The above shows that MDM is not a dominant factor in encouraging enrolment for reducing dropout (see Tables 2.18, 2.19 and 2.20).

It was brought out by the survey that parents are interested for other three food items (under MDM) viz., biscuits, bread & butter, and milk (see Table 2.21). They are less interested in cooked food as there are two major problems, *first* difficulty in cooking, and *second*, poor quality of cooking. Besides, there are difficulties in serving and eating by children, as more utensils are required.

- **Factors influencing absenteeism / dropout of students (parents' views):** The survey identified sixteen factors influencing the absenteeism / dropout of students. Among them four factors influence the maximum (see Table 2.22 and Figure 2.15). These are:
 - i. teachers come to the school but teaching quality is not good
 - ii. teacher's commitment is not there
 - iii. education is completely ineffective, children do not learn anything (not much relevant)
 - iv. books are not available

- **Factors influencing absenteeism / dropout of girl-child (girl children views):** In the case of girl children the same above four factors influence the maximum while two other factors also influence (see Table 2.23 and Figure 2.16), as given below:
 - i. I am a girl, so parents are not interested
 - ii. I am a girl, parents are interested but school environment is not safe, secure and conducive

- **Factors influencing quality of teaching:** The factors identified are as follows:
 - ability of teachers
 - teaching-aids
 - commitment of teacher
 - teacher's attendance
 - school environment
 - space (more than one class in one room)
 - space (overcrowded classrooms)

As per the views of parents, the conditioning of teaching-aids and of school environment is at the lowest level (see Table 2.24 and Figure 2.17).

- **Factors influencing learning by children:** The factors identified are as under:
 - quality of teaching
 - attention to teaching children at home
 - learning environment in the school
 - study environment in villages
 - study environment at home

The environment in the school, village and home affects in a combined form and present value is at the lowest level (see Table 2.25 and Figure 2.18)

- **Role of Panchayats:** The role of panchayats regarding monitoring and commitment for education was surveyed and it indicated that on both these accounts parents did not have good opinion (see Tables 2.26 & 2.27 and Figures 2.19a, 2.19b, 2.20a & 2.20b). It shows that there is a need to sensitize community in general and panchayats in particular for improving the educational system in rural areas.

Response of students

Table: 2.10
Do you enjoy teaching by Teachers?

	Never	Sometimes	Always
Respondents →	54	35	11

Table: 2.11
Does Teachers come regularly to the School?

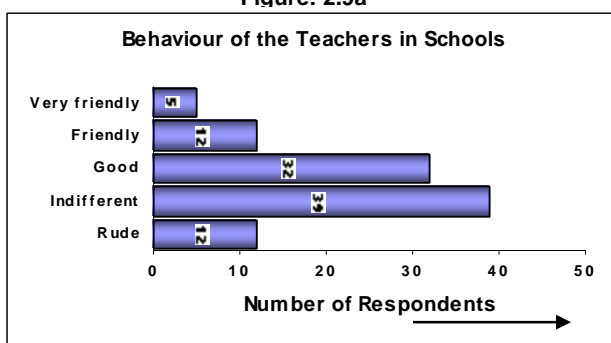
	Never	Sometimes	Always
Respondents →	35	29	36

Table: 2.12
How is the Behaviour of the Teachers?

	Rude	Indifferent	Good	Friendly	Very friendly
Scale →	1	2	3	4	5
Respondents →	12	39	32	12	5

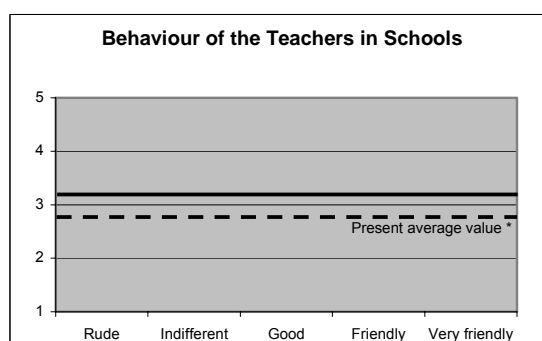
Present average value: 2.59

Figure: 2.9a



Using five-point Likert's scale

Figure: 2.9b



* Using five-point Likert's scale

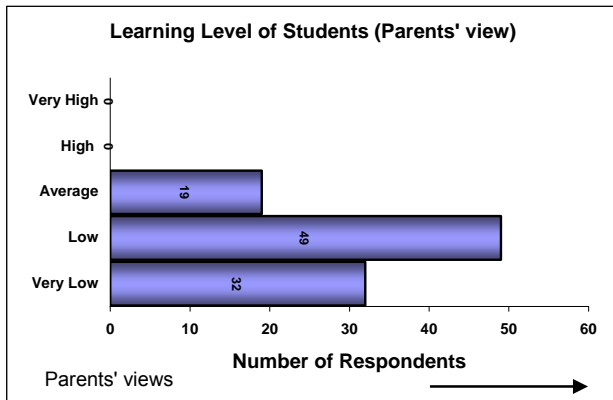
Parents' Views

Table: 2.13
Learning Level of Students (Parents' Views)

	Very Low	Low	Average	High	Very High
Scale →	1	2	3	4	5
Respondents →	32	49	19	0	0

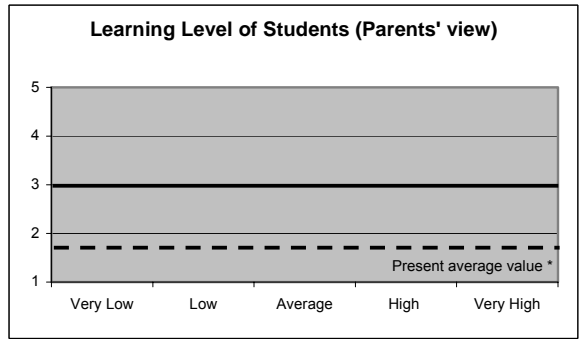
Present average value: 1.87

Figure: 2.10a



Using five-point Likert's scale

Figure: 2.10b



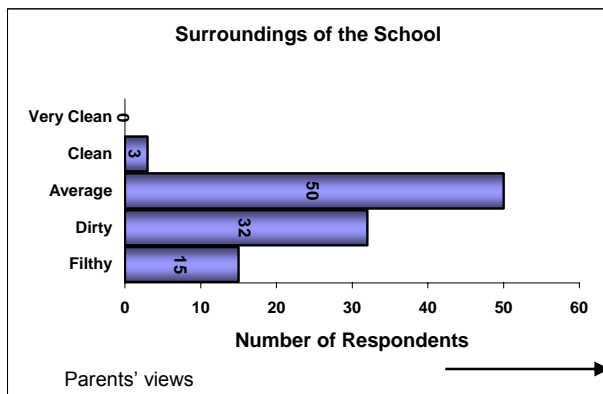
* Using five-point Likert's scale

Table: 2.14
How do you find the Surroundings of the School?

	Filthy	Dirty	Average	Clean	Very Clean
Scale →	1	2	3	4	5
Respondents →	41	51	8	0	0

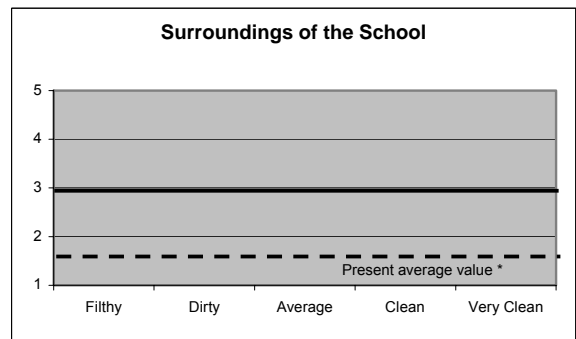
Present average value: 1.67
Using five-point Likert's scale

Figure: 2.11a



Using five-point Likert's scale

Figure: 2.11b



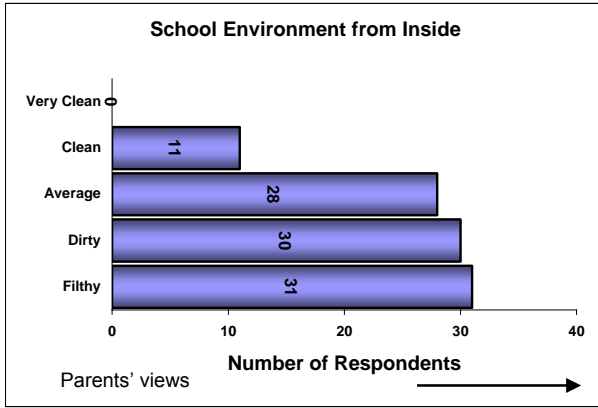
* Using five-point Likert's scale

Table: 2.15
How do you find Environment the School from Inside?

	Filthy	Dirty	Average	Clean	Very Clean
Scale →	1	2	3	4	5
Respondents →	15	52	33	0	0

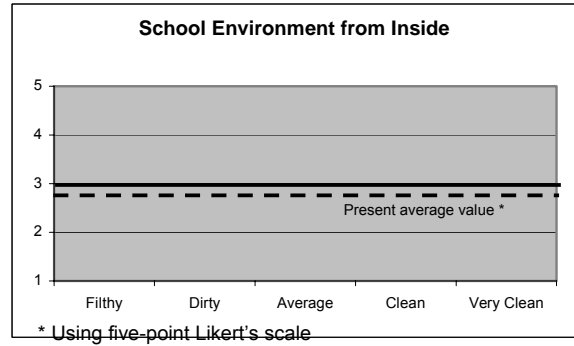
Present average value: 2.18
Using five-point Likert's scale

Figure: 2.12a



Using five-point Likert's scale

Figure: 2.12b



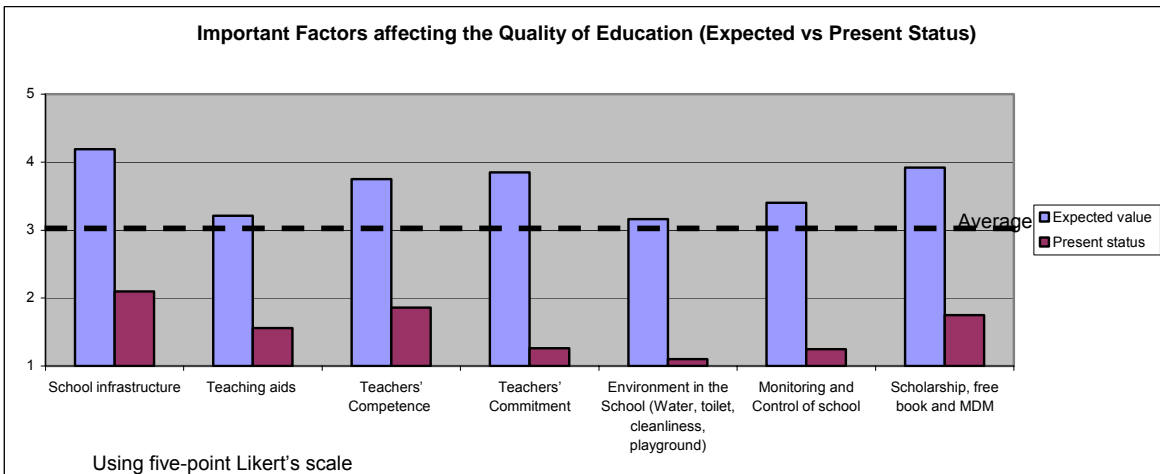
* Using five-point Likert's scale

Table: 2.16
Which are the Important Factors that Effect for Quality Education?

S.N.	Factors	Expected (value)	Present status	Percent factor as % of expected value
1.	School infrastructure	4.19	2.10	50.12
2.	Teaching aids	3.21	1.56	48.60
3.	Teachers' Competence	3.75	1.86	49.60
4.	Teachers' Commitment	3.85	1.26	32.73
5.	Environment in the School (Water, toilet, cleanliness, playground)	3.16	1.10	34.81
6.	Monitoring and Control of school	3.40	1.25	36.76
7.	Scholarship, free book and MDM	3.92	1.75	44.64

Using five-point Likert's scale

Figure: 2.13



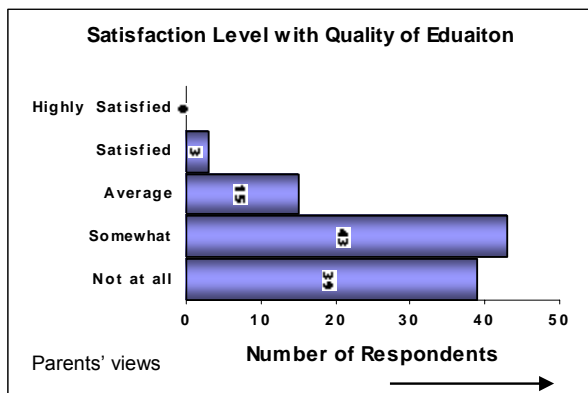
Using five-point Likert's scale

Table: 2.17
Satisfaction Level with Quality of Education

	Not at all	Somewhat	Average	Satisfied	Highly Satisfied
Scale →	1	2	3	4	5
Respondents →	39	43	15	3	0

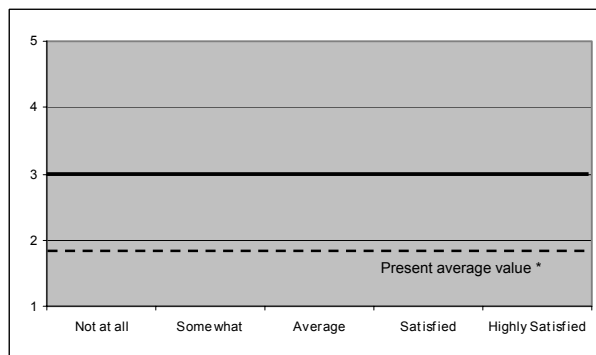
Present average value: 1.82
Using five-point Likert's scale

Figure: 2.14a



Using five-point Likert's scale

Figure: 2.14b



* Using five-point Likert's scale

Mid-day meal

Table: 2.18
Does your child like to take mid day meal in the school?

	Never	Sometimes	Always
Respondents →	45	32	23

Table: 2.19
Have you started sending your children to school due to MDM?

	Due to this reason only	This is one of the reasons	Our child was going earlier also
Respondents →	4	18	78

Table: 2.20
Will you like your child to go to school even if MDM if of poor / not given?

	Yes	No
Respondents →	95	5

Table: 2.21
What would you like your child to eat?

S. N.		%age	Rank
1	Ghogri	1	VII
2	Roti & Vegetable	6	VI
3	Existing meal	11	IV
4	Biscuits	42	I
5	Bread & Butter	20	II
6	Fruits	5	V
7	Milk	15	III

Note: Rank: 1 Best 7 Last

Table: 2.22
Absenteeism / Dropout of Students (Parents' views)

S. N.	Factors influencing absenteeism / dropout of Students	Value of influence*	Remarks
1.	We do not think that it is necessary to educate our children.	1.75	Low influence
2.	We give our children household work	3.25	Medium to high influence
3.	We are interested in sending our girl child but our society does not like going out	3.05	Medium influence
4.	We are interested in sending our children but school is far off.	1.75	Low influence
5.	We are interested, but school environment is not safe, secure and convenient. So , school is not good	2.25	Medium influence
6.	We are interested, but there are no means available to commute to the school.	2.75	Medium influence
7.	My children cannot travel by bus	2.10	Medium influence
8.	We cannot afford the cost (fees, books, stationary, uniform etc.)	2.25	Medium influence
9.	Teachers are absent most of the times	3.25	Medium to high influence
10.	Behaviour of teacher is not good. / Lack of involvement with children	3.50	Medium to high influence
11.	Teachers come to the school but teaching quality is not good.	3.75	Maximum influence
12.	My children don't want to go because of more homework	1.75	Low influence
13.	My children don't want to go because of fear of teacher	2.25	Medium influence
14.	Teacher's commitment is not there.	3.95	Maximum influence
15.	Education is completely ineffective, children do not learn anything (not much relevant)	3.75	Maximum influence
16.	Books are not available	3.45	Maximum influence

* Using five-point Likert's scale

Figure: 2.15

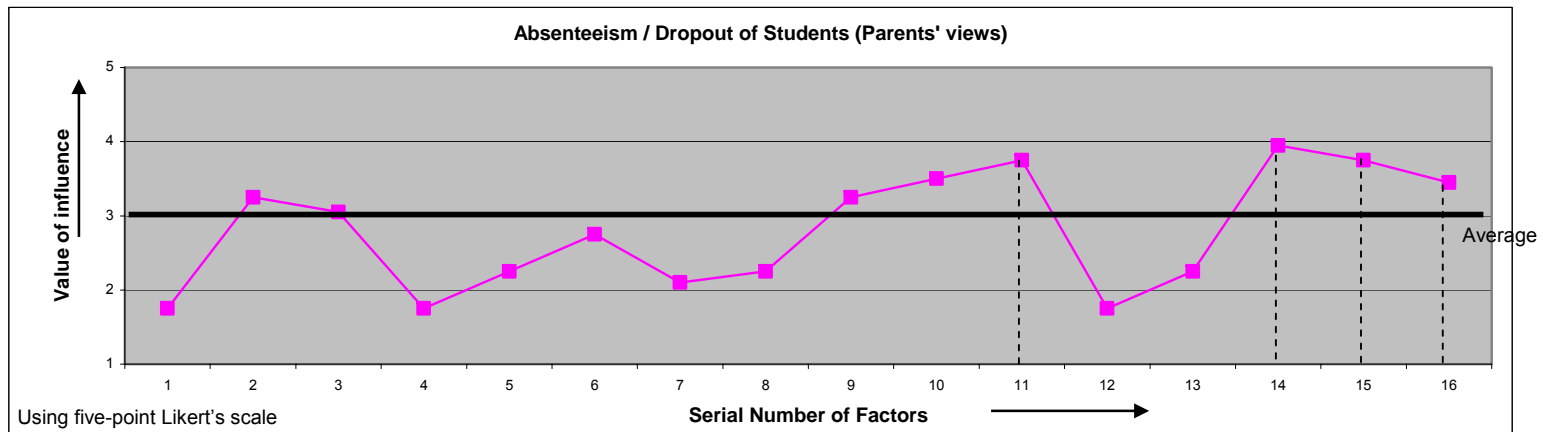


Table: 2.23
Absenteeism / Dropout (Girl Child) as per Views of Girl Children

S. N.	Factors influencing absenteeism / dropout of girl children	Value of influence*	Remarks
1.	Parents are not interested in educating us	1.60	Low influence
2.	Parents give us household work	2.25	Medium influence
3.	I am a girl, so parents are not interested	3.25	Medium to high influence
4.	I am a girl, so our society does not like going out (but parents are interested)	2.89	Medium influence
5.	I am a girl, parents interested but school is far off.	3.10	Medium influence
6.	I am a girl, parents are interested but school environment is not safe, secure and convenience.	3.25	Medium to high influence
7.	I am a girl child so cant travel by bus	2.75	Medium influence
8.	My parents cannot afford the cost of education (Books/Fees/Stationary etc.)	1.95	Low influence
9.	Teachers are absent most of the time	2.10	Medium influence
10.	Behaviour of teacher is not good. / Lack of involvement with children	2.50	Medium influence
11.	Teachers come to the school but teaching quality is not good.	3.65	Maximum influence
12.	I don't want to go because of more homework	2.65	Medium influence
13.	I don't want to go because of fear of teacher	2.25	Medium influence
14.	Teacher's commitment is not there.	3.85	Maximum influence
15.	Education is completely ineffective, I do not learn anything	3.95	Maximum influence
16.	Books are not available	3.65	Maximum influence

* Using five-point Likert's scale

Figure: 2:16

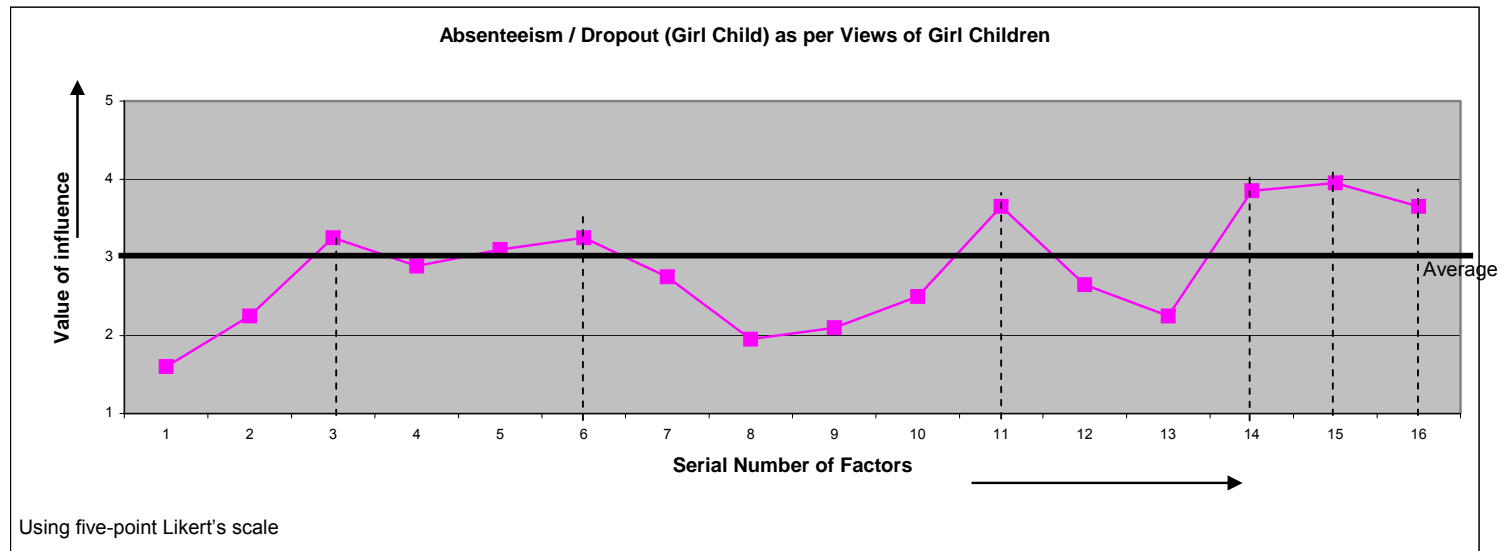
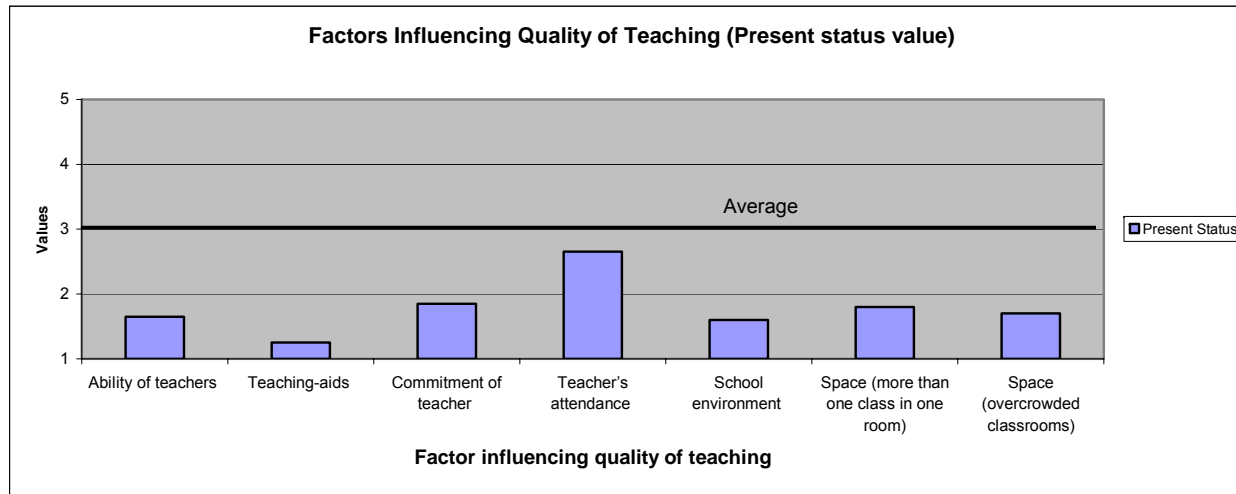


Table: 2.24
Factors Influencing Quality of Teaching

S. N.	Factors	Present Status (Value)*
1.	Ability of teachers	1.65
2.	Teaching-aids	1.25
3.	Commitment of teacher	1.85
4.	Teacher's attendance	2.65
5.	School environment	1.60
6.	Space (more than one class in one room)	1.80
7.	Space (overcrowded classrooms)	1.70

* Using five-point Likert's scale

Figure: 2.17



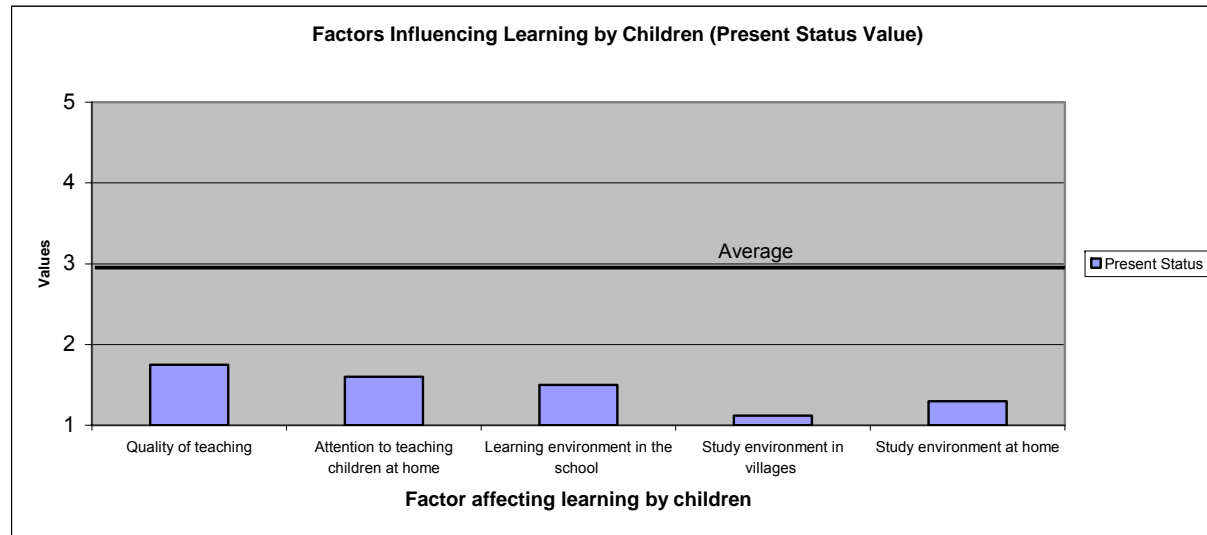
Using five-point Likert's scale

Table: 2.25
Factors Influencing Learning by Children

S. N.	Factors	Present Status (Value)*
1.	Quality of teaching	1.75
2.	Attention to teaching children at home	1.60
3.	Learning environment in the school	1.50
4.	Study environment in villages	1.12
5.	Study environment at home	1.30

*Using five-point Likert's scale

Figure: 2.18



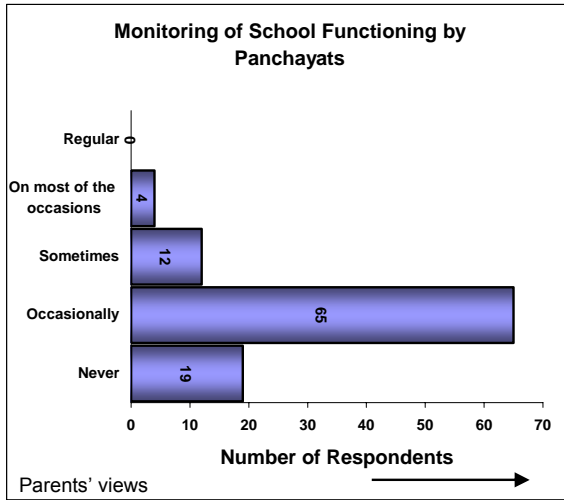
Using five-point Likert's scale

Table: 2.26
Monitoring of School Functioning by Panchayats (Parents view)

	Never	Occasionally	Sometimes	On most of the occasions	Regular
Scale →	1	2	3	4	5
Respondents →	19	65	12	4	-

Present average value: 2.01

Figure: 2.19a



Using five-point Likert's scale

Figure: 2.19b

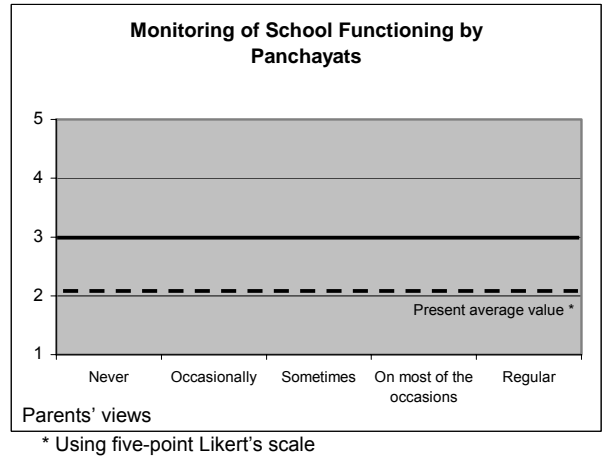


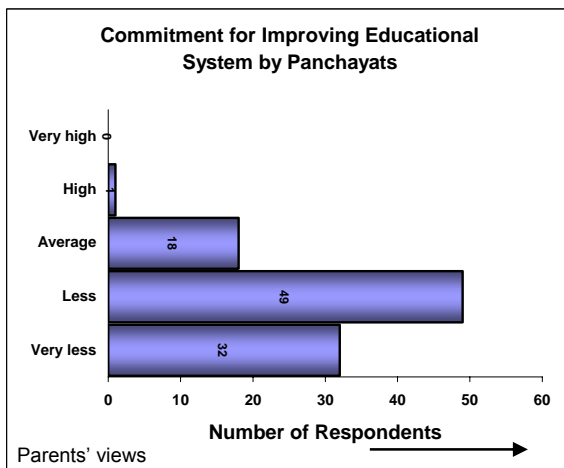
Table: 2.27

Commitment for Improving Educational System by Panchayats (Parents' view)

	Very less	Less	Average	High	Very high
Scale →	1	2	3	4	5
Respondents →	32	49	18	1	-

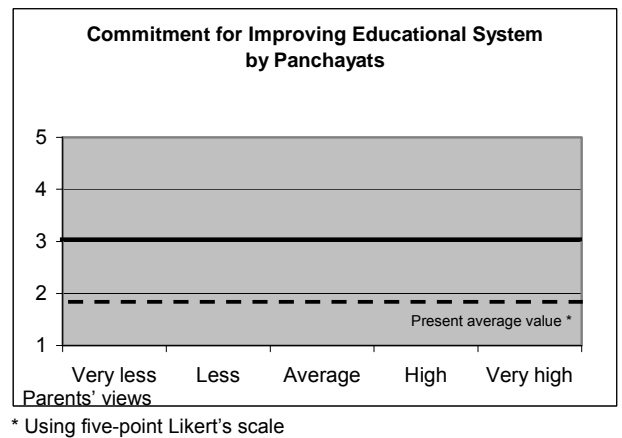
Present average value: 1.88

Figure: 2.20a



Using five-point Likert's scale

Figure: 2.20b



**Box: 2.1
National Scenario**

Vital inputs that are lacking are:

- *first*, inadequate number of classrooms (shortfall of **44.40 lakh** classrooms) (see Table 2.28 and figure 2.21b);
- *second*, inadequate number of teachers (shortfall of **24.00 lakh** teachers) (see Table 2.28 and figure 2.21c);
- *third*, inadequate teaching-aids, sharp lack of other facilities (like toilets, drinking water, electricity, etc.), and
- *fourth*, poor internal and external environment, affecting the teaching and learning environment considerably

Attempt is also made to calculate the shortfall in enrolment, inadequacy of number of classrooms and number of teachers (see Table 2.29 and figures 2.22a to 2.22c) for Chaksu Block, which also shows alarming shortfall.

**Table: 2.28
National Status of Primary Education: Summary**

S. N.	Item	Existing	Requirement	Shortfall (number)	Shortfall as % of requirement
1	Total number of children	12,58,98,231	-	-	-
2	Average number of schools	8,39,322	-	-	-
3	Number of children enrolled	11,82,96,540	12,58,98,231	76,01,691	6.04
4	Number of classrooms	22,74,121	67,14,572	44,40,451	66.13
5	Number of teachers	26,35,204	50,35,929	24,00,725	47.67

Source: NIEPA (2004-05), Census (2001) and own analysis

National Status of Primary Education: Summary

Figure: 2.21a

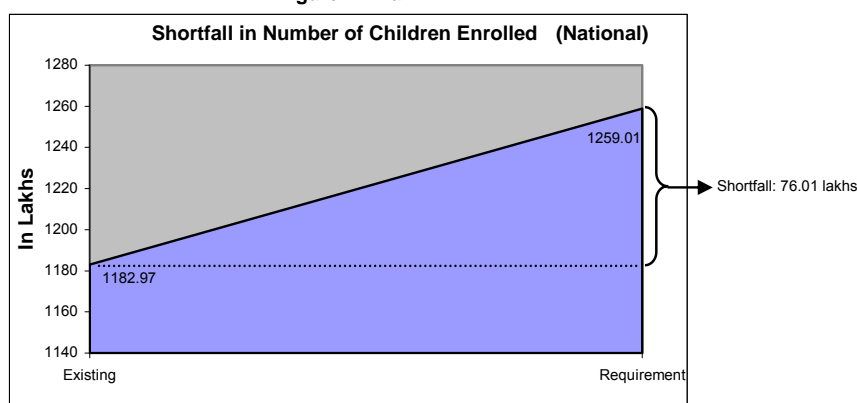


Figure: 2.21b

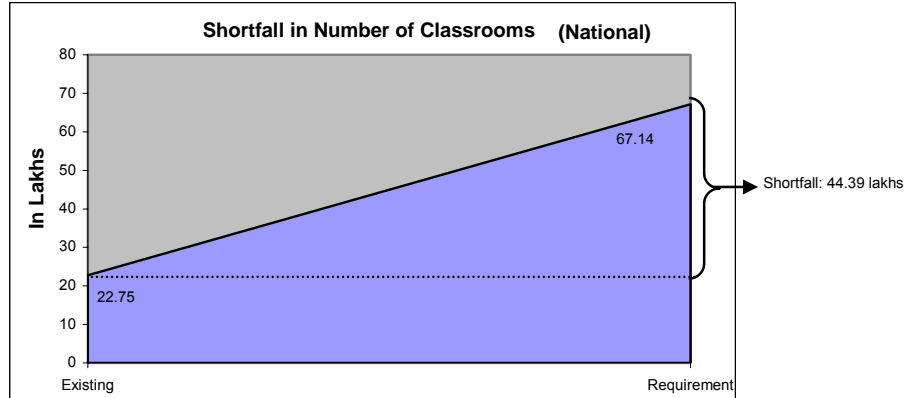


Figure: 2.21c

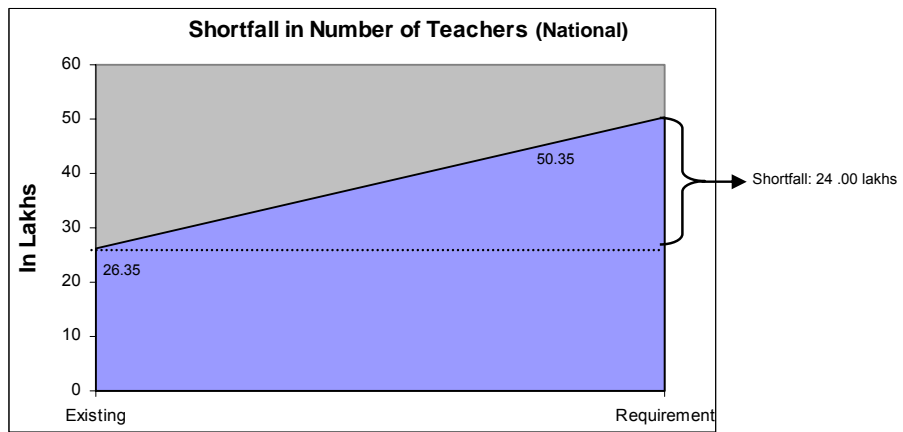


Table: 2.29
Chaksu Block (Jaipur District) Status of Primary Education: Summary

S. N.	Item	Existing	Requirement	Shortfall (number)	Shortfall as % of requirement
1	Total number of children	26,000	-	-	-
2	Average number of schools required	173	-	-	-
3	Number of children enrolled	17,326	26,000	8,674	33.36
4	Number of classrooms	413	1,387	974	70.22
5	Number of teachers	439	1,040	601	57.79

Chaksu Block (Jaipur District) Status of Primary Education: Summary

Figure: 2.22a

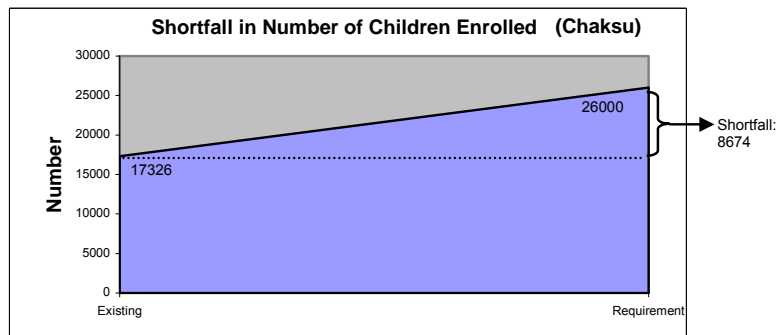


Figure: 2.22b

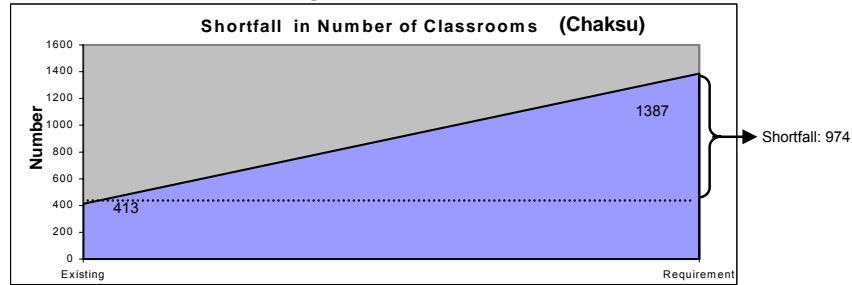
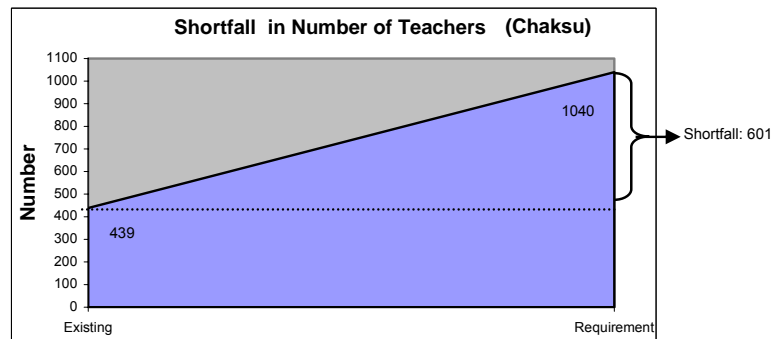


Figure: 2.22c



2.2.3 Neglect of human resources

- *Lack of HR policy.* There is a lack of HR policy related to recruitment and training. Teachers are not recruited with right attitude to teach in rural areas, as also they are not provided with proper training to impart quality teaching. They lack behavioural skills to interact with children in a friendly way, to make them comfortable / at ease, and to teach in a joyful manner.

Besides, imbalance in teaching-load, as one teacher is supposed to cover the children of 2-3 classes, even sometimes 5 classes in a day.

- *Lack of motivation, leading to lack of commitment.* Motivation is vital for imparting teaching. There are various factors affecting the motivation. These are: poor environment, lack of teaching-aids, lack of appreciation of local problems by higher-ups, lack of recognition of work, very little facilities for residence in rural areas, and occasionally hostile working environment. Low motivation has the tendency to weigh down the teachers. Such a state has direct link to the low commitment and the performance level (see Table 2.30).

Table: 2.30
Lack of motivation – Responsible factors

S. N.	Factors	Issues	Impact on performance
1.	Poor working environment	- Lack of cleanliness - Lack of electricity, almirahs, etc.	- Withdrawal syndrome
2.	Lack of equipments support	- Lack of teaching-aids / equipments for teaching	- Teachers feel frustrated, as they can not impart teachings properly
3.	Lack of recognition of their work	- Parents do not take interest - Students do not take interest	- Lack of enthusiasm and commitment
4.	Very little facilities for staying in villages	- No residential facilities / lack of appropriate facilities (no electricity and water)	- Withdrawal syndrome
5.	Hostile environment	- Teachers have to face several times harsh behaviour (indecent on some occasions) from some people and local leaders	- Frustration and withdrawal syndrome

Source: FGDs with teachers, local NGOs and citizens

2.2.4 Sarva Shiksha Abhiyan (SSA): Critical Comments

It is a flagship programme of Government of India for achievement of universalization of elementary education in a time bound manner. The programme aims to achieve the goal of universalization of elementary education of satisfactory quality by 2010. It has introduced several interventions.

There are interventions related to adding classrooms, creating new posts of teachers, providing teaching-aids, teachers' training, MDM, and other facilities (like toilets, drinking water, etc.)

But if we look at the sheer gaps in the requirements of infrastructure, number of teachers and other facilities (see Tables 1.5 in chapter 1 and 2.28), the provisions under SSA will fall short of requirements by miles. For example:

- Though SSA envisages one teacher for every forty children but it does not provide one teacher for every class
- SSA does not provide one classroom for one class (it has provision for two classrooms with veranda to every primary school) (there is ceiling of 33% of SSA funds for civil work)

In a way, there will be continuation of existing practice of: one teacher covering five classes in 2-3 rooms (in single teacher schools), or, 2-3 classes in one room (in two-teacher schools). SSA does not provide enough funds for teaching-aids (Rs. 2,000 per year is not enough). SSA provides limited grants for infrastructure creation (like classrooms, toilets, drinking water facility etc.). Though State governments are supposed to provide additional budgetary support, but they are also not in a position to do so. So, the quality in education remains a casualty, as brought out by the field survey.

There are some signs of improvements. After SSA, out of school children were 2.49 crore during 2002-03 which has come down to 1.04 crore in March

2005, which is a reduction of 1.45 crore children, who have joined the education system. Also, dropout rate has declined by 4.14 percentage points between 2001-02 and 2002-03 from 39.03% to 34.89%, which is an encouraging trend (<http://education.nic.in/Elementary/elementary.asp>). But improvement in teaching and learning environment, and quality teaching remains a big question mark, as mere opening of schools, provision of MDM, posting of 1-2 teachers are no guarantee (in the absence of requisite system inputs) for 'quality education'.

"There are some signs of improvements. After SSA, out of school children were 2.49 crore during 2002-03 which has come down to 1.04 crore in March 2005, which is a reduction of 1.45 crore children, who have joined the education system. Also, dropout rate has declined by 4.14 percentage points between 2001-02 and 2002-03). But improvement in teaching and learning environment, and quality teaching remains a big question mark, as mere opening of schools, provision of MDM, posting of 1-2 teachers are no guarantee (in the absence of requisite system inputs) for 'quality education'".

Summing up: Present state of primary education

Critical inputs for providing quality education are missing: The study shows how the entire education system is rendered ineffective due to lack of proper system design. It appears that in order to provide education, some infrastructure (classrooms, etc.) has been created, some teaching-aids are provided, some teachers have been posted (without enough temperament and skills for imparting teachings), some facility of MDM is provided (of which the quality is in serious question) and so on, but there is hardly any attempt to see whether the education system is functional or not, to provide quality teaching.

Box: 2.2

Critical Issues for Primary Education

- *First, skewed number of classrooms* (one class room is utilised for 2-3 classes) (in over 76% of schools)
- *Second, skewed number of teachers*. One teacher teaches 2-3 classes at a time that too in one classroom (in over 76% of schools)
- *Third*, low level of teaching environment (unclean environment, lack of teaching-aids)
- *Fourth*, commitment and capabilities of teachers are not enough. Teachers lack vital behavioural skills to impart teaching to children in a joyful manner
- *Fifth, poor quality of food and unhygienic conditions* under MDM programme. MDM has only marginally improved enrolment (less than 5%), but it does not have any perceptible impact on teaching and learning environment and levels, as many other vital inputs (like teaching-aids, school environment, capabilities of teachers) are missing
- *Sixth*, poor quality of teaching due to poor teaching and learning environment, and lack of teaching-aids
- *Seventh*, the above is leading to low retention rate (58.11%) and low efficiency

Low retention rate reflects (in simple terms) the proportion of children enrolled in class I that a school is able to retain in the class V.

Figure 2.1.1
Mid-day Meal

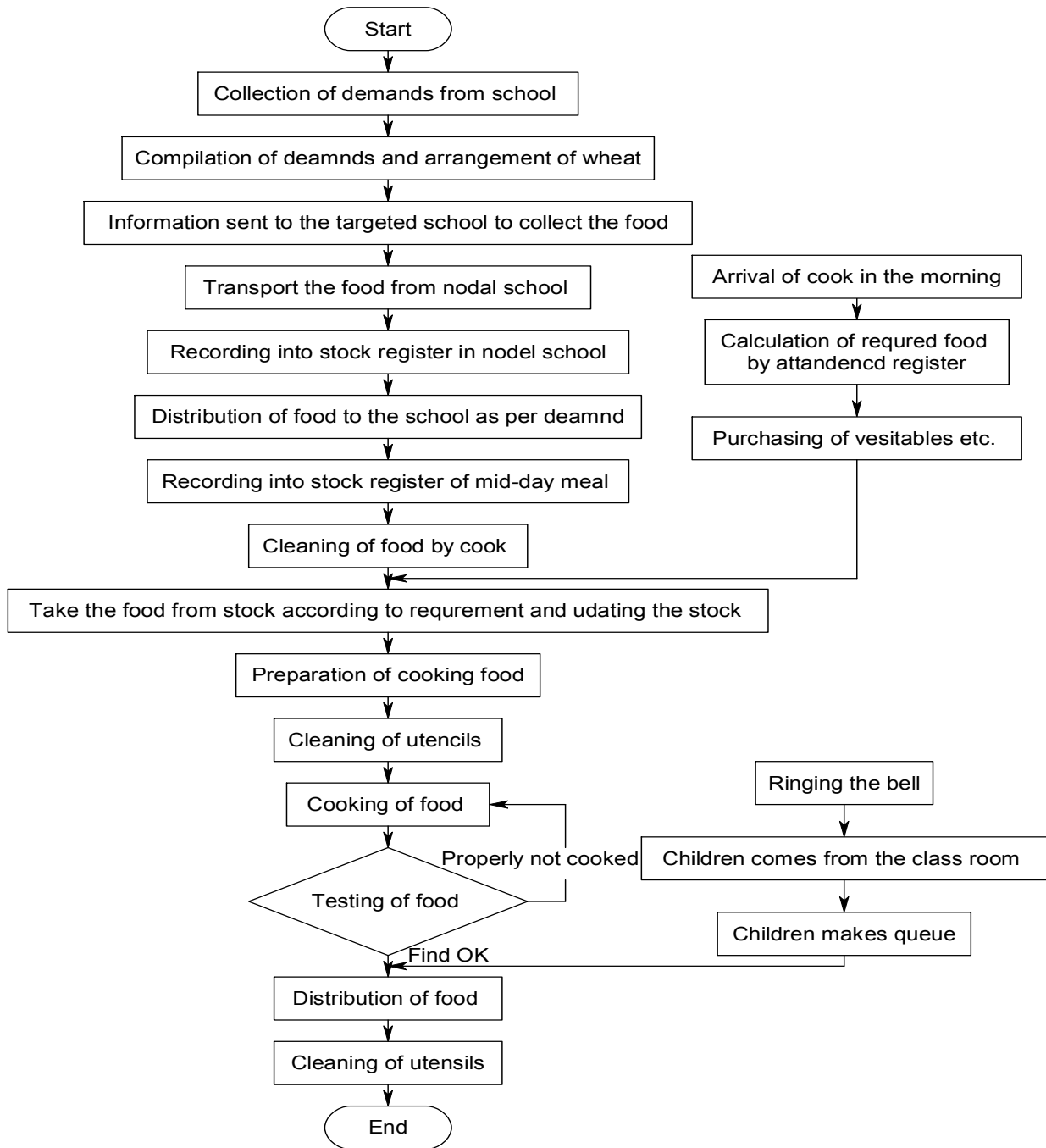
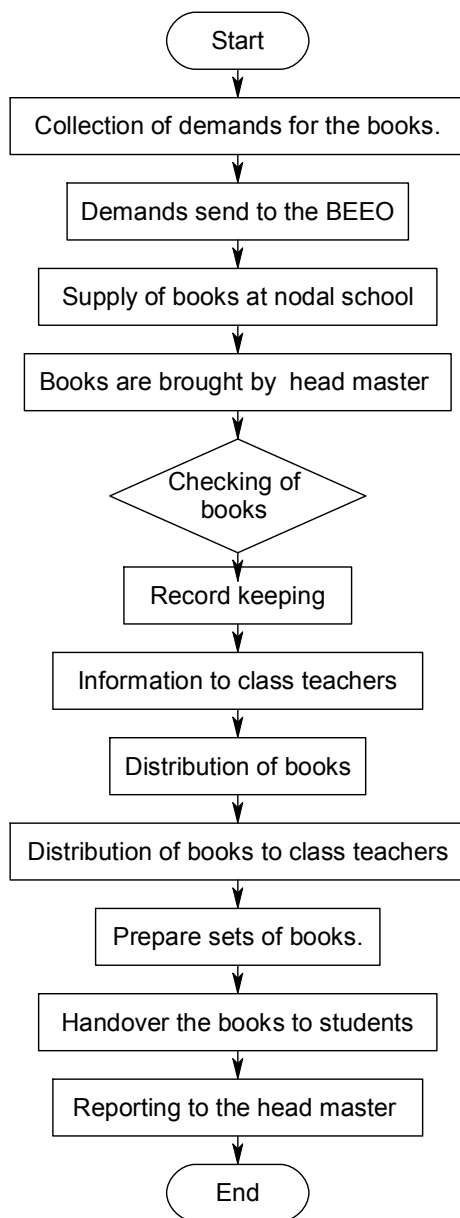


Figure: 2.1.2
Book Distribution



**Table: 2.1.1
Pareto Table - Teaching**

Activity head	Causes	RPN	% of Total	Cumulative
A6	C18	336	8.4	8.4
A6	C15	294	7.4	15.8
A6	C20	294	7.4	23.1
A6	C14	294	7.4	30.5
A6	C19	252	6.3	36.8
A6	C17	210	5.3	42.1
A2 & A3	C6	175	4.4	46.5
A2 & A3	C7	175	4.4	50.9
A7	C22	175	4.4	55.3
A7	C23	175	4.4	59.7
A1	C1	140	3.5	63.2
A1	C3	140	3.5	66.7
A1	C4	140	3.5	70.2
A6	C16	126	3.2	73.3
A2 & A3	C5	125	3.1	76.5
A2 & A3	C8	125	3.1	79.6
A7	C21	125	3.1	82.7
A4	C10	105	2.6	85.4
A4	C9	90	2.3	87.6
A1	C2	84	2.1	89.7
A4	C11	75	1.9	91.6
A4	C12	75	1.9	93.5
A5	C13	75	1.9	95.4
A7	C24	75	1.9	97.3
A8	C26	60	1.5	98.8
A8	C25	48	1.2	100.0

FMEA – Mid-day Meal

Failure Modes and Effects Analysis (FMEA) is a set of guidelines, a process, and a form to identify and priorities potential causes (leading to failures). Based on FGDs and field survey, FMEA has been prepared in Table given below for the delivery of health services. It indicates risk priority number (RPN) for various causes.

If we look at the cumulative RPN of causes under a particular activity-head, the maximum value comes under the following three activity-heads.

- A6 Distribution of food to the school as per demand and storage of food
- A2 Compilation of demand and arrangement of wheat
- A14 Cleaning of utensils
- A12 Cooking the food

Based on the FMEA, the Pareto chart is drawn as shown by Figure given below. The chart differentiates (causes) between ‘vital few’ and ‘trivial many’. As per this chart, the ‘vital few’ causes of failures are (in descending order of RPN):

- C9: Pilferage on the way of transportation of food

- C23: Insufficient resources
- C3: Delay in collection of demand
- C4: Casual attitude
- C8: Demand estimation incorrect.
- C10: Loading / Unloading of food grain not proper.
- C21: Improper measuring system
- C1: Incorrect flow of information from school authority
- C22: Lethargy on part of teachers and cook.
- C18: Insufficient resources.
- C2: Delay due to communications failures/postal delays.
- C13: Attendances not taken properly.
- C6: Insincere contractors
- C12: Distance of school very high from the place of residence of the cook
- C14: Improper measuring system

Table: 2.1.2
FMEA Mid-day Meal

Activity	Cause	RPN	% of Total	% of cumulative
A6	C9	210	7.8	7.8
A14	C23	175	6.5	14.3
A2	C3	150	5.5	19.8
A2	C4	150	5.5	25.4
A6	C8	150	5.5	30.9
A6	C10	150	5.5	36.5
A13	C21	150	5.5	42.0
A1	C1	140	5.2	47.2
A14	C22	140	5.2	52.3
A11	C18	125	4.6	57.0
A12	C19	125	4.6	61.6
A12	C20	125	4.6	66.2
A2	C2	120	4.4	70.6
A8	C13	100	3.7	74.3
A11	C17	100	3.7	78.0
A4	C6	96	3.5	81.6
A8	C12	80	3.0	84.5
A9	C14	80	3.0	87.5
A9	C15	80	3.0	90.5
A7	C11	75	2.8	93.2
A3	C5	72	2.7	95.9
A10	C16	64	2.4	98.3
A5	C7	48	1.8	100.0

Table: 2.1.3
FMEA Mid-day Meal

S. N.	Process Function/ Req	Activity head	Potential failure mode	Potential effect of failure	Sev	Potential cause(s)/mechanism of failure	Cause code	O c c	Detection Techniques	Dete ctio n	R P N
1.	Collection of Demands from the schools	A1	Demand not forecasted correctly. Delay in collection of demand.	Shortage or excess of food in the school	7	Incorrect flow of information from school authority	C1	4	Knowledge of the number of students in the age group that have not joined schools	5	140
2.	Compilation of demand and arrangement of wheat	A2	Incorrect compilation Delay in compilations	Delay in supply of food grain. Mismatch between requirements and demand	6	Delay due to communications failures/postal delays.	C2	4	Monitoring by superiors	5	120
						Delay in collection of demand	C3	5			150
						Casual attitude	C4	5			150
3.	Information sent to the target school to collect the food	A3	Delay in communication	Loss of students as no food is given	6	Lack of means of communication	C5	3		4	72
4.	Transport the food from nodal school	A4	Loss in transit	Students getting less food	6	Insincere contractors	C6	4		4	96
5.	Recording in to the stock register of the nodal school.	A5	Incorrect recording Loss during storage	Loss of food supplied to the students. Potential source of fraud	3	Students not getting the food 'due' to them.	C7	4		4	48

S. N.	Process Function/ Req	Activity head	Potential failure mode	Potential effect of failure	Sev	Potential cause(s)/mechanism of failure	Cause code	O c c	Detection Techniques	Detection	R P N
6.	Distribution of food to the school as per demand and storage of food	A6	Food quantity not as per the demand	Short supply of food	6	Demand estimation incorrect.	C8	5	Monitoring by superiors	5	150
			Food not as per the desired quality as per the norms of the government	Students not happy with the quality of food		Pilferage on the way of transportation of food	C9	7			210
						Loading / Unloading of food grain not proper.	C10	5			150
7.	Recording in to stock register of mid day meal.A	A7	Error in recording	Shortage of food	5	Inadvertent mistake	C11	3	Checking the records	5	75
8.	Arrival of cook and calculation of food required.	A8	Late arrival of cook.	Food prepared late	4	Distance of school very high from the place of residence of the cook.	C12	4	Checking the attendance register to know the quantity	5	80
			Incorrect calculation of food required.	Food prepared of incorrect quantities		Attendances not taken properly.	C13	5			100
9.	Issuing the ration from the stock	A9	Incorrect amount of food issued.	Shortage of food	5	Improper measuring system.	C14	4	Monitoring by HM	4	80
						Insufficient food in the stock.	C15	4			80
10.	Cleaning of the grain and vegetables.	A10	Cleaning improper	Food quality unacceptable	4	Lethargy on part of teachers and cook.	C16	4	Visual Checks	4	64
11.	Cleaning the utensils	A11	Cleaning improper	Food quality unacceptable	5	Lethargy on part of teachers and cook.	C17	4	Visual Check	5	100
						Insufficient resources.	C18	5			125
12.	Cooking the food	A12	Food not properly cooked.	Quality of food distributed is	5	Lethargy on part of teachers and cook.	C19	5	Tasting of food by the teachers	5	125

S. N.	Process Function/ Req	Activity head	Potential failure mode	Potential effect of failure	Sev	Potential cause(s)/mechanism of failure	Cause code	O c c	Detection Techniques	Detection	R P N
				low.		Insufficient resources.	C20	5			125
13.	Distribution of food to students	A13	Distribution not as per quantity Delay in the timings	Unhappy students Lack of proper nutrition to the students.	6	Improper measuring system	C21	5	Monitoring by teachers	5	150
14.	Cleaning of utensils	A14	Cleaning improper	Food poisoning	7	Lethargy on part of teachers and cook.	C22	4	Inspections.	5	140
						Insufficient resources.	C23	5			

Figure: 2.1.3

MDM Pareto Chart

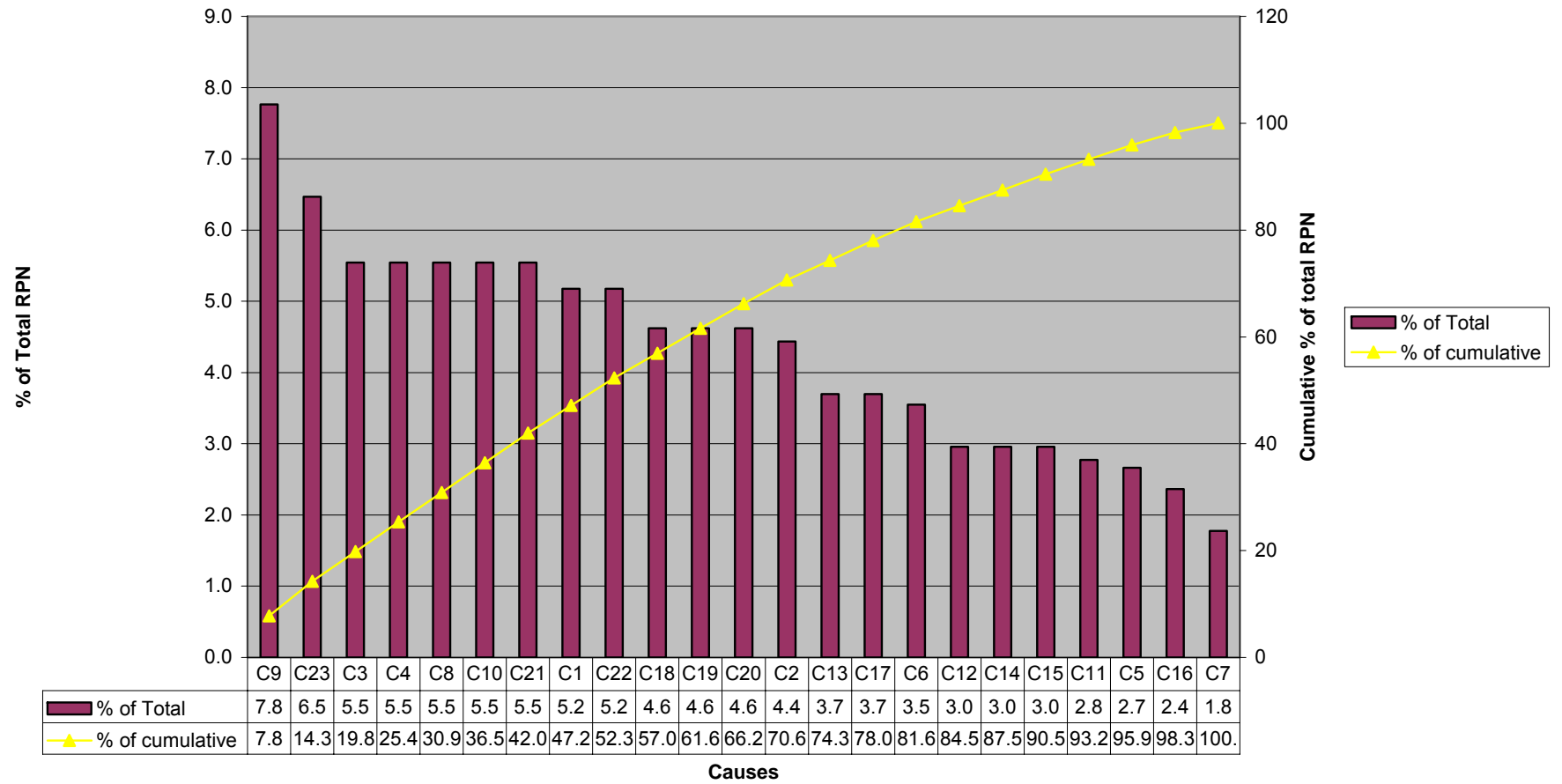


Table: 2.1.4
FMEA Free book distribution

S.N.	Process Function/ Req	Activity head	Potential failure mode	Potential effect of failure	Sev	Potential cause(s)/mechanism of failure	Cause head	O c c	Detection Techniques	Det ection	R P N
1.	Demand of the books is calculated	A1	Demand not calculated on time	Incorrect quantity ordered	6	No. of students joining not known.	C1	3	Issue of books vs. Actual no. of students. Monitoring by superiors	3	54
2.	The demand is sent to the BEEO	A2	Delay in sending the demand	Students getting book late resulting in loss of education	7	Lack of any guidance to teachers.	C2	5	Monitoring by BEEO	3	105
						Casual attitude	C3	7			147
3.	Supply of books	A3	Books not supplied Books not supplied on time	Students knowledge hampered	6	Printing delay	C4	5	Records Monitoring by Head Master	3	90
						Delay in sending the books to the nodal school	C5	5			90
						Teacher does not pick the books from the nodal school on time.	C6	5			90
4.	Record keeping	A4	Inaccurate records	Loss of accountability Loss of books	4	Lack of sincerity on part of teachers in the nodal school	C7	4	Issue of books vs. actual no. of students Checking of records Audits	3	48
5.	Information to teachers	A5	Information not sent to the teachers from the	Delay in book distribution.	4	Lack of enthusiasm in teachers.	C8	3	Records	3	36

S.N.	Process Function/ Req	Activity head	Potential failure mode	Potential effect of failure	Sev	Potential cause(s)/mechanism of failure	Cause head	O c c	Detection Techniques	Det ection	R P N
			nodal school Information sent late	Loss of students due to delay							
6.	Distribution of books to teachers	A6	Teachers not picking up the books on time.	Delay in distribution of books.	5	Lack of facilities of transportation.	C9	6		5	150
						Lack of enthusiasm	C10	6			150
						Lack of people to transport the books.	C11	6			150
7.	Prepare sets of books	A7	Improper sets made	Students not getting all the books.	3	Lack of enthusiasm in teachers.	C12	6		3	54
				Students getting mixed up books.		Teachers: Student ratio low.	C13	5			45
				Lack of awareness among teachers about which all books are to be distributed.		C14	3	27			
8.	Handover the books to students	A8	Books not handed over as per scale	Student does not derive full benefits of schools	6	Casual attitude	C15	4	Parent Checks	3	72
9.	Register to the H. M.	A9	Registration improper.	Incorrect accounts	5	Lack of enthusiasm in teachers.	C16	4	Check by HM	5	100
						Teachers: Student ratio low.	C17	6			150
						Overburdened teachers or HM.	C18	4			100

Table: 2.1.5
FMEA- Free book distribution

Activity head	Causes	RPN	% of Total	Cumulative
A6	C9	150	9.0	9.0
A6	C10	150	9.0	18.0
A6	C11	150	9.0	27.1
A9	C17	150	9.0	36.1
A2	C3	147	8.9	45.0
A2	C2	105	6.3	51.3
A9	C16	100	6.0	57.4
A9	C18	100	6.0	63.4
A3	C4	90	5.4	68.8
A3	C5	90	5.4	74.3
A3	C6	90	5.4	79.7
A8	C15	72	4.3	84.0
A1	C1	54	3.3	87.3
A7	C12	54	3.3	90.5
A4	C7	48	2.9	93.4
A7	C13	45	2.7	96.2
A5	C8	36	2.2	98.3
A7	C14	27	1.6	100.0

Chapter 3

Quality System Design for Primary Education

The analysis and findings presented in the Chapter 2 highlight both *first*, shortcomings in the system of education, and *second*, poor standards of teaching. In the light of this, suggestions are made to improve the performance of education system. Among others it calls for taking the following measures:

3.1 Way Ahead – measures required

The Education system study presented in the last chapter highlights the problems at two levels – system and students. At the system level, the inability of the system, due to numerous intertwined factors, to deliver quality teaching to students, is elaborately discussed. As a result of poor service levels, at the student level, children do not gain much in terms of knowledge and skills. It clearly points towards the criticality of nature of problem.

The vital quality dimensions that need to be addressed by proposed education system are listed below:

- *Access* – to ensure greater access to primary schools as well as secondary schools at GP level, both in terms of infrastructure and manpower (teachers).
- *Availability* – to ensure availability of services like play school, primary school
- *Cost* – to provide affordable quality education to the students
- *Reliability* - to ensure hundred percent reliability of intended services especially with regard to zero dropout rate, quality teaching and extra curricular activity
- *Technical conformance* – to ensure hundred percent conformance to standards set by independent education bodies, as the government may decide
- *Equity* – to ensure education to all, particularly to disadvantaged groups
- *Work culture* – to inculcate new value system for student-centric approach and quality of education
- *Transparency and accountability* – to ensure that the functioning is transparent and the concerned stakeholders are responsible for their action

3.1.1 Important considerations while designing the education system

In the backdrop of analysis regarding delivery of quality education, there is a need to give a fresh look to the design of system for providing quality education. The sound education system needs to take into consideration the following points:

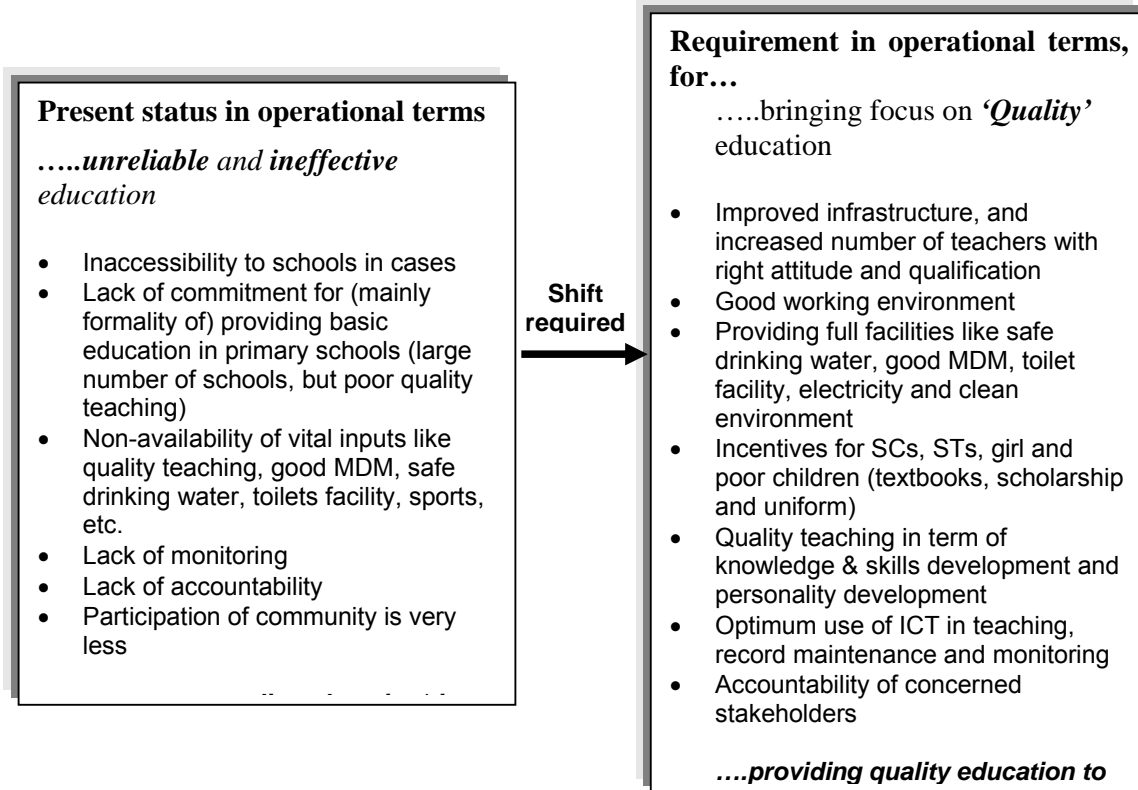
- *System approach:* For quality management, the principles of total quality management (TQM) need to be applied. It will require that all the *necessary* components of system – like infrastructure, manpower (teachers), equipments (teaching-aids), MIS, accountability mechanism, monitoring etc. – need to be placed in right perspective and also in an integrated manner.
- *Autonomy and participatory quality management:* In order to ensure timely services (books, MDM, teachings, etc.), the school should be empowered with responsibility and autonomy for enabling them to take necessary prompt action. Also, for taking best out of the teachers and increasing their involvement in the functioning, the participatory management should be encouraged. All the teaching personnel should be the part of internal quality assurance programme – study (of system / problems), analysis, decision-making, control and improvement.
- *Appreciation of local problems faced by schools:* It is highly essential to appreciate the local problems (like difficulties related to drinking water, non-availability of toilets, erratic supply of electricity, lack of cleanliness, inadequate arrangement of MDM, accommodation for teachers, etc.), as without so, many deserving problems would not be handled in time, and which would continue to nag education system, and bring its efficiency down considerably.
- *Strong students focus in education delivery:* It should have multi-pronged approach, having the following items:
 - Awareness building
 - People's participation
 - Feedback
 - Grievance redressal
 - Giving rating by parents on education delivery
- *Accountability mechanism:* Accountability of teachers from State directorate to BEEO. Also, one important point needs to be borne in mind that accountability mechanism can be effective, if necessary components are placed to make education system function effectively. Or, the accountability mechanism will be as effective as the efficacy of education system.

3.1.2 Paradigm shift in approach

In spite of some successes like provisioning of MDM in schools, increased enrolment, reduction in the dropout rate, and increased number of schools, etc., the quality of education continues to suffer. Therefore, it calls for a paradigm

shift to make education system an effective unit for quality teaching as indicated by Figure 3.1.

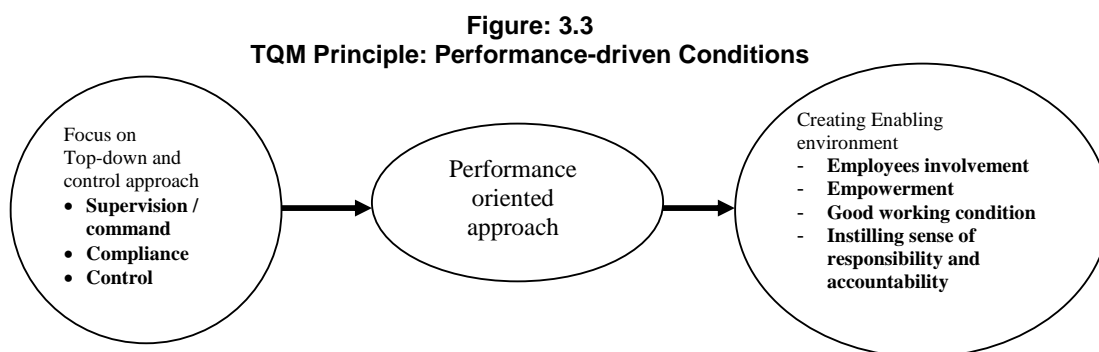
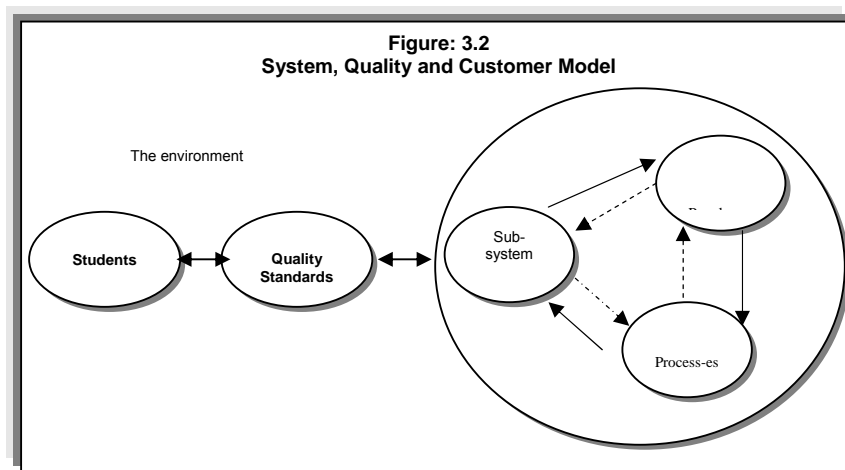
Figure: 3.1
Shift in Approach for Quantity to Quality



* Quality education in terms of knowledge & skills development and personality development

There is a need to take more rational and integrated approach. It has been quite evident that there is need of paradigm shift in evolving a right kind of system that puts features – 'quality' and 'right system' – at its core. Therefore, there is need of having following approach:

- *Alignment of People (teachers)), Process and System with quality and students (see Figure 3.2)*
- *Performance-driven approach (see Figure: 3.3)*
- *Creating enabling environment*
- There is a need to create system that recognises the worth of human resources (teachers, support staff and administrators). There is a strong need to increase their involvement and empowerment. It will require giving them autonomy and increasing their role in decision-making, particularly with regard to curriculum design and quality management.
- Simultaneously, efforts should be to provide good working conditions for raising the motivation level of teachers



3.2 Process Control Tools, Inputs and Process Standardisation

For teaching process, process control tools and inputs required are identified in Table 3.1 for each failure mode. Similarly for other mid day meal and the process control tools and inputs required are indicated by Table 3.2. Some of the major inputs for quality education required are as follows:

- One teacher for one class
- One classroom for each class
- Teachers should be posted according to students strength
- Teachers training to be focused on joyful education with proper teaching-aids
- Teachers appraisal system by parents, panchayats and students to be developed
- Use of audio-visual technology
- Residential quarters to be provided
- Teachers should be restricted to stay at HQs
- Improving working conditions
- Mainstreaming discussion on education in village meetings / gram sabhas

Some of the major inputs for quality mid-day meal required are as follows:

- Proper storage and kitchen facility to be provided
- Weighing machine to be provided to schools
- Items like soap, racks, etc. to be provided
- Utensils in adequate quantity to be provided
- Food should be provided in sealed bags to schools

Table: 3.1
Process Control and Inputs required for Improvement (Teaching)

S.N.	Possible* failure mode / Problem Area in descending order	CCPs	Process Control	Inputs required for improvement
1.	Less knowledge gained by students	Teaching is not joyful or lack of interest in students	- Feedback from students	<ul style="list-style-type: none"> - Control mechanism* - One teacher for one class - One classroom for each class - Teachers to be posted according to students strength - Teachers training to be focused on joyful learning with teaching-aids - Teachers appraisal system by parents, panchayat and students to be developed - Use of audio-visual technology
		Communication problems	- Feedback from students	
		Lack of discipline	- Random inspection	
	Improper teaching	Lack of teachers (one teacher for 2-3 classes)	- Performance Audit	
		Lack of commitment of teachers	- Random inspection	
		An environment of fear among students	- Feedback from students	
		Poor environment in classrooms (lack of space, 2-3 classes in one classroom)	- Random inspection	
2.	Late arrival of teachers	Teachers stay in Tehsil level towns	<ul style="list-style-type: none"> - Meeting with teachers - Feedback from gram panchayat 	<ul style="list-style-type: none"> - Residential quarters should be provided - Teachers should be restricted to stay at HQs
	Late arrival of students	<ul style="list-style-type: none"> - Lack of transportation available for students (in some cases) - Lack of sincerity 	- Meeting with teachers	
3.	Students not able to answer questions	Communication problem between teachers and students	- Feedback from students	<ul style="list-style-type: none"> - Teachers training - Improving working conditions
	No question-answer session takes place	Teachers are not dedicated enough to teach properly	<ul style="list-style-type: none"> - Feedback from students - Random inspection 	
4.	Students do not join schools	Low awareness amongst citizens	- Meeting with citizens	<ul style="list-style-type: none"> - Awareness programme for admission / enrolment and need of education to be organized - Mainstreaming discussion on education in village meetings / gram sabhas - Improving quality of teaching
		Teachers not enthusiastic	- Random inspection	
		Parents' poor perception about the school	<ul style="list-style-type: none"> - Meeting with citizens - Feedback from citizens 	

Based on FMEA (see Table: 2.3 and 2.5 in Chapter 2)

* Control mechanism to be devised as per the requirement of the process control by the departments

Table: 3.2
Process Control and Inputs required for improvement (MDM)

S.N.	Possible* failure mode / Problem Area in descending order	CCPs	Process Control	Inputs required for improvement
1.	Food not as per the desired quality as per the norms of the government	Poor storage and kitchen facilities	- Quality audit - Random inspection	- Control mechanism* - Proper storage and kitchen facility to be provided
2.	Cleaning improper	Insufficient resources (water supply, soap, etc.)	- Random inspection	- Items like soap, racks, etc. to be provided
3.	Delay in compilations and incorrect compilation	Delay in collection of demand and Casual attitude	- Record check - Audit	- Training for accounts keeping
4.	Food quantity not as per the demand	Demand estimation incorrect.	- Random inspection	- Weighing machine to be provided to schools
5.	Distribution not as per quantity	Improper measuring system	- Random inspection - Feedback from students	- Weighing machine to be provided to schools
6.	Delay in collection of demand.	Incorrect flow of information from school authority	- Feedback from BEEO	- Feedback Mechanism
7.	Food not properly cooked	Lethargy on part of teachers and cook. Insufficient resources	- Regularly inspection by gram panchayat members - Feedback from students	- Utensils to be provided - Training to each
8.	Incorrect calculation of food required.	Attendance not taken properly	- Feedback from BEEO - Audit	- Feedback Mechanism
9.	Loss in transit	Insincere contractors	- Feedback from teachers	- Sealed bags of food to be provided
10.	<i>Incorrect amount of food issued to schools</i>	Improper measuring system. Insufficient food in the stock	- Random inspection	- Monitoring mechanism

Based on FMEA for MDM (see Table:2.1.3 in Annexure 2.1 and Table: 2.6 in Chapter 2)

* Control mechanism to be devised as per the requirement of the process control by the department

3.3 Proposed Education System Design

For proposed education system, vision and mission statement is prepared in Box 3.1. It lays focus on quality teaching with equity. The proposed CTQs are indicated by Table 3.3.

Box: 3.1	
Vision and Mission Statement	
Vision	: Quality education for developing human capital and thereby leading good quality of life
Quality Policy:	To provide access to quality education to students at affordable cost
Mission	: <ul style="list-style-type: none"> - To strive to provide quality education, as intended - To make concerted efforts to bring the best out of children
Objectives	: <ul style="list-style-type: none"> • Access to quality education to students in rural area • Strive: <ul style="list-style-type: none"> - To develop the inter-personal skills - To develop overall personality - To develop creativity - To develop the future with self-confidence - To develop the capacity for lifelong learning
Focus	: <ul style="list-style-type: none"> • Reducing dropout rate and improving retention rate • Quality education to all children
Goal	: <ul style="list-style-type: none"> • 100% enrolment • Reduction in dropout rate to less than 1% in each year in the next 5 years • Improving retention rate from 58% to 99% (from class I to V) • Provide basic facilities like safe drinking water, good MDM, library, toilet, etc. within two years in all schools • Sustainability of above services

Source: Own analysis

Table: 3.3
Critical Indicators for three Processes under Existing System and Proposed System

S.N.	CTQs	Existing*			Proposed		
		Teaching	MDM	Free book distribution	Teaching	MDM	Free book distribution
1.	Activity in a process	13	20	11	13	20	11
2.	Frequency	Daily	Daily	Yearly	Daily	Daily	Yearly
3.	Access school	Max	3 km	-	1 km	-	-
		Min	.5 km	-	-	-	-
4.	Time spent to reach the school	15-30 minutes			10-15 minutes		
5.	Level of satisfaction (completely satisfactory % of respondents)	47%	34%	78%	100% (desirable)	100% (desirable)	100% (desirable)
6.	Cost	Free	Free	Free	Free	Free	Free
7.	Teacher student ratios in block	1:38.08			1:40		
8.	Classroom student ratios	1:24			1:40		
9.	Toilets facility	29%			100% (desirable)		

10.	DW facility not available	26%	100% (desirable)
11.	Vacant posts as per sanctioned posts	13%	0% (desirable)

* see Chapter 2

System design should have focus on the following:

- ***Focus on human resources (HR)*** – *key for success*: It is now imperative to recognise the crucial role of HR in quality teaching. The proposed system stresses on this. The key to take best out of the teachers is to provide them quality training and good working environment. And it is more so crucial, if there is a need to handle different and complex problems related to learning requirements of children, which require concerted efforts by teachers on a regular basis.
- **Education standards**: In order to evolve comprehensive standards for providing quality teachings, two major categories viz., service delivery and education system are identified as under:
 - i. Under service delivery, the quality dimensions covered are access, availability, cost, time, reliability and so on.
 - ii. Under education system, the standards are defined for important components viz., infrastructure, teachers, teaching-aids, environment (both physical as well as teaching), transparency, accountability and so on. (for details see report)

Specific measures

Enabling all children to complete primary education of good quality is a central goal of Indian education policy. The speed with which it can be achieved will be determined by the success of the central, state, and local governments in creating an accessible infrastructure for schooling, enhancing the demand for schooling, and increasing the efficiency of student flows. Supply-side interventions should focus on building enough schools and classrooms; hiring and deploying enough teachers, and improving teaching-aids and teaching. Sustained demand-side interventions should address enforcing compulsory attendance laws, implementing automatic promotion of students from one grade to the next, and sensitisation of children and parents.

- Process Control Tools, and Inputs: *For teaching process, process control tools and inputs required are identified in Table 11.*
- Mainstreaming discussion on education in village meetings / gram sabhas: *The discussion on the need for education and about related issues will bring about change in mindset of community, parents, which would put*

pressure on panchayats as well as government to make substantial effort through budgetary support for improving quality of education.

- Improving Access and Efficiency

Equity issue

There are barriers related to caste, gender, geographical area, and economic status. To overcome these problems (inequities in the system), there is a need to strengthen the existing following programmes to cover the relevant target:

- Scholarship: For SCs, STs, girl children, and other poor (BPL)
- Textbooks: For SCs, STs, girl children, and other poor (BPL)
- Engaging more female teachers (so that girls are more confident)

For children coming from remote areas, there is a need to have special programme:

- Children (SCs, STs, girl children, and other poor) coming from remote villages (more than 2 km) (which will be hardly 5% of the total population of children, as now there is a large network of primary schools in the country) should be entitled to two extra benefits: *first*, additional scholarship (Rs. 20 per month for 80% attendance), and *second*, additional MDM in the morning (Rs. 2 per day per child, which could be in the form of biscuits)
- *Improving quality of teaching*: It is vital for reducing drop out and for enhancing efficiency of school system. Besides, the subjects should have 20% locally relevant course content, which can be useful for children to meet socio-economic needs, when they grow. It will inspire parents to send their children to schools.
- *Enhancing environment*: Achieving acceptable levels of quality will require strategies that take into account school learning environment as also improving environment in the village as well as at home through awareness building and sensitisation for the need of education for development. Here, the panchayats can play vital role. Strategies also need to take account of the fact that girls, the poor, and students from scheduled castes and tribes tend to avoid staying in the school and score (marks) below average.

Drawing on empirical studies, the above steps will facilitate in reducing gaps in enrollment, retention, and achievement.

- *Improving Teachers' Performance*: In the light of the field survey, reflecting the lack of commitment, motivation and capabilities in teachers, particular care needs to be given to recruitment, developing and implementing in-

service teacher training programs that are effective in improving the quality of classroom teaching. Also important is strengthening teachers' motivation by improving working conditions and introducing incentive systems.

- *Building Managerial and Institutional Capacity*: It requires improving the administrative and technical capacity of State, district and block level education institutions so that these can provide necessary support to schools, monitor their performance and facilitate them to achieve the objective of quality teachings. It may also require setting up management information system (MIS) at all the levels, and inter-connecting them using ICT. Besides, the system of quality control and management needs to be established from Central government to gram panchayats (see Figure 3.5).
- *Financing Elementary Education*: For developing knowledge economy, the need of the hour is to improve coverage, quality, and efficiency. It calls for enhancing public funding. As the onus for financing an elementary education of reasonable quality for all of India's children rests mainly with State governments, so they need to share more responsibility, improve their fiscal management and enhance their allocations.
- *Quality management*: A brief is prepared about the steps for quality management which as follows.
 - Understanding quality issues: It requires understanding the concept of quality and its various dimensions under education.
 - BPR: It requires focus on the processes of various services viz., teaching, MDM and distribution of books and scholarship. Process has to be a starting point for taking up the task of improving service quality. After identifying processes, it should be followed by process mapping and analysis. Thereafter, the steps for process reengineering should be undertaken, which should include inter alia, control mechanism, inputs (like infrastructure, teachers, teaching-aids, etc.) and process standardisation.
 - Quality planning: It is focused on setting quality objectives and specifying necessary operational processes and related resources to fulfill the quality objectives. Quality planning, being middle to senior management task (for BEEO, DEO, Education Directorate), is required at Block and district levels.
 - Quality Control: It is focused on fulfilling requirements in order to achieve the desired goals. It is to ensure that the process is run at optimal effectiveness. It would require having quality control teams at district, block and school levels, as also the community control mechanism.
 - Quality Assurance: Part of quality management focuses on providing confidence that quality requirements will be fulfilled. It requires having a committed system for achieving desired quality standards for quality teaching and learnings.
 - Quality Audit: It is vital to measure the performance level and also to study whether different systems and sub-system are functional. Audit will require study of: first, financial; second, performance (teaching and

learning) of the programme; and third, processes and systems of service delivery. The Table indicates about what quality audit should cover.

Based on above, Figure 3.4 reflects about steps in quality management for education and the Figure 3.5 indicates framework of quality management teams for primary education system.

Special Features of Proposed System (in a school)

Special features in the proposed system are as follows:

- a. A normal school (Category A: 100 Children) should have (see Table: 3.4):
 - 5 classrooms
 - 1 library
 - 1 staff room
 - 1 kitchen cum store
 - 1 lavatory
 - 2 urinals
 - 1 water pump
- b. A special school (Category B: 200 Children) should have (see Table: 3.4):
 - 5 class rooms
 - 1 library
 - 1 office / Staff room
 - 1 lavatory
 - 3 urinals
 - 1 kitchen

 - 1 storeroom
 - 1 water pump

Table: 3.4

Status of Population and Distance Covered in Present and Future Scenario

S.N.	Items		Status	
Present				
1	Population covered			
2	Distance from villages	Maximum	3.0 km	
		Average	1.0 km	
Suggested			Category A	Category B
1	Population covered		500-1200	1200-3000
2	Distance from villages	Maximum	1 km	2.0 km
		Average	.75 km	1.0 km

Source: Based on consultations with stakeholders and own analysis

Figure: 3.4
Steps in Quality Management for Education

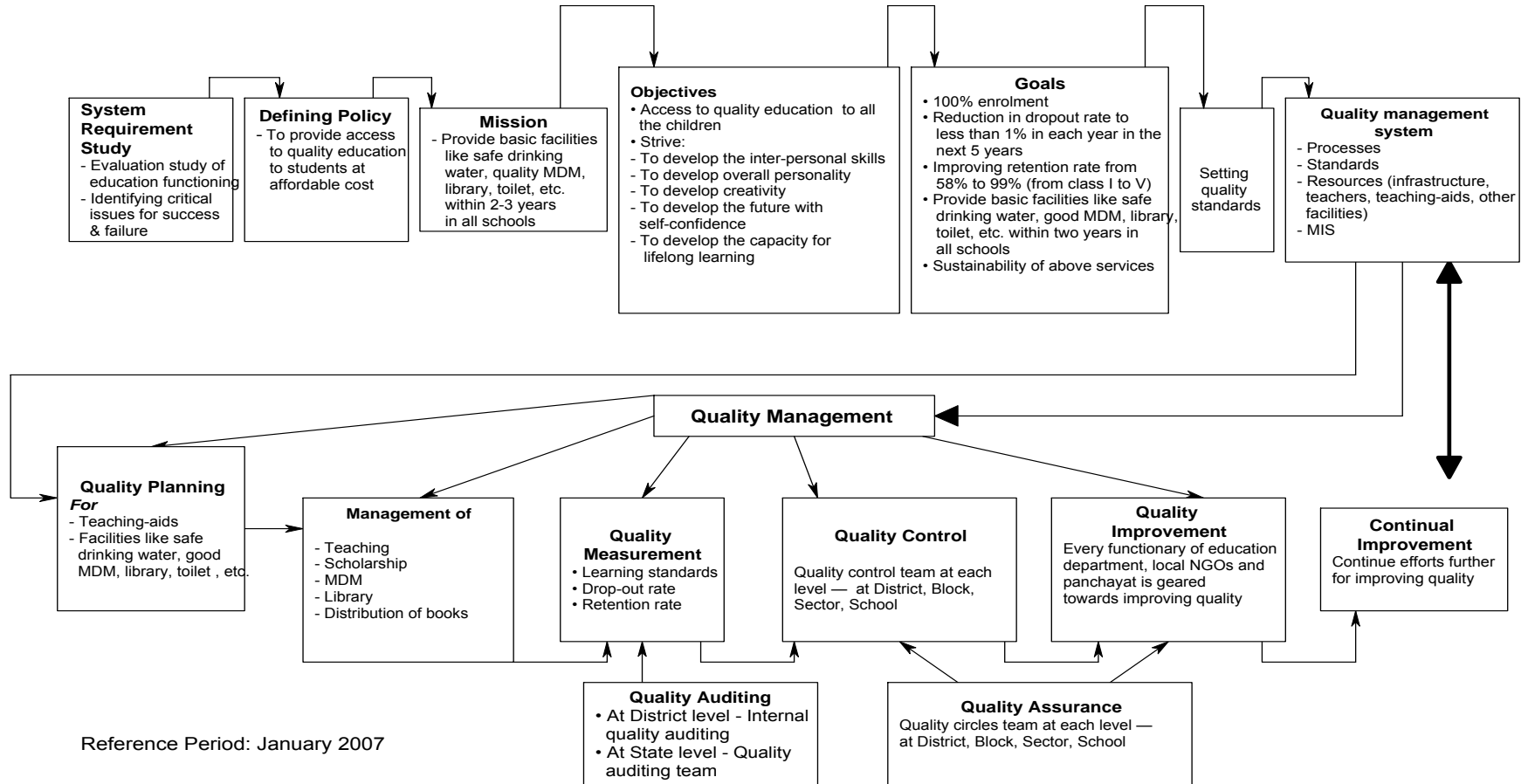


Figure: 3.5
Framework of Quality Management Teams for Primary Education System

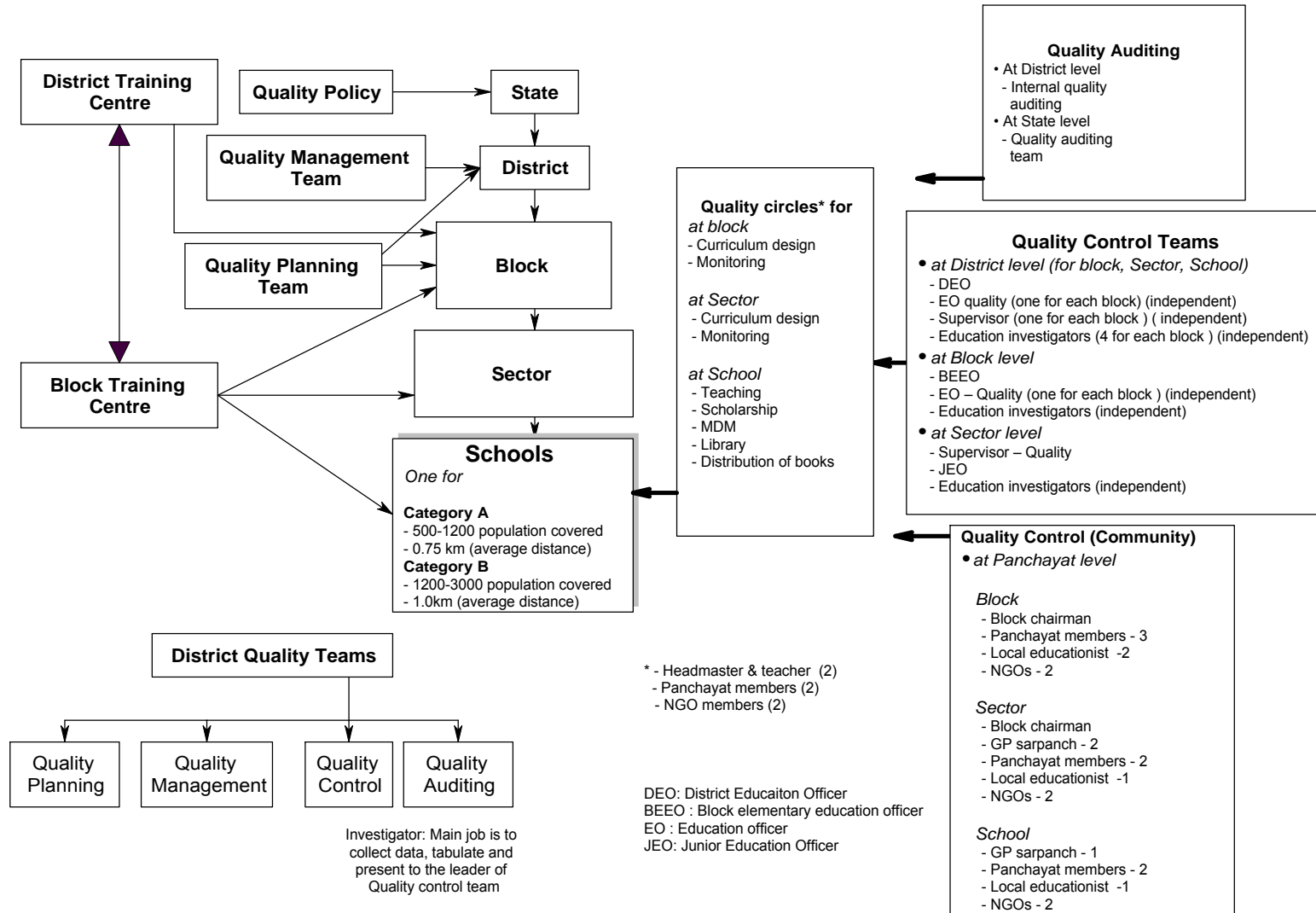


Table: 3.5
Proposed Special Features of Education System in a Block (Rural)

S. N.	Category	Proposed criteria	Focus	Special features	Quality service in life
1.	Category A	Population 500-1200	<ul style="list-style-type: none"> - One classroom for one class - One teacher for one class - Access to credible education to students in remote area - Reduction in the dropout rate - Education to all on a uniform platform - Free and nutritious MDM in schools - Free books and scholarship to SC/ST, girl and other poor category students 	<ul style="list-style-type: none"> • Access to quality education to students in rural area • Strive: <ul style="list-style-type: none"> - To develop the inter-personal skills - To develop overall personality - To develop creativity - To develop the future with self-confidence - To develop the capacity for lifelong learning 	<ul style="list-style-type: none"> - Teaching - Scholarship - MDM - Library - Distribution of books
		No of students 50-100			
		Maximum distance to student: 1 km			
2.	Category B	Population 1200-3000	<ul style="list-style-type: none"> - One classroom for one class - One teacher for one class - Access to credible education to students in rural area - Reduction the dropout rates children and deprived group - Education to all on a Uniform platform - Free and nutritious MDM in school - Free books to SC/ST, girl and other poor category students - Extra-curricular facilities 	<ul style="list-style-type: none"> • Access to quality education to students in rural area • Strive: <ul style="list-style-type: none"> - To develop the inter-personal skills - To develop overall personality - To develop creativity - To develop the future with self-confidence - To develop the capacity for lifelong learning 	<ul style="list-style-type: none"> - Teaching - Scholarship - MDM - Library - Distribution of books - Literacy - Extra-curricular activities
		No of students 150-200			
		Maximum distance to student: 2 km			

Source: Based on consultations with stakeholders and own analysis

3.4 Manpower Planning

During the course of study, it was felt necessary to make workload analysis. The analysis for teachers in schools presented in Tables 3.7 and 3.8 These tables indicate the likely workload in terms of number of days on one individual, if all the expected work is to be attended to qualitatively with perfection. The summary is given in Table 3.9.

Table: 3.6
Number of Days Required for Schools Duty in a Month for Attending Present Job-chart

S.N.	Teachers	Days*
1.	Single teacher in a school	34
2.	Two teacher in a school	28

Source: Based on consultations with stakeholders and own analysis

*If all the expected work is to be attended to qualitatively with perfection

Table: 3.7
Workload Analysis for single teacher

S. N.	Tasks / Activities	Present scenario		If one does with full sincerity		Proposed scenario	
		Days*	% Time	Days*	% Time	Days*	% Time
	Core education activities						
1.	Teaching	10	43	24	71	20	83
2.	Copy / homework checking	0.5	2	0.5	1	.5	2
3.	Question answers session	0.5	2	0.5	1	.5	2
4.	Examinations	1	4	1	3	.5	2
5.	Result preparation	1	4	1	3	.5	2
	Sub total	13	57	27	79	22	92
	Administration, meeting, etc.		-		0		0
6.	Prayer	1	4	1	3	0	0
7.	Disemination of information	0.5	2	0.5	1	.5	2
8.	<i>Bal sabha</i>	0.5	2	0.5	1	.5	2
9.	Meeting in block education office	1	4	1	3	0	0
10.	Record maintaining	1	4	2	6	.5	2
11.	Planning and Administration	1	4	1	3	.5	2
	Sub total	5	22	6	18	2	8
	Others (travel, etc.)		-		0	0	0
12.	Traveling	1	4	1	3	0	0
	Sub total	1	4	1	3	0	0
	Absenteeism		-		0	0	0

S. N.	Tasks / Activities	Present scenario		If one does with full sincerity		Proposed scenario	
		Days*	% Time	Days*	% Time	Days*	% Time
13.	Time not devoted for work / absenteeism**	4	17	0	0	0	0
	Sub total	4	17	0	0	0	0
	Total	23	100	34	100	24	100

Source: Based on FGDs and work study

*Numbers of days are calculated based on number of hours to be devoted to various activities

**Absenteeism due to (i) far off schools, (ii) sometimes negligence, and (iii) also difficulties in attending the work due to various personal problems and other problems on account difficult working conditions.

Note1: Above will be applicable in most of the cases,

Note2: Non-teaching activity like elections, survey, pulse polio, etc. are not considered above.

Table: 3.8
Workload Analysis for two teachers

S. N.	Tasks / Activities	Present scenario		If one does with full sincerity		Proposed scenario	
		Days*	% Time	Days*	% Time	Days*	% Time
	Core education activities						
1.	Teaching	15	65	20	71	20	83
2.	Copy / homework checking	0.5	2	0.5	2	.5	2
3.	Question answers session	0.5	2	0.5	2	.5	2
4.	Examinations	0.5	2	1	4	.5	2
5.	Result preparation	0.5	2	1	4	.5	2
	Sub total	17	74	23	82	22	92
	Administration, meeting, etc.		0		0		0
6.	Prayer	1	4	1	4	0	0
7.	Disemination of information	0.5	2	0.5	2	.5	2
8.	<i>Bal sabha</i>	0.5	2	0.5	2	.5	2
9.	Meeting in block education office	0.5	2	1	4	0	0
10.	Record maintaining	0.5	2	2	7	.5	2
11.	Planning and Administration	0.5	2	1	4	.5	2
	Sub total	3.5	15	6	21	2	0
	Others (travel, etc.)		0		0		0
12.	Traveling	1	4	1	4	0	0
	Sub total	1	4	1	4	0	0
	Absenteeism		0		0		0
13.	Time not devoted for work / absenteeism**	1.5	7	0	0	0	0
	Sub total		7	0	0	0	0
	Total	23	100	28	100	24	100

Source: Based on FGDs and work study

*Numbers of days are calculated based on number of hours to be devoted to various activities

**Absenteeism due to (i) far off schools, (ii) sometimes negligence, and (iii) also difficulties in attending the work due to various personal problems and other problems on account difficult working conditions.

Note1: Above will be applicable in most of the cases,

Note2: Non-teaching activity like elections, survey, pulse polio, etc. are not considered above.

Presently due to high workload, school teachers try to complete the work in hurry in order to complete the work within school time and in this process many qualitative aspects are over-looked. For example, for extra-curricular activities, adequate time is not devoted. But, with improved manpower, such problems can be handled better.

Table: 3.9
Workload on Teachers: Summary

S. N.	Tasks	Single teachers		Two teachers	
		Present scenario	Proposed scenario	Present scenario	Proposed scenario
1.	Core education activities	57%	92%	74%	92%
2.	Administration, meeting, etc.	22%	8%	15%	8%
3.	Others (travel, etc.)	4%	0%	4%	0%
4.	Time not devoted for work / absenteeism	17%	0%	7%	0%

Source: Based on workload analysis

3.4.1 Proposed Work Analysis

The proposed workload analysis reflects that more time will be devoted to core education activities (see Table 3.9). Due to improved infrastructure, teaching-aids processes, MIS and use of ICT, there will be considerable improvement in the quality of primary education.

Higher time for core education activities is likely to be due to improved working conditions, improved teaching-aids in future and use of ICT, and less time on administrative work (due to streamlining of the processes). Absenteeism will be checked through better monitoring and use of IT. Also the time on administrative and record maintenance work will be reduced as indicated by Table 3.9.

3.4.2 Cost-Benefit Analysis

An attempt is made to make cost-benefit analysis for present and future scenarios. The salient findings are listed below. Due to increased capacity and number of school and better infrastructure and quality education, about 100% of the children will go to Govt. schools:

Following assumptions have been made to work out the cost (proposed system):

- a. Block has a population: 190253
- b. Its population of primary school children is approx. 17326.
- c. Schools are two categories
 - Special schools
 - Normal schools
- d. It should have two special school per gram panchayat and seven normal school i.e. a total of 100 normal schools + 150 special schools (to meet the remote areas requirement)

- e. A special schools (to meet the remote areas requirement) (Category A : 100 Children)should have:
 - 3 classrooms
 - 1 library
 - 1 staff room
 - 1 kitchen cum store
 - 1 lavatory
 - 2 urinals
 - 1 water pump
- f. A normal school (Category B: 200 Children) should have:
 - 5 class rooms
 - 1 library
 - 1 office / Staff room
 - 1 lavatory
 - 3 urinals
 - 1 kitchen
 - 1 storeroom
 - 1 water pump
- g. There is one HM per school
- h. 1 teacher for 40 students
- i. 1 classroom for 40 students
- j. There are seven sectors for monitoring purpose
- k. One block level control office
- l. It is also assumed that the school shall be built on public land requiring no capital expenditure under this head.

The cost has been divided in to two heads:

- Capital cost – Something that is required to create new infrastructure or upgrade the existing one.
- Running cost – All the recurring costs that have been annualized. These include not limited to:
 - Salaries
 - Maintenance of infrastructure
 - Inputs like incentives, MDM
 - Cost of books, stationery, logistics, chalks, etc.
 - Electricity, water, telephone, fuel etc.

The teacher training for capacity / capability building / training would involve the following.

- Each teacher to undergo at least two week training per year
- Cost of training a teacher is Rs. 200 per day of training.

Note: Up to 40% of the envisaged facilities are already available

Note: list of teaching aids for both category are given below

List of teaching-aids

- Models
- Charts and pictures
- Maps and globe
- Library books, dictionaries and encyclopedia
- Newspaper clippings
- Tape – recorder
- Number rod & geometrical instruments
- Letter plates for single letters
- The Science lab
- Computers
- Overhead projectors
- Demonstrator
- Ready made geometrical models
- Slide projector
- Models, relief features of volcano, earthquake etc. for geography
- Pictures of Tibetan kings, courts, maps of Tibet
- Pictures of endangered species of Tibet, e.g. Drong, wild boar etc.
- Wood slate and bamboo pen.
- Proper science apparatus
- Revelation- device for improving spelling
- Creating teaching aids using raw materials like books, paper, wood etc.
- Using plants and surroundings (to make teaching aids)
- Using mud and flowers
- Pin-hole camera
- Flash cards
- Activity cards
- Paper models
- Specimens

The details of calculations are shown in Tables from 3.10 to 3.21 and Annexure 3.3. The calculations are also made for savings it shows that there would be savings of Rs. 46 per capita per year and the aggregate value of savings would be Rs. 92 lakhs per year (see Table 3.21).

Table: 3.10
Capital cost

S. N.	Items	Category A			Category B			Grand Total	Actual required
		Cost (in Rs.)	Nos.	Total (in Rs.)	Cost (in Rs.)	Nos.	Total (in Rs.)		
1	Infrastructure – Cat. A	8,22,500	125	102812500	-	-	-	102812500	- 40% of infrastructure available. - 60% to be provided further
2	Infrastructure – Cat. B	-	-	-	11,40,000	100	11,40,00,000	114000000	
3	Infrastructure for Block Office	575000	1	575000	Common for all			4,25,000	
4	Infrastructure for Sector office	250000	7	1750000	Common for all			5,25,000	
5	IT (Computer)	75,000	125	9375000	1,50,000	100	1,50,00,000	24375000	
6	Cost for Logistics Cat. A	127000	125	15875000	-	-	-	15875000	
7	Cost for Logistics Cat. B	-	-	-	1,77,000	100	1,77,00,000	17700000	
8	Equipment & Logistics (Block)	660000	1	660000	Common for all			5,10,000	
9	Equipment & Logistics (Sector)	160000	7	1120000	Common for all			12,25,000	
10	Residential quarters	-	-	-	-	-	-	0	
11	Training hall	2,00,000	2	400000	-	-	-	400000	
12	Grant Total	-	-	132567500	-	-	-	279267500	

Cat. A: Category A. Cat. B: Category B

Table: 3.11
Recurring cost – Yearly

S. N.	Items	Category A			Category B			Grand Total	%age
		Cost (in Rs.)	Nos.	Total (in Rs.)	Cost (in Rs.)	Nos.	Total (in Rs.)		
1	Manpower School – Cat A	498,000	125	62250000	-	-	-	62250000	38.15
2	Manpower School – Cat B	-	-	-	816000	100	81600000	81600000	50.00
3	Manpower – Block office **	12,12,000	1	12,12,000	-	-	-	1212000	0.74
4	Manpower – Sector**	5,64,000	7*	39,48,000	-	-	-	3948000	2.42
5	Maintenance (school)	5,000	125+100	11,25,000	-	-	-	1125000	0.69
6	Scholarship for 26,000 children (12.5% of population):	-	-	-	-	-	-	930550.5	0.57
7	Textbooks expenditure for 26,000 children (12.5% of population):	-	-	-	-	-	-	4718385	2.89
8	FOL (jeep) (Block)	1,20,000	1	1,20,000	-	-	-	120000	0.07
9	FOL (motorcycle) (Sector)	12,000	7	84,000	-	-	-	84000	0.05
10	Others (contingency)	24,000	300	72,00,000	-	-	-	7200000	4.41
11	Grant Total	-	-	75939000	-	-	-	163187935.5	100.00

* 7 Sectors

** see Tables: 3.19 & 3.20

Table: 3.12
Block level (Manpower)

S.N.	Items	Cost (in Rs.) per month	Nos.	Total expenditure (in a school) (in Rs.) per year
1.	BEEO	15,000	1	1,80,000
2.	Sr. Supervisor: Curriculum*	12,000	1	1,44,000
3.	Education officer (EO)– Quality: Monitoring and Control	12,000	2	2,88,000
4.	Sr. Supervisor (training)	12,000	2	2,88,000
5.	Education investigator	7,000	2	1,68,000
6.	Clerk	6,000	2	1,44,000
7.	Total			12,12,000

Design of curriculum

Table: 3.13
Sector Level (Manpower)

S.N.	Items	Cost (in Rs.) per month	Nos.	Total expenditure (in a school) (in Rs.)
1.	Supervisor – Curriculum*	10,000	1	1,20,000
2.	Junior Education officer (JEO) – Quality: Monitoring and Control	10,000	1	1,20,000
3.	Supervisor (training**)	10,000	1	1,20,000
4.	Education investigator	7,000	1	84,000
5.	Clerk	6,000	1	72,000
6.	Attendant cum sweeper	4,000	1	48,000
7.	Total			5,64,000

*Design of curriculum / teaching-aids / models / charts

** Training schedule (one day / month (on behavioural skills (how to pop-up with children), 3 days / 6 months (on behavioural skills+ teaching skills), 5 days / year (on behavioural skills+ teaching skills)

Table: 3.14
Cost for School Infrastructure

S.N.	Items	Category A			Category B			Grand Total
		Cost (in Rs.)	Nos.	Total expenditure (in a school) (in Rs.)	Cost (in Rs.)	Nos.	Total expenditure (in a school) (in Rs.)	
1	Classrooms	75,000	5	3,75,000	75,000	7	5,25,000	9,00,000
2	Library	1,00,000	1	1,00,000	1,50,000	1	1,50,000	2,50,000
3	Open space	-	1	-	-	1	-	-
4	Play ground (supports facility)	75,000	1	75,000	1,00,000	1	1,00,000	1,75,000
5	Kitchen + storage	1,00,000	1	1,00,000	1,50,000	1	1,50,000	2,50,000
6	Utensils (for cooking)	10,000	1	10,000	20,000	1	20,000	30,000
7	Utensils (for serving)	100	125	12,500	100	200	20,000	32,500
8	Toilets	25,000	2	50,000	25,000	3	75,000	1,25,000
9	Rain water conservation	50,000	1	50,000	50,000	1	50,000	1,00,000
10	Drinking water (Water purifier and cooler)	50,000	1	50,000	50,000	1	50,000	1,00,000
11	Total			8,22,500	-	-	11,40,000	19,62,500

Table: 3.15
Cost for Logistics for School

S.N.	Items	Category A			Category B			Grand Total
		Cost (in Rs.)	Nos	Total expenditure (in a school) (in Rs.)	Cost (in Rs.)	Nos	Total expenditure (in a school) (in Rs.)	
1	Teaching-aids	50,000	1	50,000	50,000	1	50,000	1,00,000
2	Drinking water	30,000	1	30,000	50,000	1	50,000	80,000
3	Almirah	5,000	2	10,000	5,000	5	25,000	35,000
4	Rack	1,000	35	35,000	1,000	50	50,000	85,000
5	Bi-cycle	2,000	1	2,000	2,000	1	2,000	4,000
6	Total			1,27,000			1,77,000	3,04,000

Table: 3.16
Infrastructure for Block and Sector Officers

S.N.	Items	Block Office			Sector Officers			Grand Total
		Cost (in Rs.)	Nos	Total expenditure (in Rs.)	Cost (in Rs.)	Nos	Total expenditure (in Rs.)	
1	Classrooms	75,000	3	2,25,000	75,000	1	75,000	3,00,000
2	Toilets	25,000	2	50,000	-	-	-	50,000
3	Drinking water	50,000	1	50,000	-	-	-	50,000
4	Record room	50,000	1	50,000	-	-	-	50,000
5	Store	50,000	1	50,000	-	-	-	50,000
6	Computer room	1,50,000	1	1,50,000	75,000	1	75,000	2,25,000
7	Training hall	-	-	-	100000	1	1,00,000	1,00,000
8	Total			5,75,000			2,50,000	8,25,000

Table: 3.17
Equipments and logistics

S.N.	Items	Block Level			Sector level			Grand Total
		Cost (in Rs.)	Nos	Total expenditure (in Rs.)	Cost (in Rs.)	Nos	Total expenditure (in Rs.)	
1	Almirah	5,000	10	50,000	5,000	2	10,000	60,000
2	Computer	1,50,000	1	1,50,000	1,00,000	1	1,00,000	2,50,000
3	Racks	1,000	10	10,000	1,000	10	10,000	20,000
4	Jeep	4,50,000	1	4,50,000	-	-	-	4,50,000
5	Moter cycle	-	-	-	40,000	1	40,000	40,000
6	Total			6,60,000			1,60,000	8,20,000

Table: 3.18
Manpower School Cat A yearly and Manpower School Cat B

S.N.	Items	Manpower School Cat A yearly			Manpower School Cat B			Grand Total	Remarks
		Cost (in Rs.) per month	Nos	Total expenditure (in a school) (in Rs.) per year	Cost (in Rs.) per month	Nos	Total expenditure (in a school) (in Rs.) per year		
1	Headmaster	12000	1	144000	12000	1	144000	288000	
2	Teacher	7000	4	336000	7000	5	420000	756000	One teacher also handle art, craft and supports activity
3	Special teacher (Art, craft and supports)	-	-	-	8000	1	96000	96000	-
4	Attendant cum Sweeper cum gardener	-	-	-	4000	1	48000	48000	-
5	Cook	1500	1	18000	1500	1	18000	36000	-
6	Attendant	-	-	-	4000	1	48000	48000	-
7	Sweeper cum gardener	-	-	-	2500	1	30000	30000	-
8	Clerk	-	-	-	1000	1	12000	12000	-
9	Total	-	-	498000			816000	1314000	-

Table: 3.19
Total Expenses by citizen – Summary

S. N.	Scenarios	Expenses in Govt. School (Rs.)	Expenses in Private Schools (Rs.)	Total (Rs.)
1	Present	7150200	17006850	24157050
2	Proposed	8556450	6548400	15104850

Source: Based on Table 3.1.6 in Annexure 3.1

Table: 3.20
Per Capita Total Education Expenses – Summary

S. N.	Scenarios	Expenses in Govt. School (Rs.)	Expenses in Private Schools (Rs.)	Total (Rs.)
1	Present	37.01	88.01	125.00
2	Proposed	44.28	33.89	78.17

Source: Based on Table 3.1.6 in Annexure 3.1

Note: Population of Chaksu Block: 190253

Table: 3.21
Summary of Expenditure (all Education expenses) and Savings by all Citizens in a Block in a Year

S.N.	Items	Value
1.	Expenditure Present Scenarios	2.42 (Rs. in cr.)
2.	Expenditure Proposed	1.51 (Rs. in cr.)
3.	Savings	0.92 (Rs. in cr.)
4.	Savings per capita	46.83 (In Rs.)

Source: Based on Tables

Note: Population of Chaksu Block: 190253

IT Framework for a Block Education System

Based on the requirement of monitoring of schools, use of ICT in teaching and record maintenance, IT framework is suggested (see Table 3.22). The connectivity will be provided through dial-up / GPRS mode.

It is expected that it will provide sound MIS for monitoring, planning and Implementation Schools / DPEP / Srave Shiksha Abhyan Programmes. The usage of ICT is likely to impact in many ways as identified by Table 3.23.

Table: 3.22
Education ICT framework Salient Features

S. N.	Items	Features	Remarks
1.	Online data collection	- Students strength - Dropout cases - Literacy rate - Current status of books	- Each school-wise, with name address and family records of students
2.	Reports for district and state hospital	- Weekly fortnightly, monthly, quarterly, half-yearly, yearly	-
3.	Online monitoring	- Monitoring of education - Monitoring of MDM - Monitoring of attendance - Monitoring of fund utilization	-
4.	Online dissemination of information and programme	- Admission - Events - Progress report	-

S. N.	Items	Features	Remarks
5.	Miscellanies	- Online attendance (using fingerprints and digital signature) - Position of MDM stock - Complaints inquiry	- School-wise

Source: Own analysis

Table 3.23

Likely Impact of ICTs on Education System

S. N.	Service	Inputs	Outputs	Impacts
1.	Teaching	- Computer, projector, multimedia kit, etc.	- Conceptual knowledge - Helpful in handling the school for single teacher -	- Quality in education
2.	e-Learning	- Internet, Computer, projector, multimedia kit, etc.	- Helpful in handling the advance topic, online broadcasting of special lecture, seminars, debates, etc.	- Quality in learning
3.	e-Monitoring	- Web camera, online attendance machine, intranet connectivity, Computer, etc.	- Helpful in monitoring	Effective monitoring
4.	Report preparation	- Database, analytical tools, Computer, etc.	Online report MIS	- Able to transparent and ready information
5.	Miscellaneous	- Smart card punching machine with biometrics - Connectivity	- Online attendance - Online communication -	-
6.	Computer Education	- Internet, computer, projector, multimedia kit, etc.	- Learn about the computer and operating system	-
7.	Education through computer	- Subject specific software, Internet, computer, projector, multimedia kit, etc.	- Easy to interpret - Visualization of subject matter	-
8.	Computer games	- Game machine	- Mind exercise	
9.	Video displaying	- TV / Projector, DTH set	- Education through computer	-
10.	Performance analysis	- Appraisal software		-

Source: Own analysis

Matrix of Success

The matrices of success are shown by Tables 3.24 and 3.25 for the following:

- **Matrix of Success – For Major Services**
- **Matrix of Success – System Inputs**

3.5 Education standards

Standards are essential for 'a means of describing the level of quality that schools are expected to meet or to aspire to. The performance of education system can be assessed against this level of quality.'

For developing quality education system and keeping in view the quality dimensions as mentioned in the beginning of this chapter, the standards are classified in two categories as indicated below.

▶ *Category 1: Standards for Service Quality Standards.*

Service quality standards are prepared for the following quality dimensions

- Availability
- Cost
- Time
- Access
- Convenience
- Behaviour
- Responsiveness
- Reliability
- Transparency
- etc.*

▶ *Category 2 Standards for Education System Design*

For the following quality dimensions:

- Accountability
- Cleanliness
- Citizen duty
- Panchayat duty
- Position of manpower
- Provisioning of logistics
- Provisioning of teaching aids and other support
- Provisioning of equipments
- Documentations
- Type of services
- Condition of infrastructure
- etc*

The details are represented in Annexures 3.1 and 3.2

Critical standards for Comprehensive Primary Education System

- **Vital Quality Parameters**
 - Easy access
 - Equity
 - Friendly environment in schools
 - Quality infrastructure
 - Quality teaching

- **Quantitative**
 - One room for 40 students
 - One teacher for 40 students
 - One primary school for 150-200 students (within 1km)
 - One headmaster for each school
 - One instructor for extra-curricular activities
 - Facilities
 - Toilets : 2
 - Girls toilet: 1
 - Drinking water: 1 tank / hand pump
 - Electricity provisioning
 - Fans
 - Lighting arrangement in classrooms
 - Desks, chairs, tables
 - Blackboards
 - Teaching-aids provisioning
 - Scholarship: for SCs, STs, OBCs, girls, other poor (extra scholarship for children carrying from remote villages, more than 2 km)
 - Textbooks : for SCs, STs, OBCs, girls, other poor
 - Training : Training schedule [one day / month (on behavioural skills (how to pop-up with children), 3 days / 6 months (on behavioural skills+ teaching skills), 5 days / year (on behavioural skills+ teaching skills)]
 - MDM: Rs. 5 per student per day [extra MDM (Rs. 2 per child per day) in the morning for children carry from remote areas, about 5% children)
 - Extra-curricular activities: Sports, cultural activities

- **Qualitative**
 - Internal environment : regular cleaning
 - External environment : regular cleaning and gardening
 - Quality management : establishing good quality system
 - Working conditions: improving facilities and teaching environment for teachers
 - Transparency & monitoring
 - Use of ICT
 - Accountability
 - Use of ICT
 - Feedback
 - Monitoring by panchayat and community
 - Teachers: hiring more female teachers
 - Teachers' training: Focus on behavioural skills to make teaching joyful.
 - Curriculum: 20% content as per locally relevant requirement.

- **Output**
 - Dropout rate (in a year) : <0.1%
 - Retention rate (for 5 years) : >99.90%
 - Coefficient of efficiency : >.99%
 - Achieving literacy : 99.99%
(age group of 10-15 years) in the next 5 years

Figure: 3.6

Components of Quality System (QS) for Quality Assurance (QA)

- Support Environment**
 - Policy
 - Leadership
 - Core values
 - Planning and strategy
 - Resources
- Delivery Structure**
 - Sound systems for delivery of services
 - Team building
 - Roles and responsibility
 - Grievance mechanism
 - Transparency and accountability
- Process and Management of Services**
 - Administrative processes
 - Technical processes
- Enabling Functions**
 - Training (building capabilities)
 - Empowerment and incentives
 - Control system (MIS)

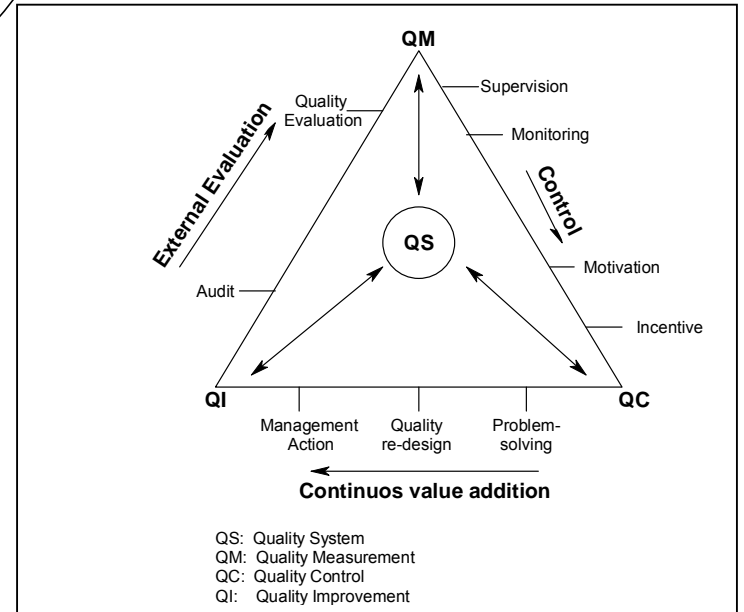
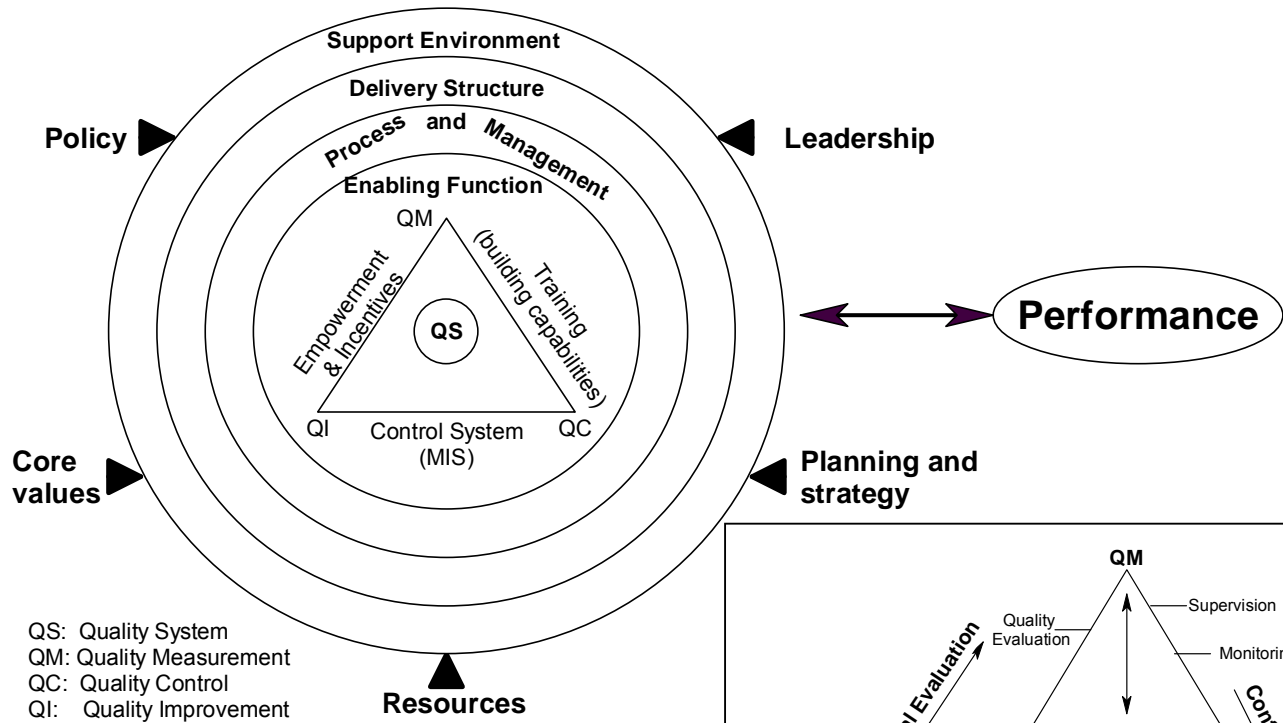


Table: 3.24

Matrix of Success – For Major Services

S. N.	Major services	Critical factors*	Key inputs required	Remarks
1.	Teaching	<ul style="list-style-type: none"> - Access to school for teachers and students - Number of teachers - Teaching-aids - Training to teachers - Design of curriculum 	<ul style="list-style-type: none"> Schools near to villages Residential quarters at village level Adequate number of teachers Adequate teaching-aids In service training / refresher courses A research wing to be developed at state level for curriculum design as per local needs Pilot testing for new initiatives 	See Tables from 3.10 to 3.21 and Annexure 3.3
2.	Admission	<ul style="list-style-type: none"> - Awareness 	<ul style="list-style-type: none"> Door-to-door campaigning Tracking of dropout children Easy admission procedure Incentives (scholarship) for special deprived group 	
3.	Mid-day meal	<ul style="list-style-type: none"> - Kitchen - Food items - Cook - Cleanliness 	<ul style="list-style-type: none"> Adequate kitchen facility Adequate utensils Training to cook Proper quality of foodgrains 	
4.	Free books distribution / availability of books	<ul style="list-style-type: none"> - Timely availability 	<ul style="list-style-type: none"> Timely delivery of books at school level Book bank facility Library facility 	
5.	Scholarship	<ul style="list-style-type: none"> - Timely availability - Adequate amount 	<ul style="list-style-type: none"> Timely transfer of money by government Proper record maintenance 	

* Based on process study

Table: 3.25
Matrix of Success – System Inputs

S.N.	Items	Critical factors	Key inputs required	Remarks
1.	Infrastructure	<ul style="list-style-type: none"> - Access - Reliability 	<ul style="list-style-type: none"> - School building near to village - Requisite number of classrooms (one classroom for one class) - Residential quarters at village level - Adequate building as per suggested standards 	See Tables from 3.10 to 3.21 and Annexure 3.3
2.	Manpower	<ul style="list-style-type: none"> - Recruitment - Training - Workload 	<ul style="list-style-type: none"> - Transparency in recruitment - Adequate teachers as per suggested standards (one teacher for one class) - In-service training - Performance assessment - Workload assessment 	
3.	Working conditions	<ul style="list-style-type: none"> - Facilities - Environment - Residence 	<ul style="list-style-type: none"> - School building and teachers' residence at village level as per suggested standards - Clean environment inside and outside of a school - Electricity connection - Safe drinking water and toilet facilities at school level 	
4.	Logistics	<ul style="list-style-type: none"> - Jeep - Two wheelers - Transportation allowance for book transportation 	<ul style="list-style-type: none"> - One jeep for field inspection for BEEO - One motorcycle / scooter to be provided for supervisor 	
5.	Teaching-aids	Availability of teaching-aids	<ul style="list-style-type: none"> - Supply of teaching-aids in adequate quantity - Adequate contingency for schools - Proper maintenance and up-keep 	
6.	Transparency and Accountability	<ul style="list-style-type: none"> - MIS - Mechanism 	<ul style="list-style-type: none"> - Adequate MIS to be provided - Centralized database for record maintenance 	
7.	Quality management	<ul style="list-style-type: none"> - Quality control - Quality assurance 	<ul style="list-style-type: none"> - Special quality team to be provided at block and sector levels - Quality audit team 	

**Table: 3.26
Comprehensive Matrix for Improving Quality in Primary Education System**

S. N.	Education services	System			System analysis and design features			
		Inputs	Processes		Likely outcomes	Key problem areas	Key improvements required	Key policy inputs
			Technical	Administrative				
1.	Teaching	<ul style="list-style-type: none"> • Infrastructure <ul style="list-style-type: none"> - School building - Water tank - Water treatment plant / aquaguard • Basic facilities <ul style="list-style-type: none"> - Safe drinking water - Toilets - Electricity - Headmaster - Teachers - Support staff - Teaching-aids - Logistics support - Computers - Library 	<ul style="list-style-type: none"> - Core teaching activity - Question-answer session - Use of teaching-aids - Examination 	<ul style="list-style-type: none"> - Discipline - Copy / homework checking - Prayer - Evaluation of exam.papers 	<ul style="list-style-type: none"> - Knowledge gain - Disciplined behaviour 	<ul style="list-style-type: none"> - Lack of teachers - Lack of classrooms - Lack of basic facilities in rural areas - Teaching is not enjoyable - Lack of discipline - Lack of interest of teachers - An environment of fear amongst students - Dull ambience in classrooms - Teachers stay in towns - No mode of transportation available for teachers - Communication gap between teachers and students - Teachers are not dedicated enough to teach properly - Low awareness amongst citizens - Teachers not enthusiastic - Parents' poor perception about the school 	<ul style="list-style-type: none"> - Teachers to be posted according to students strength - Teachers training to be focused on with teaching-aids - Teachers appraisal system by parents, panchayat and students - Use of audio-visual technology - Residential quarters to be provided - Teachers should stay at HQs - Prizes to be provided for good performance - Awareness programme for admission and sensitising about the need for education - Mainstreaming discussion on education in village meetings / gram sabhas 	<p>System approach</p> <ul style="list-style-type: none"> • Necessary provisions required for: <ul style="list-style-type: none"> - Number of teachers (one teacher for one class) - Training - Number of classrooms (one classroom for one class) - Teaching-aids - Extra-curricular activities - Proper facilities (drinking water, toilets, library, electricity) - Good internal and external environment - Free text books - Scholarship (see Tables 3.10 to 3.21 and Annexure 3.3) • Quality control and assurance system
2.	Admission	<ul style="list-style-type: none"> - Pamphlets - Admission form - Computer - Database 	<ul style="list-style-type: none"> - Admission 	<ul style="list-style-type: none"> - Campaigning - Advertisement - Form filling - Record maintenance 	<ul style="list-style-type: none"> - 100 % enrolment 	<ul style="list-style-type: none"> - Lack of interest of teachers - An environment of fear amongst students - No mode of transportation available for students (in some cases) - Communication gap between teachers and parents - Teachers are not dedicated enough to teach properly - Low awareness amongst citizens - Teachers not enthusiastic - Parents' poor perception about the school 	<ul style="list-style-type: none"> - Infrastructure development (for classrooms and facilities) - Teachers to be posted according to students strength - Awareness programme for admission to be organised - Involvement of panchayats and NGOs 	

S. N.	Education services	System				System analysis and design features		
		Inputs	Processes		Likely outcomes	Key problem areas	Key improvements required	Key policy inputs
			Technical	Administrative				
3.	Mid day meal	<ul style="list-style-type: none"> - Cook - Utensils for cooking - Utensils for serving 	<ul style="list-style-type: none"> - MDM cooking - MDM serving 		<ul style="list-style-type: none"> - Good food 	<ul style="list-style-type: none"> - Improper cleaning and hygiene - Food quantity not as per the requirement - Distribution not as per quantity - Food not properly cooked. - Food not as per the desired quality - Loss in transportation - Incorrect amount of food issued. 	<ul style="list-style-type: none"> - Proper storage and kitchen facility to be provided - Resources (soap, racks, etc.) to be provided - Weighing machine to be provided to schools - Utensils to be provided - Sealed bags of food to be provided - Water supply 	
4.	Free books distribution	<ul style="list-style-type: none"> - Books - Record maintenance 	<ul style="list-style-type: none"> - Distribution of books 	<ul style="list-style-type: none"> - Record maintenance - Handover the books to students - Stock keeping 	<ul style="list-style-type: none"> - Availability of books to students 	<ul style="list-style-type: none"> - Books are not available in time - Transportation allowance not available to transport books from Block HQs to school - Records are not kept properly - Incorrect calculation of books required. - Loss in transit - Incorrect books issued. - Printing is not OK 	<ul style="list-style-type: none"> - Timely supply of books - Transportation facility to be provided - Proper storage facility of books 	

Source: Own analysis

Standards for Services Quality

S. N.	Quality dimension	Indicators	Standards	Present status	Adequacy of standards
1.	Cost	Fee structure of students	No fees is charged from primary school students. However certain schools charge minimum fees as a part of Vikas fund or other funds. This fees helps in the development of the school.	Followed	For BPL education should be free and for APL it may be chargeable (but voluntary)
		Cost of MDM to child	Zero	Followed	
		Cost of books to children	Free of cost to BPL, SCs and STs	Followed	Free books to student
					Class 1 Rs. 200
					Class 2 Rs. 250
			Class 3 Rs. 300		
			Class 4 Rs. 350		
			Class 5 Rs. 400		
	Scholarship	No scholarship		Scholarship to SC/ST, girls, other poor students	
				Class 1 Rs. 30	
				Class 2 Rs. 40	
				Class 3 Rs. 50	
				Class 4 Rs. 60	
				Class 5 Rs. 70	
2.	Time	Teaching hours in a day	<ul style="list-style-type: none"> - 7:00am to 12:00pm in summers where each class is for 30 minutes. This also includes 30 minutes break and 30 minutes prayer. - Total timings: 240 (30*8) +60 mins. = 300 mins - In winters, timings are 10:30 to 4:30. First six classes are of 40 minutes each and last two classes are of 30 minutes each. This also includes 30 minute break and 30 minute prayer. - Total timings are 240 (40*6)+60(30*2)+60 mins. = 360 mins 	<ul style="list-style-type: none"> - Partially followed, since some teachers come late and leave early. - Problem are also faced due to teacher absenteeism 	- Punctuality needs to be followed
		At what time the food is to be provided	There is a fixed lunch time in every school between 1:30 - 2:10 pm. Food is served between this time period to a every child	Followed	- To be followed
		When should the books be distributed	In first week of July on the occasion of <i>Pravesh Samaroh</i>	Followed	- To be followed
3.	Convenience	Time of collection the books	Books should reach the nodal school between 20 th may to 30 th June. Thereafter the books can be collected at any time	Followed (Sometimes it becomes late)	- To be followed
		Admission	Procedure for taking admissions (shown in flow chart)	Refer flowchart	- To be followed
4.	Taste of MDM	Prescribed list of menus for MDM	Alternative food: <ol style="list-style-type: none"> 1. Roti-Sabji 2. Roti-dal 3. Dal-bati 4. Fruits 5. Milk 6. Biscuits 7. Dal-chawal 	It is followed	<ul style="list-style-type: none"> - It is desirable that local Panchyat is involved in deciding the menu - Rs 5 per child per day to be provided for nutritious food (Presently Rs. 2 per child per day)
5.	Behaviour	Teacher-child relationship	Under the SSA program a whole chapter 9 (No. 10) of in module on quality dimensions of elementary education under SSA		
		Teacher-Teacher relationship			

S. N.	Quality dimension	Indicators	Standards	Present status	Adequacy of standards
		Teacher-Administrator relationship			
		Sensitive treatment of children from special focus group (SFGs)			
6.	Responsiveness	Participation of the Community in the School activities			
		Facilities Available for teachers			
		System testing of MDM by teachers	Not defined		
7.	Conformance to set standards	Panchayat responsibility	Overall responsibility of providing quality MDM to child	The school was not aware about the existence of this documented. It is not being followed entirely	Copy of Shikshakarm should be in school i
		Facilities that a school must possess	A school must consist of i) A School building (one classroom for one class) ii) 2 toilets separate, one for boys and the other for girls iii) 1 Tank for water iv) 1 drinking water facility v) 1 school Vatika vi) 1 playground vii) A ramp for handicapped students	Followed Partially followed Partially followed Partially followed Partially followed Partially followed	- To be followed
		Number of classrooms	40 students: 1 room (one room for one class)	Partially followed	- To be followed
		Number of toilets	Every school should have at least 2 toilet units , one each for boys and other for girls. One unit consists of one lavatory and at least two urinals. Based on the requirement, the number of urinals /units can be increased in the following manner: i) Upto 100 girls/boys-one unit (1 lavatory and 2 urinals ii) Upto 150 girls/boys-one unit (1 lavatory and 3 urinals iii) Upto 200 girls/boys-one unit (1 lavatory and 4 urinals	Partially followed	- To be followed
		Size of the toilet	4ft. X 4ft. is the minimum size.	Not followed	- To be followed
		Facilities in the toilet	Toilet complex must consist of urinal, lavatory, junction chamber, water tank, hand washing for instance, drainage system for urine and pit.	Not followed	- To be followed
		Extra curricular activities	These are held from July-November. - Every Saturday "Bal Sabha" - In September, games - At the GP level and State level - In November cultural and sports meet	Partially followed	- To be followed
		Availability of facilities for playing	A school should consist of a playground consisting of 2 slides, 1 see-saw and 1 marri-go-round.	Not followed	- To be followed

S. N.	Quality dimension	Indicators	Standards	Present status	Adequacy of standards																								
		Facilities available in each classroom	<ul style="list-style-type: none"> - Each classroom should be of the area of 320 sq. ft. Built in area for each child should be 8 sq. ft. - Every classroom must consist of the following <ul style="list-style-type: none"> i. 2 Black boards (one in front and one at the back) ii. Windows should be 60 cms above the ground iii. The wall till 60 cms above the ground must consist of boards consisting of pictorial figures to enhance the ability of children. iv. Provision for hanging charts , maps and calender in every classroom v. The floor should be clean and must consist of kota stone preferably 	Only partially being followed																									
		Seating place for students	Dari pattis are available which act as the seating space for children	Insufficient	- To be followed																								
		Drinking water facility	Drinking water is to be provided through a water connection. If it not available, then a hand pump is required to be provided.	Followed (a pump has been provided)	- To be followed																								
		Availability of septic tank.	It is available		-																								
		Scale of pumps	One hand pump has to be provided for drinking water in every school through PHED.	Followed	- To be followed																								
		Water testing facility	No standard exists for testing the quality of drinking water. However a certificate is issued from PHED indicating that the quality of water is fit for the purpose of drinking.	Not followed	- To be followed																								
		Course content	Shikshakaram indicating what the teachers have to teach is provided by the Education Department for every class separately	Partially followed	- To be followed																								
		Promotion criteria for students	All students are promoted to higher classes. If the attendance is low, then the student is denied	Not followed	- To be followed																								
		Attendance criteria required	For 1 st and 2 nd Standard: 50 % attendance is required. For 3 rd to 5 th Standard: Minimum 60% attendance is required These criteria can however be relaxed upto 10%. A student is allowed to give examination only if these criteria are fulfilled.	Followed	- To be followed																								
		Norms for the number of weeks to be devoted to teaching and subject wise allocation	<ul style="list-style-type: none"> - 10 months is considered as the total tenure of a year. Including all the holidays in one tenure, the total numbers of working days are 242. - Week-wise allocation of classes <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Subject</th> <th>Number of periods for 1st, 2nd standard</th> <th>Number of periods for 3rd, 5th standard</th> </tr> </thead> <tbody> <tr> <td>Hindi</td> <td>12</td> <td>12</td> </tr> <tr> <td>Maths</td> <td>12</td> <td>9</td> </tr> <tr> <td>English</td> <td>0</td> <td>6</td> </tr> <tr> <td>Environment science</td> <td>6</td> <td>9</td> </tr> <tr> <td>Art</td> <td>3</td> <td>4</td> </tr> <tr> <td>Health & Physical Education</td> <td>6</td> <td>4</td> </tr> <tr> <td>Work Experience</td> <td>3</td> <td>4</td> </tr> </tbody> </table>	Subject	Number of periods for 1 st , 2 nd standard	Number of periods for 3 rd , 5 th standard	Hindi	12	12	Maths	12	9	English	0	6	Environment science	6	9	Art	3	4	Health & Physical Education	6	4	Work Experience	3	4	Partially followed	- To be followed
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Environment science	6	9																											
Art	3	4																											
Health & Physical Education	6	4																											
Work Experience	3	4																											

S. N.	Quality dimension	Indicators	Standards	Present status	Adequacy of standards
8.	Reliability	Number of days school open in a year	242	This is followed to extents practical. There are many occasion when school closed down due to decision of the state Govt.	- To be followed
		Teacher student ratios	1:40	1:40 to 50	1:40
9.	Transparency	Norms for the frequency, scope and responsibility for inspection /audit of school		Followed	
10.	Cleanliness	Frequency of white washing of the schools	<ul style="list-style-type: none"> - As per the norms laid down by DPEP, white washing had to be done at least once in an year. A sum of Rs. 5000 is given by DPEP every year to SDMC (School Development & Management committee) for the purpose of maintenance of each school. There is a SDMC for every school and it possesses a separate bank account. At every block , junior Engineer i.e. BRCF (Block Resource Centre Facilitator) monitors it. 	Not followed	- To be followed
		Number of other support staff (Sweeper)	<ul style="list-style-type: none"> - No sweeper or other staff is sanctioned apart from the teachers and the cook. 	None	There is a need to sanction at least one multi purpose office staff (MPOS) to look ater there logistic arrangements. It was found that in the absence of such a staff member, students were made to do such chores
			<ul style="list-style-type: none"> - Inside and outside cleanless 	Not done	- To be followed every day
11.	Capacity	Capacity of the school i.e. number of students that a school should consist of.	There are no as such norms laid down for the number of students a school should consist of. However the school should be built for every population of 250 people consisting of 40 boys and girls.	Followed	
		Number of schools per unit of population	The school should be built for every population of 250 people consisting of 40 boys and girls.	Followed	

Standards for System Design

S. N.	Quality Dimension	indicators	Standards	Present status*	Adequacy of standards
1.	Cost	Availability of Funds for infrastructure	- For boundary walls: Rs. 40,000	Not followed	- To be followed
			- Kitchen shed: Rs. 25,000	Not followed	Adequate
			- For school maintenance: Rs. 5,000	Followed	Adequate
			- SFG (Bal Mela): Rs 2,000	Not followed	Adequate
			- Samudayik Gatishilta (Bal Sabha, Antakshri, Rangoli, etc.): Rs 5000	Not followed	Adequate
			- Kala Jatha: Rs 200	Not followed	Adequate
			- Awareness building in women: Rs 200	Not followed	Adequate
		Teaching-aids	- A sum of Rs. 500 is provided for teaching aids every year	Followed	Desirable to give Rs. 10,000 per school per year
		Utensils provided for cooking of food	Utensils for the cooking of food have to be provided by the <i>Sarv Shiksha Abhiyan (SSA)</i> .	Rs. 2000 per annum	Adequate
		Fuel to be provided	Fuel for the cooking of food	Not followed (Using traditional fuel)	For environmental protection it is desirable that LPG be made available for cooking
Standard for the availability of raw materials (Vegetables, fuel etc.)	Rs. 1.50 is allocated per child per day	Followed (but not satisfaction) Desirable this amount is increased to at least Rs 2/- per day.	- Not adequate - Rs. 5 Per child per day required		
	Norms for discretionary funds that are allocated for this service	Rs. 1.50 is allocated per child per day. This includes all the other ingredients used for cooking and the salary of the cook. Apart from this Rs. 2000 are given for utensils Also a sum of Rs. 5 per kilogram of wheat can be provided if the local help committee promises to make more delicious food, which is also of high quality.	Followed	- Not adequate - Desirable this amount is increased to at least Rs 5/- per day.	
	Availability of burner	Burner for the cooking of food	Not followed (Using traditional fuel)	- To be provided	
Fee structure of students	No fee is charged from primary school students. However certain schools charge minimum fees as a part of Vikas fund or other funds. This fees helps in the development of the school.	Followed	For BPL education should be free and for APL it should be chargeable		
2.	Convenience	Maximum distance of school from a child's residence	There has to be 1 primary school at the radius of 1km from villages.	Followed	- To be followed

* Based on a survey of Dadanpura Primary School in Chaksu Tehsil

S. N.	Quality Dimension	indicators	Standards	Present status*	Adequacy of standards																								
		Transport of foodgrains	Zilla collector has the responsibility to collect foodgrains from FCI and transport it to every school through a contractor.	Followed	This is undertaken by the contractor consignment are just delivered and a teacher is normally made to sign the receipt without going through the formality of weighing. Present system is susceptible to malpractices in quality and quantity. The possible loophole needs to be plugged. The gunny bags handed over to the contractors by the district authorities should be sealed to prevent any tempering en-route. The bags should be delivered and signed for by a committee comprising two teachers, one parent representative and one member of gram panchayat. They should have the right to weigh the consignment to make sure that the consignment is not underweight. They should also check that seals are intact. The committee should have right to reject a consignment if its seals are found broken or bags are found to be tempered. At the cost of contractor a fresh consignment should be delivered to the school within 48 hours																								
3.	Conformance to set standards	Knowledge Standard of the educated student Class 1 - 5	Details as per <i>Shikshakaram</i> of State Govt.	The school was not aware about the existence of this documented. It is not being followed entirely	Copy of <i>Shikshakarm</i> must be in school																								
		Evaluation Standard / marks distribution of Class 1 - 5	Details as per <i>Shikshakaram</i> of State Govt.		Copy of <i>Shikshakarm</i> must be in school																								
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S. N.	Quality Dimension	indicators	Standards	Present status*	Adequacy of standards
		Teaching hours in a day	7:00am to 12:00pm in summers where each class is for 30 minutes. This also includes 30 minute break and 30 minute prayer. Total timings are 240 (30*8)+60 mins. Total is 300 mins In winters, timings are 10:30 to 4:30. First six classes are of 40 minutes each and last two classes are of 30 minutes each. This also includes 30 minute break and 30 minute prayer. Total timings are 240 (40*6)+60(30*2)+60 mins. Total is 360 mins	Partially followed. Since some teachers come late and leaving early, Problem are also encountered due to teacher absenteeism	Should be followed
		Quantity of food to be allocated per child	An entire table is specified which suggests that i) Wheat 100gms ii) Gur 35gms iii) Oil 5gms iv) Salt 5 gms v) Groundnut 10gms This quantity is to be given per child per day	Partially followed	- To be followed
		Standards for Nutritious value of food	Every child in every government and government assisted Primary Schools would be provided with a prepared mid day meal with a minimum content of 300 calories and 8-12 gms of protein each day of school for a minimum of 200 days	No measurement equipments available	The state Govt should have a program to monitor the nutrition value of the meals served
		Food Quality standards	An entire table is specified which suggests that i) Wheat (100gms) with 11.80 protein and 346 cal ii) Gur (35gms) with 134 calories iii) Oil (5gms) with 45 calories iv) Salt (5 gms v) Groundnut (10gms) with 2.52 Protein and 56 cal		The state Govt should have a program to monitor the nutrition value of the meals served
		Norms for checking the quantity of food supplied	There are no definite norms that exist for checking the quantity of food delivered by the contractor. However, the contractor has to carry the weighing machine and it is the responsibility of the head master to ensure that the food is in the right quantity before collecting the food grains.	Not followed	- To be followed (Need of a weighing machine)
		Physical quality of books	The books provided are brand new and in good physical condition.	Followed	Adequate
4.	Reliability	100% coverage	Every child has the right to get a new set of books up to 5 th class	Followed	- To be followed
		Books according to the prescribed syllabus.	Books are prescribed according to the syllabus.	Followed	Adequate
		Number of classes each teacher handles (Monograde / Multigrade)	One teacher for 2-3 classes	2-3 classes per teacher	One teacher to be assigned to one class only

S. N.	Quality Dimension	indicators	Standards	Present status*	Adequacy of standards	
		Number of days teachers involved in non-teaching assignments in a year	Nothing defined	A teacher has to attend to additional duties e.g. pulse polio, election, etc.	To be minimal	
5.	Accountability	Examination procedure	<ul style="list-style-type: none"> - A students is given 1 day leave before the beginning of half yearly exams and 2 day leave before the annual exam - If due to some unavoidable reasons the student is not able to appear for the exams then he may appear for them in the next year. - Declaration of results - The results have to be declared on the notice board for the annual exam on a specified date. - Minimum 36% is required to pass in the exams.3% grace marks can be allotted in maximum 2 subjects to pass a student. - School is required to keep the answer book of the students for a period of minimum one year. - Grading the student performance - 60% or more: I Division - 48% or more: II Division - 36% or more: III Division 	Followed		
6.	Cleanliness	Disposal of left food	Not defined	Not cleaned	-	
7.	Manpower	Number of teachers	1 teacher for 40 students.	Followed	??	
		Teachers Qualification	Minimum qualification required Senior Secondary + STC Trained: 3 rd Grade Teachers Graduate + B. Ed. : 2 nd Grade Post Graduate: 1 st Grade	Strictly followed As a part of Govt.'s recruitment program	To be followed	
		Frequency of refresher courses	<ul style="list-style-type: none"> - Every year 6 days training is provided to each teacher. - Training schedule (one day / month (on behavioural skills (how to pop-up with children), 3 day / 6 month (on behavioural skills+ teaching skills), 5 day / year (on behavioural skills+ teaching skills) 			
8.	Equity	<ul style="list-style-type: none"> - Textbooks - Scholarships - Uniform - Course content (For SCs, STs, girls and poor children)	Textbooks are provided but no standards for other items	Partially followed	<ul style="list-style-type: none"> - SCs, STs, girls and poor children to be provided scholarships, textbooks and uniform - 20% locally relevant content 	
9.	Accountability	Accountability mechanism	Frequency of opening complaint box	-	Daily	Online
			Time in resolving complaint	7 days	7 Days	7-15 days*
			In case complaint not resolved	-	-	Complaint can be made to District Collector, DEO, director primary education
			Feedback from citizens	-	No prescribed procedure	<ul style="list-style-type: none"> - Online feedback from citizen - Feedback from citizens at the time of leaving from the hospital

S. N.	Quality Dimension	indicators	Standards	Present status*	Adequacy of standards
		Feedback from staff	-	No prescribed procedure	Online
10.	Citizen duty	Maintaining cleanliness	-	No voluntary work	To help in maintaining cleanliness in schools
		Maintaining discipline in the schools	-	Sometimes indiscipline	To help in maintaining discipline
		Awareness building for enrolment	-	Not good response	- Participation in village awareness building camps
11.	Panchayat's duty	Monitoring and supervision	-	Done, but not adequate	To monitor the functioning on a regular basis
		Feedback	-	Not done	To provide timely feedback at appropriate quarter
		Participation	-	Done, but very little	To participate in awareness building program for enrolment
		Voluntary work	-	Not done	To organise tuition for poor students
		Resources mobilisation	-	Not done	Mobilisation of resources for poor and SC & ST students

