



CHAPTER -4

Analysis of Data



CHAPTER IV

ANALYSIS OF DATA

Analysis of data means studying the tabulated material in order to determine the inherent facts or meaning. The responses in this study were analysed to draw proper inferences.

4.1 RESEARCH QUESTION NO. 1 :

To examine if there is any significant difference in BRC situated in urban area and the BRC in rural area with reference to functioning.

For the purpose of study two BRCs and two BEOs were selected. They were from BRC Ambeiogai and BRC Asthi, taluka. The responses were analysed with reference to roles and functions of BRCs. First part of the questionnaire was related to the personal information about BEOs in the area such as educational and professional qualifications, address and available facilities. The details analysed are given as below

4.1.1 Educational and professional qualifications of BEOs :

The block education officers of rural and urban areas were graduated with B.Ed. They had 20-23 years experience.

TABLE 4.1

Available physical facilities at BRCs :

No.	Facilities	Urban	Rural
1.	Seminar Hall	NA	NA
2.	Tape recorder	NA	NA
3.	Furniture	A	A

4.	Telephone	A	A
5.	Fax	NA	NA
6.	Cyclostyle	A	A
7.	Sound system	NA	NA
8.	Residential facilities	NA	NA
9.	Over Head Projector	NA	A
10.	Mattress	A	A

A- Available

NA- Not Available

Table No. 4.1 shows that there were very less facilities available in BRC Seminar hall, tape recorder, fax, sound system, residential facilities were not available. Telephone, cyclostyle, mattress were available in both the BRCs OHP was available in rural BRC only.

TABLE NO. 4.2

Responses of BEOs Related to Training Activities

No.	Questions asked	Response	
		Urban BRC	Rural BRC
1.	Participation of BEOs in planning of training	Full Participation	Full Participation
2.	Percentage of training programmes held.	Residential 30% Non-residential 70%	40% 60%
3.	Selection of trainees	Selection by BEO	Selection by BEO
4.	Position of reference books	Not available	Not available
5.	Percentage of attendance to trainees	100%	65 to 80%

6.	Availability of the resource persons for training programmes	Available in sufficient numbers	Available in sufficient numbers
7.	Need of pre-test before training	For understanding of need areas of training	for understanding of various problems of teachers
8.	How much content can be covered during training	70 to 85%	70 to 85%
9.	Educational methods used	Group work Group discussion Lecture method Activity based method	Group discussion question-answer method. Activity based method
10.	Attention paid towards facilities	residence,boarding	Reference books Instructional Material sitting arrangement

1. There was full participation of both the BEOs in the planning of training.
2. It was found that urban BRCs had 30% residential training programmes whereas in rural BRCs it was 40%. The reason was that most of the trainees were coming from their homes.
3. The trainees are selected by the BEOs
4. The BEOs stated that the BRCs did not have reference books for training programmes.
5. The attendance of trainees in rural BRC it was 65-80 percentage. While attendance of trainees in urban BRC it was 100%.
6. In both the BRCs sufficient number of resource persons were available.
7. Both the BEOs stated differently about the need of pre-test. Urban BEO stated that pre-test in training was for essential for the understanding of training needs. Whereas rural BEO stated that understanding of various problems of teachers was the purpose of pre-test.

8. In both the BRCs 70 to 85% content was covered during training programme. The reason may be that the schedule of the programme was very lengthy.
9. At rural BRC group work and lecture methods were mostly used whereas at rural BRC question answer method was used. The common methods used in both the BRCs were group discussion and activity based methods.
10. The responses show that in urban BRC much attention was paid on residence. Boarding and in rural BRC reference books. Instructional materials sitting arrangement was given importance.

TABLE NO. 4.3

Responses of the BEOs functions related to training programmes

No.	Questions asked	Response	
		Urban BRC	Rural BRC
1.	Participation of DIET in training programme	NIL	NIL
2.	Participation of - a) Block Co-ordinator b) Subject expert c) Mahila Sanchalika	Full participation of all the three, material development sitting arrangement report writing Girls Education	Full participation of all the three, material development sitting arrangement report writing Girls Education
3.	Assessment of training needs	1. DRCs 2. suggestions from teachers and educationists	1. Problems of teachers
4.	Adopted strategies for follow-up of training programmes	Achievement tests, supervision of teachers teaching in class-room	Achievement tests supervision of teacher teaching in class room.
5.	Special programmes for Multigrade teaching	Self learning cards Attendance Cards Weekly Planning Teaching aids Learning corner Ideal reading of the teacher	Self learning Cards Attendance cards Weekly planning Teaching aids Learning corner Ideal reading of the teacher

6.	Visit to balwadies, Non- formal education centres by BEOs	Occasionally	Frequently
7.	Observation of schools, Balwadi, Non-formal education centre in a month by BEO	Schools 15 Balwadi 07 NFE centre 02	Schools 15 Balwadi 05 NFE centre 03
8.	Use of environment in class room teaching	As per the teaching units	As per the teaching Units
9.	Attainment of objective after post test.	65 to 80%	65 to 80%

1. There was no participation of DIET in training activities of BRCs.
2. There was a full contribution of Block Co-ordinator in planning and material development, subject expert was responsible in sitting arrangement and report writing. While Mahila Sanchalika helped in girls education.
3. In the urban BRC the sources of training needs were based on the proposals of DRCs, suggestions of teachers, Educationists etc. In the rural BRC importance was given to the problems faced by teachers
4. For the follow up of the training programmes both the BRCs used same strategies, i.e. achievement tests and supervision of teaching.
5. Both the BRCs were implementing similar programmes for multigrade teaching as shown in the table.
6. The urban B.E.O. of visited Balwadi, NFE centre, occasionally while rural BEO visited frequently.
7. Both the BEOs gave more importance to the schools (15%) then the NFE centres and Balwadies with respect to the observation.
8. At both the BRCs environment is used in teaching-learning process according to the units.
9. Both the BRCs attained 65 to 80 percentage objectives.

TABLE NO. 4.4**Planning Management and Supervision**

No.	Questions asked	Response	
		Urban BRC	Rural BRC
1.	Vacant posts in BRCs	NIL	NIL
2.	Required time for providing facilities to the staff	Payment timely T.A., D.A. Not timely increment timely	Payment timely T.A., D.A. Not Timely increment timely
3.	Devoted time to the BRCs by the BEOs	More than two hours	More than two hours
4.	Importance given to the items while making annual work plan	a) Needs of the training b) available resources c) study of precious years training programs.	a) Demands of VEC b) EMIS survey report c) EMIS survey report
5.	Participation of members in making annual work plan	a) Cluster Heads b) Experience teachers	a) Members of VECs b) Experienced teachers c) CHs.
6.	Implementation of annual plan	a) Planning of work plan (b) Arrangement of hall (c) Resource persons (d) Number of trainees (e) Residence boarding	a) Suggested programmes in plan (b) All the important factors in implanting work plan.
7.	Contribution of BRCs in construction of school building	NIL	a) Observation of construction b) Financial help
8.	Used models for supervising schools by BEOs.	a) Time table b) Planning c) Teacher knowledge of Content	a) Total number of students b) Intellectual quality of students c) Physical facilities for students
9.	Proforma used for school supervision by BEOs	Prepared by DRC	Prepared by BRC

10.	Percentage of factors while supervising the school	a) Educational 35% b) Administrative 30% c) Leadership 15% c) Social co-orporation. 20%	a) Educational 70% b) Administrative 10% c) Leadership 10% d) Social co-orporation. 10%
11.	Devoted time for BRC meeting by BEOs	full day	full day
12.	Methods of guidance to the teachers while supervising the school	a) discussion about teaching methods and innovations	a) Recognition to the good work of teachers. b) explanation in writing if not working properly
13.	Encouragement to the important activities in the school	a) Publicity in news papers b) through meeting	a) Through Gatsambelan b) Circular to all schools c) Introduction of innovations to other schools.
14.	Contribution of BEO for the making Gatsambelan effective	a) Planning of Gatsambelan b) Planning of visit	a) Discussion b) Various problems of the students c) Competitions of teachers.

1. There were no vacant posts in both the BRCs
2. In both the BRCs payment and increments were made timely but T.A D.A. was paid very late.
3. More than two hours were devoted by both the BEOs for functioning of BRCs.
4. Urban BEO had given importance to the needs of training, available resources and other facilities whereas the rural BEO included study of previous years work plan, EMIS survey report and demands of VEC during making annual work plan.

5. In both the BRCs Cluster Heads, experienced teachers were involved in making annual work plan besides, in rural BRC Village Education Committee Members were also involved.
6. While implementing the annual work plan rural BRC included working plan, arrangement of hall, resource persons, number of trainees lodging and boarding facilities. Whereas in the rural BRC suggested programmes and important factors are included in the implementing work plan.
7. There was a major contribution of rural BRC in observation of construction of school building and managing financial help from the competent authorities. Whereas in urban BRC such activities are not essential.
8. While supervising the school different educational factors like time table, teachers knowledge of content etc are checked by the rural BEO while rural BEO considered number of students standard of students and physical facilities for learning process.
9. For the supervision of school urban BEO used the proforma developed by the DRC, while rural BEO used the proforma developed by BRC.
10. The weightage given to the educational administrative, leadership and social co-operation factors in school supervision were different in respect to rural and urban BEO. Maximum weightage (70 to 35%) was given to education activities in rural and urban BRCs respectively while minimum (10 to 15%) was given to leadership activities in urban & rural BRC respectively.
11. Both the BEOs devoted complete day for BRC meeting.
12. As far the guidance to the teachers was concerned the urban BEO discussed on teaching methods, other innovations in the field of education in Gatsambelans. The rural BEO recognised the good work of teachers. He issues a memo who were not working properly.

13. In the urban BRC publicity was through news-papers or through meetings, where as in rural BRC publicity was done through Gatsambelan or through circular to all the schools.
14. Contribution for making Gatsambelan effective urban BEO was doing planning of Gatsambelan and visit. The rural BEO emphasised understanding problems of students', competitions of teachers.

4.1.2 QUESTIONS RELATED TO LEADERSHIP ROLES OF BEOs :

Nine questions were asked to the BEOs regarding purpose of BRC meeting, activities of the meeting efforts made for enrolment, retention, MLLS, Girls Education, education for out of school children, women development programme and the research work besides few questions were related to the problems faced during conducting BRC meeting and suggestions to make the BRC meeting effective.

Responses received from both the BEOs were tabulated and there was no difference in the roles and functions of these officers. The common answers described as below.

Purpose of BRC meeting is to provide information received from DRC, to discuss supervision of schools and improving the quality of education. Various activities like collection of material, sitting arrangement conducting action research etc.

The BEOs were making efforts about the enrolment, retention, attainment of MLL, girls education for out of school children undertaking innovative studies etc.

The major problem of these officers for smooth functioning of the BRC were high work load, lack of facilities and more number of training programmes. At the end they suggested that there should be pre-planning of all the training programmes with adequate physical facilities including computers.

4.2 RESEARCH QUESTION – 2 :

To assess if there is any significant difference in functioning of CRCs of urban area and CRCs in rural area. For the study of roles and functions of CRCs ten cluster. Heads (five from each) were selected.

TABLE NO. 4.5

Educational Qualifications of Cluster Heads.

Educational qualification	U	R
B.A. B.Ed.	1 (20%)	3 (60%)
M.A. B.Ed.	4 (80%)	2 (40%)

From the above table it is clear 20% in urban area were B.A., B.Ed. and 80% were M.A., B.Ed. whereas in rural 60% B.A., B.Ed. and 40% M.A., B.Ed.

TABLE 4.6

Teaching Experience of Cluster Heads

Teaching Experience	U	R
31 – 40	1 (20%)	NIL
21 – 30	3 (60%)	5(100%)
11 – 20	1 (20%)	NIL

The table 4.6 reveals that maximum teaching experience was found in the 21-30 age group. Maximum teaching experience of Cluster Heads was found at rural CRCs.

TABLE NO. 4.7

Training of Cluster Heads Programmes held at CRC level

No.	Training Programmes	Urban	Rural
1.	Self learning package	2 (7.14%)	0
2.	Gender equality	4 (14.2%)	0
3.	Multigrade teaching	4 (14.2%)	1 (8.3%)
4.	Development of teaching aids	5 (17.8%)	1 (8.3%)
5.	Training of VECs/CACs	2 (7.14%)	2 (16.66%)
6.	EMIS Training	1 (3.5 %)	0
7.	Work experience	1 (3.5%)	1 (8.3%)
8.	Value education	1 (3.5%)	1 (8.3%)
9.	MLL	5 (17.8%)	5 (41.66)
10.	Physical education	3 (10.7%)	1 (8.3%)
	Total Training Programmes	28	12

Table No. 4.7 reveals that the highest priority (41.66) in rural CRC was given to the MLLS while the highest priority was on development of teacher aids (17.8) and minimum attention was given on the areas those where self learning package. EMIS,WE and vlaue education in both the CRCs.

In CRCs situated in urban and rural areas selection of trainees was by CHs after discussing senior teachers and subject experts. At the first day of training approximately similar activities were going on such as attendance of trainees, subject wise guidance, group-discussion, pre-test, distribution of material for preparation of teaching aids, time table and inauguration. The facilities like sitting arrangement, drinking water instructional material were given importance during training programmes. The responses shows that there was expected co-operation from BRCs for training programmes. At the CRC level CHs were performing role as a co-ordinator of training programmes. With the help of responses of CHs related to training programmes the researcher concluded that 60% rural and urban CRCs could

cover above 60%, 70% to 85% Content where as 40% CRCs could cover 55-70% content of training programme, the reason behind less covered content might be number of training programmes and lack of physical facilities

After post test approximately all the CRCs could attained 65 to 70% objectives of training programme.

4.2.1 Teaching learning process :

There were 18 questions related to the involvement of CHs in teaching-learning activities. The responses of the CHs are analysed

TABLE NO. 4.8

The percentage of use of activity based teaching in class

Percentage	Urban	Rural
100	1	3
80	--	1
70	--	1
50	1	--
40	3	--

Table No. 4.8 reveals that three CRCs from urban and from rural were using cent percent activity based teaching on the other hand 2 rural CRCs using 80 and 70% activity based teaching and 4 in urban 3 were using 40% and one 50% activity based teaching.

CRCs in both the areas were practising various strategies for multigrade teaching such as, self-learning package, combine teaching learning corners, attendance cards, etc. In above all self-learning cards are given importance in the CRCs of both the areas. Trips, excursion use of things available in local environment, were some activities being

used in the schools under urban and rural CRCs for environmental approach to the class room teaching.

In response to the question regarding to supervision of periods by CHs in a week with the help of responses the researcher concluded that CHs in both the areas used to supervise 8-10 periods in a week. Besides supervision CHs were found involved in the teaching of subjects like English, Maths, Science, Marathi and Evs. All the CRCs were giving satisfactory attention towards use of monitoring self learning habits, learning by activities and participation of students in teaching – learning process as far as multigrade teaching was concern. As far as development of instructional material is concern, self learning cards, charts puppets, pictures, models paper work were being developed in all the selected CRCs of urban and rural area.

There were 41 posts of teachers found vacant in schools under urban CRCs. With respect to schools under rural CRCs 29 posts were vacant. When the researcher met to the district level officer he informed that in near future all the vacant posts would be filled. As a alternative arrangement for vacant posts, multigrade teaching distribution of work load, teaching by CHs were found in all the CRCs. Available working days, number of teachers text books, local programmes were given importance in all the cluster while making annual work plan.

While supervising the schools CHs in the rural and urban areas were giving importance to supervision of teaching, lesson plan, attendance of students, cleanliness decoration, community participation, school record, use of teaching aids, school environment, available facilities effect of training programmes and problems of teachers. CHs used to discuss all these points further in Gatsambelan. For school supervision the rural CHs were using profarma developed by MPSP whereas urban CHs were using profarma developed by BRCs. While supervising the school CHs were giving satisfactory importance to the educational,

administrative, leadership factors. By personal guidance, presenting model lesson, introducing innovations, CHs used to guide teachers besides this through news papers or by discussing in Gatsambelan they used to give recognition to important activities in the schools and encouragement them, questions related to the Gatsambelan the responses of cluster Heads revealed that they were doing annual planning of Gatsambelan, presenting model lesson, discussion about new teaching methods workshops seminars, for making Gatsambelan effective. Resource persons were available in sufficient numbers from BRCs for Gatsambelan purpose. Sometimes they were getting resource persons from other sources also e.g. teacher educators from training colleges.

4.2.2 Leadership Roles of and Functions of CHs :

Thirteen questions were asked regarding leadership roles of CHs and the responses are described as below. With the help of responses received regarding question who used to lead the Gatsambelan in absence of CHs the researcher concluded that, in almost all CRCs Kendriya Head Master used to lead the Gatsambelan. The researcher found that there was a less participation of urban CHs in CACs meeting compare to rural CHs in VECs meetings. For motivating to the teacher CHs in both the areas were doing similar activities such as celebration of "Teacher's day" (5th September) competitions for preparing models and by arranging various training programmes. It was found that most of the CRCs in urban and rural were utilising infrastructure grant for instructional material and decoration purpose. Less importance was given to the physical facilities and reference books. The percentage of achievement CRC level in the form of educational help, by labour, and by participating actively in programmes was higher in rural area i.e. 62.16% whereas in urban CRCs percentage was just 37.83%. Number of VECs established under rural CRCs were higher in number compare

to established CACs under urban CRCs. In rural meetings of VECs held regularly but the meetings of CAC not held regularly in urban CRCs.

Six questions were asked to the CHs regarding efforts for the participation of women in the meeting, main obstacles in the way of smooth running of CRCs and suggestions to make the CRCs effective. Responses received from CHs were tabulated and there was no difference regarding the situation related to these questions the common answers described as below.

For the participation of women CHs used to visit, requests personally to the women. By giving respect to the views of women they encourage them. Besides this Mahila Melava and Mata Palak Sangh were other chief programmes for motivating women participation. Preparation of annual report, collection of information related to various situations. Attendance of children belonging to nomadic class, repetition of sending information to BRCs, and work load were major problems of CHs for smooth running of CRCs. At last they suggested that work load of CHs is required to be reduced, concern authority should provide one peon and clerk to CRCs, there should be emphasis on the training of new educational technology and adequate physical facilities including computer.

4.3 RESEARCH QUESTION – 3 :

To find out if there is any significant difference in achievement of urban and rural students. For the study of academic achievements of urban and rural students four schools were selected randomly under CRCs. - and - for urban and CRCs – and – for rural. Educational tests viz.

Achievement of Marathi, Maths, EVS, and EVS were administered and analysed as follows :

TABLE NO. 4.9

Achievement level of Marathi

	N	M	σ	t
Urban	78	69	8.31	3.056
Rural	73	62	10.12	

df - 149, Table Value – 2.61 at 0.01 level of significance

Table 4.9 reveals that the calculated value (3.056) is greater than the table value (2.61) for df 149 at 0.01. This shows that there was significant difference between the urban and rural students with respect to achievement in Marathi language. The result was in favour of urban area. The reason may be that urban students utilised the media as a resource for learning language.

TABLE 4.10

Achievement Level of Maths

	N	M	σ	t
Urban	78	73	9.27	3.1496
Rural	73	65	10.23	

df - 149, Table Value – 2.61 at 0.01 level of significance

Table 4.10 reveals that calculated value (3.1496) is greater than table value (2.61) at 0.01 for df 149. This shows that there was significant difference between the urban and rural students with respect to achievement to achievement in Maths. The result was in favour of urban students. The reason may be that the teachers of urban area were competent enough in this subject than the rural Maths' teacher.

TABLE 4.11

Achievement Level of EVS,

	N	M	σ	t
Urban	78	61	11.35	2.716
Rural	73	67	9.72	

df - 149, Table Value – 2.61 at 0.01 level of significance

Table 4.11 reveals that calculated value 2.716 is greater than table value at 0.01 level for df 149. This shows that there was significant difference between the urban and rural students with respect to achievement in EVS. He as far as EVS is concern rural students were performing better the reason may be that in rural area there was sufficient contact of students with environment. The result is in favour of rural students.

TABLE NO. 4.12

Achievement Level of Science,

	N	M	σ	t
Urban	78	69.2	10.57	2.289
Rural	73	59.1	11.38	

df - 149, Table Value – 2.61 at 0.01 level of significance

Table 4.12 reveals that calculated value 2.289 is greater than table value (2.61). This shows that there was significant difference between the urban and rural students with respect to achievement in science. The result is in favour of urban students.

TABLE 4.13

Achievement Level of Urban and Rural Students

	N	M	σ	t
Urban	78	70.64	9.32	4.587
Rural	73	59.2	10.04	

df - 149, Table Value – 2.61 at 0.01 level of significance

Table 4.13 reveals that calculated value 4.587 is greater than tabled value (2.61). This shows that there was significant difference between the achievement level of urban and rural students. The result is in favour of urban students. The reason behind this may be that in urban areas students take tuition from the teachers. Education of parents may be another reason as there was mostly first learner in rural areas. Further lack of educational atmosphere in rural areas was the major factor in teaching learning process.

4.4 RESEARCH QUESTION NO. 4 :

To assess if there is proper co-ordination between DIET and BRC, CRCs and VEC/CAC. In order to assess the co-ordination between DIET and other agencies 9 questions were asked to the principal, DIET of Ambajogai (Beed). They answered his responses are as below.

- (i) DIET has not being assigned any important work relating training programmes conducted at district, block and cluster level.
- (ii) They was of the opinion that DIET Ambajogai is well equipped with respect to the physical facilities as well as resources, their services be utilised to make the training programmes effective on the other side the physical are lacking at BRC and CRC and even at DRC level.

When the researcher met to district level officer he informed that in near future the DIET will be assigned a great role with respect to development of training

material organising training programmes and monitoring and evaluation of training programmes.

The responses about assessment of co-ordination between CRC and VEC/CAC were collected from the heads of the institutions, which are interpreted below.

- (i) There was proper co-ordination among these members with respect to involvement of community for increasing enrolment and retention in the school.
- (ii) To strengthen role of VECs/CACs important instructional material are provided by the CRCs along with the necessary guidance.
- (iii) A CRC is consisting of 8 to 10 schools which are visited by the VEC/CAC members for understanding of the functioning of the schools and after observation they gave suggestions to improve the same 70 to 80% suggestions given by VEC/CAC members are followed by CRCs
- (iv) The important areas such as education of girls, use of teaching aids making the efforts gender equality and 100% attendance are considered along with drinking water, electricity, class rooms, place for games while making observation of school activities.

It is concluded on the basis of above observation and the observation of researcher that the co-ordination among BRCs, CRCs and VECs are satisfactory but the DIET found aloof.