THE MANAGEMENT OF CLUSTERED PRIMARY SCHOOL RESOURCE CENTERS IN OROMIA REGIONAL STATE

BY ASNAKE WAQJIRA

A THESIS SUBMITTED TO THE SCHOOL OF GRADUATE STUDIES OF ADDIS ABABA UNIVERSITY IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF MASTER'S OF ART IN EDUCATIONAL PLANNING AND MANAGEMENT

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Abbreviations and Acronyms

AED	Academy for Educational Development
BESO	Basic Education Strategic Objective
CPD	Continuous Professional Development
CRC	Cluster Resource Center
EFA	Education For All
ESDP	Education Sector Development Program
ITPD	In-Service Teachers' Professional Development
LEA	Local Education Authority
MOE	Ministry Of Education
NCSC	National Cluster School Committee
NETP	New Education and Training Policy
NGO	Non Government Organization
OEB	Oromia Education Bureau
PISA	Program for International Students' Assessment
PTA	Parent Teacher Association
REB	Regional Education Bureau
SEN	School Education Network
SNNPR	Southern Nation Nationalities Peoples Region
TDMS	Teacher Development Management System
TEI	Teacher Education Institute
UNESCO	United Nations Education Scientific and Cultural Organization
WEO	Woreda Education Office
ZED	Zonal Education Desk

Abstract

Quality education particularly at the primary level is the most powerful weapon in the global fight against poverty, disease and hunger. In Ethiopia especially in Oromia Regional State, currently the access to primary education is highly improved. On the contrary, there are great problems in quality and equity in education. To solve these kinds of problems, many countries in the world have applied clustered school system as one of the main strategies. In Ethiopia, the term school clustering was started in 1995 by the BESO project. The main purpose of the program was to promote and sustain quality and equity in education but changes observed after the implementation of the new approach were not as expected. So to identify the main problems and to suggest some possible solutions, conducting the study on the current status of the management of clustered primary school resource centers in Oromia Regional State is very crucial.To this end, a descriptive survey method was used. In the study, 54 primary school CRCs, 18 Wereda Education Offices and 6 Zonal Education Desks were involved.

The major findings of the study indicate that, the purposes and implementation strategies of school clustering were not widely accepted by officials and school actors and the level of committee members awareness and their active participation in planning and managing of the new approach were also very poor .This implies that, the effort made to build consensus around the objectives and implementation strategies of CRC program was not adequate. In general, the enabling environment to create the momentum for the implementation of CRCs was found to be weak .Because of this the changes observed in improving quality in education were not as expected. From these, it can be concluded that the organization of primary schools in CRCs in Oromia Regional State is perceived as only a semblance of accepting the program. Finally, it is suggested that building consensus around the objectives and strategies of school clustering, creating sound organizational structure at all educational administrative levels, preparing clear policy statement and handbook of cluster guidance and allocating funds in the woreda budget and identifying other sources (NGO's and local communities) are very crucial for the effective management and sustainability of the program. Besides these, since school clustering approach is a new phenomenon in our country and uneasy to change a century old concept of a school system over night, there is a need for further research and careful analysis of the problems in order to develop strategies to improve the management of school CRC system in Oromia Regional State.

CHAPTER 1

THE PROBLEM AND ITS APPROACH

This chapter deals with the background, statement of the problem, purposes, significance, delimitations, limitations, the research methodology and procedures used in the study, as well as definition of key terms and organization of the study.

1.1. Background of the Study

Quality education, particularly at the primary level, is the most powerful weapon in the global fight against poverty, disease and hunger. That is why, when world leaders agreed the eight Millennium Development Goals (MDGs) to end world poverty, two of the eight goals focused on quality education for all by 2015. T0 improve quality and equity in education, many countries in the world have applied clustered school system as one of the main strategies.

The major motives for organizing schools into a cluster, regardless of the contextual difference across the world, are listed below as follows: to disseminate new curriculum and initiate creativity at local (school) level; to utilize scarce resources efficiently and sharing the resources and experiences among satellite and school clusters; to improve teaching and management skills thereby raising professional development and quality of teaching and learning process; to compare performance of schools and achievement of students within (and outside) the members of the cluster so as to develop creative and competitive culture (Dean, 1991:4; Martin, 1984:14). In an attempt to realize such advantages of school cluster various countries use different ways of organization and management.

The practice in Sirilanka that includes 10-15 schools in a cluster can, for instance, create the problem of coordination and performance in certain countries with highly dispersed schools and large class size. In such a situation, decreasing the size of the cluster or arranging a sort of

accommodation, as is the case with Papua New Guinea, may exemplify alternative ways of organization or management of cluster system. The training programs designed only for principals, like the experiences of Kenya and Uganda, may not also be sound, since the role of teachers (main actors) is minimized at the expense of budget reduction. Yet, this could integrate systems thereby facilitating continuity and sustainability of worth while achievements of the model. Hence school cluster model can particularly increase the benefit of underdeveloped nations when sound management and organization is employed BESO, 2001 in (Assefa, 2003:4).

In Ethiopia, school clustering program was introduced in 1995 by the BESO project. Initially, cluster-based teacher professional development was not favored by either the Ministry or the Regional State Education Bureaus, because they had a long tradition of centralized, expert-driven teacher development programs and did not believe that teachers themselves could, with supporting materials, facilitate their own professional development. However, some regions like, Tigrai, SNNP, Harari, Oromia and Amahra are trying out cluster based programs through small-scale pilot programs.

Each region created its model differently, based on local needs and geography. Since the previous centralized model of in-service teacher workshops had reached only a tiny fraction of teachers, and since there was no follow up mechanism in place for the cascade to function, the cluster based program that included all teachers in professional development activities became immediately popular with teachers (BESO, 2002:2).

Oromia is the largest region in the Federal Democratic Republic of Ethiopia. It covers 32% of the country's total area. The region is divided into 17 zones, 198 woredas, 6500 kebeles and 375 urban centers. The total population in the region is 25, 098,000. This is 35.3% of the total population of the country. Out of the total population only 12.31% are urban dwellers, while the rest 87.69% are predominantly rural. It is assumed that the young, the

economically active adults and the old constitute 46.5%, 50% and 3.5% respectively. The high proportion of children and youth indicates the very high need for education service in the region. (OEB, 2005:2).

Regarding educational coverage, gross enrollment rate of primary education is 87.5% (male 100.5 and female 74.3), the net enrolment rate is 73.7% (male 86.2% and female 61.2%) and the drop out and repetition rate are 14.9% and 3.7% respectively (MOE, 2005:26).In the region from the total number of 7336 primary schools, 4059 have organized under 1232 CRC schools. Out of these, 95 CRC schools, which contain 437 satellite schools are supported by AED BESO II project.

The major educational problems of the region are poor efficiency, low quality and inequitable educational distribution. To solve these kinds of problems, many countries in the world have applied clustered school system as one of the main strategies. In Ethiopia also the term school clustering was pioneered in 1995 by the BESO project. The main purpose of the program was to promote and sustain quality and equity in education but changes observed after the implementation of the new approach were not as expected. This was the problem that motivated me to study the current status of the management of clustered primary school resource centers in Oromia Regional State

1.2. Statement of the Problem

Available documents about CRC pertaining to Regional Education Bureau of Oromia revealed that, school clustering has been applied in the region for almost 10 years. The main objective of the establishment of this model was to improve the quality of teaching and learning in schools by means of low cost professional development.

According to Samaranayake (1983:24), some of the activities which must be done to promote and sustain quality education are: share the available human and material resources among clusters; encourage and assist teachers to produce local teaching materials; train teachers to localize the curriculum to include their environment and to undertake action research; examine the existing inequities in the provision of educational facilities so that equitable standards could be maintained in all parts of the region; apply systematic and intensive supervision of schools to improve qualitative development in education on cluster basis and improvement of the teaching learning situation; exercise optimum utilization of scarce resources; share experience among principals, teachers, students and parents with a view to achieving general objectives of education; and prevent individual unhealthy competition among schools for limited state resources.

In Oromia regional state, however, the implementation of the cluster strategy varies widely both among and within the zones. Participants in some clusters have seen the advantages of sharing knowledge and experience among schools and have developed a number of collaborative activities. On the contrary, participants in other clusters wait patiently for instructions as to what they should do. For each cluster of schools, one school is usually assigned as a cluster center. The original model for clusters suggested that this school be supplied with additional resources and schools in the cluster would be able to come and share or use them. However, because of absence of financial support some teachers could not meet at the cluster center training and experience sharing program. The other difficulty identified was that some of the selected resource teachers might not have the capacity to transmit training content to his/her peers, and the committees formed by the school cluster were not meeting on continuous and regular basis to give solutions to problems of school clustering. In general the enabling environment to create the momentum for the implementation of the Schol clustering program was found to be weak. So to identify the main problems

in management and implementation of the school CRC program and to suggest some possible solutions, conducting the study is very crucial.

The region was selected because of its large size (32%), population (35.3%) and large number of primary students (39.84%) of the total population of the country. So, the status of primary education in Oromia Regional State is a manifestation of the overall scenario of education in the country. (OEB, 2005:2).

The reason why the study focused on primary schools is because primary schools are found at grassroots level their number and enrollment of the students is very great when compared to secondary schools and higher education institutions. Besides this, primary schools are the levels at which we can lay good foundation by giving students proper instruction as well as creating interesting environment.

Improving the quality of primary education has been a corner stone of the implementation of the Education Sector Development Program (ESDP) in Ethiopia. As Grant (1978:24) stated, the early years are the most important in the child's whole life. If he/she is stimulated and his/her personality is well developed, he/she will be an interested keen learner in later years. As a house can not be built without good foundations, secondary teachers can only build on the good foundation already laid by the elementary school teachers.

The reason why the study focused on management because, it is not the purpose of any organization; but it is a "how?" not a "what?" the underlying problem is the tendency of applying management in education in order to realize group activity that involve many people. The nature of this activity will be contingent upon the context, desired outcomes, resources and relevant values (Bush and Burnham, 1994:11).

Therefore, although management functions, problems, and organizational situations may not exactly be identical in all forms of organizations, there are similar situations in different organizations to apply common management principles and procedures. Adesina (1990:39), writes management functions and problems are universal. The scope of authority, the environment, and the types of problems handled by different professional managers may be different. But as managers, they all occupy critical positions, take vital decisions, and are expected to obtain results by establishing a suitable atmosphere that would ensure that the goals of the system, organization or institution are fully met.

To solve the problems on quality education using the new model (school clustering), there is only one research which was recently completed. The research work focused on "Management of Clustered School Teachers In-Service Training in Selected Oromia Zones", by (Assefa, 2003). Thus, this particular study was designed to improve some of the ideas including other factors which can contribute to the enhancement of education.

1.2.1. Objectives of the Study

General Objective

The main objective of the study was to assess the current status of the management of clustered primary school resource centers in Oromia Regional State. It was also intended to find out whether efforts made in CRC have supported to improve quality of primary education.

Specific Objectives

- to assess the extent to which the objectives of school clustering model of educational management are known to each zonal, woreda education offices and school communities;

- to assess the level of participation of school communities in planning, organizing, implementing and managing school clustering model education program;
- to identify the major problems in the management of clustered primary school resource centers to achieve its objectives; and
- to suggest some possible solution(s) for the problem to enhance the management of school clustering model in primary schools in the future.

1.2.2 Basic Research Questions

Schools within a defined geographical area will be grouped into a cluster for the purpose of better organization, management and development. This will enable a more efficient utilization of resources of both the state and the community. Each cluster will function as an administrative entity to meet the educational needs of the entire area it serves (Samaranayake, 1983:25).

In Oromia Regional State the practice of this model was yet inadequate and there were considerable disparities among the experiences of the zones and woredas which deserve further investigation to improve the application of school clustering system, based on the following basic questions.

i. What are the basic features of school clustering model, in terms of improving the quality of education?
ii. Is the management of school clustering model supported by adequate organizational structure, management functions and guidelines which enable the management of school clustering at local level?
iii. To what extent do school communities participate in planning, organizing and managing clustered school educational program?
iv. What major problems have been encountered in the implementation of school cluster model in the region?

v. What are the strategies and mechanisms that help to improve the management of school clustering in the region?

1.3. Significance of the Study

Regions with poor infrastructure and scarce resources can provide educational opportunities to children and adults, if educational organs at different levels exercise their responsibilities and authorities in mobilizing the available resources (Jeilu, 2001:7). Many developing countries have improved their educational access and quality through management's reform, Cummings et. al., in (Jeilu, 2001:7). School clustering model is a very crucial program to improve the quality of teaching and learning in all primary schools by means of low cost professional development. Hence, there is a need to study the management of clustered primary schools resource centers in Oromia Regional State.

The study, thus, will have the following benefits:

i. it may help to indicate the important features of the school clustering model for effective utilization of human and material resources;
ii. it may help to create awareness among the different layers of the educational organs in order to take corrective measure;
iii. it will also pinpoint some possible solutions to the problems that hinder the management of clustered primary school resource centers in the region;
iv. it may help to initiate (bilateral, multilateral) donors to assess and examine their supportive work in the program; and
v. it may also serve as a springboard for further research on this issue.

1.4. Delimitations of the Study

The scope of the study was delimited to 54 government CRC schools, 18 Woreda Education Offices and 6 Zonal Educational Departments of Oromia Regional State. The selected sample areas involved in the study can

represent the whole population. Furthermore, the study was delimited to the management functions of school CRC in Oromia: planning, organizing, implementing, monitoring and evaluating of effective utilization of human and material resources. Besides these, the activities done in enhancing the capacity of teachers and principals were also assessed in the study.

1.5. Limitations of the Study

Some of the limitations faced in the study were: shortage of reference materials especially on topics related to the case of Ethiopia; some of the respondents were not cooperative to fill the questionnaires on time and consequently the researcher and supporters were forced to go to the centers more than two times to get the questionnaires back. In addition, financial constraints and lack of means of transportation were challenges met by the researcher. Despite all these limitations, the study was plainly managed and completed.

1.6. Research Methodology and Procedures

1.6.1. Method

Since the objective of this study was to assess the management of clustered primary schools in Oromia Regional State, descriptive survey method was employed in undertaking the study. This was because the method is useful to explain or express current issues. It is also important to describe the background and status of the various subjects of the study. Moreover, the descriptive method has the potential to depict the real picture of the samples as they are. Furthermore, the method was used to describe the cluster school management in respect to system theory, in terms of planning, organizing, implementing, monitoring, evaluating and improving to see the variables that exist between what theories explain and practices show.

1.6.2. Sources of Data

In this study the data were collected from different sources. The first sources of data were teachers and principals from school CRC and supervisors, experts and officials from REB, ZEDs and WEOs. The second source was responses from interviews presented to Regional, Zonal and Woreda level officials, experts and supervisors. All principals, educational officials, supervisors and experts were selected on the basis of their vested position and involvement in the management of the education system. Besides this, three teachers (one female, one key teacher and one from school pedagogical center) as key implementers of the new approach were included in the study.

1.6.3. Sampling Techniques and Sample Size

To make the sample area manageable and representative, 6 zones (35.3%) were taken as representatives from the total 17 zones in Oromia Regional State. To identify the 6 zones, first all zones were grouped into 4 sub-regions based on their geographic, economic, social and cultural background. Zones assigned in sub region 1 were: East Shoa, North Shoa, South west Shoa and West Shoa; in sub region 2: East Hararge and West Hararge; in sub region 3: East Arsi, West Arsi, Bale, Borena and Guji; and the last sub region included: East Wolega, Horogudru , Qelem , Ilubabor, Jimma and West Wolega.

From these 6 sample zones, East Shoa from Central, East and West Hararge form Eastern, East and West Arsi from Southern and East Wolega from Western sub regions, were selected by using stratified random sampling technique in order to decrease the probable sampling error by insuring that representatives were drawn from homogeneous subsets of the population. Then 18 Woredas (3 from each Zone) and 54 school CRCs (3 from each Woreda) were randomly selected as sources of information. The selection was done considering fair representation and their accessibility by vehicle

transport. These sample woredas and schools were believed to be adequate in representing the target population.

Sample Size

The sample comprised of 6 zones, 18 woredas and 54 primary school CRCs. The respondents were: officials, experts and supervisors form all administrative levels. These involved 3 from REB, 12 from ZEDs, 54 from WEOs and 1 principal and 3 teachers from each CRC school, making the total number of respondents 285. Therefore, the sample size of the population that responded to the research study (questions) was reasonable for this specific study.

1.6.4. Procedures and Data Gathering Instruments

The following procedures were followed to conduct the study: primarily relevant literature was reviewed to get acquainted with the issue under consideration. Next, statistical data from different sources were secured and analyzed. Then, appropriate data gathering tools were prepared and piloted. This was done to check the clarity and relevance of the questions. After approving the instruments, administration of the instruments was followed and eventually analysis of data collected was made, using appropriate statistical tools. Finally, report of the research was prepared.

Data Gathering Instruments (Tools)

To secure more reliable and adequate information from respondents, two sets of questionnaires were adopted in English and 'Afan Oromo' languages as the instrument of data gathering. This was because to prevent misunderstanding and misinterpretation on the parts of the respondents. The questionnaires which consisted both close-ended and open-ended items were distributed to the respondents under the study. This was done so as not to lose the key information obtained from responsible and concerned persons. The questionnaires which consisted of the 79 items were discussed under 9

major sections. Besides these, unstructured interview questions were also conducted on responsible officials, experts and supervisors to get some important information that would not be otherwise obtained by other data gathering tools. Moreover, relevant documents that were available in the school CRCs were consulted by using checklists to increase the reliability of the information.

Pilot Test

Any instrument of measurement especially the one that we have just invented, must be clear to checklist's accuracy in terms of producing the same results on different groups. So, before the instrument was used for the actual data collection, it was piloted on 7 CRC schools and 1 Woreda Education Office experts and supervisors. The total numbers of respondents for the purpose were 17and all questionnaires were duly filled and returned. The place selected for the pilot study was Akaki Woreda and the CRC schools in it. The purpose of the pilot test was to improve the clarity and relevance of the instrument. Based on the responses given on the pilot test items which lacked clarity were rephrased; poor and vague items were discarded and more points were also added.

Data Analysis

The data collected using different instruments were described and analyzed. The purpose was to see whether there was conformity with theory thereby associating with practice, experiences and principles of school clustering system indicated in the literature. In doing so, the profiles, educational backgrounds and experiences were used to explain the characteristics of the respondents in the educational hierarchy.

Depending on the nature of the basic questions and the data collected, the following statistical tools were employed.

a. Percentage -to measure relative standing.
b. Mean – to indicate center of distribution and point of balance.
c. Standard deviation - to indicate average distance of every score from the mean.
d. T-test – to determine the significant difference in attitudes scores between the two groups.
e. Weighted mean- to find out the average value against each item score.
f. In cases where the Likert scale was applied, mean score for each statement has been computed to two significant figures by converting the categorical replies to a numerical scale, where values 5,4,3,2, and 1 were assigned for extremely serious, very serious, some what serious, obstruct but not serious, not observed respectively. At the same time there were questions prepared to know the respondents attitude (5: excellent, 4: very good, 3: good, 2: poor, 1: very poor). Any item score below an average point of 3 was seen as unsatisfactory and any item score above an average point of 3 was regarded as satisfactory level of understanding and participation.

In all the above cases the existing difference were tested for statistical significance at the 0.05 level in order to relate errors that come due to chances, this level is conventionally used in social science research (McCall, 1975: 194). Moreover, information and opinion gathered from respondents through open ended questions and unstructured interview were considered in the data interpretation.

1.7. Definition of Operational Terms

The following words/phrases are defined in the context of the study.

Cluster:- Literally, refers to a number of things of the same kind of growing or being close together in a group.

Cluster Resource Center:- A place where the most important materials or skilled persons are involved to provide the necessary support for others or satellite schools around the center.

Cluster Schools:-Collaborative group of schools organized to enhance educational provision and correct deficiencies.

Government School:-A school fully run by the government, in this case schools run by Oromia Regional State.

Management:- The process of planning, organizing, leading and controlling the efforts of organizational members and of using all other organizational resources to achieve organizational goals.

Mentor: A person who plays a key role in the staff development process. He is released from teaching duties one half day each month to work with new teachers.

Resource: In educational context are vital inputs in terms of material or any abstract quality needed to effectively conduct instructional activities at all levels of the educational system.

Satellite School: A school that is member of cluster schools. The cluster consist 3-5 satellites within the catchment area of 1-10 kilometers from the center.

Supervisor:- A person formally designated by the organization to improve curriculum and instruction in order to improve the quality of learning of students.

Woreda:- A division or area marked off, established for administrative purposes with defined authority and responsibility, between Kebele (the smallest administrative level) and zone.

Zone: - An intermediate administrative level between region and woreda.

1.8. Organization of the Study

The study was organized in four chapters. The first chapter dealt with the problem and its approach that includes introduction, statement of the problem, significance of the study, basic questions, delimitations, limitations, research design and definition of terms. The second chapter reviewed related literature. The third chapter treated the analysis and interpretation of the data and summary of the findings. Conclusions and recommendations of the study were presented in the fourth chapter. Finally, list of reference materials and papers containing important information were annexed in the appendices.

CHAPTER 2

REVIEW OF RELATED LITERATURE

School clustering approach is a new phenomenon in our country. Because of this it needs a continuous improvement in its organization and management system. Therefore, this chapter presents a review of related literature and lays down the conceptual framework of the study. It includes an overview of the system of school clustering, context of school clustering, purposes and principles of school clustering and planning, organization and management of school clustering. It also provides a brief description of the management of school clustering in Ethiopia as well as in Oromia Regional State.

2.1 An Overview of School Clustering

2.1.1 The Meaning of School Clustering

School clustering is a system for networking of schools within a defined geographical area to facilitate the implementation of teaching learning processes. In this system a group of 3-5 nearby schools are to be organized centering on a full-fledged primary school, (1-8) where possible. The resource school should have relatively better facilities, well staffed and easily accessible to the members of the cluster. The distance between resource school and satellite schools should be 5-8 k.ms. so that the participants can easily move when there is need to move from resource center to satellite schools (Linda, 1995: 8).

According to Samaranayake (1983:7), a cluster is a group of 10-15 primary schools identified as one organizational unit for purposes of both education and management. Similarly, others designate school clustering as a group of 6-9 primary schools for administrative and educational purposes. It is also a means for distributing resources and for raising the quality of primary education. It is an adaptable cost effective model which promotes ownership of schools by parents, students, community members, supervisors and local education officials (Dykstra and Kucita, 2003:16).

School clustering is a means to improve school management system, for instance to achieve the goal of Education For All (EFA) using the activity of one school in isolation is unthinkable. Rather it requires the active cooperation and participation of all the schools within a district pre-school, primary and secondary. This is essential to ensure continuity in the education of children. Cooperation among schools is even more crucial if clustered schools are located in the district (UNESCO, 2001:100).

School clusters are mechanisms of breaking isolations among schools and creating connections like the ones done in South Africa. The school cluster creates an opportunity for any group of schools geographically close together to interact with one another (UNESCO, 1987:13). Clustering in the context of education systems, entails elements of inter-school collaboration, interaction, connection networking, giving and receiving support, sharing resources and ideas. Many other terms can be used in its place such as, networks, partnership, joint planning and the like (Gibson, 2000:3).

As per the above discussion, school cluster refers to group of schools in geographically closer area that work together to share experiences, resources and training in order to create opportunities for continous professional development and decision making about an area of school activity.

2.1.2 Brief History of School Clustering

According to Gibson (2000:3), the origins of the concept 'clustering' and the noted benefits can be traced back to 1962 as reflected in Litwak's and Hylton's article on Inter-Organizational Analysis: a hypothesis on coordinating agencies. In 1967, Yuchtmann's and Seashore's article also discussed a system resource approach to organizational effectiveness. Both articles provide information based on research carried out in how to get the most out of one's organization by ensuring effective communication within and between departments and similar organizations. Their practical

relevance to today's post-modern world is some what questionable but the theory they espouse does provide insight about the benefit of coordinated organization.

In England the term school cluster was pioneered in 1960 where small rural and urban schools were in short of subject expertise. One way in which small schools have sought to enhance their educational provision and overcome these challenges have been to form collaborative group of schools, which are called clusters (Linda, 1995:8).

The first official documentation on school clustering practice in United Kingdom was published in 1985. It was a report based upon the findings of the Fish Committee. The Fish Committee has been set up to look into the benefits and possibilities for clusters in meeting the nation's School Education Network (SEN). Ingrid Lunt (1994:6), writing on the Fish Committee findings, states that: "in its report (1985) the Fish Committee recommended that secondary schools and their feeder primary schools in a locality should form themselves into 'clusters' and collaborate in meeting their pupils' SEN by sharing resources. The committee took the view that, by pooling resources in this way, ordinary schools could take joint responsibility for meeting greater levels of SEN among their pupils" (Gibson, 2000:4).

In Cambodia in 1991 Redd Barna, the Norwegian NGO, began administration of three cluster schools in three provinces and provided emergency supplies for school repair and teaching supplies and restarted the publishing house, which was destructed in 1970 during the heavy fighting and bombing which was an extension of the Vietnam War. The project focused on teacher training at the local level and provided training to instructors of the provincial teacher training college. Supervision of teacher training in primary schools in the cluster was provided through the provincial teacher-training college and Redd Barna staff in co-operation with district and local educators (Dykstra and Kucita, 2003:2).

exchanges, Local Education Authority (LEA) advisory and resource assistance and the formation of school federations and clusters have not only helped many small schools to maintain a broad curriculum, but also have extended greatly their teachers' and pupils' experiences.

In the context of other countries too, school clustering is an effective way of building capacity in remote schools and reducing the feeling of teachers that they are isolated from innovation. School clustering is an innovative feature of the school system. In Malawi, for example, clusters of schools focus on improving management systems and on encouraging teachers to share good practice. Clusters require support from central or regional government if they are to operate effectively, since there is a need for someone to take a leadership role in the cluster, at least in the early stages. Later on, it may be possible to leave the cluster to manage them (Berry, 2006:12).

There may, however, be difficulties associated with the development of school clusters. The financial commitment can be quite high initially, and ministries may lack the regional capacity to give school clusters the kind of support they need in their early stages. One way in which regional needs can be met is through the decentralization of the education system (Berry, 2006:12).

Thomas and Shaw (1992:23), in their review of the issues in clustered schools make the following comments as regards decentralization of the educational administration. A decentralized education system lends itself to building effective clustered schools. Such a system encourages teachers and local education officers to actively participate in managing schools, developing learning materials, and in making decisions regarding curriculum and pedagogical methods. In short, it fosters independent learning and development of decision making skills in teachers and local administrators.

School clusters, such as those employed in Thailand, the Philippines, and Sri Lanka, are very helpful in that they share scarce materials and personnel. Core schools tend to host educational resource centers developed and

operated jointly in the cluster (typically five to ten schools, and even more in Sri Lanka). The learning action cells in the Philippines exist at the school, district, and regional levels, and are used for school evaluation and staff development for both teachers and principals. Similar organizational patterns operate in Nepal, in the Cianjur protect in Indonesia, and in the school zones of Zambia. Small schools, in particular, can benefit from clusters of schools teaming together (Craig, et. al., 1998:113).

2.1.3.1 Clustered Schools in Australia

In response to poor results in the Second International Association for the Evaluation of Education Achievement in South Australia, the state government allocated funds for the development and implementation of a teacher professional development program that would improve the quality and quantity of science and technology taught in primary schools in the state of South Australia. The key principles of this program are: "sharing of expertise within the group; the necessity of developing shared ownership of the project; the importance of responding to needs; and the establishment of support net works (Craig et. al., 1998:131).

Schools within the local districts are clustered together to enable joint professional development activities, the sharing of resources, and the dissemination of information. There is generally one focus school selected per district cluster. In projects initiated prior to 1992, the focus schools were selected by the education department's district superintendents. These schools were selected because of their experience or expertise in the field (Craig et. al., 1998: 131).

Thirty focus schools were identified and two teachers from each of the schools were designated focus teachers. The project management team considered it essential that the two focus teachers be appointed by each school because of the collaborative nature of the project, as well as to ensure continuation of the work if one of the teachers left the school during

the term of the project. The selection criteria for the focus teachers were that they had highly developed skills working with adults or that they were highly skilled in their subject area (Craig et. al., 1998: 131).

Through out the project, the focus teachers were responsible for developing their own classroom practices; identifying the needs and interests of the teachers with whom they worked; organizing and maintaining the school's resources; facilitating school workshops; working with teachers in the school; assisting with the development of school policy; negotiating agendas for the monthly cluster meetings with their focus school colleagues; sharing success and failures at the focus school cluster meetings; and liaising with parents (Craig, et. al., 1998:131).

2.1.3.2 Clustered Schools in Cambodia

In Cambodia school clustering system was stared in 1991 by UNICEF reform of education. They provided the Ministry of Education with the structure to implement new policies which promote the formation of parent-teacher associations, retrain supervisors in management of schools so that efficiency and learning increase, and provide for the systematic, on going training of teachers in methods and content which match the new curriculum and text books. Cluster schools foster a two-way learning process which is facilitated from both ends of the administrative hierarchy and includes community members. The national level staff gains lessons from the local level and vice versa, improved resources, school facilities and teacher quality raise, parent understanding and expectations for greater learning and achievement for their children. The cluster structure is an adaptable, cost effective model, which promotes ownership of schools by students, parents, community members, supervisors and local education officials. It provides a structure that can be used for educational investment and as a community resource (Dykstra and Kucita, 2003:16).

Cluster schools are only a part of the education reform in Cambodia. New textbooks are being introduced; year by year a new educational management information system has been introduced, a new curriculum introduced and the outdated student testing system will be changed. There is much more to be done. The ultimate success of the cluster school initiative can be achieved if the systems put in place continue to evolve to meet the needs of children and their families and if enough time and resources are provided to this young effort (Dykstra and Kucita, 2003:16).

2.1.3.3 Clustered Schools in Sri Lanka

The unplanned and haphazardly located and established school system continued to perpetuate for socio-economic and political reasons and at great cost to the nation, in spite of imbalances and duplication, overlapping and wastage of resources. The Educational Reforms Committee of 1979 proposes to meet this problem in three ways:

i. by introducing the concept of school clusters recognizing the key role of heads of schools;
ii. by reducing the wide gap between the smaller and poorly equipped schools and the very large fully equipped schools; and
iii. by fostering greater community participation in the management of schools.

It is in this light, that 'educational proposals for reform' introduced the concept of school clusters as an organizational and management innovation aimed at rationalizing the school system (Samaranayake, 1983:23).

The main goals of school clustering in Sri Lanka are to eliminate the existing inequities in the provision of educational facilities so that equitable standards could be maintained in all parts of the Island, achieve qualitative development in education through systematic and intensive supervision of schools on cluster basis and improvement of the teaching-learning situation, achieve optimum utilization of scarce resources, contribute towards

achieving efficiency in the school cluster system provide for identification of specific problems and search of solutions at the local level. Therefore, it could contribute towards improvement in participation rates. Besides these, it can contribute to developing positive attitudes among principals, teachers, students and parents with a view to achieving general objectives of education and identification of needs and allocation of resources on cluster basis. This could contribute towards a blue print for action at the planning stage in the provision of educational facilities on a national basis-with due consideration to connection of regional imbalances (Samaranayke, 1983:24).

2.1.3.4 Clustered Schools in New York

The New York city school system appears to differ in most ways from those in developing countries. However, New York city does share some interesting similarity with developing countries. The diversity and poverty of its student population pose problems that also confront many developing countries. The student body comprised a diverse ethnic mix of immigrants form 100 countries: 29% of the students are white, 14% black, 22%, Latino and 34% Asian. 20% of them used English as a second language and about 50% lived below the official poverty line (Elmore,1997). In New York clustered schools the diverse TPD activities are presented in five models. These are: the professional development laboratories, instructional consulting service, inter-visitation and peer networks, off-site training and over site and principal site visit.

The organizing principles of school CRC have also played a major role to teachers' continuous professional development approach. These organizing principles have resulted from a strong belief system or a culture of shared values in the system around instructional improvement that binds the work of teachers and administrators into a coherent set of actions and programs. These set of organizing principles are arguably more important than the specific models of ITPD that have grown out of them. A summary of the organizing principles are: focus on the entire system of instruction and

learning; instructional change is a long and multi-staged process; shared expertise is the driver of change; talented people working together generate good ideas; maintain a focus on system wide improvement; set clear expectations; then decentralize responsibility and nurture a culture of collegiality, learning, respect among staff and cluster schools (Elmore,1997).

2.1.3.5 Clustered Schools in Germany

The Hanau model (cluster model) schools partnership was formed in Germany in 1995. The aim was that of providing a test- bed for exploring the development of net-worked schools. The goal of this project, supported by the National Science Foundation (NSF), was two fold: to infuse technology into cluster schools so that learning with technology becomes a deeply accepted part of daily school life for all members of the school community and to actively support the development of exemplary teaching approaches that complement the aims of the districts and nation's educational reform goals and make good use of technology.

The cluster schools were formed from two elementary, one Junior and one high school over the course of three years (1995-1998). The four schools, which serve 1,500 students, have become a networked cluster of schools with more than 500 networked computers and a faculty broadly knowledgeable of the technologies available to them and the ways in which these tools can be applied to all grades and content areas. Getting to this point required mainly kinds of supports and processes: a cross-school planning team, on-site curriculum integration support, family and community involvement and most important a comprehensive professional development plan.

Some of the professional development principles that would guide the partnership are: Professional development for technology must extend a vision of technology as an empowering tool for teachers and students; professional development must stimulate reflective practice and be grounded

in the context teaching; professional development must exemplify our deepest beliefs about learning inquiry, collaboration and discourse; professional development must value and cultivate a culture of collegiality, professional development must provide opportunities for meaningful teacher leadership roles to emerge; and professional development must enable teachers to shape their own learning (Grant, 1998:3-4).

2.1.3.6 Clustered Schools in Uganda

With the concept of comprehensive and integrated delivery program for primary education, reform services and tools were aimed to improve pupils' learning in Uganda. The issue of well trained and competent teachers and head teacher is given due attention to overcome the problem, because nearly half of the teachers were untrained. Teacher development management system (TDMS) based on clustered school is a comprehensive program in Uganda. TDMS activities which started in 1991 were guided by national primary education reform management committee and chaired by permanent secretary. It works closely with donor support (MOE, 2003).

In preparation of TDMS, competence tests were administered to teachers to identify the competent teachers from the population in order to train the others. School mapping was done to establish school clusters, and clusters of about 18 schools each were established. The expansion undertook in 45 districts and 18 core primary teachers college. Considering the case, Uganda has given more attention to the management aspect (MOE, 2003).

In general, although there are some differences in management and implementation strategy of school clustering in the above countries, the main objectives of this program are: improving quality and equity education by using shared experiences, promoting ownership of school communities, developing positive attitudes among school actors and by achieving optimum utilization of scarce resources.

2.2 Context for School Clustering in Education

2.2.1 Cluster Based In- service Teacher Professional Development

The current movement to universalize access to quality education in a cost effective manner coupled with recent developments in our understanding of human learning has led to a critical re-examination of conventional modes of teacher education. Traditional pre-service teacher training programs have been lacking in quality and slow to change while large-scale in-service teacher training schemes have proven to be unsustainable and have rarely translated into instructional gains. Cluster based in-service teacher professional development programs have been offered as promising alternatives. This approach includes community participation which ties teacher training curricula to local conditions and school level goals, and purports to be cost-effective. Pilot activities and innovations, some taken to scale, have proliferated around the world in both developed and developing countries (Mac Neil, 2004:1).

Cluster based professional development is primarily part of two recent paradigm shifts that concern: our basic concept of what it means to teach and to learn and the decentralization of authority and agency to more local levels (Hiebert, J. et. al., 2002:31). The following tables compare previous and present approaches to student learning, teacher learning and management and organization of schools.

Table I Comparison between Previous and Present Learning and Management Approaches.

	Previous approaches	Present approaches
Table A Student Learning	- Passive learning - Rote memorization. - Teacher- centered. - Positivist base (Knowledge as stable)	- Active learning - Use of higher-order thinking skills. - Student- centered. - Constructivist base. (Knowledge and learning as more dynamic)
Table B Teacher Learning	- Goal is teachers who are competent in following rigid and prescribed class-room routines. - Teachers are "trained" to follow patterns. - Passive learning model. -Cascade model- Large centralized workshops or programs. - Expert driven. - Little inclusion of "teacher knowledge" and realities of class rooms. - Positivist base.	- Goal is teachers who are reflective practitioners who can make informed professional choices. - Teachers are prepared to be empowered professionals. - Active and participatory learning model. - School and cluster based model in which all teachers participate. - Teachers facilitated. - Central importance of "teacher knowledge "and realities of classrooms. - Constructivist base.
Table C Management and Organization of Schools	- Centralized decision making. - Authoritarian school environment and classrooms	- More decentralized /local decision making. - More participatory/ democratic school environment and classrooms.

(Hiebert et. al., 2002:3)

One of the benefits of school clustering is its cost effectiveness for teachers' professional development. This can be done by utilizing key teachers which are selected from each CRC and offered specific training in participatory methodologies and develop a manual of specific activities that trainers can apply during the CPD sessions. Utilizing key teachers as mentors or facilitators of the CPD program might help teachers of respective satellite schools promote their profession without going to distant places and this can help them to enhance efficient utilization of cost and time.

Finding alternative, effective, relevant and cost-effective means of providing ITPD that will reach all teachers has thus become a priority for many governments, particularly those that are introducing new paradigms of teaching and learning. Ensuring that teachers understand the meaning of such reforms are competent in the subject matter they teach, know a range of appropriate methodologies, and approach their work with professionalism and high moral are issues that demand urgent attention.

The issue is particularly urgent given the context of rapidly expanding enrollment rates, declining educational quality, and the growing awareness that the quality of teachers is one of the most important factors in creating a good quality of education for students. The recent study of the Program for International Student Assessment (PISA) has shown that teachers - related factors account for 31% of the variation between teachers.These are even more important in developing countries, where the teacher is often one of the few resources available to students (MacNeil, 2004:3).

To sum up, many countries have developed or are currently developing cluster-based in-service programs as an important means of updating teacher skills and providing professional support. It is hoped that cluster-based approaches will be more cost-effective, make better use of local resources, respond to teachers' immediate needs, and provide opportunities for on-site practice and reflection. This approach has been used to good effect

in many developing countries, and in developed countries as well (Mac Neil, 2004:3).

2.2.2 Cluster Based School Pedagogical Centers

The main goal of education is to transmit knowledge, values, norms and other elements of culture to which individuals belong. To carry out these goals education must be transmitted qualitatively.

The quality of education and the effectiveness of instruction given in the classroom are determined by efficient utilization of instructional materials. These materials help to develop conceptual understanding and make learning more meaningful. Thus, bearing this in mind, all elementary schools must employ a variety of concrete and first hand experiences in the class-room by means of models, objects, specimen, mockups, dramatization, etc. (Kindred, 1968:235).

Instructional materials are media that are used to reinforce and facilitate a classroom instruction in particular and finally this leads to the quality of education in general. Properly designed and applied instructional materials have numerous merits in impairing and receiving the pertinent information in the teaching learning processes. Some of the values are: stimulate the learners interest; secure and retain the attention of students; improve the balance between concrete and abstract learning experiences not easily obtained through others; provide direct interaction of students with the reality of the social and physical environment; provide uniformity of percepts among various students and solve communication problems between teacher and students; promote the efficiency and the effectiveness of the teacher and students; and promote the efficiency and the effectiveness of the teaching-learning process Sless, 1981 in (Fantu, 1992:11).

However, constraints hamper on the proper preparation and utilization of instructional materials at school level. These are incorporated under human

and non-human factors. Some of the hampering factors on preparing and utilizing instructional materials include lack of competence on the part of teachers due to poor training, lack of qualified heads of school pedagogical centers and shortage of equipment and materials. The main reasons for these problems are mismatch of scarce resources with the demand for education Heinich, et .al., 1996 in (Abraham, 2001:26).

According to Wittich and Schuller, 1973 in (Animaw, 2000:39), production of instructional materials is properly a team work involving specialists, teachers and students at pedagogical centers. This group of individuals can produce a fairly superior product than an individual teacher because of the shared material, effort and expertise. This does not mean, however, that teacher involvement in the production process has a minimal effect. For the fact that teachers have a recognized amount of exposure to classroom situations, their contribution for instructional materials preparation is very important. Before deciding to prepare instructional materials in pedagogical centers, certain prerequisites should be taken into consideration. One must determine whether there is enough time, trained personnel and financial support in order to produce instructional materials. Administrative support for local production facilities are both educationally and financially accepted.

School pedagogical centers at CRC level serve to utilize the scarce human and non-human resources effectively for the preparation and utilization of instructional materials. The center enables to prepare instructional materials and equipment and distribute them for respective satellite schools at a minimum cost. Besides this the CRC PCs facilitate teachers' continuous professional development by using peer coaching and experience sharing program, that would help strengthen clustered school management, and the teaching learning process with emphases on improving teachers' skills and students' learning.

According to Brown 1977 in (Kebede 1990:13), integrated school pedagogical centers have a potential to improve the preparation and utilization of instructional materials: by working together schools have access to clarify goals and objectives of the proposed instructional materials; by sharing resources schools have a greater number of teaching aids available and can learn to use and develop them more; by sharing skills and resources schools utilize available funds more efficiently and cost effectivelyl; and by utilizing cluster system schools to create a system of staff support that stops teachers from feeling isolated.

2.2.3 Cluster Based Supervision

Supervision is defined as a service, which is an expert technical service primarily aimed at studying and improving cooperatively all factors which affect child growth and development. Its major function is school operation, not a task or specific job or a set of techniques. Supervision of instruction is directed toward both maintaining and improving the teaching learning process of the school (Harris, 1985:10).

The functions of supervision are guiding teachers how to teach and professional leadership in reformulating education. Similarly, Harris (1985:27), introduced ten operational and instruction related tasks of supervision as follows: developing curriculum; organization for instruction; providing staff; providing facilities; providing materials; arranging for in-service education; orienting staff members; relating special pupil services; developing public relations and evaluating instruction.

Local level supervision acts as an essential vehicle for improving instruction and developing teachers' initiative, responsibility, creativity, internal commitment and motivation. It has taken a pivotal position in improving quality of education and pupil growth Harris, 1963 in (Digafe, 2003:19).

The cluster school supervisor supervises all headmasters in the cluster, sets the teacher-training schedule with other members of the committee, and assures that materials from the resource center and teachers are supplied equally to all schools in the cluster. Cluster school supervisors are given the authority to supervise teachers and to make decisions on how to maximize the use of resources available in their own clusters. They may also give an idea to WEO to reassign teachers to schools that have a sudden jump in enrollment or lack instruction in a specific subject. They are the liaison to the community, to schools in the cluster and to the district. They are the advocates for their cluster through the Ministry's chain of authority and to civil authorities (Dykstra and Kucita, 2003:8).

CRC supervisors are responsible for the improvement of teaching and learning especially in support of the new curriculum. The cluster school supervision established a training calendar for teachers. For instance, Cambodian policy sets every Thursday as an in-service day. The agenda for weekly training meetings include the preparation of lesson plans, development of teaching aids, class demonstration and summary of weekly meetings as well as plan for the next month. Usually, teachers from various schools take turns meeting at the resource center to make teaching aids and, on alternate weeks, they meet at their schools for other training events. There are often cluster-wide training events in the resource centre especially when new textbooks are introduced (Dykstra and Kucita, 2003:8).

School clustering helps to stop unhealthy individual school competition by means of giving and receiving resources and experiences. This can be done by the joint effort of the following activities. For instance a supervisor can help schools by giving support, solving problem and transmit best practices from one school to another. Teachers also promote their profession by on going in-service training using their resource center and the pedagogical center which help schools to promote the experience on preparing and utilizing instructional materials.

2.3 Purposes of School Clustering

Here are some ideas that are emerging from around the world to foster partnership between schools in supporting each other's efforts towards school clustering. Teachers can visit each other's school to learn about the techniques they have taken in their classrooms to improve quality education. The schools might try to establish in their district a shared resource center of teaching aids and equipment; books, magazines and video programs that teachers and families can use. Teachers may be seconded to another school for a period of time. For example, a teacher from a special school may go to a neighboring primary school to assist the staff there (UNESCO, 2001:100).

A group of teachers drawn from all the local schools can be convened to work on topics of mutual interest and need in developing more inclusive schools; such as curriculum adaptation, teaching methods and assessing children's learning. These working groups should have a specific focus and be time limited. The product can be shared with all schools. This means that work gets done which one school could not do on its own but it also produces shared polices and procedures across the schools. If teachers from one school attend a training course, on their return they could become a resource for the teachers in other schools in the district; for example, they can speaking at staff meetings or at parent meetings or they might organize training inputs for local teachers (UNESCO, 2001:100).

Groups of schools within an area, might invite local 'experts' to present training workshops for all their staff. They may be found in Teacher Training Colleges, Universities, Ministry of Education or Non-Governmental Organizations (NGOs). By combining with other schools, such events will attract reasonable numbers of participants and once again, networks are built among teachers.

In the cluster primary schools, the school community should have an awareness on cluster beliefs and understandings and major and minor objectives of school clustering. Some of them are discussed as follow.

i. Cluster Beliefs and Understandings

The school cluster believes that a thinking- oriented curriculum provides a/an:

- ***Paradigm*** for creating an environment whereby leadership, curriculum, pedagogy, assessment, school and class organization work with synergy to bring about and reinforce productive thinking.
- ***Process*** that describes the development, delivery and monitoring of teaching and learning and the establishment and sustainability of relationships.
- ***Product*** that is reflected in dynamic groups engaged in critical, creative and caring teaching and learning.
- ***Proficiency*** that prepares and empowers individuals for the real and ever changing world of tomorrow; and
- ***Ownership*** ownership of schools by students' parents and local educators (Dykstra and Kucita, 2003:1).

ii. Major and Specific Objectives of School Clustering

The major objective of school clustering is to create a better organization, management and development. This will enable a more efficient utilization of resources of both the state and the community. Some of the specific objectives are: to shift the focus from the individual school as the unit of planning and development of educational infrastructure to a group of schools in a specific geographical area so the total educational needs of the area could be taken into consideration creating a grass-root level planning unit, prevent individual unhealthy competition among schools for limited state resources, improvement of the teaching-learning environment and teaching methodology by cooperative efforts within the cluster to enable exchange of experiences, creating an atmosphere where teachers could help each other in

the different schools, upgrading the neglected and under-developed schools by linking them with developed schools enjoying wider social acceptance in an effort to bring about uniformity in standards, improvement of school management and administration under able leadership of the cluster principal while recognizing the role of heads of member schools and fostering of greater community participation in the activities organized at the cluster level (Samaranayake, 1983: 24-25).

The practice of school clustering in education has been noted as beneficial in many settings, rural and city, economically disadvantaged and economically affluent (Dykstra and Kucita, 2003:4), provides a list of purposes which answer the question why cluster.

A. Economic Objectives

The country may not afford basic equipment such as supplemental readers, science materials, type writers, duplicating machines, and even paper for each school. Therefore, by furnishing one resource center with equipment and supplies that allows teachers to make learning aids, several schools can benefit. The clusters, therefore, have an economic objective: sharing facilities and staff, bulk ordering of materials such as stationery, chalk, paper and other supplies for the cluster. Conservation of supplies such as promoting systems for the return of school books and better maintenance of schools are also more efficient within a cluster system. Resources centers permit teachers to participate in ongoing in-service training without distant travel (Dykstra and Kucita, 2003:4).

B. Pedagogical Objectives

School clustering approach can improve students learning through a variety of strategies that will be carried out through clusters, equalizing student access to teacher specialists and resources such as supplementary readers, programmed in-service training and mutual sharing of the experiences among the teachers. Also, teachers have the opportunity to pilot new

curricular materials, along with academic competition and evaluation to motivate better performance. Besides these, schools clustering approach provides an environment for innovation, encourage cooperation in school projects, integrate different levels of schooling and integrate schools with non-formal education. Teachers in cluster schools work on setting and monitoring of learning goals and standards according to the newly adopted education policy (Dykstra and Kucita, 2003:5).

C. Administrative Objectives

Improved administration is sought at all levels through simplifying paper work, authorization procedures and communication processes primarily by working through the cluster school heads for micro-planning, personnel management, and resource mobilization instead of trying to contact every headmaster. Authority to supervise and monitor teachers, goal achievement and other functions is devolved to cluster supervisors, and principals or heads (Dykstra and Kucita, 2003:5).

D. Political Objectives

Raising consciousness about the causes of under-development and of the actions that can be taken by individuals and communities and increased community participation in decision making, reduced zonal and social inequalities. Besides these school clustering have the following political objectives; to reach the goal of education for all (EFA) by 2015, to increase community awareness on ownership and participation of school problems and quality education to enhance decentralized management system to give efficient service and immediate solutions for local problems and to promote girls education and integrated activity to protect the transmission of HIV/AIDS (Dykstra and Kucita, 2003:5).

To sum up, school clustering has been noted as beneficial in developed and developing countries discussing a list of purposes. For instance, resource

centers can facilitate on going in-service training for teachers with-out distant travel, create opportunity to equalize student access, help to improve administration through simplifying paper work and help to reach the goal of quality education for all by 2015.

2.4 Principles of School Clustering

The body of knowledge concerning well-designed learning environments is contained in the following clustered school principles. These principles are designed from a variety of sources: from the reflective practice of educators and design professionals to the empirical research of environmental psychologists and educational researchers. The principles contain responsibility, flexibility, unity, problem solving, and integrity, result oriented and participatory in it (Lackney, et. al., 2003:1).

1. ***Responsibility-*** every concerned personnel is responsible to participate in teachers' continuous professional development and managing scarce resources effectively and efficiently. (Dykstra and Kucita, 2003:16).

2. ***Flexibility-*** by nature, education is a dynamic process. The development of science and technology and community demand brought about the need for better and improved educational system than ever before. Because of these realities there should be continuous improvements in the organization and management of the school clustering system (Lackney, et.al, 2004:9).

3. ***Unity-*** integration; inseparable oneness of notion; interdependence of one with the other; univocal and act together. Integrate the school principles with country education policy (Mac Neil, 2004:13).

4. ***Problem Solving-*** Using effective decentralized educational organization and management system and involving supervisors, school principals, teachers, students and community representatives in the management of

school clustering approach the best alternative to solve problems at a local level (Lackney, et. al., 2004:3).

5. Integrity- The principle integration should focus on the fact that every one makes a commitment; the commitment is for every one; the commitment is integrated with district goals, and it contributes to the systems goals and implementation of the commitment is a responsive process. (Lackney et. al., 2003: 12).

6. Result Oriented: The activities of school clustering are measured by the out-put which is registered after the implementation of the new model. These can be:

- What concrete activities are done by teachers using this model?
- How much is it cost effective?
- What new creative work is done? and
- How many of the students show improvement in their knowledge, skill and attitudes? (Lackney et. al., 2003: 12).

7. Participatory- Clustering primary schools can-not be effective by limited personnel activities. Educational officers or experts must be involve in educational management and monitoring activities. Besides this, all level supervisors, by promoting teachers' capacity; PTAs, by fully participating and enhancing school activities and quality education; teachers and students, by participating and promoting the learning-teaching process; and teachers educational colleges, by organizing clustering unit centers (Mac Neil, 2004 : 4).

2.5 The Planning and Management of Cluster School Program

2.5.1 Planning Cluster School Program

Planning is vital for efficient administration, organization and coordination. All planning need to be done very far in advance to take account of the various stages of the educational process. Many aspects

need to be considered within the planning process. The following are the major ones.

A. Needs Analysis:

Training should meet the actual needs of teachers in their classrooms or directors in their schools.

Very often training is theoretical and does not address the real issues facing a teacher in a class of up to 100 children with few resources. If teachers play a role in planning their own development then it will ensure that it is appropriate to their needs. The key to this process is saying, "This is not good enough. How can we make it better for ourselves and the children?"

B. *Deciding Priorities:*

" You cannot do everything at one time".

Everybody needs time to understand new ideas and think of practical ways to put them into practice. People need time to share ideas to solve problems and find effective ways of doing things. Everybody needs a lot of help, support, guidance and advice when dealing with new ideas. Too much change at the same time just leads to confusion, anxiety and resistance. Then nothing gets done.

C. Delivering Training:

The best way to learn is to try things out practically. The best way to become confident is to try to explain to someone else.

Lectures are not effective ways of teaching skills and improving professional knowledge. Teachers learn best when they sit and discuss their problems and share ideas to find solutions. Then they need to try out practical and workable ways of implementing new methodologies, managing a classroom, improving planning and developing teaching materials.

D. Monitoring Implementation:

Going to a training session or workshop is not enough. Teacher and directors, after a training session, should have enough knowledge, skills and confidence to try to improve things. They should also be given the opportunity to share their experiences (both good and bad!) with others. The cluster committee also needs to know that the work of the cluster is effective and serves the needs of all those in their schools. It should evaluate the effectiveness of all activities. Bureau and woreda officials also need to know what is happening in their areas and take an active role in planning, supporting and acknowledging this work (Cummings et. al., 2004:2).

2.5.2 Organization and Management of School Clustering

There are various mechanisms to achieve success through the use of scarce resources of an organization. Bartol et. al., (1991:401), state that the purpose of management is to ensure success and provide unlimited services that support the achievement of unified objectives of an organization. It also enables the organization to obtain and retain the skilled, committed and well-motivated workforce.

Management is not concerned only with the assignment of the right persons for right jobs, but it also assists to create a team spirit and feel a sense of commitment where workers satisfy their desires by developing themselves and contribute to the attainment of organizational goals (Bartol et. al., 1991:402).

Organization and management will also enable a more efficient utilization of scarce resources and shift the focus from individual school as the unit of planning and development of educational infrastructure to a group of schools in a specific geographical area and improve the teaching-learning environment and teaching methodology by cooperative efforts within the cluster to enable exchange of experiences creating an atmosphere where teachers could help each other in the different schools and bring uniformity

in standards (Samaranayake,1983:24). Because of these and the like reasons organizing clustered school committees and explaining their role for each of educational administrative level is very essential.

2.5.2.1 Clustered School Committee Organization

Some of the roles of organized committees at different educational administrative levels are discussed below.

A. National Cluster School Committee

The first activity of the school clustering model is to form the national cluster school committee (NCSC) under the General Education Department. It is staffed from various departments in MOE. The NCSC drafted cluster school guidelines, including definitions for the role and function of each level of the cluster, indicators for the measurement of wastage within the cluster and an accompanying training syllabus. There will be close collaboration of all regional bureaus of education with technical advisers and partner NGOs in the development of the structure, role, responsibilities and objectives of cluster schools as stated in the guidelines (Dykstra and Kucita, 2003:6).

Thereafter begin an overall co-ordination of the zonal education department by forming teams of two or three National Cluster School Committee (NCSC) members each will be assigned to sub regions. The team becomes the facilitator of the planning process for the cluster, and reviewes renovation and construction plans, academic goals, work plans and budgets.

They provide information about the progress of the cluster to officials and committees at each level. Similarly, they give information about conditions in schools and problems faced by students and teachers to the minister and central department heads. They solve contract disputes, facilitate the delivery of supplies, help schedule, textbook tryouts evaluate teacher training in the cluster, organize material exchanges, review localized adaptations of cluster

operations and give technical assistance in organizing PTAs (Dyksara and Kucita, 1973:6).

B. Zonal Cluster School Committees

Zonal cluster school committees organize a yearly training calendar for supervisors and head masters and are responsible for the supply of teachers to clusters. This may mean training untrained teachers where there have been no classes for many years, especially when new clusters begin in remote areas. They approve new clusters, construction plans, and budgets and submit them to NCSC for final authorization and verification of projected costs (Dykstra and Kucita, 2003:7).

C. District Cluster School Committees

The district education office is responsible for the operation of clusters within district boundaries, and for the achievement of the work plan to meet the district education goals. They house the newly trained resource teachers who work with teachers and supervisors in the cluster to implement curriculum reform. The district supervises cluster school heads (Dykstra and Kucita, 2003:7).

D. School CRC Committees

The school CRC committees are responsible to organize and manage the total activities of school CRC, prepare short and long term plan, assess the budget and resources, coordinate continuous TPD program, determine group teaching material production and distribute to each satellite school, coordinate integrated activity of the school with the local community and PTAs and make them fully participate in quality education, prepare and coordinate programs for discussion, workshops and seminars, monitor CRC resources so that they are effectively and efficiently utilized by school communities, actively participate in student enrollment and make a special

support for female students and assess the cause of student dropout and search solutions to the problem (Dykstra and Kucita, 2003:8).

2.5.2.2 Implementation of School CRC

Whether setting educational access or financial goals, four mechanisms increase accountability and transparency between community members, teachers and ministry officials. These are:

1. Endorsement of local plans to improve education by local community members, monks, educators, and civil authorities.
2. Expression of yearly plans as quarterly goals whose posting of data is done during cluster school meetings.
3. Use of public meetings attended by ranking local, provincial and state officials to report on the utilization of money' reports should be given by the PTA and/or cluster school chairman.
4. Approval of budgets by Ministry Officials for cluster school improvements or activities in writing to the cluster school committee though the provincial education office. The turnover of money or resources is completed by central or prejudicial authorities at a public meeting. The accepting committee then reports the intended use for the moneys received and the projected date of completion. All people on the project committee are introduced at this time (Dykstra and Kucita, 2003:16).

A. Making a Cluster Work

Making a cluster work is a major activity and it is up to the schools within the cluster to make it work and the school community must remember the following points: Clusters need to share; Clusters need to communicate; Clusters need to cooperate; Clusters are based on human resources, not money! They have to use resources effectively; and Clusters need to be realistic; they have to build up a cluster program step by step; they should not try to run before they can walk!

B. Community Involvement in School CRC

Parent and community involvement from the beginning of cluster formation builds new levels of trust between families, school staff and local authorities. In Cambodia a nation healing from a long civil war, trust is a precious thing. Parental participation can guarantee transparency and accountability of both material and education resources when they are genuinely allowed to participate in management of schools. Parental participation is not expected to substitute for good school management or teaching excellence, but if both the educators and the community are committed to support education, barriers can be overcome. If there is a strong will to address problems, they can be readily solved. By understanding the education process necessary to educate their children parents can make sure that every school-age child in the village arrives at school ready to learn and that the school, in turn, is ready to teach the child (Dykstra and Kucita, 2003:15).

The bond between the community and schools becomes stronger when the cluster begins to return services to the community. Cluster resource centers have purchased solar panels or batteries so that there is light in some classrooms at night for citizens to use as a meeting place, or lending library. Community sports events held in the school play ground, or other recreational events provide family fund and entertainment. The cluster resource center can become a center for short courses on a variety of subjects for community members. As well, health fairs and all manner of information can be disseminated from the schools or resource center in a cluster. In the broader context of rebuilding the nation's social contracts, one with another, and between government and the communities, cluster schools provide a structure, clear goals, and a continuous reason to be successful- the improvement of children's education (Dykstra and Kucita, 2003:15).

2.5.3. Monitoring and Evaluation

Monitoring is a process to ensure the implementation is effective, standards are maintained and the program continues to meet the actual needs of all groups. Evaluation is a process of celebrating success and identifying weakness to improve future planning (MOE, 2003:109).

Monitoring and evaluation of school CRC is the responsibility of the school cluster unit officers and experts at the central level, regional level, zonal and woreda level. Feedback on the operation and activities organized in the clusters are obtained by the school cluster unit in the following manner, from time to time: visits by the monitoring team of the school cluster unit and their observations; progress report from cluster principals; and reports of the coordinating education officers at different levels. It is interesting to use a news bulletin of cluster activities issued for circulation in all clusters to promote sharing of experiences. The feedback gathered from school clusters can provide data for remedial measures to be taken, in order to improve the implementation of the program as well as to develop the concept of school clusters further e.g., sharing of leadership by member schools as regards improvement of educational programs subject wise and level-wise, so that leadership does not rest with the core score alone (Samaranayake, 1983:39-40).

2.6. Factors Affecting the Implementation of School Cluster System

There are various determinants of performance that affect the teachers' interests (or satisfaction) either negatively or positively. Regarding the professional satisfaction, there are various problems influencing it. According to Samaranayake (1983:63), these factors are: difficulties related to the nomination and position of core principals, resistance to change on the part of various sectors, administrative and planning difficulties and relationship between satellite schools and school CRCs, of recurrent activities.

The following are major factors which affect the implementation of school clusters as distilled from the literature.

I. Difficulties Related to the Nomination and Position of CRC Principals

In certain cases members of school CRC are equally or more qualified and senior than the CRC school principal. This happens because the grades and the size of the schools as well as the seniority and efficiency of the principals have often been ignored in the appointment of principals. In such cases the cluster principals could not help, but suffer from an inferiority complex which adversely affects the progress of the cluster. Besides this CRC schools can not be provided with capable additional or deputy principals to assist the principal at this stage and consequently the cluster principal has to work under severe strain in cases when efficient deputies are not available. Moreover, because of lack of clear instructions defining duties of cluster and satellite principals there have been constraints to smooth functioning (Samaranayke, 1983:63).

II. Resistance to Change on the Part of Various Sectors

Negative attitude or indifference towards change has sometimes been observed on the part of some principals, teachers, parents and officials. It results in slowing down the process of acceptance of the concept. Worda Education Officers also have not always cooperated with cluster principals. Their role is not anticipated in the operation of the cluster concept. Even though they are expected to play a supporting role at this stage, it is observed that not everyone can take it in that spirit-hence difficulties for the cluster principal to assert his position (Samaranayke, 1983:63).

III. Administrative and Planning Difficulties

There are some delays on the part of the principals in achieving the expected perspective shift towards the cluster framework. It is not easy to change an age old tradition; supervisory and administrative officials at woreda levels are

not always adequate. Turn-over of cluster school principals, satellite school directors and officers at every level have slowing down effects resulting, and un-stability of the personnel also negatively affect the running of the program. (Samaranayake, 1983:64).

IV. Relationship between Satellite Schools and School CRCs.

CRCs may not always be willing to share their resources, especially pedagogical materials or library books that may become damaged or lost. Besides, without appropriate understanding of the benefits of inter-school communication, the presence of the CRC can discourage informal interaction. The resource teacher may not have the capacity to transmit CPD content to his/her peers effectively and also may not have sufficient time to provide effective in-class support, especially in satellite schools (Samaranayake, 1983:65).

2.7 The Management of School CRC in Ethiopia

2.7.1 The Need for School Clustering in Ethiopia

The system of clustered school has been adapted and emulated in Ethiopia with the aim of: utilizing scarce resources efficiently by sharing the resources and experiences among and in between school clusters; improving the quality of teaching-learning process thereby ensuring that teachers are better equipped to fulfill the aims and objectives of the education and training policy; enabling teachers to develop professionally and become more effective as part of an on-going process by means of low cost professional development through the cluster model; creating team spirit and working atmosphere among school communities; promoting and sustaining professional development to provide opportunities for teachers to keep up with changes in education; and encouraging and assisting teachers to produce local teaching materials and localize the curriculum (MOE, 2004:4).

In addition to the above objectives, school cluster resource centers can fulfill the following specific purposes: sharing facilities, upgrading untrained and sub-standard teachers, meeting diverse training needs of specific target groups, e.g. senior teachers for specific subjects, establishing net working of in-service programs in a decentralized system at national, regional, zonal, woreda and school level, so that there is integration and coordination, motivating and supporting of teachers and providing them with opportunities for promotion, enabling teachers to acquire new skills and broaden existing areas of expertise, for example, preparing teachers for inducting purposes in the case of new teachers to familiarize them with the process for adaptation to the environment, preparing teachers for specific responsibilities such as supervisory and training roles or school leadership and upgrading the qualification of the teachers, facilitating mentoring of the teachers, motivating teachers to undertake action research. These are some of the reasons why school clustering is practiced in primary schools of Ethiopia (MOE, 2003:16).

School clustering is widely accepted because, the teaching-learning process is not static. New concepts, research findings and current classroom approaches and methods have to be combined to take on new form. Teachers have to assimilate and implant these new trends and they, therefore, need to acquire the necessary knowledge, skills, attitudes, and professional competencies. Continuing professional development must be seen as an integral part of the teaching profession. It is important that every teacher understands that they share the responsibility for their own professional development. Very few teachers have the opportunity to attend in-service summer programs. There has been a lack of inbuilt, systematic arrangement to facilitate or enhance the professional competency of teachers once they are out of the TEIs (MOE, 2003:116).

2.7.2 The Current Situation of School Clustering in Ethiopia

A number of regions have sought to use existing human resources within the school cluster to provide training. The strategy to use existing teachers to provide training and support is a good one. It is cost effective and it reinforces an element of the teacher promotion guidelines. However, one difficulty identified is that the selected teacher may not have the capacity to transmit training content to his/her peers. In most cases the training is delivered at the CRC level to all teachers in the cluster (MOE, 2003:117).

In terms of supervision it was noted that the existing system of in -built supervision and the creation of core/key teachers in the cluster provide an excellent foundation on which to build a very good supervision and support system. The most common response from the school level as to the objectives of clustering schools is to share experiences and resolve common problems. In some schools, both formal and informal committees were meeting on a fairly regular basis to meet this objective.

An important element to the efficient functioning of the cluster is a strong representative coordinating committee to work with the cluster coordinator. The committee represented all schools; the cluster activities were more frequent. In most cases, the woreda signaled that they hand responsibility for cluster coordination but appeared to be involved less than their responsibility required (MOE, 2003:118).

Furthermore, the absence of per-diem of teachers that participate in training at the cluster level. There was much objection to this, as training was perceived to be part of the formal training system and thus appropriated per diems should apply-conversely many of the teachers said they would continue to participate without allowance because of the benefits they derived and the improvement of their teaching practices (MOE, 2003:118).

2.7.3 Primary Education Situation and School Clustering in Oromia

Provision of quality primary education to all would not be easy in Oromia because of four major reasons: the first reason is the fact that the number of children who should get this opportunity is huge and yet many children are outside the school, particularly among 7 years old children 50.1% are unable to come to the school at appropriate age; secondly, even among children who come to school, a significant number of them drop out before acquiring the necessary knowledge. Particularly, 22.7% of grade 1 children dropped out; thirdly, the gap between participation of boys and girls between woredas is extremely wide; and fourthly, large pupil to section ratio, lack of sufficient text books, lack of sufficient teachers both qualitatively as well as quantitatively are the prevailing problems. Also, since almost more than 40% of schools are operating based on shift system the quality of education is still affected.

Therefore, in order to provide quality primary education to all by 2015 the identification of obstructing issues to act upon in giving priority of attention shall have high output in meeting the stated goal. It requires to state about what speedy change could be achieved, how the resources can be acquired and the available are allocated, deciding on the focuses of priority of place of work and with the available capacity what to attain when and at what stage. School clustering program began in Oromia Regional State in 1995 and currently the program has extended to 4059 schools from the total of 7336 primary schools. (OEB, 2005:11).

The cluster meetings took place either at a cluster-center school (that was supplied with a minimum package of materials for workshop support) or rotated among the schools in a cluster. This was decided by the individual clusters.

Teachers were not paid for attending the workshops, either per-diem or transport. The regional education bureau insisted on no payment for teachers because the bureau would not be able to pay for this when project support ended. Teachers complained about the lack of per-diem but the cluster workshops remained highly popular despite this.

Individual schools were encouraged to carry out short meetings based on using and reflecting on the content of the cluster workshops. Success was uneven, with some schools organizing weekly meetings of subject mater groups or grade-level groups of teachers and other schools rarely organizing meetings. This depended heavily on the enthusiasm and vision of the school head. The clusters and cluster workshops were organized overall by the Woreda Education Offices and supervised by the Zonal Education Department.

CHAPTER 3

PRESENTATION AND DATA ANALYSIS

This chapter consists of two parts: the first part deals with the background characteristics of the study population which includes personal and professional characteristics of respondents. The second part presents the analysis of the main feature of the management of primary school clustered resource centers with nine detailed sections.

3.1 Characteristics of the Study Population

In order to maximize the diversity, different categories of respondents were involved in this study. These included decision makers and implementers. Specifically, education officials, experts and supervisors at different administrative levels ranging from Regional to Woreda education offices, school principals and teachers of primary school CRCs were targeted to respond to the questionnaire. Accordingly, 285 copies of questionnaire were prepared and distributed to 1 REB, 6 ZEDs, 18 WEOs and 54 Primary School Cluster Resource Centers. The total numbers of respondents were 285(69 officials, supervisors and experts, 54 primary school principals and 162 teachers). Out of the total 285 questionnaires, 95.08% (271) were duly filled and returned. Out of these 92.75% by officials, supervisors and experts, 96.3% by school principals and 95.68 were filled by CRC school teachers.

Key informant interviews were also held with 33 officials, supervisors and experts. These respondents were selected from REB, ZEDs, and WEOs. For purposes of checks and balances, checklists were also used and these were filled by 52 school principals.

Therefore, it is believed that the responses and other relevant data were graded, organized and analyzed in such a way as to determine the outcome of the study.

Table II. Respondents' by Sex and Age Category

N.	Sample areas	Sex					Age				
		Male		female		Total	18-25	26-35	36-45	≥46	total
		%	N.	%.	N.						
1	REB	100	(3)	-	-	3	-	-	3	-	3
2	ZED	91.66	(11)	8.33	(1)	12	-	4	6	2	12
3	WEO	93.87	(46)	6.12	(3)	49	1	11	27	10	49
4	School CRC	71.01	(147)	28.98	(60)	207	42	103	51	11	207
	Total	76.38	(207)	23.62	(64)	271	43	118	87	23	271

As can be observed in Table II, the nature of respondents in terms of their sex composition is very much male dominated. In all cases, except those in school CRCs, which is relatively better (29%), the males share account 100% at the REB and more than 90% at the ZED and WEO levels. This may pinpoint that female participation in places or positions that require high level of expertise and managerial skills is still inconsiderable as far as the reality in those sample areas reveals.

In terms of their age composition, all of the respondents (100%) at the REB level fall between age ranges of 36 to 45. At the ZED and WEO levels, 50% and 55% of the sample respondents respectively fall in ages 36 to 45. At school level, almost half of the respondents (49.76%) were found between ages 26 to 35. In all of the sample areas those who fall in the age category of 18 to 25 do not exceed 16%. Therefore, what we can infer from the age structure of the sample respondents is that the number of experienced educational leaders and other professionals dwindles as we go down to the lower level of the educational hierarchy. And it is also believed that most respondents were at enough maturity level to respond the questionnaire and interview.

Table III. Respondents' by Educational Level

N.	Sample areas	Educational level											
		TTI		Diploma		12+3		Degree		M.A/M.Sc		Unspecified	
		%	N.	%	N.	%	N.	%	N.	%	N.	%	N.
1	REB	-	-	-	-	-	-	100	(3)	-	-	-	-
2	ZED	-	-	33.33	(4)	-	-	66.66	(8)	-	-	-	-
3	WEO	12.24	(6)	73.46	(36)	10.2	(5)	4.08	(2)	-	-	-	-
4	School CRC	43.96	(91)	49.27	(102)	4.34	(9)	0.48	(1)	-	-	1.96	(4)
	Total	35.79	(97)	52.39	(142)	5.16	(14)	5.16	(14)	-	-	1.47	(4)

It is revealed in Table III, that the number of degree holders ranges from 4.08 % (2) at the WEO level to 66.66% (6) at the ZED level and 100% (3) at REB level. At the WEO level, 73.46% (36) of the respondents were graduates of Diploma. From the total 271 respondents more than half (64.21%) of the respondents were diploma graduates and above. From this one can consider that the respondents were relatively in a good position concerning their educational background.

Table IV. Respondents' by Job Responsibility

N.	Responsibility	Woreda	Zone	Region	Total	%
1	Officials	8	2	1	11	4.06
2	Supervisors	22	6	-	28	10.33
3	Experts	19	4	2	25	9.22
	Total	49	12	3	64	23.61
4	**School actors**	**Female**	**Key**	**PC coordinator**	**Total**	**%**
	Teachers	53	48	54	155	57.19
	School principals				52	19.19
				Total	207	76.38

Concerning job responsibility, the data in Table IV, reveals that of the total 271, 57.19% (155) were teachers, 19.19% (52) were school principals and 23.62% (64) were officials, supervisors and experts. These groups were considered relevant and key actors in the field by the virtue of their position and vested responsibilities in the management and implementation of the education system.

Table V. Respondents' by Service Years

N.	Sample areas	Total service years										Total N.
		≤ 5		6-10		11-15		16-20		≥ 21		
		%	N.	%	N.	%	N.	%	N.	%	N.	
1	REB	-	-	-	-	-	-	66.66	(2)	33.33	(1)	3
2	ZED	-	-	-	-	8.33	(1)	33.33	(4)	58.33	(7)	12
3	WEO	2.04	(1)	6.12	(3)	24.49	(12)	32.65	(16)	34.69	(17)	49
4	School CRC	20.77	(43)	31.40	(65)	18.84	(39)	17.87	(37)	11.11	(23)	207
	Total	16.24	(44)	25.09	(68)	19.19	(52)	21.77	(59)	17.71	(48)	271

Table V indicates that all (100%) of the respondents at the REB level and most (91.66%) of the respondents at the ZED level fall between 16-20 and above total service years. At the WEO and school level however, 32.65 and 17.87 percent of the sample respondents have total service years of 16 to 20 respectively. Most respondents (79.22%) at school level have above five years of service. From these data it is possible to assume that both groups of school actors and officials have relatively good teaching or working experience and they are in a position to respond on the questionnaire and interview, which are prepared to study the management of primary school CRC.

3.2. Analysis of the Findings of the Study

In the study, the sample populations include teachers, school principals, officials, experts and supervisors. The interview made with officials in the region, zone and woreda is also analyzed accordingly.

3.2.1. Communicating the Purpose of School Clustering

School clustering is grouping of schools that can work together to share experiences, resources and training in order to create opportunities for continual professional development and improve the quality of education with minimum cost. The success of school clustering depends on efforts made to clarify the purpose of school clustering and shared vision of what to accomplish.

Thus, the intention of the researcher was to assess how educational objectives and purposes were known or effectively communicated to decision makers and implementers.

In this direction, to access the school CRC objectives and purposes known and communicated to officials and school actors, a list of 11 purposes of school CRC were exposed to respondents to prioritize. Accordingly, the responses obtained were in terms of high, medium and low priority.

Table VI: Respondents' View on the Purposes of School Clustering

Group 1 = School Actors (Principals and teachers) N= 207 Group 2 = Officials, supervisors and experts N = 64

N.	Purposes	Group	Priority						Mean	Weighted index
			High		Medium		Low			
			%	N.	%	N.	%	N.		
1	To promote resource utilization	1	41.54	(86)	41.54	(86)	16.92	(35)	2.24	465
		2	51.56	(33)	32.81	(21)	15.63	(10)	2.35	151
2	To improve quality education	1	51.21	(106)	40.09	(83)	8.7	(18)	2.42	502
		2	56.25	(36)	25	(16)	18.75	(12)	2.37	152
3	To create team spirit among school communities	1	50.24	(104)	42.99	(89)	6.76	(14)	2.43	504
		2	43.45	(28)	45.31	(29)	10.94	(7)	2.33	149
4	To encourage participation of school community	1	45.89	(95)	40.58	(84)	13.53	(28)	2.32	481
		2	43.75	(28)	39.06	(25)	17.19	(11)	2.26	145
5	To prevent unhealthy competition among schools	1	61.35	(127)	30.92	(64)	7.73	(16)	2.54	525
		2	60.94	(39)	28.12	(18)	10.94	(7)	2.5	160
6	To initiate creativity	1	33.33	(69)	53.14	(110)	13.53	(28)	2.2	455
		2	40.62	(26)	43.75	(28)	15.63	(10)	2.25	144
7	To allow flexibility	1	39.61	(82)	45.41	(94)	14.98	(31)	2.25	465
		2	39.06	(25)	46.87	(30)	14.06	(9)	2.25	144
8	To develop positive attitude among teachers	1	55.07	(114)	29.95	(62)	14.98	(31)	2.4	497
		2	53.12	(34)	26.56	(17)	20.32	(13)	2.33	149
9	To transfer responsibility from WEO to CRC	1	24.64	(51)	56.04	(116)	19.32	(40)	2.05	425
		2	32.81	(21)	56.25	(36)	10.94	(7)	2.22	142
10	To create better organization.	1	47.34	(98)	31.40	(65)	21.26	(44)	2.26	468
		2	50	(32)	35.94	(23)	14.06	(9)	2.36	151
11	To promote teachers continuous professional development	1	55.07	(114)	37.68	(78)	7.25	(15)	2.47	513
		2	56.25	(36)	32.81	(21)	10.94	(7)	2.45	157

G1= Average mean score 2.32 G1 = Standard Deviation = 0.6955
G2 = Average mean score 2.33 G2 = Standard Deviation = 0.7159

Weighted index:- The first, second and third priorities are combined to create an index in which the first priority is given 3; the second and the third priorities are given 2 and 1 respectively.

Figures in parenthesis are actual observations and represented by N. All other similar tables follow the same principle.

According to Table VI, more than 50% of the officials, supervisors and experts of the total respondents thought that only items 1, 2, 5, 8, 10 and 11 were taken as high priority objectives. Concerning the school actors more than 50% of them have accepted items 2,3,5,8 and 11 as high priority objectives in the school clustering approach.

On the other hand, among 11 items, more than 50% of officials, supervisors and experts identified only item 9 as medium priority and similar percent of school actors identified items 6 and 9 as medium priority. Of the total respondents of both groups those who identified the 11 items as low priority were not more than 21%.

It seems that there is a consensus on the purposes in items 2, 8,9 and 11 of school clustering by both groups of respondents. Discussion made with Regional, Zonal and Woreda officials, supervisors and experts indicated that the purpose of the management of school clustering was to promote: experience sharing, effective resource utilization, teachers' professional development and quality education by using cost effective method.

In general the three highest priority of the objectives according to their weighted index as prioritized by officials, supervisors and experts were to promote teachers' continuous professional development(157), to improve quality education (152), to create better organization and management (151) and to promote resource utilization (151). While the three top priority areas using weighted index as prioritized by school principals and teachers were to prevent unhealthy competition among schools (525), to promote teachers CPD (513), and to improve quality education (502).

Discussion made with Regional, Zonal and Woreda level officials, supervisors and experts, indicated that the purposes of the management of clustered school were to promote quality education, to develop positive attitude among teachers, to initiate creativity, to transfer responsibility from WEO to CRCs and to promote

teachers continuous professional development as priority objectives. The overall priority was ensuring proper functioning of the 11 objectives.

In order to test whether there was a significant difference in responses between the two groups of respondents, the, mean scores were exposed for further statistical analysis. This was used to test the similarity or differences in opinions or views. The t-critical at alpha 0.05 two tailed t-table for df (N-2) reads 2.262. Hence t-calculated 0.2533 is less than t-critical; the observed difference is not statistically significant. Therefore it can be said that there is no statistically significant difference in opinions towards the objectives of school CRC between the two groups.

The implication is that, however, all items were cited as high priorities in the purpose of school clustering management, all respondents did not equally accept the objectives of school clustering. Therefore, clarifying the purposes of school clustering management for wide acceptances among the actors seem very important for the success of the system.

3.2.2. School CRC Organization and Structure

The term clustered school structure refers to a frame-work of relationships among similar functions, physical factors and personnel that is set up to facilitate the accomplishment of some mission by promoting cooperation and facilitating an effective exercise of executive leadership. Before looking into different structures of school clustering, it is better to discuss some cluster teams. These are cluster management teams, cluster planning and implementation teams and professional learning teams.

Cluster Management Team- principals from the satellite schools meet with the CRC at least once in a month. The management team provides leadership for the initiative, oversees the general direction of the project, provides budget advice and is responsible for accountability process.

Cluster Planning and Implementation Team- Representatives from the satellite schools meet with the CRC at least twice per term. The planning and implementation team identifies and details strategic actions, coordinates and organizes support within individual schools and ensures that tasks agreed to by the cluster are completed.

Professional Learning Teams- Teachers will work in professional learning teams that meet to discuss work-based questions of relevance to the overall direction of the project. The composition of professional learning teams will be fluid. It is anticipated that work-based projects will be highly focused, of immediate relevance to the team and relatively short-term in duration (Proctor 2003:10).

There are various mechanisms to achieve success through the use of scarce resources of an organization. Bartol (1991:401), states that the purpose of management is to ensure success and provide unlimited services that support the achievement of unified objectives of an organization. It also enables the organization to obtain and retain the skilled, committed and well-motivated work force. The following Table is designed to get information about organization and structure in school clustering program.

Table VII: Respondents' Responses on School CRC Organization and structure

No.	Organization and structural aspects	Group	Respondents school principals N=52	
			Percentage	Frequency
1	Are clustered school committee organized in your school?	Yes	88.46	(46)
		No	11.54	(6)
		I do not know	-	-
2	Level of committee awareness to know their roles and responsibilities	High	13.46	(7)
		Medium	21.15	(11)
		Low	65.38	(34)
3	Level of committee participation in CRC activity and management	High	13.46	(7)
		Medium	48.07	(25)
		Low	38.46	(20)
4	Number of satellite schools in your CRC	1	1.92	(1)
		2	5.77	(3)
		3	36.54	(19)
		4	28.85	(15)
		≥5	26.92	(14)
5	Maximum distance among satellite schools and the school CRC	≤ 30 minutes	7.69	(4)
		30 minutes to 1 hour	25.0	(13)
		1 hour to 1 ½ hours	34.61	(18)
		1 ½ hours to 2 hours	15.38	(8)
		> 2 hours	17.30	(9)
6	Place of in-service training where meeting takes place	Always at CRC	78.85	(41)
		Always in some selected schools	13.46	(7)
		Rotating in each satellite schools	7.69	(4)
		other	-	-
7	Structure used to communicate school CRC with satellite schools.	Hierarchical	13.46	(7)
		Vertical	67.30	(35)
		Horizontal	13.46	(7)
		Hybrid	5.76	(3)
		Other	-	-
8	- Materials assigned for the center	High	-	-
		Average	33.61	(18)
		Low	65.38	(34)
9	Human resource assigned for the center	High	-	-
		Average	25.0	(13)
		Low	75.0	(39)

According to Table VII, committee organization at school CRC level, 88.46% had succeeded. The level of awareness among the organized committees knowing their roles and responsibilities were high for 13.46%, medium for 21.15% and low for 65.38%. Regarding number of schools involved in one CRC most of them contained 3-5 satellite schools. The maximum distance among satellite schools and the school CRC on foot were more than one hour for 67% of the respondents and the place where in-service training and meetings takes place mostly (78.85%) were at

CRC level and the structure used to communicate with satellite schools and school CRC were mostly (67%) vertical. Furthermore, the amount of materials and human resources assigned for the center were mostly (65.38% and 75.0% respectively) and these were responded to as below average.

Although the number and distance of satellite schools differ from place to place, most of the schools involved in this research have: the level 1-8, 3-5 satellite schools and 5-12 k.ms. far from the center. On the contrary, there was less horizontal communication among satellite schools and satellite schools are obliged to go to the center to participate in in-service trainings, meetings and other activities. Furthermore, the amount of materials and human resources assigned for the center were mostly below average. This implies that enough attention is not given to the new approach.

3.2.3. Functionality of Planning Aspects

Planning is vital for efficient administration, organization and coordination. All planning need to be done very far in advance to take account of the various stages of the education processes. Many aspects need to be considered within the planning process.

Design for planning cluster school programs should also follow the following major points: 1. need analysis. The key to this process is saying "This is not good enough. How can we make it better for ourselves and the children?" 2. Deciding priorities. You cannot do every thing at once. Too much change at the same time just leads to confusion anxiety and resistance, and then nothing gets done. 3 Delivering training. The best way to learn is to try things out practically. The best way to become confident is to try to explain to some one else (Cummings et. al., 2004:2).

In order for an educational facility to be successful in meeting the needs of learners, a process of planning, design and construction must be followed. As such, the process by which a building is conceived can be long and complex. For

these reasons, the planning process must be itself planned carefully based on clear project objectives. From the very beginning or strategic facility planning process, one main objective should be to obtain multiple perspectives while exploring all potential problems and opportunities.

The planning aspects were designed to assess the level of planning activities of cluster based educational management program. Accordingly, respondents' responses on the extent to which the planning aspect was addressed were organized as high, medium and low as depicted in Table VIII.

Table VIII: Responses on the Extent of Planning Aspects Addressed

Group 1= School principals = N = 52 ,2= Officials, supervisors & experts N= 64

N.	Planning aspects	Group	Priority						Mean	Weighted mean
			High		Medium		Low			
			%	N.	%	N.	%	No		
1	Individuals awareness in planning school CRC program	1	28.84	(15)	44.23	(23)	26.92	(14)	2.02	1.94
		2	15.62	(10)	54.68	(35)	29.70	(19)	1.86	
2	School community involvement in planning the program	1	21.15	(11)	32.69	(17)	46.15	(24)	1.75	1.65
		2	9.37	(6)	35.93	(23)	54.68	(35)	1.55	
3	Need assessment	1	19.23	(10)	19.23	(10)	61.53	(32)	1.57	1.55
		2	10.93	(7)	31.25	(20)	57.81	(37)	1.53	
4	Utilization of program evaluation report in planning the program.	1	34.61	(18)	42.30	(22)	23.07	(12)	2.11	2.03
		2	21.87	(14)	53.12	(34)	25	(16)	1.96	
5	Identifying and prioritize problems	1	28.84	(15)	44.23	(23)	26.92	(14)	2.02	2.01
		2	23.43	(15)	53.12	(34)	23.43	(15)	2.0	
6	Relation of school clustering plans with educational goals	1	26.92	(14)	48.07	(25)	25	(13)	2.02	1.86
		2	12.5	(8)	45.31	(29)	42.18	(27)	1.7	
7	Consultant involvement in planning	1	21.15	(11)	43.46	(7)	65.38	(34)	1.55	1.45
		2	9.37	(6)	17.18	(11)	73.43	(47)	1.36	

As can be seen from Table VIII, 78.45 % of the respondents (84.37% officials, experts and supervisors and 71.15% school principals) have indicated that the individual awareness in planning cluster school program has been maintained below high level. Regarding involvement of committee members in the planning of the program only 14.65 % of the respondents (9.37% officials and supervisors and 21.15 % school principals) were involved at high level. Concerning need assessment more than 59% of the respondents (57.81% officials and supervisors and 61.53% of school principals) responded that, the activity of need assessment was at low level. Utilization of program evaluation report and prioritize problems in planning were almost at medium or low level.

This means 75% of officials and 77% of school principals are prioritized below high level. 12.5% of officials, experts and supervisors and 26.92% of school principals identified high level relation-ships between schools clustering plan's and long range educational goals. Concerning out side consultant involvement in planning both groups (73.43 % officials, experts and supervisors and 5.38% school principals) identified at low level.

In general, although community participation is vital in educational planning, the discussions made with officials, experts and supervisors revealed that community and other stakeholders' involvement in planning was very poor and planning function remained the responsibility of the civil servants or the personnel in the planning team.

In order to test significant differences in responses, the mean scores were exposed for further statistical analysis, the test for differences between the two means showed that, at 0.05 levels of significance, t-calculated (2.9395) is greater than t-critical (2.015). This means there are significant differences between opinions of the two categories of respondents regarding planning issues.

3.2.4 Communicating Management and Implementation Strategy

Management is not concerned only with assignment of the right persons for right jobs, but it also assists to create a team spirit and feel a sense of commitment where workers satisfy their desires by developing themselves and contribute to the attainment of organizational goals (Bartol, 1991: 402).

As Ayalew, 1995 and Seyoum, 1996 discussed, there are merits of decentralized management. Hence for success, there has to be competent, trained, experienced and knowledgeable subordinates, that can carryout responsibilities and make decisions at all levels of the education system.

Implementation is explained as the actual use of an innovation in practice. Because of its complexity, successful implementation involves a great deal of materials and human resources. Besides these, implementation requires planning, and planning focuses on three factors: people, programs and processes. These three factors are inseparable. Therefore, introducing strategies for officials, experts and supervisors and school actors seems very important for the success of the system.

The following statements were exposed to respondents to prioritize management and implementation strategies needed in the cluster based educational management. Accordingly the responses were organized as high, medium and low, as depicted in Table IX.

Table IX: Respondents' View on the Extent of Management and Implementation Strategies

Group 1 = School actors (Teachers and principals) N= 207 Group 2 = Officials, Experts and Supervisors N= 64

N.	Strategies	Group	Priority						Mean	Weighted Index
			High		Medium		Low			
			%	N.	%	N.	%	N.		
1	Establish clear policy statement	1	64.7	(134)	25.60	(53)	9.66	(20)	2.55	528
		2	57.81	(37)	17.18	(11)	25	(16)	2.32	149
2	Greater community involvement	1	56.52	(117)	28.01	(58)	15.45	(32)	2.41	499
		2	54.68	(35)	23.43	(15)	21.87	(14)	2.33	149
3	Flexibility among school communities	1	66.18	(137)	19.80	(41)	14.0	(29)	2.52	522
		2	43.75	(28)	28.12	(18)	28.12	(18)	2.16	138
4	Resource mobilization from WEO to school CRC	1	51.69	(107)	25.12	(52)	23.18	(48)	2.28	473
		2	40.62	(26)	32.81	(21)	26.56	(17)	2.14	137
5	Increased teachers' capacity using CPD program	1	62.31	(129)	20.28	(42)	17.39	(36)	2.45	507
		2	59.37	(38)	18.75	(12)	21.87	(14)	2.37	152
6	Motivate experience sharing program	1	65.70	(136)	20.77	(43)	13.52	(28)	2.52	522
		2	46.87	(30)	28.12	(18)	25	(16)	2.22	142
7	Promote teachers motivation with self interest	1	64.25	(133)	21.25	(44)	14.49	(30)	2.50	517
		2	42.18	(27)	29.68	(19)	28.12	(18)	2.14	137
8	Allocate annual budget and basic materials for CRC activity	1	50.24	(104)	26.08	(54)	23.67	(49)	2.26	469
		2	45.31	(29)	34.37	(22)	20.31	(13)	2.25	144
9	Enhance capacity of committee members	1	55.07	(114)	25.12	(52)	19.8	(41)	2.35	487
		2	45.31	(29)	26.56	(17)	28.12	(18)	2.17	139
10	Establish clear vision, mission, objective and strategy	1	65.70	(136)	21.25	(44)	13.04	(27)	2.53	523
		2	53.12	(34)	26.56	(17)	20.31	(13)	2.33	149
Average mean G1 = 2.43 Standard Deviation. = G1 = 0.7580 Average mean G2 = 2.24 Standard Deviation = G2 = 0.8215										

As can be read from Table IX, among 10 management and Implementation strategies, all of the strategies were highly accepted by (50-60%) of school actors. And strategies number 1, 2, 5 and 10 were identified as high by officials, experts and supervisors. While the rest of the items which were reported by officials,

supervisors and experts were medium or low. However, all items were cited as high priority in the management and implementation strategy. This implied that although it seems that there was a consensus on the strategy in items 1, 2, 5 and 10 the rest strategic items were not well known or not accepted by officials, supervisors and experts.

Discussions made with Regional, Zonal and Woreda officials, supervisors and experts indicated that the main strategies of management and implementation should promote community participation to increase teachers' professional development and to enhance mutual sharing of resources and experiences.

In order to test the variance in responses between the two groups of respondents, the mean scores were exposed for further statistical analysis. The test for differences between the two means showed shat at 5% level of significance t-obtained (2.5972) is greater than t-critical (2.306). Therefore, t-test indicates there is significance difference between opinions of the two groups.

3.2.5 Functionality of Monitoring and Evaluation

Going to training sessions, workshops and experience sharing programs is not enough. Teachers and school principals after a training and experience sharing session should have enough knowledge, skills and confidence to try to improve things. They should also be given the opportunity to share their experiences with others. The cluster committee also needs to know that the work of the cluster is effective and serves the need of all those in their schools. It should evaluate the effectiveness of all activities. Officials and supervisors also need to know what is happening in their areas and take an active role in planning, supporting and acknowledging this work (Cummings et. al., 2004:2).

The following activities were designed to assess the level of monitoring and evaluation activities in clustered based educational management, by using 1; for excellent 2: for very good, 3: good 4: poor and 5: very poor.

Table X: Respondents' Responses on Monitoring and Evaluation Aspects

Group 1= School actors (Principals and teachers) N= 207 Group 2= Officials, Supervisors and experts N= 64

N	Monitoring and Evaluation Aspects	Group	Rating Score					Mean	Weighted mean	Weighted index
			1	2	3	4	5			
1	Systematic and careful evaluation program	1	9	51	83	48	16	2.9	2.8	610
		2	-	7	37	18	2	2.7		177
2	Involvement of school communities in evaluation	1	11	22	73	57	44	2.5	2.45	520
		2	-	7	24	24	9	2.4		157
3	Evaluation focused on effective utilization of human and material resource	1	17	55	75	45	15	3.0	2.9	635
		2	-	14	28	20	2	2.8		182
4	Reporting evaluation data	1	69	63	34	23	14	3.6	3.5	759
		2	25	11	8	10	10	3.4		223
5	In-service training programs assessed by WEO at least quarterly.	1	12	26	67	50	52	2.4	2.4	517
		2	1	4	23	30	6	2.4		156
6	Assessment of the program by higher officials at least in a semester	1	22	51	62	45	27	2.9	2.6	617
		2	-	5	25	23	11	2.3		152
7	Arranging program for monitoring and evaluation by CRC committee	1	21	37	53	58	38	2.7	2.4	566
		2	1	8	21	14	10	2.1		138
8	Inclusion of CRC activity in the regular evaluation format	1	24	41	78	48	26	3.0	2.8	640
		2	2	10	23	21	8	2.6		169
9	Continuous supervisory service by concerned bodies	1	16	31	67	60	33	2.6	2.55	558
		2	-	9	23	26	6	2.5		163
Average mean score G1=2.844 G2= 2.577										
Standard Deviation G1= 1.192 G2= 1.008 Grand mean = 2.711										

Table X above, depicts respondents' perception of monitoring and evaluation of school CRC management. The weighted mean scores for all functions listed, except item 4, lay below 3.0. This means the level of monitoring and evaluation activities in cluster-based educational management has been medium or fair with weighted mean scores ranging from 2.5 to 3.49 for items 1,3,6,8 and 9 and low with weighted mean scores ranging from 1.5 to 2.49 for items 2, 5 and 7 while for

item 4 the weighted mean score was found to be 3.50 and thus only this function seems to be highly considered.

As per the discussion made on reporting evaluation data, evaluators report the evaluation data for the management committee to give decisions on problems and to share good experiences. Concerning community involvement, arranging program and assessment in-service training and experience sharing program respondents respond very negatively.

In this regard, discussions made with officials, supervisors and experts revealed that, community involvement was very poor and the role of school committee was inactive and nominal. This was because of lack of common vision of school clustering approach among committee members, difference in the level of awareness, lack of commitment and transparence between the school principals, committee members and officials.

In general, since the grand mean obtained from five points of Likert scale was equal to 2.7 and that is less than the average 3.0, monitoring and evaluation activity in school CRC management were at negative level.

The statistical analysis for significant differences for two independent average mean score shows that, the standard error,

$$S.E.\ \bar{X}_1-\bar{X}_2 = \sqrt{\frac{\delta_1^2}{n_1} + \frac{\delta_2^2}{n_2}} = 0.147$$

The observed difference between the two means is 0.267 which is about 1.8 times the S.E. $\bar{X}_1-\bar{X}_2$. Consequently, there is little ground to doubt the hypothesis that the difference is due to sampling fluctuation and hence the difference is in-significant.

3.2.6 Changes Observed after CRC Implementation

The impact of school clustering approach in educational management can be seen from changes observed within the schools and the system as a whole. As the process of school clustering is far from complete and it is an on-going process,

some of the unpleasant things are likely to be felt only over time. In this regard, the changes in school environment, changes in educational objectives and problem solving activities in the process of clustering were assessed as indicated below as high, medium and low.

Table XI: Changes Observed After CRC Implementation

Group 1 = School actors (Principals and teachers) N = 207 Group 2= Officials, Supervisors and experts N= 64

N.	Changes shown in Schools	Group	Priority					
			High		Medium		Low	
			%	N	%	N	%	N
1	Enrollment of primary students increased	1	68.60	(142)	25.12	(52)	6.28	(13)
		2	60.94	(39)	31.25	(20)	7.81	(5)
2	Quality of education improved - Repetition rate decreased. - Dropout rate decreased. - Facility of pedagogical center improved. - Facility of library improved. - Supervisory service enhanced.	1	20.29	(42)	56.52	(117)	23.18	(48)
		2	17.19	(11)	50.0	(32)	32.81	(21)
3	Financial support increased	1	11.11	(23)	41.54	(86)	47.34	(98)
		2	3.12	(2)	40.62	(26)	56.25	(36)
4	Income generation improved	1	23.67	(49)	45.89	(95)	30.43	(63)
		2	15.62	(10)	50.0	(32)	34.37	(22)
5	Teachers' CPD program improved - Problem solving activity enhanced - Experience sharing increased. - Team spirit increased - Uniform activity increased.	1	23.67	(49)	53.14	(110)	23.18	(48)
		2	28.12	(18)	46.87	(30)	25.0	(16)
6	Management efficiency improved - Human resource utilization improved. - Material resource utilization improved - Financial resource utilization improved	1	28.50	(59)	52.66	(109)	18.84	(39)
		2	21.87	(14)	56.25	(36)	21.87	(14)
7	Burden from WEO decreased.	1	17.39	(36)	42.99	(89)	39.61	(82)
		2	17.19	(11)	42.19	(27)	40.62	(26)

As depicted in Table XI, positive management benefits from school clustering were indicated by increased enrollment as supported by 68.6% of the respondents. On the other hand, 73.5 % of the respondents thought that no improvements in quality of education. This might be due to lack of adequate inputs to the system and less attention might have been given to it. Whether quality is getting improved or not in the process of the reform, it can be assessed in terms of what mix of

inputs are brought into the educational process. Thus, one of the relative magnitudes, supervisory service, has been taken as a measure of quality.

By means of supervision, schools receive technical assistance and ensure the implementation of new policies. In an assessment made to find out how frequently schools were supported, most of the respondents (72.7%) have the opinion that schools could not get continuous supervisory service.

On the other hand, regional, zonal and woreda level officials have reported the reasons, for not visiting schools to the level of expectation. These were lack of logistics, skilled manpower and budget. It seems that there is a consensus around lack of capacity to assist schools from the system is level and implementers.

Concerning changes in school finance and income generation, about 49.4 % of the respondents have reported that there is no change in school finance, while 50.55 % thought that there was a notable change in school finance.

Regarding management efficiency, only 27% of the respondents have reported that there was high improvement in management efficiency as a result of experience sharing with satellite schools, while 19.50% of the respondents thought that no changes have been made and 53.50% of the respondents have reacted that there were changes in administrative efficiency to some extent. This might have resulted from lack of awareness on the new approach and absence of well organized structure.

Concerning teachers in-service training, 24.72% of the respondents have reported that there was high improvement in teacher in-service training program. This is because of using the responsible TOT, while 75.27% of the respondents thought that medium or low level changes have been made. This should have resulted from the commitment and competence of assigned school principals and mentors to transmit what they took from the training and workshop programs.

About 72.65% of respondents indicated that the management of school CRC had no change to decrease the burden from WEO, while 17.34 % of respondents agreed that the new program can decrease the burden from WEO. In general, although school clustering is vital in all activities mentioned on Table XI, most respondents responded negatively about change shown after CRC implementation. This is because of the level of awareness and commitment on school actors and officials at different level.

3.2.7 Difficulties in Management and Implementation

Implementation of the new school CRC program involves students, teachers, school principals, officials, experts, supervisors and other concerned bodies in direct contact with the innovative concept. It relates to bolts and nuts because it demands not only to get the innovation components in tune, but also to give a solution for quality education. Because of its complexity, successful implementation involves a great deal of material and manpower cost. Besides this, a number of factors hinder the implementation of clustering approach in many primary schools.

As a result, to arrive at the major factors that affect the implementation of school clustering model for the study under review, opinions and responses were gathered from different groups or respondents.

In the following table the potential difficulties encountered in management and implementation of clustered schools were presented to the respondents to be rated using the five points Likert type scale as: 1.extremely serious, 2.very serious, 3. some what serious, 4. obstruct but not serious and 5. not observed.

In addition respondents were allowed to add additional potential difficulties that have been left out if they felt the list was incomplete. For the purpose of analysis, the responses were rated as 4.5 and above (extremely serious),
3.50 – 4.49 (very serious), 2.50 – 3.49 (some what serious), 1.50 – 2.49 (not serious but observed), 0.5 – 1.49 and above (not observed).

Table XII: Rating on Difficulties in Management and Implementation of the School CRC Program

Respondents Group 1 = School actors (Principals and teachers) N= 207 Group 2 = Officials, supervisors and experts N= 64

N.	Difficulty	Group	Rating Scores					Mean	Weighted mean	Weighted index
			1	2	3	4	5			
1	Inadequacy of financial support	1	142	50	10	3	2	4.57	4.58	948
		2	47	10	5	2	-	4.59		294
2	Lack of technical assistance	1	25	54	94	31	3	3.32	3.23	688
		2	8	29	11	6	-	3.14		201
3	Lack of skilled human power	1	37	50	80	28	12	3.35	3.52	693
		2	21	13	21	7	2	3.70		236
4	Lack of structural organization	1	22	43	78	50	14	3.14	3.26	650
		2	11	16	25	10	2	3.38		216
5	Absence of motivation	1	70	51	31	50	5	3.63	3.81	752
		2	25	19	16	3	1	4.0		256
6	Lack of experience sharing	1	24	59	77	41	6	3.26	3.41	675
		2	9	22	29	3	1	3.55		227
7	Lack of meeting and discussion	1	24	37	98	36	12	3.12	3.17	646
		2	5	15	35	8	1	3.23		207
8	Lack of managing capacity	1	70	56	19	50	12	3.59	3.80	743
		2	26	18	16	3	1	4.02		257
9	Lack of awareness to do action research	1	42	44	66	46	9	3.31	3.58	685
		2	27	10	19	7	1	3.86		247
10	Distance between CRC and satellite schools	1	40	54	68	37	8	3.39	3.43	702
		2	11	19	25	7	3	3.48		223
11	Lack of willing well organized schools to do with small schools.	1	27	50	77	35	18	3.16	3.10	654
		2	6	15	21	20	2	3.05		195
12	Absence of considering CRC activity in evaluation format	1	67	51	39	37	13	3.59	3.57	743
		2	13	18	25	7	1	3.56		227
13	Lack of awareness of CRC committees	1	40	58	70	30	9	3.43	3.58	711
		2	19	17	20	8	-	3.73		239
Average mean score G1=3.45 G2= 3.64										
Standard Deviation G1= 1.15 G2= 1.05 Grand mean = 3.54										

As can be read from Table XII, among 13 management and implementation difficulties, 7 were rated as very serious by the categories of respondents with weighted mean scores ranging from 3.5 to 4.49. These were inadequacy of financial support, lack of skilled human power, absence of motivation, lack of managing

capacity, lack of awareness to do action research, absence of considering CRC activity in evaluation format and lack of awareness of CRC committees about the program. These problems were considered as prominent and very serious to carry out school clustering management as both types of respondents agreed upon. In general, these 7 very serious difficulties accounted for 53.84% of the total.

The interview and checklists revealed the seriousness of the above mentioned difficulties. Besides this, resistance of officials to accept the new approach, the way school principals and mentors assigned and commitment of concerned bodies were also very serious problems to manage and implement the school CRC program. Inadequacy of financial support was also rated as a very serious problem observed in the process of school clustering with a weighted mean score of 4.58. This supports what has been reported as inadequate budget transferred to zones and woredas to cover educational expenditures. It was said that financial problems were the main factors for the management of school clustering and thus lack of mechanism designed to inject more finance for educational expenditures, flexibility and transparency in planning and implementation of school clustering management system might have affected the success.

As indicated in the above table, among those 7 very serious difficulties, absence of motivation was also found to be a very serious barrier to implement the school CRC management, with weighted mean score of 3.81 as rated by the respondents. Most teachers expect to be paid per-diem to attend staff development sessions. Moreover they need support and direction from bureau, training and communication regarding staff development processes and handbook of cluster guidance and annual plan to develop their confidence and to avoid misunderstanding, but none of them would be fulfilled in the real case.

Lack of managing capacity was also rated as a very serious problem with weighted mean scores of 3.80. Management has the elements of planning, organizing, staffing, controlling, directing and order effective managerial competence is the basis for success. There fore, knowledge, skills and attitudes required of school principals in order to ensure the effective operation of programs require strategic

planning and activities to facilitate greater collaboration within and across the school and the community.

In certain cases, member principals were equally or more qualified and senior than the CRC school principal. This happened because the grade and the size of the schools as well as the grades, seniority and efficiency of the principals have often been ignored in the appointment of principals. In such cases the cluster principals could not help, but suffer from an inferiority complex which adversely affected the progress of the cluster.

Lack of awareness of CRC committees was also rated as a very serious problem observed in the process of implementing the new program with weighted mean scores of 3.58. As parents and committee members become more informed about what goes on in schools, they can play a more active role in school activities. They are more likely to encourage their children to attend school, complete their homework and to be involved in extra-mural activities. They can also respond more actively to issues such as teacher and learner absenteeism. Promoting committee awareness is not only in school construction but in many other aspects of school management and learning. This is promoted by involving Parent-Teachers Associations (PTAs) in localizing curriculum, monitoring school services, or mobilizing children to enroll at the correct age. Local policies for the use of the cluster schools as a learning center for adults and a delivery centre for other services by development and community agencies were formulated by cluster committees or PTAs.

The other important problem rated as very serious by respondents with weighted mean scores of 3.57 was absence of considering CRC activity in the evaluation format. Teachers, specifically those who teach in primary schools have low professional self esteem and do not feel valued by their communities. To motivate and to make active participant in school CRC there should be work competition among clusters and that should be supported by continuous supervisory service. In the study since their creative work would not be recognized and credited in evaluation format, teachers were reluctant to participate actively.

All of these activities might not be implemented without awareness of CRC committee members and this was the major problem that was found out in the study.

Lack of skilled human power was also found to be a very serious problem to implement the management of school clustering with weighted mean score of 3.52 as rated by respondents. In the context of school clustering management, skilled human power has either to exist or be provided. If not, the program can not be implemented and the management becomes difficult. This problem might be related to the concern that decision makers and planners in education sector themselves lack the skill and capabilities required for implementation. Problems like staff turnover, lack of incentives and lack of effective experience might have constrained the implementation.

The identified problems whose weighted mean scores ranging from (2.5 – 3.49) in numbers: 2 (lack of technical assistance), 4 (lack of structural organization), 6 (Lack of experience sharing), 10 (distance between CRC and satellite schools) and 11 (lack of allowing well organized schools to do with small or poor schools) were considered as some what serious problems. But, since the mentioned problems were hindrances to the smooth operation of the management of school clustering approach, it seems there is a need to take corrective actions in order to make the problems viable. Although the problems seem to be deep rooted in the system, prioritizing them for action based on the degree of seriousness might be necessary.

In general, since the grand mean was equal to 3.54, it may reveal the potential difficulties listed in management and implementation of school CRCs and presented to the respondents to be rated using the five points of Likert scale, were very serious.

The statistical analysis for significant differences for two independent average mean scores shows that, the standard error,

$$\text{S.E. } \bar{X}_1 - \bar{X}_2 = \sqrt{\frac{\delta_1^2}{n_1} + \frac{\delta_2^2}{n_2}} = 0.151$$

The observed difference between the two means is 0.19 which is about 1.26 times the S.E. $\bar{X}_1 - \bar{X}_2$. Consequently there is little ground to doubt the hypothesis that the difference is due to sampling fluctuation and hence the difference is insignificant.

CHAPTER 4

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

This final chapter of the thesis presents the summary of the major findings of the study, the conclusions drawn and recommendations given.

The overall objective of the study was to assess the current status of the Management of Primary School CRCs in Oromia Regional State, with the following specific objectives in mind:

i. to find out whether there was a matching or coherence between what the review of literature suggested and the real practice taking place in our situation;

ii. to assess the extent to which the objectives of school clustering educational management were known to each zonal, woreda education offices and school communities;

iii. to assess the level of participation of school communities in planning, organizing, implementing and managing cluster school education program;

iv. to identify the major problems in the management of clustered primary school resource centers to achieve its objectives; and

v. to suggest some possible solution(s) for the problem to enhance the management of school clustering model in primary schools in the future.

To meet the above objectives, the study was guided by the following five basic research questions:

i. What are the basic features of school clustering model, in terms of improving quality education?

ii. Is the management of school clustering model supported by: adequate organizational structure, management functions and guide lines which enable the management of school clustering at local level?

iii. To what extent do school communities participate in planning, organizing and managing clustered school educational program?

iv. What major problems have been encountered in the implementation of school cluster model in the region?

v. What are the strategies and mechanisms that help to improve the management of school clustering in the region?

The findings of this new system will help to scratch the problem, and generate valuable information for planners, decision-makers and implementers of the school CRC activity. Furthermore, it may encourage others for detailed investigation.

In dealing with the research questions, related literature was reviewed. As information sources, questionnaire, interview and checklists were used. The total numbers of respondents that responded to the study questionnaire were 271 and the respondents that were involved in interviews were 33.

4.1. Summary of the Findings

The summary of the findings is presented below under six sections.

4.1.1. Communicating the Objectives of School Clustering

a) Although all of the 11 objectives of school clustering were cited as high priorities, 51-61% of respondents from both groups have indicated only 4 items as the highest pressing objectives of the system. These are: preventing unhealthy competition among schools, promoting teachers, continuous professional development, improving quality education and developing positive attitude among teachers.

b) On the other hand 50-51% of the officials, supervisors and experts have cited promoting resource utilization and creating better organization and management as the highest priority. Similar percent of school principals and teachers were also reported, creating team spirit among school

communities as the most pressing educational objective of the system. The rest of the objectives were considered to be either of medium priority or low priority.

4.1.2. School CRC Organization and Structure

a. Concerning committee organization at school CRC level, 88.46% succeeded but the level of their awareness about the new system and the level of committee participation in CRC activity such as planning and managing were very poor and not more than 14% actively participated.

b. Even though the number and distance of satellite schools differ from place to place, most of the CRC schools involved in this research have: 3-5 satellite schools (65.39%) are 5-12 k.ms. far (67%) and the structure used to communicate with satellite schools and school CRCs mostly (67%) were vertical. Furthermore the amount of materials and human resources assigned for the center were mostly below the average level.

4.1.3. Management and Implementation Strategy

a) Among 10 management and implementation strategies of school clustering to be addressed as priorities, the majority (53-65%) of the respondents have indicated only the following items: establishing clear policy statement, increasing community involvement, increasing teachers' CPD program and establishing clear vision, mission and goals as the highest pressing strategies of the system.

b) In the context of the study, the respondents have cited different priorities. School actors (principals and teachers) 50- 60% have accepted all (ten) strategies as high priorities. But officials, supervisors and experts have accepted only 4 strategies, which were cited and explained in the above paragraph. Although all items were cited as high priorities in the management and implementation strategies, the strategic system was not well known or not accepted by officials, experts and supervisors.

4.1.4. Monitoring and Evaluation

Concerning monitoring and evaluation, except item (4) reporting evaluation data (weighted mean scores 3.50), the rest items such as: community involvement, systematic and careful program arrangement, periodical assessment and continuous supervisory service and inclusion of CRC activity in the regular evaluation format were responded negatively and their weighted mean values lay between 2.40 – 2.90.

4.1.5. Changes Observed after CRC Implementation

Regarding changes observed after CRC implementation except item (1) increasing the enrollment of primary education, which was highly accepted by both groups of respondents, 60.94% and 68.6% of officials and school actors respectively, the rest such as improving quality education, increasing financial support and income generation, improving teachers' CPD program, improving management efficiency and decreasing burden from WEO, were found out to be medium or low. This can be due to the fact that school clustering efforts have not been expanded from regional, zonal or woreda level to individual schools. Besides this, the initiatives taken by the region, zone and woreda education offices might have not been to the expected level. In general the enabling environment was not sufficient to promote changes in the schools.

4.1.6. Difficulties in Management and Implementation of School CRCs

Among 13 management and implementation difficulties 7 were rated as very serious with weighted mean scores ranging from (3.5 to 4.49); these were: inadequacy of financial support, lack of skilled human power, absence of motivation, lack of managing capacity, lack of awareness to do action research, absence of considering CRC activity in evaluation format and lack of awareness about the program. These problems were considered as prominent and very serious to carry out school clustering approach as both types of respondents agreed upon. In general, these 7 very serious difficulties were accounted for 53.84 % of the total.

4.2 Conclusions

Based on the findings the following conclusions can be drawn.

4.2.1 The objectives and implementation strategies of school clustering were not widely discussed and the objectives were not well known among officials, supervisors, experts and school actors (teachers and principals). Thus, absence of common vision or unifying objectives among officials and school actors constrains the implementation and risks the chance of success. From this, it can be concluded that enough jobs on consensus building around the objective and implementation strategies were not done well before starting the CRC program.

4.2.2 Planning and organizing are the key functions of management in school CRCs. However, although committee organizations were succeeded at most of the school CRCs, the level of awareness and active participation of the committee members in the planning and managing of the new approach were very poor. Thus the existence of the gap implies that the system does not function effectively and hence loss of major part of its objectives.

4.2.3 Cluster school system is primarily part of two recent paradigm shifts that concern: our basic concept of what it means to teach and to learn and the decentralization of authority and agency to more local levels. However in the region, the study found out that the local capacities in terms of: planning, organizing, managing and efficient utilization of human and material resources were observed as a mix of fair and poor. This implies that the enabling environment to create the momentum for the implementation of the school clustering program was found to be weak and the changes observed in improving quality in education was un satisfactory.

4.3. Recommendations

The school clusters seem to have the potential for contributing to more rational planning and management functioning at a grassroot level and deployment of resources within the cluster. However, it is not easy to change a century old concept of a school system overnight. School clusters being a radical change and an innovative step in the organizational structure of the school system, it would require a considerable length of time to get rooted even after generalization. School cluster certainly provides a valuable 'means to an end' rather than an 'end' in itself. It can be considered a step in the right direction provided the concepts are adequately understood, adapted and implemented with a degree of thoroughness (Samaranayake, 1983: 70). Bearing this in mind and based on the findings, the following are recommended.

4.3.1 Consensus Building

The study showed that there was lack of consensus regarding the objectives and strategies of school CRC among officials and school actors. This was because of inadequate organizational structure, guidelines, policies and poor information flow. Therefore, it is advisable to formulate strategies to solve problems focused on consensus among implementers and decision makers. Some of the strategies can be:

i. Creating sound organizational structure that meet the growing requirement for planning, organizing and implementing capabilities of management functions at zonal, woreda and school levels.

ii. The REB should prepare clear policy document and handbook of cluster guidance or manual to avoid misunderstanding provide quality training to officials and develop management skills.

iii. The ZEDs and WEOs should prepare checklists to assess reports on cluster progress, findings of action research and evaluation data

analysis to schools and the schools send their reports to WEO and the WEO to ZEDs, and reports and evidences of good practices to REB.

4.3.2 Capacity Building Intervention

School CRC functions must coincide with the capacity for execution and sustaining the reform at the level to which responsibilities are transferred. However, the study has indicated the existence of some problems in areas of local capacities to manage the school CRC program. This was because of lack of management and leader ship skills, inadequate resources and insufficient supervisory service. To solve these problems responsible bodies (implementers and decision makers) should have to prepare and participate in: quality long and short-term trainings, seminars, workshops, open discussions, forums and experience sharing programs could create a dynamic atmosphere for school clustering activities. While conducting such program, key teachers are selected from each CRC and offered specific training in participatory methodologies, and develop a manual of specific activities that trainers can apply during the CPD sessions. It will be possible to use key teachers as mentor (facilitator) of the CRC activity in their respective satellite schools, with minimum cost and time. Besides these, the following strategies are suggested to solve the problems which related to capacity building.

i. The organized committee from WEO and School CRC level should involve people in the hierarchy, NGOs and community to provide facilities like stationary, type writers, duplicating machines, computers, and library and laboratory materials to make the work easy.
ii. The REB, ZEDs and WEOs empower communities through regular awareness and sensitization programs in order to enable them to support and take the responsibility for running the schools. The schools have to work closely with the local community so as to create sense of owner ship that ensures sustainability and continuity.
iii. The School CRC committee should allocate enough time for key teachers for professional development activities.

4.3.3 Active Participation

For effective implementation of school clustering program, willingness and active participation of responsible bodies are very important. This study shows that almost all different educational echelons failed to perform their tasks as expected. Therefore, to promote active participation of responsible bodies the following points are recommended.

i. The WEO should try to allocate funds in the woreda budget to cover teachers' transport and lunch costs during CPD sessions.

ii. Certifying teachers for attendance or officially recognizing and praising teachers' participation, interviews with outstanding teachers on local radio by concerned authorities can play a role in the success of programs.

iii. Initiate responsible bodies to participate in evaluating the school clustering program and make them take account of the needs of the learners in a systematic way.

iv. The role of CRC within the structure should carefully explain to all teachers and CRC should not be considered the only location of interaction and regular monthly meeting should rotate between the schools.

v. The Bureau should give due consideration to support, motivate and sustain to the development of the cluster program by means of regular communications. E.g. by News Letter of all good work of clusters in the region, sharing good ideas for training sessions, tips for practical teaching materials and professional information.

4.3.4 Further Study

School clustering is a new phenomenon in our country and it was introduced without enough consensuses on its objectives and strategies. Besides these, responsible bodies that should have played active role in organizing, supporting and managing cluster activities did not effectively take part. Hence, changes observed after CRCs implementation were not as expected and the organization of schools into CRCs is perceived as only a semblance of accepting the program. So, to solve these problems and to bring the expected changes, further research and careful analysis of the problems with a wider scope is recommended in order to develop strategies to improve the management of school CRC system in Oromia Regional State.

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Appendix A: Questionnaire

(To be filled by Education Officials, Supervisors, Experts, School Principals and Teachers).

General Instructions

Clustering approach is a new phenomenon in our country and region. Because of this it needs a continuous improvement in its organization and management system. Therefore, this questionnaire is designed to collect information about the management of Cluster Resource Centers (CRCs) in primary schools of Oromia Regional State.

The purpose of this study is purely academic. So, your genuine, frank and timely responses are quite vital to determine the success of this study. The findings may serve to diagnose the problem of the management of primary school cluster resource centers and will help to develop plans of actions in the future. Therefore the researcher kindly request your contribution in filling the questionnaire honesty and responsibly.

N.B. 1. No need of writing your name.
2. Mark your response in the space provided by putting "X" mark.
3. For any additional opinion or explanation, you are kindly requested to write briefly as much as possible in the space provided.
4. The questionnaire consist nine sections.

Please follow the specific instructions at the beginning of each section and try to read each before attempting to complete it. It may help you to respond as accurately as possible.

Thank you in advance for your kind cooperation!

SECTION – I Personal Information

1.1 Name of your organization/school_____

Woreda _____ Zone _____

Your current position _____

1.2

Sex		Age	Educational Level	Job Responsibility	Total Years of Service
M	F				
___	___	18-25___	M.A/M.Sc ___	Official ___	≤5= ___
		26-35___	BA/B.Sc ___	Expert ___	6-10= ___
		36-45___	12+3 ___	Supervisor ___	11-15= ___
		≥ 46___	Diploma ___ Or 12+2 ___	School Principal ___	16-20= ___
			12+1 ___	Teacher ___	≥21 = ___
			12+TTI ___	Other ___	
			Other ___		

SECTION – II Objective Issues

In your opinion which of the following statement/s do you think is/are the major objectives (purposes) for school clustering approach? Please indicate in terms of priority by rating them as:

High, Medium and Low priority

S/N	Purposes	Priority		
		High	Medium	low
2.1	To promote efficient utilization of resources.			
2.2	To improve quality education.			
2.3	To create team sprit among school communities.			
2.4	To encourage school community to participate in the management functions.			
2.5	To prevent individual unhealthy competition among schools for limited resources within the cluster.			
2.6	To initiate creativity at local level.			
2.7	To allow flexibility.			
2.8	To develop positive attitude among teachers towards change.			
2.9	To transfer responsibilities from WEO to CRC or decrease the burden of work from WEO.			
2.10	To create better organization.			
2.11	To promote teachers in- service training in a cost effective manner.			

SECTION – III School CRC Organization and Structure

The following questions are designed to get information about organization and structure in school clustering program. Please indicate your answer by circling the choice letter.

3.1 The level of School CRC you involved in?
a) 1-4 b) 1-6 c) 1-8 d) Other

3.2 Do clustered school committee organized in your school?
a) yes b) no c) I do not know

3.3 If yes, the level of committee awareness to know their roles and responsibilities is?
a] high b] medium c] low

3.4 The level of committee participation in school CRC activities and management is?
a] high b] medium c] low

3.5. How many satellite schools involved in your CRC?
a] 1 b] 2 c] 3 d] 4 e] ≥ 5

3.6 The maximum distance among satellite schools and the school CRC in hours on foot is?
a] ≤ 30 minutes b] 30 minutes to 1 hour c] 1 hour to 1 ½
d] 1 ½ hours to 2 hours e] > 2 hours

3.7 Where do members of schools in your CRC attend in-service trainings and meetings?
a] always at CRC b] always in some selected schools
c] Rotating in each satellite schools d] other

3.8 Which structure do you use in your area to communicate satellite schools with school CRC?
a] hierarchical (↓) b] vertical [↕] c] horizontal [↔]

d] hybrid [✛] e] other _____

SECTION – IV Planning Aspects

The following questions are designed to assess the level of planning activities of cluster based educational management program. Please prioritize your responses on the bases of the given priority scale.

High Medium Low

S/N	Planning Aspects	Priority		
		High	Medium	low
4.1	The individuals' awareness in planning cluster school program.			
4.2	Teachers, PTAs, school boards and CRC, committees involvement in the planning of the program.			
4.3	Formal and systematic need assessment under taken by participants.			
4.4	Utilization of program evaluation report of previous times in planning program.			
4.5	The level of identifying and prioritize problems in planning process			
4.6	Relationship of school clustering plan's with long range educational goals.			
4.7	The out side consultants involvement in planning clustered school program.			

SECTION – V Management and Implementation Strategy

In your opinion which of the following statement/s do you think is/are the major strategy for cluster based Educational Management and Implementation? Please prioritize your responses on the bases of the given priority scale.

High Medium and Low

S/N	Strategies	Priority		
		High	Medium	Low
5.1	Establish absolutely clear policy statement agreed to regional level at the out set to avoid misunderstanding.			
5.2	Greater community involvement which has fostered greater support to schools and more active participation in clustered school management.			
5.3	Flexibility, openness and creativity among school communities.			
5.4	Resource mobilization to CRC level instead of trying to contact every head master at Woreda level.			
5.5	Increased teacher capacity using teachers' continuous professional development program.			
5.6	Programmed mutual sharing of experiences among teachers			
5.7	Promote teachers motivation and application with self interest.			
5.8	Allocate annual budget, supported by a detailed annual action plan and furnishing CRCs with basic materials.			
5.9	Enhance capacity of clustered school committees at different levels.			
5.10	Establish clear vision, mission, objective and strategy.			

SECTION –VI Monitoring and Evaluation

The following activities are designed to assess the level of monitoring and evaluation activities in Clustered Based Educational Management. Please indicate your response in terms of priority by rating them as:

1= Excellent 2= Very good 3= good 4= poor 5= very poor

S/N	Monitoring and Evaluation Aspects	Rating Scores				
		1	2	3	4	5
6.1	The evaluation of the program is systematic.					
6.2	School communities are actively involved in the process of evaluating program.					
6.3	The evaluation process is focused upon effective utilization of human and material resources.					
6.4	Evaluation data are reported to leaders.					
6.5	The cluster in-service training program is assessed by WEO at least quarterly.					
6.6	Higher level officials evaluate the program at least twice a year.					
6.7	The school CRC committee arrange program for monitoring and evaluation of the CRC activity.					
6.8	Points from CRC activity are included in the regular evaluation format.					
6.9	Continuous supervisory service by WEO supervisors to maintain direct and active contact with their schools					

SECTION –VII Change Observed after CRC implementation

In your opinion, is there any change in the following educational processes after the practice of cluster based educational management?

S/N	Changes Observed	Priority		
		High	Medium	Low
7.1	Enrollment of primary students increased			
7.2	Quality of education improved - Repetition rate decreased. - Dropout rate decreased. - Facility of pedagogical center improved. - Facility of library improved. - Supervisory service enhanced.			
7.3	Financial support increased			
7.4	Income generation improved			
7.5	Teachers' CPD program improved - Problem solving activity enhanced - Experience sharing increased. - Team spirit increased - Uniform activity increased.			
7.6	Management efficiency improved - Human resource utilization improved. - Material resource utilization improved - Financial resource utilization improved			
7.7	Burden from WEO decreased.			

SECTION – VIII Difficulties in Implementation

Difficulties in the implementation of school clustering approach are given below. In your opinion judge the seriousness of each of these difficulties.

1. Extremely serious
2. Very serious
3. Some what serious
4. Obstruct but not serious
5. Not observed

S/N	Difficulties	Rating				
		1	2	3	4	5
8.1	In adequacy of financial support					
8.2	Lack of technical assistance					
8.3	Lack of skilled human power					
8.4	Lack of structural organization to manage the program.					
8.5	Absence of motivating teachers that actively involved in CRC program.					
8.6	Lack of continuous experience sharing program					
8.7	Lack of programmed discussion program.					
8.8	Lack of management functions capacity.					
8.9	Lack of awareness to do action research to solve problems locally.					
8.10	Distance between CRC and satellite schools.					
8.11	Lack of willing in well organized schools to do with small /poor schools.					
8.12	Absence of considering the CRC activity in the teachers evaluation format.					
8.13	Lack of awareness by CRC committees about the CRC program.					

Please list down if any major problems are left out:

_____

_____

_____

_____

SECTION – IX Comment and Opinion

9.1 Please list any comment, opinion, or views with respect to management of primary school clustering in Oromia if any,

_____

_____

_____

_____

9.2 What conclusion, recommendations would you like to suggest?

_____

_____

_____

_____

_____

_____

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Appendix B: Interview and Focus Group Discussion Guide

(For Regional, Zonal and Woreda Education Officials and Supervisors)

The purpose is to identify the perception of officials and supervisors, regarding Management of School Clustering.

1. Why school clustering?
2. How can School Clusters improve the management of education?
3. What are the major achievements of the cluster school program?
4. How do school clusters improve community involvement in education?
5. What are some of the drawbacks of the school cluster system?
6. What is/are the role of NGOs to improve school clustering program?

Appendix C: Checklists

Which of the following are available in Your CRC?

S/N	Factors	Responses	
		Yes	No
1	Well equipped pedagogical centers.		
2	Continuous CRC supervisory service at least once in a month.		
3	Programmed meeting or discussion at least twice in a month.		
4	Continuous in-service training within and between satellite schools and school CRCs.		
5	Positive teachers' attitudes to actively participate in CRC program.		
6	Clear evaluation standards.		
7	Uniformity in school activities.		
8	Action research.		
9	Increased community participation.		
10	Organized planning activities.		
11	Highly motivate professionally oriented and capable teams of teachers.		
12	Responsibility and autonomy within school communities.		
13	Adequate material support.		
14	Enrollment of school community in school governance.		
15	Active learning is promoted.		
16	Guide line that enable to manage school clustering approach.		

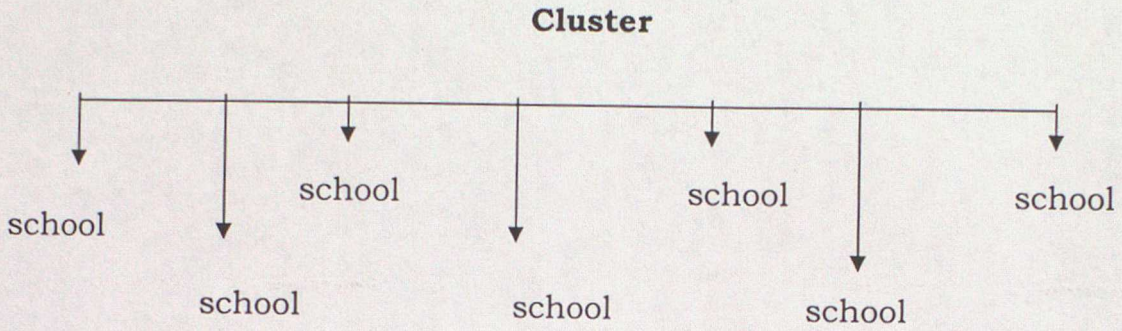
Appendix .D. Sample Zones, Woredas and School CRCs.

	Zone	Woreda and primary School CRCs			
1	**East Arsi**	**Boqoji**	**Disksis**	**Robe**	**Woredas**
		- Boqoji - Tigil fire - Welash Gora	- Kara Gedemsa -Sude Sedeqa -Tenna Anno	- Chafe - Sebiro - Robe No. 1 - Sediqa	School CRCs.
2	**West Arsi**	**Adabba**	**Dodola**	**Gedeb Asasa**	**Woredas**
		- Ejersa - Maribo Cala -Malka Wakena	- Dodola - Bucho - W/Eddo	- Ardayita - Asasa - Asasa Burqitu	School CRCS
3	**East Hararge**	**Babbile**	**Haromaya**	**Metta**	**Woredas**
		- Awsharif - Babbile - Bisidimo	- Adelle - Fendisha - Haromaya	- Chelenqo - Harewo - Kullubbi	School CRCs
4	**West Hararge**	**Chiro**	**Habro**	**Qunni**	**Woredas**
		- Chiro - Odamoti -Wachu Weletane	- Danse - Kufakas - Wachu	- Borama - Lage Lafto - Oda Roba	School CRCs
5	**East Wolega**	**Neqemte**	**Diga**	**Gutogida**	**Woredas**
		- Beke Jama -Burka Bekumsa - Cheleleki	- Arjo - Kolobo - Muleta	- Bandira - Caalaa - Mesera	-School CRCs
6	**East Shoa**	**Adama**	**Gimbichu**	**Lume**	**Woredas**
		- Wanji No-2 - Adulala Qoce -Wenji Hawasuma	- Aredda - Chafe Donsa - Kersa	- Deka Roba - Ejersa - Mojo No.3	School CRCs.

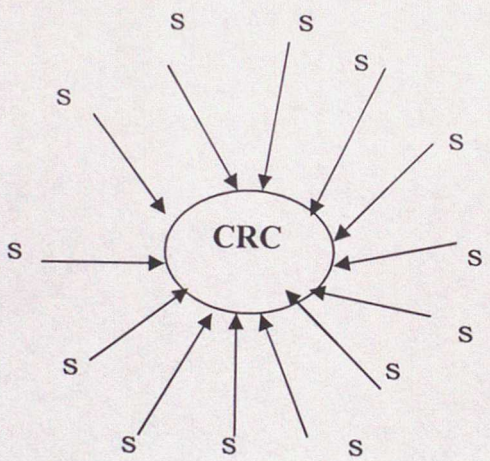
Appendix. E. Clustered School Structure

1. Hierarchical and Vertical Structure

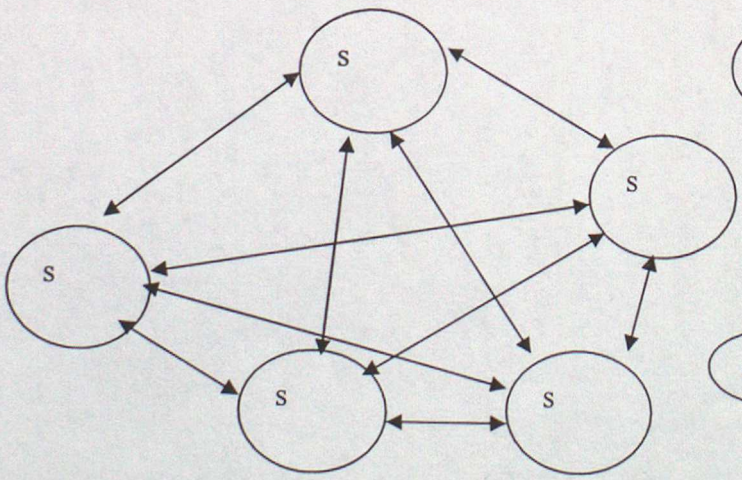
A. Hierarchical 'Frame work



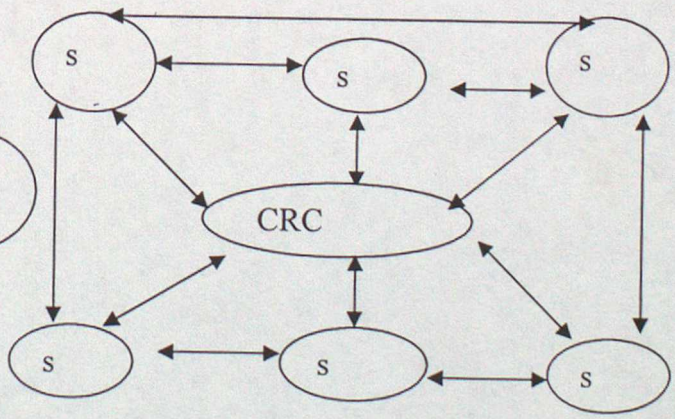
B. Vertical Structure



2. Horizontal Structure



3. Hybrid Structure



[MOE, 2003:121

Appendix. F. Vision, Mission, Objective and Outcomes of School clustering.

Vision:- To establish a productive and sustainable cluster learning approach or system that is recognized locally and regionally for its teaching and learning culture.

Mission:- To model best practice form current educational research that enables the cluster to provide intellectually rigorous, challenging and engaging programs that meet the needs of students in the cluster.

Objective: Incorporate thinking oriented curriculum as a goal within the teaching and learning priority of the school charter in all cluster schools.

Outcomes: Students will demonstrate improved attitudes to school; increased engagement with learning;knowledge and application of thinking skills [Proctor, 2003:3].

Appendix. G. Roles and Responsibilities of Decision Makers and Implementers on Effective Management of Cluster Schools.

	Should Receive	Must Provide
Regional Education Bureau	• Training on effective management of clusters • progress reports from schools and clusters, including annual plan • Data and standard proforma returns • Research reports from TEIs	• quality training to woreda experts, cluster coordinators and school Directors • Handbook of cluster guidance • Support and supervision • Reports on progress and evaluation, data analysis
TEI Staff	• Support and direction from Bureau • Trainings and communication regarding staff development processes • Handbook of cluster guidance and annual plan	• Assessment reports on cluster progress • Support and periodical supervision to cluster schools • Findings of action research to schools, woreda and Bureau • Reports, evidence of good practice to REB • Support for developing and making use of relevant instructional media
Zone and Woreda Staff	• Quality training in staff development processes in cluster and schools • Annual plan from cluster coordinators • Training in the management of effective clusters • Support from REB and Handbook of cluster guidance	• Practical support to schools and clusters • Supervision and monitoring of schools and clusters • Best practices of teaching/learning methods • follow up training in conjunction with bureau and TEIs • Reports, evidence of good practice, data and proforma returns to REB and TEIs • Annual plan to REB and TEIs
Cluster coordinators and advisors	• Training in the management of effective clusters • Training on staff development processes • Handbook of cluster guidance • Support and supervision from woreda and Bureau experts	• Well planned programs of staff training and development for schools within their cluster • Support and supervision to cluster schools • Reports, evidence of stood practice, data and proforma returns to schools, woreda and Bureau • Annual plan to woreda • Program of training to schools
School Directors	• Training programs to support school development at cluster level • Overview of roles of Bureau, worda and clusters in staff development working with cluster coordinator • Supervision and support from WEO/REB • Handbook of Cluster Guidance	• An effective program of school based staff development • Evidence of good practice, data and standard proforma returns as required • Support, monitoring and controlling services • Guidance in initiating and mobilizing • Professional resources
Key Teachers	• Methodology training • Training in supervision and support • Handbook of cluster guidance	• Model good teaching methods • Design and produce instructional materials • Make classroom observations • Give constructive feedback • Design and deliver appropriate training at school and cluster levels • Evaluate training • Work closely with cluster coordinator
Teachers	• Staff development and support program at schools and cluster level • Handbook of cluster guidance	• Self- appraisal records • Data and standard proforma returns as requested • Evidence of good practice to Director and/or cluster coordinator • Practical assistance and support for supervision program

(Cummings, et. al., 2004:21)

Appendix-H በጉድኝት ማዕከል ሊኖሩ የሚገባቸው ቋሚ ንብረቶችና መዛግብት

ተ.ቁ	የዕቃው አይነት	ብዛት
1	የማባዣ ማሽን	2
2	ታይፕራይተር የአማርኛ	2
3	« የእንግሊዝኛ	1
4	ስካነር ማሽን በባትሪ የሚሰራ	1
5	ሶላር ሲሲሸራ	
6	ቱፕ ሪኮርደር	2
7	ሬድዮ	2
8	ቴሌቪዥን 24 ኢንች	2
9	ተንቀሳቃሽ ሠሌዳ ጥቁር ነጭ	 1 1
10	ዴክ	1
11	የፎቶግራፍ ካሜራ	1
12	ማስመሪያ የተለያየ መጠን	15
13	አቨርሄድ ፕሮጀክተር	1
14	የድምፅ ማጉያ	1
15	የሁሉም ክፍል የመማርያና የማስተማርያ መፅሀፍና ሲለበስ በኮፒ ከእያንዳንዱ	10
16	ልዩ ልዩ መመሪያዎች ተጠርዘው ከእያንዳንዱ	2
17	የመንግስት ፖሊሲና ስትራቴጂ ከእያንዳንዱ	2
18	ልዩ ልዩ የማሠልጠኛ ሞዴሎች ከእያንዳንዱ	2
19	ልዩ ልዩ ሞዴሎች/ሉል፣ ካርታ፣ የአካል ቅርፆች ወ.ዘ.ተ	
20	የሳይንስ ኪት	2
21	ትልቅ ሳጥን	1
22	ትልቅ ሼልፍ	10
23	የብረት ሼልፍ	1
24	የክላስተር ማህተም ቀለም	1 1

ተ.ቁ	የዕቃው ዓይነት	ብዛት
25	ልዩ ልዩ መዝገብ - የአስተባባሪ ኮሚቴ ቃለ ጉባኤ - የመምህራን ምክክር - የተመክሮ መመዝገቢያ - የኢንስፔሽንና ሱፐርቪዥን - የክላስተር መምህራን ፓርትፎሊዮ - ስታትስቲካዊ መረጃ - ልዩ ልዩ ሪፖርቶች	
26	የመሠብሰቢያ - ጠረጴዛዎች - ወንበሮች	 30 30
27	ስሊፒንግ ባግ	2
28	ፔዳል ብስክሌት ወይም ሞተር ብስክሌት ወይም በቅሎ	2 1 1
29	ስቴፕለር ትልቅና ትንሽ	2
30	የሱፐርቫይዘር ቢሮ ወንበር ጠረጴዛ አንስተኛ ሼልፍ የእንግዳ ወንበር	 1 1 1 4
31	የወረቀት መብሻ	1
32	መቀስ ትልቅና ትንሽ	10
33	አቃፊ ፋይሎች	30
34	የወረቀት መቁረጫ	2

[አብክመ ት/ቢሮ 1997: 25]