ADDIS ABABA UNIVERSITY
COLLEGE OF EDUCATION AND BEHAVIORAL STUDIES
DEPARTEMENT OF EDUCATIONAL PLANNING AND MANAGEMENT

THE EFFECTIVENESS OF CLUSTER CENTERIN PROMOTING TEACHERS' PROFESSIONAL DEVELOPMENT IN HADIYA ZONE GOVERNMENTAL SECONDARY SCHOOLS

BY
ERMIAS GIRMA SHANKO

ADDIS ABABA, ETHIOPIA
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A THESIS SUBMITTED TO THE SCHOOL OF GRADUATE STUDIES OF ADDIS ABABA UNIVERSITY IN PARTIAL FULFILLMENT OF THE REQUIREMENT FOR THE DEGREE OF MASTER OF SCHOOL LEADER SHIP IN SUMMER PROGRAM

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Approved by the Board of Examiners

Kenenissa Dabi (PhD)	_____	_____
Chair person, department	Signature	Date
Demoze Degefe (PhD)	_____	_____
Advisor	Signature	Date
Dejene Nigusse (PhD)	_____	_____
Examiner (Internal)	Signature	Date
Tilahun Fanta (Asso.Pro.)	_____	_____
Examiner (External)	Signature	Date

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Acronyms/Abbreviations

AREB	Amahara Region Educational Bureau
BESO	Basic Education of Strategies Objectives
CPD	Continuous Professional Development
CRC	Cluster Resources Center
CSC	Cluster School Center
EQIP	Educational Quality Improvement Program
HTTC	Hossana Teacher Training College
MoE	Ministry of Education
NGO	Non-Governmental Organization
PTSA	Parent Teacher Student Association
REB	Regional Educational Bureau
SNNPR	Southern Nation Nationality Peoples Region
USAID	United States Agency for International Development
WES	Woreda Education Sector

Abstract

The purpose of this thesis was to investigate the effectiveness of cluster centers in promoting teachers' professional development in the case of Hadiya zone governmental secondary schools. The descriptive survey method was used to study the problem. The study was carried out in 7 cluster secondary schools and 7satellite secondary schools. The subjects included 248 teachers 14 principals, 7 resource center supervisors, 6 woreda educational sector experts. Questionnaire was administered accordingly. In addition to questionnaire; interview were also used. The data collected through questionnaire was analyzed using frequencies and percentages. Qualitative data, which were collected using interview, were analyzed by direct interpretation. The findings of the study indicated that, the training programs held at cluster resource center and satellite schools were spontaneous, infrequent and not determined by need assessment. Experience sharing among cluster schools did not exist. The cluster school innovation was not successful in attaining, active learning, question and answer, training, in the teaching learning process. On the other hand, lack of structuring cluster resource representative and attaching responsibility to innovate cluster school program affected the positive outcome of the intervention. Lack of monitoring and follow-up from the concerned officials also had its negative influence on the proper functioning of cluster resource center. On the basis of the findings, it was concluded that all secondary schools in Hadiya zone was organized under cluster secondary schools resource centers. However, there is absence of interest and commitment of teachers as well as a shortage of resource materials and budget to implement properly. The participation of school community in the cluster center is not sufficient when compared with the guideline as expected. Finally, It is suggested that teachers get chance to participate actively in the cluster center, fulfilling basic materials to prepare teaching aids, concerned bodies prepare a program at the end of semester and year to present their plan and report for satellite schools community, Woreda education offices ask budget for cluster centers and Cluster center supervisors, were recommended for the successful attainment of the program.

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

Education is a corner stone for economic growth and social development and a principal means of improving the welfare of individuals. It increases the productivity of the society and the political, economic and scientific institutions. It also helps to reduce poverty by increasing the value and efficiency of labor offered by the poor and by mitigating the population health and nutritional consequence of poor (Lockheed, 1988). 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 groups of 3-5 nearby schools are organized centering on a full-fledged school where possible. The cluster resource center school should have better facilities and well stuffed relatively with the members of the cluster (Macniel, D. J. 2004).

Professional development is the overall improvement process of teachers' ability, knowledge, skill in the classroom teaching-learning process practice and individual specific performance and it also empowers teachers to conduct action research. Moreover, teacher professional development in combination with the whole school program that is involves all stakeholders working on a process of planning, reflection, and assessment is a promising approach to improve quality at the school or cluster levels (USAID, 2006:6)

School Clustering, in the developed world country started before the last three and four tenth years to enhance professional competence of teachers in a direction of student centered teaching. Furthermore, in relations for this point; Assefa (2003:20) stated that; «the team school cluster was pioneered in 1960 in England where small rural and urban schools were in short of subject expertise. »Again as Bridges (1993:51) and Morrison (1993:126) indicated, 1980s was marked in UK as a time of shift from higher education based courses to school based in-service program.

Indeed, school clustering in Ethiopia is a very recent phenomenon. Ethiopian's Ministry of education adopted school and cluster-based teacher professional development as national policy in 2000 (Leu, 2004). The general objectives of teacher education in Ethiopia are to improve educational standards of the country. In service program identified the possibility of implementing continuous professional development of teachers through school cluster based training activities (MoE 2003). Educational sector millennium development goals needs assessment draft report (MoE, 2004) considered school clustering as means of improving teaching condition by responding to the local needs around the school. Recently school clustering system in Ethiopia has deserved a name cluster resource center (CRC). In this process, MoE has left the autonomy of choosing school clustering model to the respective regional educational bureaus.

The dynamic nature of education and the incapability of the existing teachers to handle the growing needs of students and the society using the previously acquired educations and training demand teachers to be engaged in cluster school of training. In similar way, the curriculum change introduced as a result of new educational training policy of 1994 incorporated, implementation of new teaching methodologies and new ideas. This can be implemented by teachers who can reorient themselves in such a way. At this point school clustering becomes easy. In explaining the need for clustering in Ethiopia TESO in-service sub-committee (MoE 2003:14) document stated as: It is widely accepted that 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 forms. Teachers have to assimilate and implement 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.

Thus, the above continuous professional development can be realized, as it is suggested in the document, particularly with in a cluster of schools. Sharing this belief AREB 1997 E.C cluster guide line document asserted that school clustering is needed primarily to build the capacity of primary school teachers continuously in the practical aspects of the profession which is expected from them Abraham (2007).

At it is stated in TESO in-service sub-committee document (MOE, 2003), the purposes of schools cluster program are indicated under general objectives which to improve the

quality of teaching and learning in Ethiopian schools by means of low cost professional development through the cluster model.

As presented in Education Sector Development Program IV (ESDP IV) of Ethiopia, MOE,(2010) it is better to give attention for quality concerns in general and those inputs and processes whichtranslate more directly in to improved students learning and help to change the schools in to a genuine learning environment (such as: quality focused school supervision, internal school leadership, school community partnership). This process was started by referring the General Education Quality Improvement Package (GEQIP) which was launched in 2006 by Ministry of Education as a guide line.

The Study Site

The site of study Hadiya Zone has 26 governmental general secondary schools. Geographically, Hadiya Zone is one of the 14 Zones and 4 Special Woredas of the SNNPR of Ethiopia. Its capital city, Hossana, is 230 km away from Addis Ababa, the capital city of Ethiopia. It is also 168 km and 200 km away from the capital city of the SNNPR Hawassa through Angacha and Durame, respectively. Hadiya Zone is bordered in the South by KembataTembaro Zone and Alaba Special Woreda, on the West by the Omo River which separates it from Oromiya Region State and the Yem Special Woreda, in the North by Gurage and Silite Zones, and in the East by the Oromiya Region State with an estimated area of 346958.14 hectares. Hadiya Zone has 10 woredas, namely, Soro, Lemo, Ana-lemo, Shashogo, East Badawacho, West Badawacho, Duna, Gombora, Misha, Gibe, and two Town Administration: Hosanna and shone. Based on the statistical report of the 2007 population and housing census results. Hadiya Zone has a total population of 1243776, ofwhom 625531 were men and 618245 were women (CSA, 2007). This impels that male to female ratio is almost equal. (See map of study area appendix

1.2. Statement of the Problem

The system of school clustering should be adapted and implemented for the purpose of utilizing scarce resources effectively by sharing the resources and experiences between

schools; improving the quality of teaching through teachers professional development, and creating team spirit and working atmosphere in schools (Asnake, 2007:48)

However, there are various determinants that affect the teachers' interests (or satisfaction) either negatively or positively. According to Sumaranayake (1983; 63), these factors are difficulties related to the nomination and position of core principals, administrative and planning difficulties relationships between satellite schools and schools cluster, and resistance to change on the part of various sectors. 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 ignored in the appointment of principals. In such cases the cluster principals could not help, but suffer from any inferiority complex which adversely affects the progress of the cluster.

Besides the CRC schools cannot 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 efficient deputies are not available. The content of in-service training programs of teachers does not fit to the needs of teachers, and teachers do not have a systematic way of communicating with administrators or managers, and training programs are too short unrelated to the needs of teachers (Villegas-Reimers, 2003:63). Moreover, because of lack of clear instructions defining duties of cluster and satellite principals there have been constraints to smooth functioning (Samaranayke, 1983:63).

Many countries including Ethiopia are trying their best to improve their education and training practice through clustering schools. To this effect Hossana Teachers Training Collage (HTTC) within SNNPR is fully engaged in supporting cluster schools since 2008. No tangible study has been carried so far to ascertain the impact of clustering primary schools enhancing the teaching learning process. Among these, Hadiya zone educational units are the one. All woredas were supported by government and HTTC, to implement cluster school program innovation to increase educational opportunities. HTTC supported cluster schools of 10 woreda and 2 town administration cluster school centers. In order to address these issues, the study has been guided by the following basic research questions and used as a framework for reference in the study.

Moreover, the CC themselves have no sufficient resource let alone to support the member of the school and the school and the committee formed by the school cluster do not meet on continuous regular bases to give the solution of the school clustering on the professional development.

Ethiopian's ministry of education adopted school and cluster-based teacher professional development as national policy in 2000 (Leu, 2004). The general objectives of teacher education in Ethiopia are to improve educational standards of the country. In service program identified the possibility of implementing continuous professional development of teachers through school cluster based training activities (MOE 2003).

A local study in Hadiya zone which was done by Tadesse (2012), focused on problems and practice of cluster resource centers and Adugna (2014), focused on the strategies and major managerial functions in primary schools within the same title. But my study differ from other studies carried out in the area done before; by addressing on the effectiveness of cluster center in teachers' professional development in Hadiya zone secondary school and suggesting the solutions to improve the performance of the cluster centers on teachers' professional development.

Therefore, this study is designed to identify the effectiveness of the cluster center on teachers' professional development in the secondary school of Hadiya Zone.

To these effects the study was attempted to answer the following basic questions.

1. What are the contributions of cluster centers on teachers' professional development?
2. What are the Perceptions of teachers regarding Cluster Center role on teachers' professional development?
3. What are the factors that affect the effective implementation of the cluster centers in terms of Teachers' professional development?

1.3. Objectives

The study was conduct to attain the following general and specific objectives:

1.3.1. General objectives

The general objective of the study was to assess the effectiveness of cluster centers on the professional development of teachers in the secondary schools of Hadiya Zone.

1.3.2. Specific objectives

More specifically the study focused on the following specific objectives:

- To examine the level of cluster centers contribution on teachers professional development.
- To identify the teachers' views towards cluster centers on teachers professional development.
- To identify the major problems that hinder the cluster centers effect on the professional development.
- To suggest some possible solutions for the problem to enhance the effects of school cluster centers on professional development in the future.

1.4. Significance of the Study (Application of Results)

The school clustering centers are a very crucial program to improve the quality of teaching learning in all secondary schools by means of low cost of professional development. But this can only be achieved if cluster centers are properly managed. Thus, the study is important in the following:

1. It may help to create awareness among different levels of educational organs about the theory, practice, objectives and strategies of the management of clusters resource centers.

2. The findings of this study may be used by the responsible bodies as insight on the strength and weakness of management system and consequently design an appropriate strategy of cluster model to improve professional development.

3. The recommendation forwarded may help the responsible bodies to take alternate measures to improve the effectiveness of cluster centers to improve Teachers Professional Development.

4. The finding of the study can become the stepping-stone for further research on this issue.

1.5. Delimitations (Scope) of the Study

The study was conducted on 6 governments Cluster Center schools from 5 woredas out of 10 woredas, and 1 governments Cluster Resource Center school from 1 town administration out of 2 town administrations of Hadiya zone. The reason why I selected Hadiya zone from other zones of SNNPR is easily accessible for me and I have an adequate knowledge of the zone and Woredas education sector.

The study was delimited to government's secondary schools because the Cluster Centers support the government institution of this level. It was also delimited to secondary schools of Hadiya zone because of my work area.

1.6. Limitation of the Study

This study has its own limitations. The followings were some of the majorfactors that contributed to the limitation of the study:

1. This study conducted in only in one Zone of government secondary schools. Consequently, the results of this study may not generalize all secondary schools in the other parts of the country.
2. Shortage of related research works and reference materials on thetopic were the major impediments of the study.
3. Less willingness of some respondents to fill the questionnaires and to return back. To alleviate this problem the researcher goes 2-4 times to one school.

1.7. Operational Definition of Basic Terms

Cluster School: a cluster is a group of schools that are geographically close and accessible to each other to enhance education provision (MoE, 2003).

Effectiveness: The word effectiveness is used to evaluate the disparity between expectation and performance.

Cluster Resource Center: The focal point of contact and coordination between the schools in the cluster.

Innovation: refers to any change in one component of the education system which is not made simply for the sake of change but with the intention of promoting improvements in the aspect concerned and having regard to the close interdependence of all such aspects-in the system as a whole (Nicholas, 1983: 3)

In-Service Teacher Training: refers to conducting training sessions for school heads and teachers to reinforce active learning using self study professional handbook, instructional kits, supplementary materials and continuous professional development courses (USAID, 2001)

Satellite schools: schools that organized under one common cluster center for the purpose of sharing resources and to get support from cluster schools resource center supervisor. (MOE, 2003)

Secondary Education: Secondaryeducation in Ethiopia takes 9-12 years' duration which comprises the first cycle (grades 9-10) and the second cycle (grade 11-12) MoE,(1994).

Woreda: an area marked off and developed for administrative purpose with definedauthority and responsibility representing the population of up one hundred thousandpeople (Proclamation 1992; sited: Abdu, 2005).

Woreda education sector: the office under woreda and city administration education office that organizesand manages all education sector activities in the Woreda.

1.8.Organization of the study

This research paper is organized in to five chapters. The first chapter presents with back ground of the study, statement of the problem, objectives of the study, significance of the study, delimitation of the study, limitation of the study and organization of the study. The second chapter is concerned with the review of related literatures while the third chapter deals with research design and methodologyof the study. The fourth chapter is concerned with the result and discussion of the data. The fifth chapter brings to an end of this survey research with summary, conclusions and recommendations. Finally references and appendices are presented.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

2.1. The Meaning, Theoretical Understanding and purposesof Clustering-School

2.1.1 The Meaning of cluster-school

A cluster school is a grouping of schools for administrative and educational purposes. It is an organization of schools in the same vicinity or neighboring villages which are grouped together for the benefit of sharing available resources such as teaching and learning materials, facilities and staff so that the access for all children and the educational quality of schools within the cluster are improved. The model implies a degree of decentralization and also permits strongly local participation in decisions (Dykstna and Kucita 1997). The concepts of school clustering are a major agency for transmitting mainly to children's knowledge, traditions and values of the society. Broadly speaking, schooling has been interpreted as providing a primary, secondary and higher education intended to provide intellectual, political and social leadership. Schools have both reflected their society and contributed to its dynamic (Silver, 1994: 1).

2.1.2 Theoretical Understanding of School Clustering

The concept and models of school clustering system

As Cummings. et al (n.d;3) put "a cluster is a group of schools work together to share experiences, resources and training in order to create opportunities for continual professional development, necessary for acquiring and pertaining the teaching license." Thus, school clustering system is a kind of networking of schools and teachers working in those schools cooperatively. The network is used as a practical means of enhancing teacher's professional development responding to the local class room-school needs.Leu (2004) considered school clustering, as localized in service teachers training forum.In such kind of program teachers themselves take the responsibility to facilitate the activities. In addition, self-reflection, collegial learning through active participation is vital to effectively realize the designer of clustering exam, sporting, questioning and answering, training, supervision and CPD activities. Leu (2004:3) reported that «At the

heart of most programs [of cluster] are the ideas of reflective practice, communities of learning, and communal problem solving. » by continuing her argument she identified the focus on active learning and the use of higher order thinking skills are central in this program.The demand for reflective activities need in school clustering is also confirmed by Cummings, et al (n, d, b). Similarly AREB (1997E, C; 2), Stated that school clustering came in to existence, historically due to the increasing need of student centered teaching learning activities and new teaching methodologies. These demands can possibly by responded positively if the previously acquired pre-service knowledge and skills are updated through such localized school clustering program. Hence, such clustering as a system has its own goals, objectives and also purposes.

After approbation of the importance of school clustering for in-service teacher professional development, various implementing models are presented. For instance; Mac Neil, (2004), suggested two models of school clustering. These are self organized school development model in which the school with its teacher is considered as provider of the training services; and model of net working and inter-school collaboration through which teachers share experiences and resources with each other with in a single school and amongst school.

2.1.3. The purposes of Clustering Schools

Cluster school has various purposes to fulfill. Among these include: pedagogic purposes, administrative purposes, economic purposes and school community purposes.

a) Pedagogic purposes: improved student learning would be achieved through a variety of strategies to be carried out through clusters equalizing students' access to teacher specialists and resources. Teachers had also the opportunity to pilot new curricular materials that the ministry with NGO support developed, along with academic competition and evaluation to motivate better performance.

b) Administrative purposes: improved, administration was 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 head master.

Authority to supervise and monitor teachers, goal achievement and other functions was developed to cluster heads.

c) Economic purposes: a country could not afford basic equipment such as supplemental readers, science materials, or even silk screen supplies and paper for each school. Therefore, by furnishing one resource center with equipment and supplies that allowed teachers to make learning aids, several schools benefited. The clusters therefore had an economic objective sharing facilities and staff, and bulk ordering of materials such as stationary, chalk, paper and other supplies for the cluster conservation of supplies such as promoting system for the return of school books and better maintenance of schools were also more efficient within a cluster system resource center permit teachers to participate in ongoing in service training without distant travel.

d) School-Community purposes: community participation in schools, not only in construction but in many other aspects of school management and learning, was promoted by involving parent teacher's students associations (PTSAs) 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 center for other services by development and community agencies were formulated by cluster commutes or PTAs (Dykstra and kucita, 1997).

2.2. Importance of Resource Center in the Cluster Schools

In many programs that aim to improve educational quality, clusters and resource centers are designed to work together. Among many countries of the world, countries like Zambia, Lesotho, Nepal and India are well known by this. School clusters and resource centers are dealt with jointly because the two strategies are complementary to one another. Both school cluster and resource center are strategies for bringing together people and resources for mutual benefit. They provide local solutions for local problems in decentralization context, bringing services closer to the school level, encourage participation of local teachers, parents and the community in general. As Elizabeth A. Giordano (2008; 29) remarked, authors traditionally present four areas targeted through TRCs and clusters. These are; improvement of educational quality, improvement of cost

effectiveness, improvement of management of education, encouragement of community participation in education.

According to Giordano (2008) and Khaniya (1997) TRCs centre strategies was an attempt to address the problems faced by teachers and schools. From Giordano's and Khaniya's idea, one can find that TRCs of today have gone beyond the mentioned boundaries. Now they are addressing teachers‟‟ problems in both rural and urban areas with the aim of improving the quality of education. For instance, Knamiller et al. (1999) see TRCs as strategies that aim to provide professional support to teachers to enable them to perform effectively in their classrooms. Along with that, literature review shows that the concept of TRCs has proven to be flexible, adaptive, and organic wherever it has taken root but its subsequent evolution has been affected by social, political, administrative, and cultural environment (Mushi, 2003).

Additionally, Qvist and Omar (1996) explain that, TRCs provide on-going professional development and academic support to teachers as well as improving classroom instructional performance for the improvement of quality education. That meant that TRCs are crucial for teachers in the aspect of improving not only their profession but also knowledge of the subjects they are teaching at the schools. For instance, research shows that pedagogical content knowledge is highly specific to the concepts being taught, is much more than just subject matter knowledge alone, and develops over time as a result of teaching experience. What is unique about the teaching process is that it requires teachers to "transform" their subject matter knowledge for the purpose of teaching (Shulman, 1987).Considering the teacher as a primary agent for educational change, and access to resources as a major factor in educational quality, TRCs have been set up to administer support to teachers (Mac Neil, 2004 as cited in Giordano, 2008).

2.3. Characteristics of Resource Center

Teacher resource centers are common centers used for delivery of professional development activities, such as in-service training and to support teachers in their work in the classroom. TRCs have also called teacher activity centers, teacher advisory centers, teacher support groups, microcenters, teacher circles, etc.

TRC is characterized by three elements.

I. The group of teachers that serves as a network exchange and support.

II. The presence of a tutor or facilitator who provides support classroom Practice, professional development and in-service courses.

III. The space that is called 'Teacher Resource Center' which may house meeting facilities, a lending library, reprographic materials and ICT tools (telephone, fax, internet).

It doesn't mean that a TRC need to use all three of these elements; many start of as teacher groups and grow gradually according to their needs and the resources available to them to incorporate a tutor, their own building and even evolving as far as taking on a role management of schools (Grauwe and Carron, 2001).

In some cases, resource centers have no permanent building and meetings are held in a school classroom or other suitable space. A support person also called resource person, tutor, mentor or supervisor may organize meetings, activities and in-service training, visit teachers in schools to follow up and lend support, organize the materials and the resources available in the center (Elzabeth A.Giordano,2008;26). The resource person sometimes acts as a supervisor through his/her role is usually more pedagogical than administrative.

TRCs are centers for in-service training and are responsible for training teachers in active teaching methodologies in order to replace the traditional „chalk and talk" (Giordano, 2008). Additionally, TRCs are responsible in encouraging teachers to play an active role in educational innovation which can take the form of curriculum material development, adapting natural curricular, teaching methodology, and resource production.

In order to achieve this, Tyler (2003) asserts that good training enables participants to gain new knowledge and skills as well as the attitudes. Furthermore, TRCs are responsible for the need to bring educational services closer to the schools as well as providing on-going professional support to teachers (Chonjo, 1998). This is done at the TRCs through distance learning programmers whereby teachers and tutors are separated in time and place. Additionally, TRCs serve as convenient places where government and other lovers promoters of education can make inputs for the enhancement of teachers and the teaching profession, provide for teachers" professional in-service training and

development all together in recognition of the central and critical value of teachers in society. At the TRCs, teachers are able to get induction on how best to implement approved programs, teach relevant courses, use appropriate teaching devices and materials, and assess students‟ progress and achievements.

The relationship between education policy makers, administrators of education, curriculum writers, publishers, school inspectors, teachers, and parents can best be promoted in the interest of school children and students (Sabaya, 2011). Drawing from what have been discussed, it can be said that professional development of teachers is necessary since the quality of learning depends on the quality of teachers which in turn depends to some extent on the quality of professional development they have experienced. That is why Knamiller et al. (1999) confirmed that quality teachers are the single greatest determiners of pupils‟ achievement. So, like other practitioners in other professions, teachers need to deepen their knowledge and improve their skills over the course in their career. Therefore, professional development through TRCs gives teachers at all levels the tools they need to approach classroom challenges with confidence.

2.4. Problems in Managing Cluster Resource Center

Managing schools under one common resource center didn't mean managing them without facing problem. The successful operation of clusters often relies strongly on the coordination and leadership role of the cluster head. Newly appointed cluster heads, whether they be head teachers, teachers or other educational officials may not necessarily prepare to take responsibilities attributed to them. ‘‘Those who enter in the positions of cluster center may not know what their responsibilities are or how best to carry out’’ (Wheeler et.al, 1992:76). In countries like Cambodia, are Lanka and Thailand inadequate training was cited as problem for number of cluster center programs (Bredenberg: 2000).

Clusters and resource centers are often designed to encourage community participation in education. However, several programs lack community participation as weak point. Communities may be not aware of to participate in their local education committee. For example in Kenya's head teacher support groups which count on community participation and support, community support were not aware that the support groups were not exclusively for heads(Herriot. et.al.,2002). In the cases where there are

structures for community participation, like management committee, the voice and responsibility of community in decision making is often limited. For example in Cambodia schools it was observed that local cluster school committees remain passive.

One of the obstacles to sustained cluster operations cited by the head teacher support group is lack of support from education officials in the area: ‘‘Education officials, regardless of a strong sensitization program tended not to recognize support group meetings with in mainstream of educational strategies.’’ Herriot.et.al. (2002: 521).

Clusters and resource center programs are often intermediate support structure between the district and the school level. Their initiatives relay largely on the role of the district to support and animate clusters and resource centers, help diffuse initiatives and otherwise keep up the momentum of cluster activities. The effectiveness of cluster however may ultimately depend on the availability of district level facilitators to motivate and facilitate professional dialogue and pedagogical reflection.

The sustainability of cluster and resource center programs is often insufficiently planned. When it is planned, it often ends up being unrealistic. When donors pull out from a successful project, a few individuals are left shoulder the responsibility of keeping initiatives alive. This is why so many cluster and resource center projects stress the importance of community participation and ownership of projects. When financial support falters, materials cannot be renewed resource centers fall into neglect and disrepair, extra personnel required for functioning cannot be paid, and teachers and tutors are forced to cover expenses out of pocket.

Even when measures for sustainability have been written in to project plans, when donor support ends, it is very difficult for resource centers created in the context of a donor project, tend to fed away once donor support in the form of funds and expertise for specific project cases. Most often program monitoring and evaluation also cease. In the case where capacity building of key personnel and ownership of local actors has not been emphasized enough, clusters and resource centers are likely to fail when the program is withdrawn. This unfortunately makes many cluster initiatives dependent on owner support for long term survival (Knamiler, 1999).

Lack of overlap between cluster boundaries and administrative boundaries could also a problem for managing cluster schools resource centers. Because, clusters and networks

aim to group together schools within geographic proximity, cluster boundaries do not always correspond with local administrative or political boundaries. This can cause confusion or conflict in attributing funds and determining responsibility and authority over clusters. It was the case in Namibia where, in order to group schools together that are geographically close, cluster boundaries are not aligned with boundaries of constituencies.

2.5. Teachers' Professional Development

Teachers' professional development is the process and activities designed to promote professional knowledge, skills and attitudes of teachers for the purpose of improving pupils' learning (Guskey, 2000; Anney, 2013, 2014).

The purpose of professional development in education is to build and transform strong knowledge through teachers with the ambition to achieve excellence in education, Compoy (1997) meaning that teachers' professional development should be effective and successful in order to improve pupils' learning which will lead to quality education in any country. Moreover, Gaible& Burns (2005) assert that in order to be effective, teachers' professional development should address the core areas of teaching-content, curriculum, assessment and instruction.

They add that, teachers' professional development should have the following characteristics:

(i), Address teacher and pupil needs via approaches that are appropriate for conditions in schools;

(ii), Be long-term, ongoing, sequential, and cumulative, providing teachers' opportunities to gain new knowledge and skills, and increase their abilities over time

(iii), Focus on pupils' learning outcomes in ways that enable teachers to use their new knowledge and skills;

(iv), Model learner-centered instruction so that teachers' experiences reflect on the learning activities that they will lead;

Furthermore, literature indicates clearly that there should be a number of criteria to guide and promote teachers' professional development programmers (Villegas-Reimers & Reimers 2000).

However, Villegas-Reimers & Reimers (2000) contend that, teachers' professional development requires four types of growth: growth in knowledge, growth in skills, growth in judgment (classroom related), and growth in the contribution teachers make to a professional community. In this regard, Guskey (2000) argues that "viewing professional development as a special event of three or four days of the school year severely restricts the educators' responsibilities to learn". That meant that teachers need an opportunity to analyze the effectiveness of their current practice, and continually explore new alternatives and opportunities for improvement. For instance, the Department of Education and Training, Rajabu (1998) asserts that in order to be effective, teachers need a deep understanding of their subject area, knowledge of how pupils learn specific subject matter, and a range of strategies and practices that support learning. Since quality education processes require well-trained teachers who are able to use learner centered teaching and learning methods, and life skills approaches (Pigozzi, 2003), then TRCs have been given several roles to play to ensure rapid delivery of in-service training in order to enhance teachers' understanding of the content they teach.

It is through teachers' professional development provided at the TRCs that will enhance the quality of teaching that pupils receive in the classrooms. That is why Pollard &Tann (1993) maintain that high-quality education is not possible without the committed professionalism of teachers. They add that, the nature of teaching, professional development, and learning should never stop. This means that teachers need ongoing, sustained opportunities to develop knowledge and skills in order to teach effectively.

Along with that, a number of studies have reported that the more professional knowledge teachers have, the higher the levels of pupils' achievement (National Commission on Teaching and American Future, 1996 as cited in Villegas-Reimers, 2003; Kimaro, 2005 &Koda, 2006) this means that improving the quality of teaching at primary schools is a major concern, and the demand of today's primary education call for teachers who are well skilled and grounded in knowledge, values and teaching strategies. That is why Quist (2000) stresses teachers at all levels to have access to training, on-going professional development, and support because they are essential players in promoting quality education. So the establishment of the TRCs should aim at training untrained

teachers as well as upgrading trained teachers for effective teaching and improved performance of learners.

Looking at the foregoing evidences, it can be argued that professional development for teachers plays an essential role in improving the quality of education for all pupils, but Villegas-Reimers (2003) alleged that high-quality professional development should:

- Focus on teachers as central to pupils learning yet includes all other members of the school community;
- Enable teachers to develop further expertise in subject content, teaching strategies, uses of technologies, and other essential elements in teaching to high standards;
- Promote continuous inquiry and improvement embedded in the daily life of schools;
- Be planned collaboratively by those who will participate in and facilitate the development;
- Require substantial time and other resources;
- Be driven by a coherent long-term plan;
- Be evaluated ultimately on the basis of its impact on teacher effectiveness and pupil learning; and this assessment guides subsequent professional developments efforts (p.24).

If that is the case, then there is no doubt that we can produce quality teachers who are competent, qualified and motivated to teach in our schools with the aim of improving the quality of primary education. This can only be done if our educators and facilitators will primarily focus on teacher professional development, and find new innovative ways to train our teachers. In this view, teachers must continuously develop and modernize their skills, techniques, and knowledge which will maintain and improve their competency. For instance, Mbunda(1998) states that: Pre-service training alone is not enough whether one acquires a teacher certificate or a first degree for the basic reasons that;

- A single teacher training course is not sufficient to keep one intellectually alive;
- The curriculum always changes and knowledge and teaching technology develop; and
- Education is a life-long and continuous process (p. 68).

Nevertheless, Gaible& Burn (2005) explain that this should go together with the use of technology because experience around the world has shown that teacher training in the application of technology is the key determining factor for improved pupil learning.

So, Tanzania is in need of well-trained primary school teachers who are also effective. In order to accomplish this plan, TRCs as a strategy was adopted to upgrade trained and untrained primary school teachers. In Zanzibar, TRCs are now accepted as an integral part of the National Policy. TRCs as strategy for teachers 'professional development has the following potentials:

- To establish an upgrading system for untrained and under qualified teachers;
- To improve pedagogical skills of teachers through systematic in-service training;
- To improve school management by training heads of schools;
- To improve teaching and learning by establishing TRCs libraries and encourage teachers improvise teaching materials;
- To supervise and assess the impact and effectiveness of training using inspectors' reports, and classroom observation (Qvist & Omar, 1996, pp. 68-69).

TRCs in Zanzibar are nationally managed under the Department of Professional Services, Division of Teacher Education. Under this division there is a National Teacher Resource Centre Coordinator (NTRCC) who coordinates and organizes training for all TRCs based in the districts. The main objectives are:

(i) To provide support and co-ordinate the cluster teacher centers;

(ii) To provide support in educational innovations and the use of low cost teaching and learning resources;

(iii) To provide in-service training to education supporting staff, like subject advisors, material writers and other education related personnel;

(iv)To revise curriculum and suggest any technical changes;

(v) To co-ordinate teacher support programmers with the aim of improving the status of teachers academically and professionally (National Teacher Recourse Centre, 1999, p. 2).

The mentioned strategies and objectives indicate that Zanzibar TRCs had well-planned and achievable objectives to develop primary school teachers academically and pedagogically that would play part in pupils' achievement at the primary schools.

2.6. Functions of CRCs

TRCs are centers for in-service training academically and professionally (National Teacher Recourse Centre, 1999), and are responsible for training teachers in active teaching methodologies in order to replace the traditional 'chalk and talk' (Giordano, 2008). In order to achieve this, Tyler (2003) asserts that good training enables participants to gain new knowledge and skills as well as the attitudes. In addition to that, TRCs are also responsible for the need to bring educational services closer to the schools as well as providing on-going professional support to teachers. Furthermore, TRCs are responsible in encouraging teachers to play an active role in educational innovation which can take the form of curriculum material development, adapting natural curricular, teaching methodology and resource production. Moreover, TRCs function as an information agency where teachers and members of the school community as well as informal meeting place where educationists meet and exchange ideas informally. Such meetings greatly enhance the professional development of teachers (Chonjo, 1998).

2.7. Effectiveness of Training Course Programmers and Quality of Trainers

Gaible and Burns (2005) maintain that in order to be effective and successful, teacher professional development programmers must be of high quality and relevant to teachers' needs. Their experience is also a crucial factor in the quality of work. For instance, Rajab (1998) conceives a good trainer as the one in need of a variety of approaches and patterns of working together with flexibility, to call on several different strategies within space of one lesson. In addition to that, good trainers need to use language which does not limit trainees' responses as well as teaching and learning materials. That meant that quality trainers are very essential if learning is to be effective.

2.8. Quality assurance mechanisms of CRCs' activities

For the success of any programmed, quality assurance mechanisms are important to determine the strengths and weaknesses of the program, so that decisions can be made to continue with program or not. There must be indicators to show attainment of the intended goals (Shoo, 2004). Binde (1999) pointed out that some indicators, which

should be set and used in the process of assessing the performance of the programs, are as follows:

- Goals attained and timeliness - How CRC programs enable teachers to attain their goals within the specified time;
- Needs met - To what extent does CRC programs meet clients' needs in relation to their expectations.

Besides, various scholars have conducted studies on CRCs worldwide and pointed some positive results. For example, a study by Giordano (2008) on School Clusters and TRCs found that some TRCs and School Clusters have the potential to contribute to improvements in education but the programs have not convincingly demonstrated the capacity for effectively improving the quality of education. In Tanzania, Mushi (2003) did a research on TRCs: Theory and Practice and established that the policy of the establishment of TRCs to promote teachers' innovations in teaching methodology as well as preparation of teaching materials were not implemented as a coherent national strategy. Furthermore, Shoo (2004) on the Role of TRCs in Improving the
Quality of Education in Tanzania Mainland and Maganga (2006) on the Role of Teachers' Resource Centers in Promoting Teachers' Professional Development Growth found that TRCs programmers were not operating effectively hence failed to contribute towards the improvement of the country's quality of education because most of the tutors were under qualified and incompetent. There was also inadequacy of material resources for running the TRCs that tutors who were responsible in upgrading teachers at the TRCs were not competent. More importantly, they were borrowed or hired from secondary schools, and they were not sufficient (Kisuda, 2005; Kimaro, 2005; Koda, 2006; Mirambo, 2007).

2.9. Experiences of Other Countries

This part of the discussion focuses on how school clusters are managed for professional development purposes as a process to improve the quality of education, the basic principle underlying all these programs is that the change process starts at the school level. Implementation of classroom instruction, clustering school innovation is practiced by build the capacities of teachers professional development in different parts of the

world. Ethiopia is part of them. The main objective of clustering school is to improve classroom instruction; experience of practicing the innovation differs from one to the other. As there are similarities there are differences of implementation. Since clustering schools is a recent innovation one can share and learn from the experiences of others. (Assega, 2007)

The following countries; Cambodia, Uganda, Malawi, and Namibia are exercises cluster schools innovation to enhance, quality of education in primary schools like Ethiopia. I did select the countries because of the principles of school clustering system to improve the quality of education. They have supported by USAID and they have similar educational back ground and economic level. In most cases there are similarities in the objectives, activities and contents of training program where as there is a difference in system of organization and provision of training. All are USAID support countries similarly AED/BESO project II support schools in Ethiopia.

2.9.1. Malawi's Experience

The Malawi institution of education, and communities for targeted at decentralization action down to the school level. The purpose of the project was to support teacher's professional development and provide for the establishment of a support network for teachers. Mentor teachers and primary education advisors are involved in the support network. The method that used in to class room instruction is grouping strategies, role playing, pair work, participatory approaches and integration of songs. In the program content included utilization of local materials for teaching and learning, teacher awareness of student participation and performance, continuous assessment, practical skills, teaching methodology and effective teacher supervision (Gashaw 2008).

2.9.2. Cambodian Experience

Cluster committees in Cambodian common functions are to set goals for access to education and reduction of wastage rates. Vertically work to assure that there is communication between levels and regular consultation to solve problems. Horizontally to provide training in concepts of cluster management and supervision, they implement educational reform. Each at on appropriate level and specialty monitor primary teachers

colleges providing traditional campus based pre-service teachers training and supported a network of five hundred and thirty nine resource center schools. Schools served by outreach staff, coordinating center tutors or from the teacher training colleges. Then support class observation, refresher courses seminars, work shop, teaching methodology and community mobilization volunteers for school management committees and parent teacher association. USAIDS has been supported the Ugandan primary education reform successfully due to the government commitment to making sure that reforms were implemented. Community and parents have become more involved in the education of their children contributing further to the sustainability of in -service activities Engel (2001). To concise the countries experience Cambodian an in -service day appears every Thursday for weekly meeting of teachers to weigh the pros and cons of their cluster activity. Parents and community members of Uganda share the biggest responsibilities to involve in the school improvements. Direct training is provided to the school teams of every school in a cluster of Haiti. Decentralizing action down emphasizes to the school level in Malawi. All countries share the same experience in supporting teachers' professional development, and experiences sharing among teachers, principals and communities schools in the mentioned countries are grouped in close geographical proximity.

The distribution of supplies and facilitate the construction and repair of school buildings. Cluster schools become nationalized skilful teachers or education officials at the provincial, district or cluster levels, who had gained adequate experience from the objects, became national trainers for new clusters in order to expand the model.

The cluster school head supervisors and all head masters sets the teacher training scheduled with other members of the committee and assumes that materials from the resource centers and teachers are supplied equally to all schools in the cluster. Resource centers display data and graphs on wastage, and disseminate other information to educators and community members. Cluster school technical committee establishes a training calendar for teachers and responsible for the improvement of teaching and learning especially in support of the new curriculum. There are cluster wide training in resource center when new text books are introduced & every Thursday an in -service program. Because to prepare lesson plan ,develop teaching aids, class demonstration

,summary of weekly meeting and plan for next month. Traditionally parents and communities contribute to school construction and renovation .So parent teacher Association help the committee why children drop-out , not attend school .Then they set goals to remedy these problem Gashaw (2008).

2.9.3. Uganda's Experience

The Ugandan primary education system support the design and management of teacher and manage mental system development .This system are training teachers and head masters, giving refresh course, managing resource centers, linking primary schools with teachers colleges, ministry of education, sports, communities and coordinating education reform initiatives . It is widely accepted that 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 forms. Teachers have to assimilate and implement these new trends, and hence they need to acquire the necessary knowledge, skills, attitudes and professional competences continuing professional development must be seen as an integral part of the teaching profession. It is important that every teacher understands that shares the responsibility for his own professional development.

The Ugandan experience is being successful and sustainable, in-service and cluster programs must address the needs of the teachers. To generalization program to be sustainable and effective monitoring and evaluation by observation and reporting systems to match curriculum goals of the cluster should be under gone.

2.9.4. The Experience of Namibia

According to the study done by RAISON and GTZ (2002), schools in Namibia are grouped into about 260 clusters. The clusters have in turn been grouped into inspection circuits, usually with five, six or seven clusters to each circuit. This means that every school belongs first to a cluster and second to a circuit. The outer boundaries of all the clusters in a circuit form the borders of the circuit. In most regions of Namibia, inspectors have been moved away from the regional education office to places where they are much closer to the schools and clusters they serve.

Cluster management committees, made up of all principles in each cluster provide a plat form to share and resolve problems, as do higher level circuit management committees, comprising the cluster center principals and the circuit inspector. The role of principles is thus broadened to include general management and education issues in their clusters. Inspectors can then concentrate more on the function of linking between clusters of schools and the regional education office, because they are less involved in local management issues. Thus, in Namibia, the cluster system provides a framework through which a more comprehensive and coordinated program of training can be delivered efficiently at each cluster centre. Training needs can also be assessed cluster by cluster, rather than having a uniform program for the whole region RAISON and GTZ, (2002:5).

Effectiveness: In the context of this study, effectiveness is defined as teachers' use of teaching aid, active learning methods, action research, continuous assessment, supervision, experience and resource sharing in their schools. To this end, teachers were required to rates the extent of effectiveness of cluster based CPD from the given countries experience were shown;

Malawi's experience: Supported teacher's professional development and provide establishment of net-work for teachers and students participation and performance. (Gashaw 2008)

Cambodian experience: are to set goals for access to education and reduction of wastage rates.(Gashaw 2008)

Uganda's experience: The Ugandan primary education supported and managed new concepts research find, classroom approaches have to be combined to take on new forms. (Assega 2207)

Namibian experience: Clusters have been grouped into inspection, (Raison 2002)

To conclude the above experience

Management application:

- Cluster help to improve the management of education in several ways
- Using participatory approach, cluster center principal's support, guide and supervise the satellite schools.
- The positives example of cluster center that are well managed encourages satellite schools to improve their management practice.

- The administration of schools improved through training which followed up at cluster management meetings.
- Principals are encouraged to take more responsibility for staff supervision and accountability.
- Exam papers are set, typed, duplicated, assessed and moderated as a group effort or similar levels of testing.
- Teachers morale and confidence are boosted and their skills are developed as they work together to improve their teaching efforts within a supportive context.
- By working together, schools have access to great variety of skills and experiences.
- By sharing resources, schools can have a great number of teaching aids can learn to use and develop more.
- Teachers can control their own professional development.
- Schools can work together to set up effective, supportive supervision program.

To this effect, the MOE (2003:19) has set a program to improve the quality of teaching and learning in Ethiopian schools by means of low cost professional development through the cluster model as a general objective with the following specific objectives.

- To promote and sustain professional development
- To provide opportunities for teachers to keep up with changes in education (sustain competent in their profession)
- To provide an opportunity to share professional experiences
- To encourage and assist teachers to produce local teaching material,
- To enable teachers to localize the curriculum,
- To facilitate mentoring of the teachers and,
- To motivate teachers to undertake action research MOE (2003:106).

According to RAISON and GTZ (2002:11-18), clustering schools has many purposes out of which the following are cited as major ones:

- Improve the quality of teaching and learning
- Help to improve the management of education
- Empowers clustered schools
- Improves the efficiency of schools

- Enhance effective use of human resources within the schools and clusters

In summary, the experiences of the above countries show that, if the cluster model has been effectively implemented to support professional development can contribute to improve the quality of education through capacitating teachers to implement new teaching techniques.

According to MOE (2002) and Dittmer and Vivard, (2002) to implement training the following steps and figure one should be considered by cluster coordinators

1. Need analysis/training program need assessment/
2. Deciding priorities/training program deciding development/
3. Training program implementation
4. Training program evaluation

2.10. School Clustering in Ethiopia

School Clustering, in the developed world country started before the last three and four tenth years to enhance professional competence of teachers in a direction of students centered teaching. Assefa (2003:20) stated that; «the team school cluster was pioneered in 1960 in England where small rural and urban schools were in short of subject expertise. »Again as Bridges (1993:51) and Morrison (1993:126) indicated, 1980s was marked in UK as a time of shift from higher education based courses to school based in-service program. Indeed, school clustering in Ethiopia is a very recent phenomenon. Ethiopian's ministry of education adopted school and cluster-based teacher professional development as national policy in 2000 (Lev, 2004). The general objectives of teacher education in Ethiopia are to improve educational standards of the country. In service program identified the possibility of implementing continuous professional development of teachers through school cluster based training activities (MOE 2003). Educational sector millennium development goals needs assessment draft report (MOE, 2004) considered school clustering as means of improving teaching condition by responding to the local needs around the school. Recently school clustering system in Ethiopia has deserved a name cluster resource center (CRC). In this process, MOE has left the autonomy of choosing school clustering model to the respective regional educational bureaus.

Content of Training in cluster resource center (CRC)

Content of training in CRC according to (MOE, 2002] include cluster school organization concept, student centered approach, developing using of teaching aids, continuous assessment, lessen planning, and usage continuous professional development , classroom management, school and community, action research, evaluation and measurement, HIV/ADIS mentoring etc (Assega 2007).

2.10.1. The Cluster Resource in Ethiopia

The dynamic nature of education and the incapability of the existing teachers to handle the growing needs of students and the society use the previously acquired educations and training demand, teachers to be engaged in cluster school of lifelong training. In similar way, the curriculum change introduced as a result of new educational training policy of 1994 incorporated, implementation of new teaching methodologies and new ideas. This can be implemented by teachers who can reorient themselves in such a way. At this point school clustering becomes essay. In explaining the need for clustering in Ethiopia TESO in- service sub-committee (MOE 2003:14) document stated as:

It is widely accepted that 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 forms. Teachers have to assimilate and implement 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.

Thus, the above continuous professional development can be realized, as it is suggested in the document, particularly with in a cluster of schools. Sharing this belief AREB 1997 E.C cluster guide line document asserted that school clustering is needed primarily to build the capacity of primary school teachers continuously in the practical aspects of the profession which is expected from them. Abraham,(2007).

2.10.2. The Objectives of Cluster Resource Centers in Ethiopia.

At it is stated in TESO in-service sub-committee document (MOE, 2003), the purposes of schools cluster program are indicated under general objectives and specific objectives, these are:-

- To improve the quality of teaching and learning in Ethiopian schools by means of low cost professional development through the cluster model.

Specific objectives

- To promote and sustain professional development.
- To provide opportunities for teachers to keep up with change in education.
- To encourage and assist teachers to produce local teaching materials.
- To enable teachers to localize the curriculum to include their environment.
- To facilitate mentoring of the teachers.
- To motivate teachers to undertake action research.

Cognizant to the general and specific objective of MOE about CRCs, articulated the general objective as to create efficient citizen through keeping the quality of education being delivered. Besides its specific objectives they are presented in four categories; economic, pedagogical, political, and administrative. To the interest of the paper the pedagogical objectives of cluster resource centers in Hadiya Zone and Hosanna & Shone town administration are presented as follows;

- By acquiring teachers continually with up to data teaching methodologies, helping them to improve their profession and then upgrade quality of education.
- To enrich the curriculum with the existing local conditions.
- To enable teachers utilizes modern class room organization; students centered teaching learning process, continuous assessment efficiently and through these activities attain the designed profile of student of each grade.
- To create a forum that gives opportunity for teachers of regular schools so that they provide professional support for alternative basic education centers.

Based on the objectives, the purpose of cluster resource centers are oriented to attain the objectives stated as, in Amhara region. However due to the interest of this paper we concentrate on the pedagogical purposes of cluster resource centers the contents covered by cluster resource centers have been, according to Leu (2004; 6) «active learning class

room approaches, continuous assessment promoting the success of girls in school effective team building at the school level and effective school leadership subject-based improvement in teaching and learning -----» Besides, the use higher order thinking skills and connecting school learning activities with students own live has got important emphasis. Thus, according to the report of leu, the contents are suggested to be circulated around practical and realistic guidance of the teaching learning activities, support for development of curriculum and other aspects of classroom planning and management .This by itself encompassed so many sub contents. Consistent of text books, pedagogical skills, academic knowledge of teachers themselves, especially, English, mathematics, and Environmental studies are necessary to be addressed by CRCs. This provides us the package of contents to be addressed in the training of CRCs, which serves as designed curriculum of school clustering program in Ethiopia.

2.11. Conceptual Framework

The conceptual framework in this study based on the current model of evaluation by Stufflebeam (2000) that involves four aspects: Context, Input, Process and Product (CIPP). Context evaluation assesses needs, problems, and opportunities as based on defining goals and priories and judging the significance of outcomes. Input evaluation assesses alternative approaches to meeting needs as means of planning programs and allocating resources. Process evaluation assesses the implementation of plans to guide activities and later to explain outcomes. Product evaluation identifies intended and unintended outcomes both of which help the process on track to determine effectiveness. The model was crucial since it shows how specific evaluation can be conducted. Stuflebeam's (2000) model was found suitable because it shaded light on what has to be done at the TRCs which relates to this study as shown in Figure1.

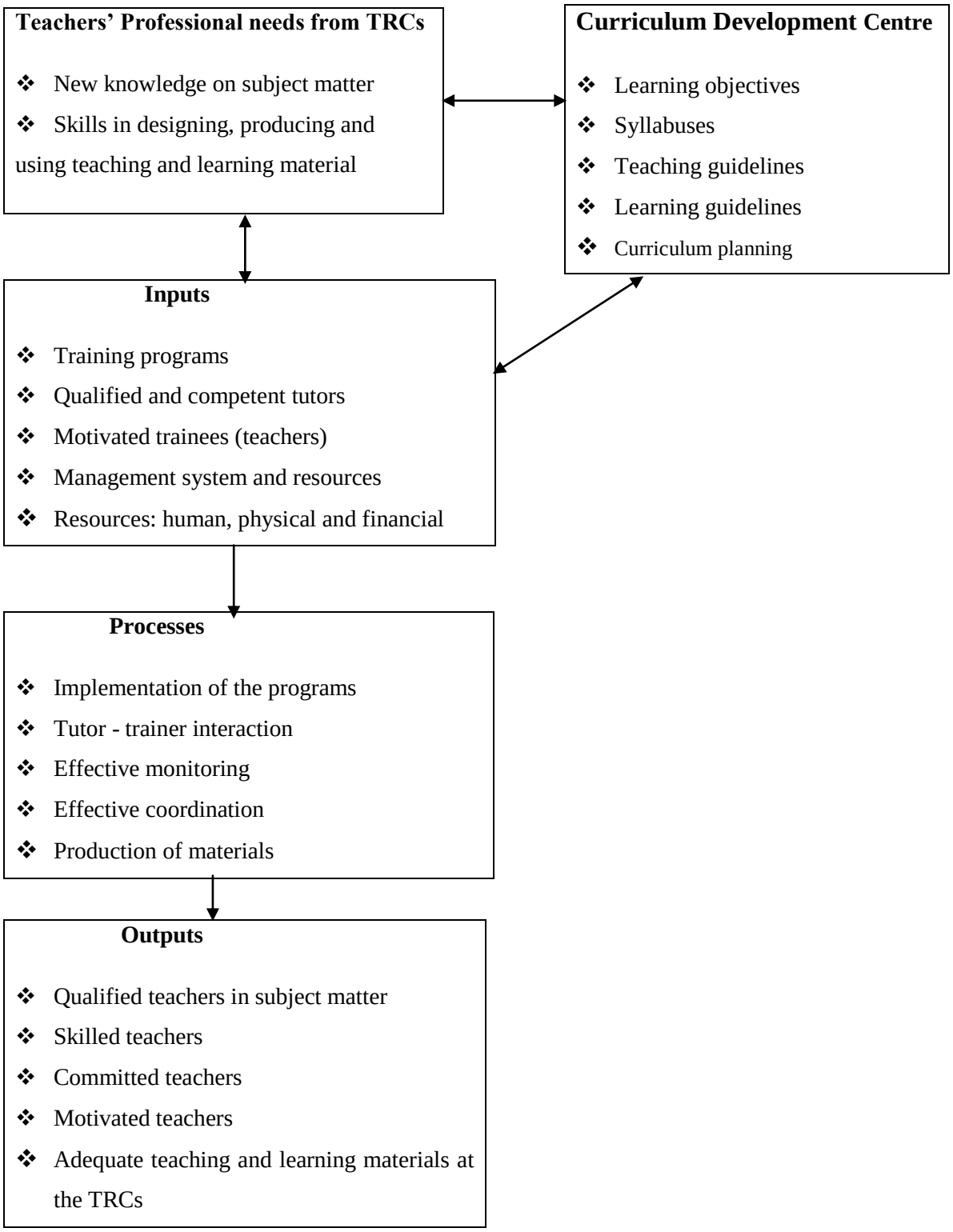

Figure 1: A Model explaining the Role of TRCs in Teachers' Professional Development, and enhancing the Quality of Education.

The model in Figure 1 consists of five components, which are teachers' needs from the TRCs, the curriculum development center, inputs, processes, and output.

The first component explains teachers' professional learning needs from the TRCs. This needs include new knowledge on the subject matter, and skills for designing and producing teaching and learning materials. The literature indicates that effective teacher professional development begins with an understanding of teachers' needs and their work, and the school and classroom environment (Gaible & Burns, 2005).

The second component is the curriculum development center. TRCs need to state clearly the objectives to be achieved, the syllabuses, and teaching guidelines in order to meet teachers' professional needs.

The third component is inputs, which are the resources necessary to yield outputs. The study anticipates that if there are well planned programs, qualified and competent tutors, motivated/self-directed trainees (teachers), good management and adequate resources (human, physical and financial), the TRCs would then be able to meet teachers' needs.

The fourth component is processes. The figure shows that in order for the processes to take place, the programs should be implemented, teachers and tutors should interact, monitoring and coordination should be effective and materials produced. In this study sufficient funds should be in line with the processes so that the TRCs achieve their objectives. It has been noted by Kaufman & Zahn (1993) that processes are the heart of any educational enterprise, and it is where we spend most of the resources and time.

The fifth component is outputs. Outputs are the results expected from the processes. The study expects that if inputs are well processed, then TRCs will produce committed, motivated and qualified teachers with knowledge of the subject matter and skilled at designing, producing and using teaching and learning materials.

2.12. Summary

From the literature review appears in this paper important issues can be highlighted. These points can be represented as follows.

A. The role of school cluster is a means of disseminating new methods and skills of teaching that respond to the practical demand of classrooms. In this way, sharing experiences among teachers through a culture of reflection has got an important attention.

B. Activities of school clustering are highly related with capacity building of the human resources of schools. Thus, it is highly connected with the various continues teacher professional development programs. Subsequently, school clustering is considered as a fruit of paradigm shift that concentrate from a highly centralized formal in-service teacher professional development to such decentralized, locally oriented form of teacher professional development. For this to happen, besides the activities perspectives professional development various models are suggested by scholars.

C. School clustering is considered as key strategy of enhancing teachers competence through which better learning performance of teachers can be realized.

D. Ministry of education, teachers' educational college and other stakeholders believed to improve quality of the education through increasing capability of teachers so that they perform well in the class room. They also believed that teachers' professional competence can be enhanced through engaging teachers in continuous professional development like in cluster resources centers of schools. This strategy is taken as promising, it seems, based on the experience of other countries and suggestions of many scholars. Due to this, by new, the establishment and activities of school clustering has got conceptual, legal and morale basis in Hadiya zone and Hosanna & Shone Town administration cluster schools.

CHEPTER THREE

RESEARCH DESIGN AND METHODOLOGY

This chapter deals with research design, method, source of data, target population, samples size and sampling techniques, instruments and procedure of data collection, and method of data analysis mentioned as follows.

3.1. Research Design

In order to get relevant and sufficient information on research problem, descriptive survey design was employed. The design was selected to investigate adequately the effectiveness of cluster center in the teachers' professional development in government secondary schools of Hadiya Zone, so that the intended purpose was achieved.

A descriptive survey design was helped in picturing the existing situation. Additionally it was allowed to gather the necessary information by using data collecting instruments. Best and Kahn (2003:114) have suggested that a descriptive study concerned with conditions or relationships that exist, opinions that are held, processes that are going on, effects that are evident, or trends that are developing. Furthermore, this approach is helpful to collect descriptive information directly from the population to employ simple statistical techniques and to facilitate drawing generalization about large population on the basis of the study of representative sample (korir and kipkemboi, 2014). Hence, this design was preferred in order to address more precisely and effectively the effectiveness of cluster center in the teachers' professional development in government secondary schools of Hadiya Zone.

3.2. Research Method

Method is a style of conducting a research work, which is determined by the nature of the problem. Thus, both quantitative and qualitative methods were employed to investigate the effectiveness of cluster center in the teachers' professional development in government secondary schools of Hadiya Zone. For this research, a quantitative research method was adopted for teachers& principals and qualitative research method was carried out for principals, supervisors and woreda education sector experts in order to get their

opinions on the current situation of cluster schools. Hence, to examine and analyze the current status of effectiveness of cluster center in the teachers' professional development in government secondary schools of Hadiya Zone, as stated by (Koul, 1996:205), combining both quantitative and qualitative research approaches was adopted.

Creswell (2005) argues "combining qualitative and quantitative data best understand and explain a research problem" (p. 52). Therefore, the researcher believed that the method chosen describes the effectiveness of cluster center in the teachers' professional development.

3.3. Data Sources

Hadiya zone is one of the 14 zones and 4 special Woredas in SNNPR state. According to Hadiya Zone Education Department 2017 statistical data (HZED 2017); the zone has 10 Woredas and 2 town administration. There are 43 secondary schools (grade 9 & 10), 22 general secondary & preparatory schools (grade 9-12) and 1 preparatory school (grade 11 & 12). The total numbers of secondary school teachers are 2324 in the zone; the school cluster system has been adopted with the aim of promoting education in an endeavor to alleviate the problem of efficiency and quality. Accordingly, all secondary schools are organized in to clusters with a total number of the zone is 24 cluster schools.

To collect relevant data for the accomplishment of the study the following sources data was used. The source of data includes teachers, principals and cluster supervisors from CRC, and officials from woreda education sector.

3.4. Target Population

In Hadiya Zone, there were 2324 government secondary schools' teachers, 66 principals and 24 supervisors 12 woreda & town administration education sector experts totally 2426-study population in government secondary schools during the study.

3.5. Sample Size and Sampling Techniques

To make the sample manageable and representative 5 woredas out of 10 woredas and 1 town administration out of 2 town administration were selected by using simple random sampling lottery method by ensuring that representative were drawn from homogenous

subsets of population,(Table 1). With regard to cluster resource centers, out of 12 cluster resource centers in sample woredas 7(58.3%) of the cluster resource centers was selected on the basis of simple random sampling technique by lottery method.

Table.1. Sampling cluster resource center

No.	Selected woreda	No. of CRCs in sample woreda	No. of CRCs chosen	Methods of samplings
1	Gombora	1	1(100%)	censes
2	Gebe	1	1(100%)	censes
3	Lemo	2	1(50%)	Simple random sampling
4	Misha	2	1(50%)	Simple random sampling
5	Soro	4	2(50%)	Simple random sampling
6	Hosanna	2	1(50%)	Simple random sampling
total		12	7(58.3)	

Then one satellite school was includes as a sample from each cluster. After selecting the sample cluster resource centers and satellite schools, the distribution of cluster school supervisors, school principals, woreda officials and teachers were identified. From each selected cluster center schools and satellite schools 248 teachers were selected by random sampling. The principals of cluster centers schools and satellite schools 14, cluster school supervisor 7 and 6 WES education quality core work process coordinators were selected by purposive sampling techniques. Totally 275 respondents were chosen for questionnaire and for interview so as to make study manageable.

Based on this, the population, samples and sampling techniques was summarized as follows.

Table.2. Sampling techniques of Respondents

N_o	Participants	Population	Sample	Sampling techniques	Instrument used
1	Clusters	12	7(58.3)	Randomly	---
2	Schools	43	14(32.6)	Simple random sampling	---
3	Teachers	496	248(50%)	Simple random sampling	Questionnaire
4	Principals	14	14(100%)	Census	Quest + Interview
5	Supervisors	7	7(100%)	Census	Interview
6	Sample woredas expert	6	6(100%)	Census	Interview
	Total	523	275(52.6)		

For this study, questionnaires and interviews was used as instrument of data collection.

3.6. Data Gathering Tools

The researcher employed multiple instruments to collect useful data for the study. These include questionnaire and interview.

3.6.1. Questionnaire:

A questionnaire is extensively used in educational research to collect information that is not observed directly. (Kumar 1996) stated that a questionnaire is less expensive and it offers greater anonymity. It is convenient to gather the reliable and adequate information from a large number of respondents by distributing the exact the same questions. It is the best and appropriate methods for primary data source collection.

Questionnaire with both closed and open items was employed to collect quantitative and qualitative data from teachers and principals. This is because questionnaire is convenient to conduct survey and to acquire necessary information from large number of study subject with short period of time. The questionnaire was prepared in English language, because all of the sample teachers can have the necessary skills to read and understand the concepts that were incorporated in the questionnaires.

The questionnaires were dispatch and collected through the assigned data collectors. To make the data collection procedure smart and cleared from confusions, the data collectors were properly oriented about the data collection procedures by researcher. In addition to this, follow up was kept by the researcher.

The questionnaire has two parts. The first part of the questionnaire describes the respondents' background information, categories include: gender, age, level of qualification, length of service.The second and the largest part contain the whole number of both closed and open-ended question items that address the basic questions of the study. The closed ended items were prepared by using Likert scales model by which the researcher has the chance to get a greater uniformity of responses of the respondents that was helpful to make it easy to be processed. The value of the scale was in between one and five. But the type of Likert varied according to the type of questions. In addition to this, few open ended type of questions were used in order to give opportunity to the respondents to express their feelings, perceptions, problems and intentions related to the effeteness of cluster centres on teachers professional development. It was used to collect data from teachers and school principals.

3.6.2. Interview:

In addition to the questionnaire, the researcher used interview as an instrument for data gathering as complementary and to obtain relevant data that may not be handled by the questionnaire. Together qualitative data and open ended interview questions were administered by researcher and interview who the education officers for half an hour for the WES, selected supervisors in the cluster center schools office and school principals. It is used to the nature of the research issued demands interactive, method of data collection. Interviews might be required with special respondent population who might not be able to handle the requirements of questionnaire (Crano & Brewer, 2002).

The purpose of this interview were to gather the necessary additional information on the effects of cluster centers, to get supportive comment from the heads and to use the information comparatively with the data gathering from different respondents. Unstructured or in-depth interview and semi-structured interview will prepare to get

detailed information. This type of list specific questions has taken to each interview to ensure continuity (Dawson, 2007).

The interview questions mainly focused on the level of the effects of cluster center on teachers professional development, the extent of cluster centers practicing appropriate strategies of cluster centers for professional development, the major problems of the cluster centers to the professional development, the level of participation of school communities in planning, implementing school cluster model program, the competence of supervisors and teachers for professional development, and suggesting some possible solutions for the problem to enhance school clustering model in the secondary school in the future. The interviewees were asked very general questions in the areas of focus. They replied to the questions raised in any way they like as much as possible.

In the process of interview the general guidelines was followed to process the session according to the basic or research questions. The questions for interview was prepare in English and translated in to Amharic for interviewer. Interviewer was record by note book to get all information without any loss of data. The recorded data were categorized according to their similarities of responses and summaries written shortly after the interview tack place. This written record and the information categorized were analyzed on the bases of the research questions relation to the analysis of other information gathered through different instruments. It's more appropriate approach for collecting in depth information (Kumar, 1996).

3.7. Procedures of Data Collection

The following procedures were followed to collect data. Primarily, relevant literature was review. Next, a questionnaire was designed with open and closed ended items. Each dimension was prepared on five point Likert scale (from very high to very low, or strongly agree to strongly disagree).

Secondly, the interview questions were formulated and raised for principals, supervisors and woreda experts.

3.8. Methods of Data Analysis

The analysis began with a quantitative method for exploratory purposes and following up with a qualitative method. Collecting quantitative data first helps to explore the topic with participants at sites. The great priority in the analysis is given to the quantitative approach. To analysis the researcher presented two phases. Phase one analysis quantitative data, and phase two qualitative data. Based on the type of the instrument employed and the nature of questions set narration, direct interpretations and the percentage were used for analysis of data. Direct interpretation explains the data presented in the interview. Percentage was used to explain personal characteristics of respondents and the data in the questionnaire.

As explained in the design section, the quantitative phase was the dominant one. This was because the investigation based on testing the stated research questions integrates the information in the interpretation of the overall results. This facilitates the internal validity of the study, helps to clarify and gives a complete picture of the quantitative results through narration. Finally, the data collected through interview were coded, organized and built on the quantitative findings while discussing the findings in order to give further explanations about the effectiveness of cluster centers in promoting Teachers' professional developments in government secondary schools of Hadiya Zone.

CHEPTER FOUR

PRESENTATION, ANALYSIS AND INTERPRETATION OF THE DATA

4.1. Introduction

This chapter deals about presentation, analysis and interpretation of the data. The groups that are included in the study were teachers, principals, supervisors and woreda education sectors experts. Analysis and interpretation of the data gathered by different instruments, mainly questionnaire and unstructured interview and the summary of the quantitative data has been presented by the use of tables and various statistical tools. Similarly, the qualitative data were organized according to the themes, analyzed and used to strengthen or to elaborate quantitative one. Because the research design is descriptive design, thus the qualitative data is used to support the result obtained from the interpretation of the quantitative data.

The focuses of this part of discussion is analysis of the data collected from teachers, school principals, supervisors and woreda education sector experts through questionnaire and interview. The questionnaires were distributed for 248 teachers and 14 principals. On the other hand, 14 principals, 7 cluster resource center supervisors, and 6 Woreda education office experts, were involved by the interview. Responses given by teachers for each question were tables followed by discussions. The interview responses were used to substantiate the data gathered through questionnaire. As a result, the responses are expected to be sufficient to draw inference for the study.

4.2. Characteristics of Respondents

Background information regarding the target population of the study, (teachers, schools principals, cluster resource center supervisors, Woreda education sector experts) the respondents' sex, age, educational status and experiences are presented as follows.

Characteristics of the respondents of teachers, school principals, supervisors and woreda education sector experts in the sample survey were presented bellow in table 3.

Table 3. Background of the respondents'

No.	characteristics		Respondents							
			Teachers		principals		supervisors		w/e/s expert	
			No	%	No	%	No	%	No	%
1	Sex	Male	194	78.2	14	100	7	100	6	100
		Female	54	21.8	-	-	-	-	-	-
		Total	248	100	14	100	7	100	6	100
2	Age	< 21	7	2.8	-	-	-	-	-	-
		21-30	86	34.7	-	-	-	-	-	-
		31-40	97	39.1	4	28.6	-	-	2	33.3
		41-50	40	16.1	8	57.1	4	57.1	3	50
		51-60	18	7.2	2	14.3	3	42.9	1	16.7
		Above 60	-	-	-	-	-	-	-	-
		Total	248	100	14	100	7	100	6	100
3	Experience	< 2	6	2.4	-	-	-	-	-	-
		2-5	27	10.9	-	-	-	-	-	-
		6-10	66	26.6	3	21.4	-		2	33.3
		Above 10	149	60.1	11	78.6	7	100	4	66.7
		Total	248	100	14	100	7	100	6	100
4	Educational Backgrounds	MA/MASC	48	19.4	8	57.1	5	71.4	2	33.3
		BA/BSC	189	76.2	6	42.9	2	28.6	4	66.7
		Diploma	11	4.4	-	-	-	-	-	-
		Others	-	-	-	-	-	-	-	-
		Total	248	100	14	100	7	100	6	100

According to Table 3 out of 248 total teachers, 194 (78.2%) of them were male, while 54 (21.6%) were female. All principals, supervisors and woreda education sector experts of them were male, but no female participants. In the case of sex data of the participants shows total numbers of 275 respondents who has given information on their sex, 221 (80.4%) were male, while 54 (19.6%) were female. So that female participants were low at leadership position.

Concerning teachers work experiences, only 6 (2.4%) were below two years services, but no principals, supervisors and woreda education sector experts under two years work experience. Similarly, 27 (10.9%) of teachers have 2-5 service years. 66(26.6%) of teachers, 3 (21.4%) of director, 2 (33.33%) of woreda education sector experts have 6-10 service years, while 149(60.1%) teachers, 11(78.6%) principals, 7(100%) supervisors and 6 (100%) of woreda education sector experts have above 10 service years.

Regarding the respondents academic qualification 11 (4.4%) of teachers were diploma holders, where as 189 (76.2%) of teachers, 6(42.9) of principals 2(28.6%) supervisors and 4 (66.7%) of woreda education sector experts were BA/BSC degree holders. Similarly, 48(19.4%) of teachers, 8(57.1%) of principals, 5(71.4%) supervisors and 2 (33.3%) of woreda education sector experts have MA/MASC degree holders. This implies that there are sufficient human resources with different level of education that can implement the program and teachers professional development program innovation. In addition to this, the experiences and qualification of these respondents enable the researcher to draw valid conclusion from the information they offered.

4.3. Data Analysis

Under this part, the data obtained through questionnaire and interviews were analyzed to find answer for the basic research questions set for the study. In addition, the researcher employed Likert scale to know respondents' agreement or disagreement on certain views. Likert scale is appropriate for measuring the degree to which people agree or disagree with a statement, usually on a point scale. (Encarta Dictionary- Reference Library Premium 2007)

4.3.1. The contribution of cluster resource centers on teachers' professional development

Together information about the contribution of cluster resource centers on teachers' professional development 7 items were presented in the questionnaire to be responded by teachers and school principals as depicted in table 4 below.

Table 4: The contribution of CRC on teachers' professional development

5=very high, 4=high, 3=average, 2 = low, and 1= very low

No	Items	Participant	5		4		3		2		1		total
			n	%	n	%	n	%	n	%	n	%	
1	CRC facilitates experience sharing among the satellite schools teachers.	Teachers	14	5.6	46	18.5	120	48.3	38	15.3	30	12	248
		Directors	-		7	50	5	35.7	2	14.3	-		14
2	The in service training provided by CRC could help the teachers to improve their profession	Teachers	6	2.4	72	29	142	57.3	24	9.7	-		248
		Directors	-		4	28.6	8	57.1	2	14.3	-		14
3	The CRC could provide the material resource to the effectiveness of teaching-learning process in the school	Teachers	14	5.6	38	15.3	62	25	104	42	30	12	248
		Directors			3	21.4	3	21.4	7	50	1	7.1	14
4	The CRC facilitate preconditions for teachers' learn from and promote competition among schools	Teachers	-		36	14.4	52	21	124	50	26	10.4	248
		Directors	-		2	14.3	6	42.8	6	42.8	-		14
5	The meeting in the CRC are interesting for the teachers to improve their professional development	Teachers	12	4.8	48	19	52	21	142	57.3	32	13	248
		Directors	-		-		4	28.6	10	71	-		14
6	The CPD in CRC school motivate teachers to develop their profession	Teachers	5	2	38	15.3	124	50	72	29	8	3.2	248
		Directors	-		1	7.1	8	57.1	5	35.7	-		14
7	The CRC encourage collaborative and team work among cluster resource center and community.	Teachers	-		21	8.5	56	22.6	160	64.5	17	6.9	248
		Directors			2	14.3	4	28.6	8	57.1	-		14

As indicated in the table 4. Item 1, cluster CRC facilitates experience sharing among the satellite schools teacher. Accordingly, considerable proportion of respondents 120(48.3%) of teachers and 5(35.7%) of principals confirmed that the cluster resource centers have medium contribution on teachers professional development.

This report shows that the involvement teachers in cluster level participate somewhat according to the purpose of establishment of cluster as a center for junction in the area.

However, according to MoE (2005), as the cluster centers in the given local area they have to mobilize the resource from the member satellite schools. The woreda education office should support the cluster centers based on their duties, to coordinate the teachers from member schools of the cluster the experienced teachers to share the best practices. But the actual practices in the clusters is implemented was full of problems; this can affect sharing of experience among teachers.

From table 4, item 2, regarding the in service training provided by CRC to help the teachers to improve their profession, the largest portion of teacher respondents' 142(57.3%) and 8(57.1) of principal respondents agreed that CRC sometimes provide the capacity building program in the cluster to improving the teachers' professional development. In order to achieve this, Tyler (2003) asserts that good training enables participants to gain new knowledge and skills as well as the attitudes. Furthermore, TRCs are responsible for the need to bring educational services closer to the schools as well as providing on-going professional support to teachers (Chonjo, 1998). From this, it can be said that the capacity building program which was provided by the cluster center could help the teachers to improve the teachers' professional development on average level.

From table 4, item 3, regarding the CRC could provide the material resource to the effectiveness of teaching-learning process in the school, the majority rated from medium to strongly disagree 79% of teachers and 78.5% of principals' respondents. Only 21% of teachers and 21.5% principals' respondents rated it as high. Thus the CRC couldn't provide the material resource properly.

From table 4, item 4, regarding the CRC facilitate preconditions for teachers' learn from and promote competition among schools, 150(60.4%) of teachers respondents and

6(42.8%) of principal respondents said disagree and strongly disagree. The rest 88(35.4%) of teachers respondents and 8(57.1%) principal respondents said agree and medium. From this the facilitation of CRC is undesired and the competition sprit among cluster schools is less.

From table 4, item 5, regarding the meeting in the CRC are interesting for the teachers to improve their professional development, the largest portion of teacher respondents' 174(70.3%) and 10(71.4%) of principals' respondents said low & very low, while 29.7% and 29% of teachers and principal respondents' replay medium and high. TRCs function as an information agency where teachers and members of the school community as well as informal meeting place where educationists meet and exchange ideas informally. Such meetings greatly enhance the professional development of teachers (Chonjo, 1998).

From table 4, item 6, regarding, the CPD in CRC School motivate teachers to develop their profession, 124(50%) of teacher respondents' and 8(57.1%) of principals respondents' replayed that medium/average motivation to develop their profession. Ethiopian's ministry of education adopted school and cluster-based teacher professional development as national policy in 2000 (Leu, 2004). The general objectives of teacher education in Ethiopia are to improve educational standards of the country. In service program identified the possibility of implementing continuous professional development of teachers through school cluster based training activities (MOE 2003). Thus, it is needed that CRC should organize as well.

From table 4, item 7, *t*he CRC encourage collaborative and team work among cluster resource center and community, 229(71.4%*)* of teacher respondents' and 8(57.1 %) of principals respondents' the majority rated from disagree to strongly disagree, while 77(31.1%) of teachers and 6(42.9%) of principals respondents' said medium & high. From this, it can be said that CRC have low performance in encouraging collaborative and team work among cluster resource center and community.

Additional information from open ended questions, replied that there is no support/any incentive and proper coordination to implement the listed above cluster programs. Thus, it is difficult to implement without financial support.

The principals' and supervisors' interview results also indicated that:

> *The contribution of CRC on teachers' professional development was in low level. This is why the in-service short term training provided for teachers' is not continuous, no budget allocation for this purpose from woreda/town administration, material resources couldn't provided, no motivation among teachers, no organized experience sharing, collaborative and team work did not organized properly.*

Woredas education sector experts also indicated that:

> *The problem is not only budget allocation, but also the problem of commitment of teachers, principals, supervisors and so on. Practice of supervision in the school was insufficient to enhance teachers' professional development because supervisors in their current supervisory roles lacked the basic supervisory technical skills.*

Under this question, the finding from the interview held with principals, supervisors and woreda education sector experts indicates that the management of clusters is not held continuously as the standard allow to participate teachers in different educational issues to share experience among teachers from different status of satellite schools. The cluster coordinating principals said that the problem was the shortage of budget for the cluster coordinating schools.

Table 5**: Perception of teachers on cluster centers professional development**

5=strongly agree, 4=agree, 3=average, 2 = disagree, and 1= strongly disagree

No	**Items**	participants	5		4		3		2		1		total
			n	%	n	%	n	%	n	%	n	%	
1	The contribution of cluster centers to improve teachers' professional development.	Teachers	30	12	118	47.6	48	19.3	40	16.1	12	4.8	248
		Directors	-		8	57.1	6	42.9	-		-		14
2	The extent of cluster resource centers support teachers to share experience.	Teachers	30	12	104	42	62	25	52	21	-		248
		Directors	-		9	64.3	4	28.6	1	7.1	-		14
3	The extent of Cluster centers to develop teachers' skills and knowledge.	Teachers	-		59	23.8	103	42	86	34.5	-		248
		Directors	-		5	35.5	6	42.6	3	21.3	-		14
4	Cluster resource centers are useful to improve the class room teaching- learning processes.	Teachers	16	6.5	70	28.1	124	50	38	15.3	-		248
		Directors	2	14.3	3	21.4	8	57.1	1	7.1	-		14
5	Teachers who teach common subjects in the satellite schools prepare teaching aid together in the cluster center	Teachers	-		-		55	22.2	165	66.5	28	11.2	248
		Directors	-		1	7.1	3	21.4	8	57.1	2	14.3	14
6	Satellite school teachers share experience per month	Teachers	-		20	8	50	20.2	150	60.5	28	11.2	248
		Directors	-		-		4	28.6	7	50	3	21.4	14
7	The activities of CRC increases teachers' capacity by using teachers' continuous professional development program.	Teachers	-		59	23.8	143	57.7	38	15.3	8	3.2	248
		Directors	-		6	42.9	8	57.1	-		-		14

As indicated in table 5, item 1, regarding the contribution of cluster centers to improve teachers' professional development, the large number of teachers respondents 118(47.6) and 8(57.1) principals respondents agree on high level, while 40(16.1) and 12(4.8) of teachers' respondents rated on low & very low respectively. This shows that respondents understood contribution of cluster center to improve teachers' professional development.

As indicated in table 5, item 2, regarding the extent of cluster resource centers support teachers to share experience, the large number of teachers 134(54%) and 9(57.1%) principal rated in high and very high level, while 52(21%) teachers respondents and 1(7.1%) principal respondents in low level. From this, it is possible to conclude that teachers understand the extent of how much support to share experience.

As indicated in table 5, item 3, regarding the extent of Cluster centers to develop teachers' skills and knowledge, the large number of teachers 103(42%) and 6(42.6%) principal rated in average level, while 59(23.8) teachers respondents and 5(35.5) principal respondents rated in high level and 86(34.5) teachers respondents & 3(21.3) principal respondents rated in low level. From this, it is possible to conclude that the cluster centers could not give an adequate skills and knowledge. Thus it needs improvement in order to give adequate skills and knowledge to develop teacher's profession.

As shown in table 5 item 4, Cluster resource centers are useful to improve the class room teaching- learning processes, the large portion of teachers 124(50%) and 8(57.1%) principal rated in average level, while 70(28.1) teachers respondents and 3(21.4%) principal respondents rated in high level. AsQvist and Omar (1996) explain that, TRCs provide on-going professional development and academic support to teachers as well as improving classroom instructional performance for the improvement of quality education. That meant that TRCs are crucial for teachers in the aspect of improving not only their profession but also knowledge of the subjects they are teaching at the schools. Thus, different programs which could develop teachers' profession but the understanding level of the respondents could not as standard.

As indicated in table 5, item 5, concerning preparation of teaching aids together in the cluster schools resource centers by teachers of satellite schools who teach common

subjects, majority 165(66.5%) of teachers respondents and 8(57.1%) principal respondents replied by saying its implementation was low.

As shown in table 5 item 6,the activities of CRC increases teachers' capacity by using teachers' continuous professional development program, majority 143(57.7%) of teachers respondents and 8(57.1%) principal respondents rated on average level, while 59(23.8) of teachers respondents and 6(42.9) principal respondents rated as high level. From this, it is possible to conclude that the activity of cluster resource center in CPD programs is not uniform among the cluster center and satellite schools.

Responses given by teacher respondents for open ended questions about the ways teachers know cluster schools resource center program shows, as they also know the program when they prepare model exam questions for grade 10th and 12th students and during question and answer competition program between satellite schools students and when cluster supervisor observe them in the class room.

An interview result of principals, supervisors and woreda education experts indicated that:

> *Most of the teachers' perception in cluster centers contribution on teachers'* professional development *is negative, that means they relates with incentives, they reject the activity of cluster center, disinterested in CPD activities, they ask allowance during orientation and in-service training. They haven't interest too collaborative and team work. Material resources were not used among schools in the cluster.*

To sum up, table 5 and responses from interview illustrates both cluster resource center and Woreda education offices has not been given orientation about cluster schools for new teachers, different books and guide lines about cluster center were not found in the satellite schools library on simply observable place, both cluster center committee and core teachers didn't asses training needs, training has not been given for teachers continuously by cluster center, satellite schools did not use teaching aids by borrowing from cluster center, teachers who teach common subjects in the satellite schools didn't prepare teaching aid together in the cluster center, teachers did not got chance to give their opinion on the plan and report of cluster center.

Teachers didn’t aware about the CRC program. Moreover, common model exams have been prepared for grade 10th and 12th students, question and answer competition also has been between satellite schools students. These programs made teachers to know something about cluster schools resource centers program.

Table 6: Challenges of effective implementation of cluster resource center

5=very high, 4=high, 3=average, 2 = low, and 1= very low

No	**Variables**	participants	5		4		3		2		1		total
			n	%	n	%	n	%	n	%	n	%	
1	Absence of teachers' commitment to work collaboratively with colleagues.	Teachers	38	15.3	120	48.3	58	23.4	28	11.3	4	1.6	248
		Directors	-		10	71.4	3	21.4	1	7.1	-		14
2	Lack of follow up and monitoring from concerned bodies	Teachers	11	4.4	33	13.3	106	42.7	98	39.5	-		248
		Directors	-		4	29.4	7	50	3	21.4	-		14
3	Low interest of teachers to develop their knowledge	Teachers	8	3.2	88	35.5	124	50	28	11.3	-		248
		Directors	-		2	14.3	9	64.3	3	21.4	-		14
4	Cluster center committee did not perform its responsibility	Teachers	10	4	140	56.5	84	33.8	14	5.6	-		248
		Directors	-		8	57.1	6	42.9	-		-		14
5	Lack of adequate resource in the cluster center	Teachers	14	5.6	136	54.8	86	36.7	12	4.8	-		248
		Directors	3	21.4	8	57.1	3	21.4	-		-		14
6	Usually trainings given in the cluster center were not directly related with teaching	Teachers	-		34	13.7	112	45.2	66	26.6	36	14.5	248
		Directors	-		4	28.6	9	64.3	1	7.1	-		14
7	The budget for CRC is not enough	Teachers	48	19.4	160	64.5	40	16.1	-		-		248
		Directors	3	21.4	11	78.6	-		-		-		14
8	Lack of reward and competition sprit for good performance	Teachers	54	21.8	148	59.7	38	15.7	8	3.2	-		248
		Directors	-		3	21.4	8	57.1	3	21.4	-		14

On the above table item 1, absence of teachers' commitment to work collaboratively with colleagues, 120(48.3) teachers' respondents and 10(71.4) principal respondents gave high level, while 58(23.4), 28(11.3) & 4(1.6) of teachers' respondents were ranked average, low & very low respectively; and as the same time 3(21.4) & 1(7.1) principal respondents were ranked average & low respectively. That is why Pollard & Tann (1993) maintain that high-quality education is not possible without the committed professionalism of teachers. They add that, the nature of teaching, professional development, and learning should never stop. This means that teachers need ongoing, sustained opportunities to develop knowledge and skills in order to teach effectively. From this, it is possible to conclude that high problem of teachers' commitment to work collaboratively with colleagues.

As indicated in table 6 item 2, regarding lack of follow up and monitoring from concerned bodies, the majority of teachers' respondents 106(42.7) and 7(50) of principals respondents replied average challenges, 98(39.5) of teachers' respondents & 3(21.4) of principals respondents said low challenges, as well as 33(13.3) of teachers' respondents & 4(29.4) of principals respondents said high challenges. Thus, the monitoring and evaluation system of concerned bodies is not sufficient to be effective implementation of CRC for teachers' professional development.

As indicated in table 6 item3 above, respondents were requested to show how much ''low interest of teachers to develop their knowledge'' be a challenge for cluster schools resource center program. 124(50%) of teachers' respondents and 9(64.3%) of principals respondents gave on average level, while 28(11.3%) of teachers' and 3(21.4%) respondents gave very low rank for it. Quist (2000) stresses teachers at all levels to have access to training, on-going professional development, and support because they are essential players in promoting quality education.

As indicated in table 6 item 4, regarding Cluster center committee did not perform its responsibility, when we see the rank of being a challenge for cluster center given by respondents to the statement which says ''Cluster center committee did not perform its responsibility'', majority 140(56.5%) of teachers and 8(57.1%) of principals respondents considered it as high challenge.

According to the report of the beneficiaries of resource material 12 (4.8%) teacher replied low, 86 (36.7%) teacher replied and 3(21.4%) of principals respondent medium, 136(54.8%) of teachers & 8(57.1%) principals were high challenges and 14(5.6%) 3(21.4%) very high challenges. This shows that there is shortage of adequate materials, which is a great hindrance for effective implementation.

As indicated in table 6 item 6, regarding trainings given in the cluster center were not directly related with teaching, majority 112(45.2%) of teachers and 9(64.3%) of principals respondents replied average level, while 66(26.6) & 36(14.5) of teachers' respondents ranked as low & very low. Gaible and Burns (2005) maintain that in order to be effective and successful, teacher professional development programs must be of high quality and relevant to teachers' needs.

Content of training in CRC according to (MOE, 2002] include cluster school organization concept, student centered approach, developing using of teaching aids, continuous assessment, lessen planning, and usage continuous professional development , classroom management, school and community, action research, evaluation and measurement, HIV/ADIS mentoring etc (Assega 2007). According to the authors, trainings given in the cluster center were directly related with teaching to promote their profession.

With respect to shortage of budget for cluster center, majority 160(64.5) of teachers' respondents and 11(78.6) of principals respondents replied as it is a very high level challenge of cluster schools resource centers.

With respect to lack of reward and competition sprit for good performance teachers reported that 8 (3.2%), 38(15.7 %), 54 (21.8%), 148 (59.7%), reported about reward system consequentially low, medium, very high and high hindered to get cluster school program good result, and also principal reported that 3(21.4),3(21.4) and 8(57.1) reported consequentially as low, high & medium. This shows that not inculcated in to students, teachers and all participants spirit of competition in their clustering school program. The responds believe that rewarding for good performance and inseminating accountability advances cluster school activities in schools.

On the open ended questionnaire parts Teachers respondents replied; we didn't got chance to participate on the training in the cluster center, to assess training needs of their

school, to create suitable conditions for those teachers and students who have special talent to share our knowledge for others, and we didn't work together with cluster center committee. Chance was not given for teachers to give their opinion on the plan and report of cluster center. Because of this we can't informed about budget and adequate resources.

An interview result of principals, supervisors and woreda/town administration educational experts also indicated that:

> *Lack of budget was series problem of cluster centers to training, to motivation, to providing adequate resource materials. Low interest of teachers to develop their knowledge, absence of commitment to work collaboratively with colleagues, lack of reward or competition sprit among teachers and schools.*

During interview, all cluster supervisors, most school principals and Woreda education experts also stated; lack of budget was series problem of cluster centers. With respect to the idea ''materials found in the cluster center were not enough when compared with the responsibility given for the center'' replied as it is a very high challenge. In relation to this, during interview majority of principals and woreda education experts said since most cluster supervisors became a supervisor directly from being a teacher without being principal, their ability to coordinate became low.

Concerning low interest of satellite schools to share their resources, majority interviewer principal replayed it very high challenges of cluster schools resource centers. Cluster supervisors also strengthen this response during the interview done with them. They said schools were not that much volunteer to use resources by sharing each other. Always they need push either from cluster center supervisor or from Woreda education offices. Absence of commitment to work collaboratively with colleagues hindered cluster school center from being effective.

Also the majority of principals, supervisors and woreda education sector experts said that, there were not inculcated to students, teachers and all participants spirit of competition in their clustering school program. The responds believe that rewarding for good performance and inseminating accountability advances cluster school activities in schools.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATION

This chapter deals with the summary, conclusions and recommendations. In this section, first brief summary on the general study and the major findings are presented second, conclusions of fundamental findings are made. Lastly, some possible recommendations are given based on major findings of the study.

5.1. Summary of Major Finding

The main purpose of this study was to identify factors affecting the effectiveness of school cluster resource center in teachers' professional development in Hadiya zone governmental secondary schools.

Thus, the following three basic research questions were formulated that were focused on the extent to which the cluster resource center has been successful implementation on teachers' professional development and factors that influence its effectiveness. In order to meet this purpose, the following three basic research questions were raised.

Basic research questions:

1. What are the contributions of cluster centers on teachers' professional development?
2. What are the Perceptions of teachers regarding Cluster Center role on teachers' professional development?
3. What are the factors that affect the effective implementation of the cluster centers in terms of Teachers' professional development?

To find answers to these basic questions the study was conducted on Hosanna town administration and five woreda (Gombora, Gebe, Lemo, Misha, Soro) education sectors; and seven Cluster center schools (Wachemo, Morsito, Homecho, Hebicho, Gimbichu, Jajura, Masbira) and seven satellite schools (Heto, Wasgebeta, Mesmes, Shelela, Shara, Wosheba, Ashebuquna) of the zone. A total of 248 teachers, 14 directors, 7 educational supervisors and 6 educational experts were the respondents from satellite schools, cluster centers and education sectors.

The researcher has employed descriptive survey method using the questionnaire as the main data collecting instruments from teachers' and principals' substantiated with interview of principal, supervisors' and educational expert respective. The data collected through survey (quantitative method) analyzed using percentage. Secondly, the data obtained using qualitative method were collected and analyzed in each phase of the analysis. Finally the results of both methods were integrated, triangulated and interpreted to answer the basic questions.

The data obtained were analyzed through the use of percentage and direct interpretations. At last, based on the review of related literature and the analysis of the data, the following findings were obtained from the study.

Major findings:-

1.The finding related to the issues of the contribution of cluster center on teachers' professional development indicated that; cluster resource center were established to organize, coordinate, and facilitate human and material resources to promote the teaching learning activities by improving teachers' professional development. Also facilitate pre-condition to teachers' learn more from and promote computation among schools, make interesting meeting programs, motivate the implementation of CPD program, encourage collaborative and team work among cluster resource center. However the majority of respondents were agreed that the contribution of cluster center in improving teachers' professional development in the case of participating teachers and other stakeholders in facilitation to experience sharing among satellite schools(48.3% of teachers) respondents agreed that on average level of implementation whereas (42.8% of principals' & supervisors' respectively) agreed that on high level of implementation, the in service training (57.3% & 57.1% of teachers' and principal & supervisors' respondents respectively) and on the CPD activities of CRC (50% & 57.1% of teachers' and principal & supervisors' respondents respectively) respectively agreed that on average level of implementation. Both cluster center committee and supervisor didn't asses training needs, training has been given for teachers at least one times per year by cluster center. The frequent turnover of principals and supervisors has made the trainings not to be sufficient

as expected. Yet, trainings given on active learning techniques and related topics were are important to develop teaching skills of teachers.

Regarding on providing material resources to the teaching-learning process (54% & 57.1), facilitating competition among schools (60.4% & 42.8), in making interested meeting for teachers in the CC (70.3 &71%) and in motivating collaborative & team work among cluster resource center (71.4% & 57.1), were assure less performed as designed to achieve teachers' professional development. Lacks of coordination to working cooperatively have its own influence on the practice of implementing cluster resource center innovation in clustered secondary school. The school principals, supervisors and woreda education sector experts indicated that the contributions were not implemented as expected as guidelines in their schools and cluster resource centers through interview.

2. With regard to attitudes of teachers in cluster center role for teachers' professional development; the finding of the study showed that the contribution of cluster center to improve teachers professional development (59.6% & 57.1% of teachers' and principal & supervisors' respondents respectively) and the extent of cluster center support teachers' to share experience (54% & 64.3% of teachers and principal & supervisors') agreed on high and very high level. However, the extent of cluster centers to develop teachers' skills and knowledge (42% of both respondents), importance of cluster center to improve class room teaching learning processes replayed(50% &57.1% of teachers and principal & supervisors') on average level. Teachers' who teach common subjects in the satellite schools prepare teaching aid together in the cluster center (77.5% & 71.4% of teachers' and principal & supervisors' respondents respectively) agreed on low &very low, based on this not good perceptions exhibited.

The school principals, supervisors and woreda education sector experts indicated that the program were highly useful to them and applicable to their students' work and activities. Instead of implementing; they refer on other stakeholders, shortage of budgets and time shortage. This shows that Lack of experience sharing among cluster school teachers to develop their profession, which is the problem of commitment and coordination of stakeholders.

3.Regarding factors affecting implementation of improving teachers' professional development in cluster schools, the findings showed that; absence of teachers' commitment to work collaboratively with colleagues (63.6 % & 71.4% of teachers' and principal & supervisors' respondents respectively) were rated as high & very high challenges. Teachers have negative feelings to work collaboratively with colleagues and cluster school program activities and absences of commitment. Supervisors' activities at cluster and school level in promoting teachers professional competences through their supervisory practices were not promising. No sufficient support was given for cluster center supervisors from heads. The interest of teachers to develop their knowledge is not to be sufficient as expected.

Regarding the responsibility of committee, (60.5% & 57.1% of teachers' and principal & supervisors' respondents respectively) were rated as high & very high challenges. Even though school principals participate as member of cluster center committee, it is not much enough when it compared with the activities given for them by the guideline of as expected MoE. Shortages of material resource/inputs in the cluster resource center are considered as high problems (60.4% &78.5% teachers' and principal & supervisors' respondents respectively) were rated as high & very high challenges.

Lack of budget for cluster center is not enough (83.9% & 100% of teachers' and principal & supervisors' respondents respectively) and lack of reward and competition sprit for good performance (81.5% of teachers')were rated as high & very high challenges where as 57.1% of principal & supervisors' respondents were rated as average challenges.

Regarding the follow up and monitoring from concerned bodies (42.7% & 50% of teachers' and principal & supervisors' respondents), interest of teachers to develop their knowledge (50% & 64.3% of teachers' and principal & supervisors' respondents) and the training given in the cluster center were related with teaching-learning processes (45.2% & 64.3% of teachers' and principal & supervisors' respondents) were rated as average level challenges.

The school leaders with in interview assure that, as the same way with questioners results said teachers didn't got chance to participate on the training in the cluster center, to assess

training needs of their school, to create suitable conditions for those teachers and students who have special talent to share their knowledge for others, and they didn't work together with cluster center committee. Satellite schools did not use teaching aids by borrowing from cluster center as well as teachers who teach common subjects in the satellite schools didn't prepare teaching aid together in the cluster center. Chance was not given for teachers to give their opinion on the plan and report of cluster center.

5.2. Conclusion

Based on the above major findings of the study the following conclusions were drawn.

1. The result showed that no providing material resource to the effectiveness of teaching learning process, facilitation of precondition to promote competition, providing interested meeting and encourage collaborative and team work among cluster resource center was found below the expected goal. Even though the contribution of cluster center on teachers' professional development is very decisive to achieve duties and responsibilities of teaching learning process, there are other administrative problems such as; lack of budget to carry out the in-service training programs, experience sharing, less activities of CPD to motivate teachers' and low coordinating ability of cluster center supervisor. Unless solutions are found for the above mentioned problems, teachers and school principals may develop positive attitude towards the cluster centers.

2. Regarding the attitudes of teachers on cluster center program, in some extent the teachers know CRC program's when they prepare questions for academic competition and model exams, but their attitudes towards the CRC programs were negative. The reasons they gave which they haven't got any incentive and/or motivation to their active participation. Low coordinating ability of cluster center supervisor, shortage of material inputs, low interest of satellite schools to share their resources, less support of cluster center committee, no tailored training directly related to teaching and learning. Trainings organized to teachers and principals in around program need to be implemented with high discontinuity.

3**.** Regarding factors affecting implementation of improving teachers' professional development in cluster schools, the result of the research findings shows the following challenges such as low coordinating ability of cluster center supervisor; teachers have negative feelings about the training and cluster school program activities, training program is too short and lacks continuity, shortage of resource material inputs, low interest of satellite schools to share their resources, less support from cluster center committee, the presence of trainings that did not directly related to teaching-learning processes, shortage of budget, excessive responsibilities of cluster center supervisors, low interest of schools to share resources are prevalent at cluster secondary schools resource centers.

5.3. Recommendations

Based on the research findings and conclusions drown, the following possible solutions are recommended so as to improve the teachers' professional development of Hadiya Zone Education:

1. Since the policy insists the training and retraining of teachers with the aim of improving the quality of teaching then, it is better CRCs need to use a more effective approach of training teachers. One issue that needs attention of the CRCs uses different models of training that have been developed to promote and support teachers' professional development. It is suggested that considerable body of evidence indicates that different models to teacher professional development can complement to each other and can be implemented in a variety of forms, enabling Teacher Professional Development programs to reach large number of teachers while supporting them in their efforts to improve teachers' professional development.

2.As the findings indicated, the meetings in the CRCs are not interesting and not properly organized. Since, there is no any contribution for teacher's professional development. To solve this problem, supervisor's and woreda education sector experts planed discussion and organized meeting is recommended. For effective implementation of cluster school based program innovation, willingness and positive reaction from responsible bodies are very important.

3. Factors that influence innovative action need to be considered for the success of cluster school program innovation. It is advisable if follow up and monitoring, accountability, commitment, etc be taken as part of the teaching profession for the effectiveness of practice of cluster school program innovation. Low coordinating ability of cluster center supervisor, shortage of material inputs, low interest of satellite schools to share their resources, less support of cluster center committee, no modified training directly related to teaching and learning are complex challenges of the CRCs. Therefore, it is recommended that the innovative action may go on with its program of improving the quality of education in Hadiya zone secondary schools.

4. The participation of school community in the activities of cluster center was very low. Teachers, students and administrative employees are the main actors in the teaching learning process; the involvement and collaborative effects of cluster supervisors, town administration and woreda education sectors is a vital to improve students success and schools improvement. Additionally, cluster center supervisors didn't present their plan and report for community of satellite schools. This makes teachers to have poor knowledge about the program and to be passive. Therefore, it is better cluster supervisors prepare a program at the end of each semester and year to present their plan and report for the community at satellite schools.

5. The support and follow up of the town administration and woreda education sectors to satellite schools and cluster centers by supply of teaching materials and training is vital to improve the teaching and learning, as well as concerned bodies should take part to fix these problem.

6. Teachers of satellite schools didn't have clear information about the activities of cluster centers. This is because of lack of formal orientation about the program. It is advised that cluster center supervisors, town administration and Woreda education sectors give adequate orientation about the program especially for newly assigned teachers at the beginning of each academic year.

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Appendix A

Addis Ababa University School of Graduate Studies College of Education and behavioral studies Department of Educational Planning and Management

Questionnaires about the effectiveness of cluster center in teachers' professional development to be filled by Hadiya zone governmental secondary schools teachers

Objectives of the questionnaires

The main objective of this questionnaire is to study about effectiveness of cluster center in teachers' professional development in Hadiya zone governmental secondary schools.

Dear teacher;

In addition to study about effectiveness of cluster center in teachers' professional development in Hadiya zone governmental secondary schools, the result of this study will be used for the purpose of fulfilling the requirement of degree of Masters in Educational Leadership and Management at Addis Ababa University.

Therefore, please fill the questionnaire by voluntarily.

Thank You!

Ermias Girma

General Directions

1. All questions included in this questionnaire have equal benefit for the purpose of achieving the goal of the study. Therefore, it has its own negative impact on the study if there is a question that did not answered, please give answer for all questions.

2. Answer each question according to the given instruction for you.

3. Give short, precise and loyal answer for the question that requires your opinion.

4. If you want to change your answer, you can write after fully canceling the previous one.

5. Please do not write your name.

6. Write here the Woreda your school found……..

Section one; Questions related to personal background

Direction one; Give response for the questions below by using ‘‘√’’ sign in the box for the choice that much with yourself.

1.1. Your age <21 years old ☐ 21-30 years old ☐ 31-40 years old ☐

41-50 year old 51☐ years old above☐ ☐

1.2. Sex Male ☐ Female ☐

1.3. Academic status

MA/MASC ☐ BA/BSC ☐ Diploma ☐ Certificate ☐

1.4. Teaching experience

< 2 years ☐ 2-5 years ☐ 6-10 years ☐ > 10 years ☐

Section two: Contribution of CC on teachers' professional development

Direction one: The table below contains information about Contribution of CC on teachers' professional development. By considering the cluster center under which your school found identify by rank how much you agree and they implemented by using ''√'' sign.

5=very high, 4=high, 3=average, 2 = low, and 1= very low

No	Items	Rating scale				
		5	4	3	2	1
1	CRC facilitates experience sharing among the satellite schools teachers.					
2	The in service training provided by CRC could help the teachers to improve their profession					
3	The CRC could provide the material resource to the effectiveness of teaching-learning process in the school					
4	The CRC facilitate preconditions for teachers' learn from and promote competition among schools					
5	The meeting in the CRC are interesting for the teachers to improve their professional development					
6	The CPD in CRC school motivate teachers to develop their profession					
7	*The CRC encourage collaborative and team work among cluster resource center and community.*					

Direction Two: Write here if there is any more.

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Section three: Attitudes of teachers on cluster centers professional development

Direction one: The following questions are designed together information about attitudes of teachers on cluster centers professional development. Please indicate your answer by putting ‘‘√’’ parallel to statement.

5=very high, 4=high, 3=average, 2 =low, and 1=very low

No	**Items**	**rank**				
		5	*4*	*3*	*2*	*1*
1	*The contribution of cluster centers to improve teachers' professional development.*					
2	*The extent of clusters resource centers support teachers to share experience.*					
3	*The extent of cluster centers to develop teachers' skills and knowledge.*					
4	*Cluster resource centers are useful to improve the class room teaching- learning processes.*					
5	Teachers who teach common subjects in the satellite schools prepare teaching aid together in the cluster center					
6	The activities of CRC increases teachers' capacity by using teachers' continuous professional development program.					

Direction Two: Write here if there is any more.

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Section four: **About Challenges of Cluster Center**

Direction one: The table below contains list of activities that assumed to be challenges of cluster schools resource centers. By considering the cluster center under which your school found identify by rank how much they affect the center to achieve its objective by using ‘‘√’’ sign.

5- Very high, 4- High, 3-average, 2- Low, 1- Very low challenge

No	**Variables**	**rank**				
		5	4	3	2	1
1	Absence of teachers‘commitment to work collaboratively with colleagues.					
2	Lack of follow up and monitoring from concerned bodies					
3	Low interest of teachers to develop their knowledge					
4	Cluster center committee did not perform It responsibility					
5	Lack of adequate resource in the cluster center					
6	Usually trainings given in the cluster center were not directly related with teaching					
7	The budget for cluster resource center is not enough					
8	Lack of reward and competition spirit for good performance					

Direction Two: Write here if there is any more.

…...……..……

……

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Appendix B

Addis Ababa University School of Graduate Studies College of Education and behavioral studies

Department of Educational Planning and Management

Interview Guide for directors, supervisors' and town administration or woreda educational experts

1. What are the contributions of Cluster Center on teachers' professional development in your woreda/cluster?

- List of them and explain how it is implemented?

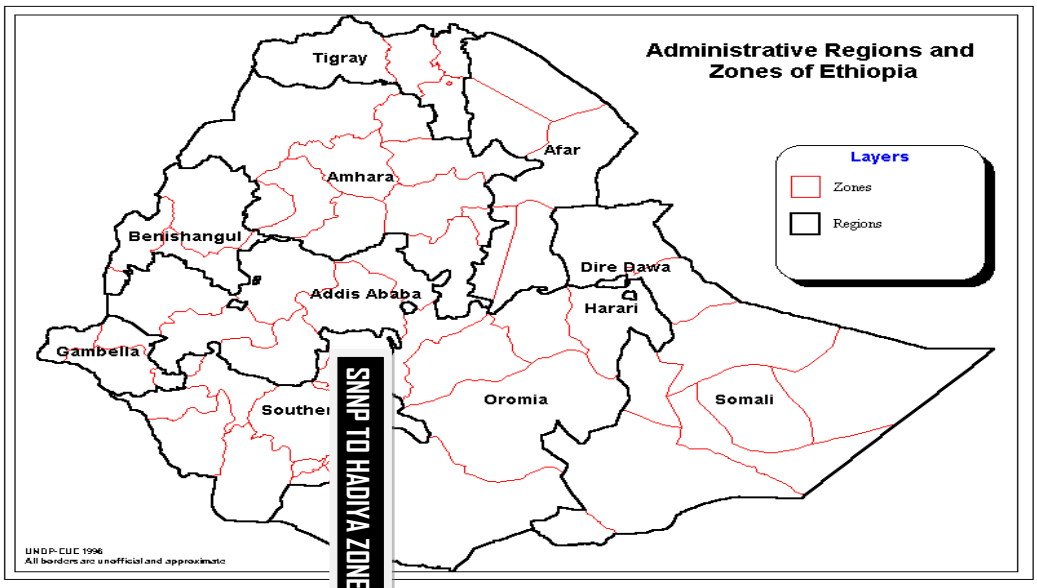
2. What are the views/ attitudes of teachers regarding CRC role on teachers' professional development?

- How do you evaluate the activities of teachers on cluster centers in teachers' professional development?

3. Would you explain the Challenges of effective implementation of Cluster Centers on teachers' professional development?

- What challenges do you observe in your cluster center in teachers' professional development?
- And how can solve the problems?

Appendix c



SNNP TO HADIYA ZONE

Figure ----

Source HZFEDCMD

Declaration

I declared that this thesis is my own organized work and has not been presented for any other degree and that all sources of materials used for the thesis has been duly acknowledged.

Name: Ermias Girma Shanko

Signature: _____

Date: _____

This thesis is submitted examination with my approval

Name: Demoze Degefa (PhD)

Signature: _____

Date: _____