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Master's Thesis of Arts

**A Study of Zones of Pedagogical
Influence (ZIPs) in Mozambique**

모잠비크 ZIPs의 형성 및 특징에 관한 연구

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ABSTRACT

A Study of Zones of Pedagogical Influence (ZIPs) in Mozambique

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The research presented here is a study of the Zones of Pedagogical Influence (Portuguese: Zonas de Influencia Pedagogica; ZIPs) in Mozambique. Mozambique, a country suffering from chronic education problems resulting from the numerical lack as well as the under-qualification of teachers, has implemented the ZIPs as a pedagogical system for in-service teacher training since the 1990s. However, there has been much criticism in relation to the effectiveness of the system to this day.

This study aims to identify the factors that have inhibited ZIPs' practical effectiveness through the socio-historical and political contexts of Mozambique. By doing so, this study explores how the socio-historical and political contexts have influenced the current practice of ZIPs. Exploring the contexts helps to understand the current issues and challenges of ZIPs in multiple dimensions. In addition, this study adopts the School Cluster Model (SCM) as a comparative tool, because ZIPs have been classified as an offshoot of SCM, given their similarity in

structure – one core school and several satellite schools. Since the 1990 Education for All (EFA) initiatives advocating for quality education, SCM has received the attention of the international community as an alternative teacher training model for that end. Therefore, this study also contributes to the global endeavor for quality education by examining in the practices of ZIPs.

Findings of this research show that there are diverse historical prototypes of ZIPs with different characteristics, such as the teacher training system for Portuguese missionaries and African teachers, Catholic seminars for young Mozambicans, Pilot Centers, and Political and Administrative Organization of Schools (Portuguese: Organização Política e Administrativa das Escolas; OPAE). In the beginning, a prototype of ZIPs performed as the teacher training system for Portuguese missionaries and African teachers in mission schools in order to improve teaching ability. Later mission schools provided secondary education for young Mozambicans through Catholic seminars that provided a backdrop for the foundation of the Mozambican ruling party, the Mozambique Liberation Front (Portuguese: Frente de Libertação de Moçambique; FRELIMO). In the 1960s, prior to the independence, FRELIMO established Pilot Centers structured as groups of schools covering both the community and the provincial levels. In the Pilot Centers, teachers engaged in farming for community production, and gathered and discussed the political, social, and military issues for independence as well as the pedagogical issues. In the mid-1970s, after the independence, OPAE was established. All personnel in a school (students, teachers, and school staff) organized into groups by subject and dedicated themselves to various aspects of school life including school-community administration and work-study. Due to the influence of the political ideology of Marxism-Leninism, the schools showed

political and administrative characteristics.

These historical practices did not utilize the exact term ‘ZIPs’ at the time of their implementation. Nevertheless, their various characteristics overlap with ZIPs in practice today. Although the government of Mozambique nominated ZIPs as a pedagogical system for in-service teacher training when introducing the system in the 1990s, ZIPs in practice have functioned as an administrative office at community level, performing various roles such as managing, monitoring and supervising schools and teachers, submitting administrative reports to the education district office, distributing budget, and so on.

Although the government of Mozambique utilized the term “revitalization” when introducing ZIPs in its education policy, there was no clear consensus about which characteristics should be reflected in ZIPs in order to overcome the chronic problems. Besides, it seems that there was no clear definition of the term ‘pedagogical’. In other words, even as the historical process formed the foundation of today’s ZIPs, it also brought a conceptual confusion to the system. Therefore, the influences of the historical prototypes are concluded as follows.

First, the roles and functions of ZIPs are unclear because of the stakeholders’ different understandings. While the government officially designated ZIPs as a pedagogical system for in-service teacher training, it has played various other roles beyond the pedagogical. Second, the position of ZIPs is unclear, somewhere between the education district office and the schools. Under the decentralized system, ZIPs are required to function as an administrative unit, even though it is not authorized and there are no designated offices for them. Besides, they do not receive any support, finances or human resources from the national or local government, nor are they given any autonomous capacity.

Nevertheless, ZIPs are pedagogically meaningful as an in-service teacher training system for improving the quality of education up to the international standards. Therefore, the national implementation of ZIPs has important implications for the international community trying to raise the quality of education by training qualified teachers in developing countries.

Keyword: Zones of pedagogical Influence (ZIPs), Quality Education, Quality of Teachers, Teacher Training, School Cluster Model, Education in Mozambique

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LIST OF ACRONYMS

ADB	Asian Development Bank
ADEA	Association for the Development of Education in Africa
DfID	Department for International Development
DPECs	Provincial Directorates of Education and Culture (Portuguese: Direcção Provincial da Educação e Cultura)
EFA	Education for All
FRELIMO	Mozambique Liberation Front's (Portuguese: Frente de Libertação de Moçambique)
IMAP	Institute Primary Teacher Education (Portuguese: Instituto de Magistério Primário)
IPO	Input-Process-Outcome Framework
MDGs	Millennium Development Goals
MINEC	Ministry of Education and Culture
MINED	Ministry of Education
OPAE	Political and Administrative Organization of Schools (Portuguese: Organização Política e Administrativa das Escolas)
PNE	National Education Policy (Portuguese: Política Nacional da Educação)
SCM	School Cluster Model
SDEJTs	District Services for Education, Youth and Technology (Portuguese: Serviço Distrital de Educação, Juventude e Tecnologia)
SDGs	Sustainable Development Goals
SNE	National Education System (Portuguese: Sistema Nacional de Educação)
SSA	Sub-Saharan African
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNICEF	United Nations Children's Fund
UPE	Universal Primary Education
USAID	United States Agency for International Development
ZIPs	Zones of Pedagogical Influence (Portuguese: Zonas de Influência Pedagógica)

CHAPTER I. INTRODUCTION

1.1. Background

Since the adoption of the 2030 Agenda for Sustainable Development in September 2015 that included a set of 17 Sustainable Development Goals (SDGs), quality education, the Goal 4 of the SDGs, became the prominent education objective among international development initiatives. As the explicit goal of the SDGs, quality education reinforced the momentum of international development agenda in the education domain.

The discourse on quality education at the global level goes back to 1990. From the World Conference on Education for All (EFA) held at Jomtien, Thailand in 1990, an international discourse on education started to focus on ensuring the quality of education (Little et al., 1994; Cochran-Smith, 2003; O’Sullivan, 2005; Koster et al., 2005; Murray & Male 2005; Courtney 2008; Gordon, 2010). As the Millennium Development Goals (MDGs) prioritized the achievement of Universal Primary Education (UPE), the importance of quality education continued to be expanded (UNESCO, 2005; Courtney, 2008; Yoo & Park, 2015).

The international community has underlined the importance of qualified teachers and agreed that teacher quality is the prerequisite to quality education as a way of achieving EFA (UNESCO, 2005; UNESCO, 2015). The SDG on quality education also calls attention to the supply of qualified teacher through in-service teacher training as the means of implementation at national levels.

Mozambique is a Sub-Saharan African (SSA) country that has struggled to rebuild its nation since the end of its civil war in 1992. Following the global

initiatives, education became one of the core areas on which the government of Mozambique concentrated for development, carrying out various education policies for its stabilization. In relation to quality education, the Zones of Pedagogical Influence (Portuguese: Zonas de Influencia Pedagogica; ZIPs) have lasted more than two decades as a representative policy and system, particularly as the pedagogical system for in-service teacher training. The government of Mozambique has regarded ZIPs as a solution to overcome its chronic education problems of low-quality education and under-qualified teachers (GoM, 1995). However, ZIPs have not been implemented¹ effectively as to contribute to ensuring quality education. Many publications have criticized ZIPs, pointing out its practical challenges and limitations.

Analyzing the current issues of ZIPs in practice would contribute to ensuring quality education in Mozambique through in-service teacher training. However, understanding the socio-historical and political contexts to education in Mozambique must precede the diagnosis of the issues of ZIPs. Therefore, although the government of Mozambique is keeping step with the international discourse and movements for securing qualified teachers, the characteristics of ZIPs must be traced on the local context, remembering to respect the local setting.

¹ The quality education in Mozambique is still very low to become a shock to many scholars as well as practitioners. Here is an example. In the reading comprehension test performed by the United States Agency for International Development (hereinafter 'USAID') that examined in seven districts along the economic corridors of the provinces of Nampula and Zambézia in Mozambique, only 6.3% of students (33 out of 527 students) in third grade are shown to be able to correctly read 45 or more words of connected text (USAID, 2015). Given that most children in Mozambique begin to learn Portuguese, the official language in Mozambique, rather than their vernaculars in the first grade, the outcome of 6.3% is dismal.

1.2. Statement of the Problem

Mozambique was expected to achieve UPE by 2015 under the EFA and the MDGs (UNDP, 2010). The government of Mozambique officially adopted both initiatives and embraced the overlapping goal: the achievement of UPE (Yoo & Park, 2015). Actually, until the early 1990s, the Mozambican education system and its conditions continued to deteriorate due to colonial vestiges and a civil war. It was only after the end of the civil war in 1992 that the government of Mozambique was able to start setting up national education policies and strategies in accord with the EFA initiative.

Based on the national education plan to improve student learning and their academic performance by ensuring quality education, the government of Mozambique developed a particular teacher training system in ZIPs. It was introduced based on the fundamental belief that teachers and teaching are key resources and factors to improve student learning in the schooling process. ZIPs therefore serve as a pedagogical system for the development of the teaching-learning process through group activities, supervision, pedagogical evaluation of teachers (MINEC, 2010).

However, there has been much criticism in relation to the effectiveness of the system to this day. ZIPs have not worked as intended, and have multiple roles beyond the pedagogical. It means that ZIPs do not work as it was initially designed, according to the literal meaning of ‘zones of pedagogical influence’. Some studies already pointed out the discrepancy between policy design and practice of ZIPs. For example, Junaid & Maka (2014) argued that the decentralized system in Mozambique is limited and ineffective due to the unstable governance structure,

while Ribeiro (2007) stressed difficulties in communication, financing, and infrastructures. However, these researches focus only on the currently visible phenomenon and do not touch on the fundamental historical and political contexts that trigger the role discrepancy

Besides, the ZIPs are classified as an example of the School Cluster Model (SCM) whose structure is similar to ZIPs. ZIPs' roles overlap with those of SCM that incorporates economic, political, administrative, and pedagogical roles. As such, some studies regard the ZIPs in Mozambique as a mere example of SCM, even though the government of Mozambique had never introduced or adopted SCM in their national policy (Hoppers, 1996; Bray, 1999, Giordano, 2008). However, even if classifying ZIPs as a type of SCM were meaningful to understand their similarities on school groups and to standardize such concepts and practices, it would not be useful to analyze the unique characteristics of ZIPs nor suggest alternative ways of overcoming the challenges and improving their effectiveness.

When ZIPs were introduced in the national policy in the mid-1990s, the government of Mozambique announced their revitalization. As the word "revitalization" implies, the origin of ZIPs seems to go back to the pre-independence period when the Catholic Church and its mission schools dominated the education system, influencing the formation of the early Mozambican education system (Ribeiro, 2007).

Therefore, this study begins with the fact that formation and development of ZIPs have been influenced by various historical, political societal and cultural factors. By doing so, this study illuminates the socio-historical and political contexts related to the colonial vestiges and nation-state building processes that

have influenced the development and transformation of ZIPs, then explores their characteristics, specifically their roles and functions today. This approach will reveal the causes of role discrepancy of ZIPs between their policy and practice, offering insight into the roles ZIPs should play, according to its original intention, in ensuring the quality of teachers.

1.3 Purpose of the Study and Research Questions

The purpose of the study is to understand the transformation of ZIPs in the socio-historical and political contexts, from its origins in the colonial periods to through the period of nation-building until today, and analyze their influence on the current implementation of ZIPs.

To this end, this study formulates the following research question:

- What are the roles and functions of ZIPs in the Mozambican education system, and how have the socio-historical and political contexts influenced its characteristics?

This study seeks to answer the following specific questions:

- When did ZIPs start and from where did it originate?
- How have ZIPs been developed and transformed in the socio-historical and political contexts of Mozambique?
- How do socio-historical and political vestiges influence the current roles and functions of ZIPs?

1.4 Significance of the Study

This study is meaningful in several distinct ways as it explores the socio-historical and political contexts of the development and transformation of ZIPs and illuminates their influence in its current implementation.

First, this study adds to research on the Lusophone Africa in terms of international development discourse on education. While there are many studies dealing with the Anglophone and Francophone countries in SSA there is comparatively less research and case studies on the Lusophone Africa including Mozambique, due to the language barrier. Therefore, this study contributes to studies on Lusophone African countries, especially focusing on Mozambique, concerning international development studies on education.

Second, this study explores historic transitions in Mozambican education by examining the ZIPs from the colonial period to the present. It is particularly important to understand the education history in the pre-independence period, given its lasting influence post-independence. In that sense, the ZIPs, that originated from the pre-independence period and was continuously developed and implemented up to the present, bridges the past and the present in Mozambican education. Thus, this study contributes to understanding the education history in Mozambique.

Third, this study explains the importance of socio-historical and political contexts in understanding education in practice. The socio-historical and political contexts count when assessing a current condition to formulate a diagnosis and solving the problems. In that sense this study tries to explore the indigenous character of ZIPs by exploring the mission schools and the ruling party

Mozambique Liberation Front's (Portuguese: Frente de Libertação de Moçambique; FRELIMO) education movements in pre- and post- independence periods. By examining the socio-historical background, this study finds traces endogenous efforts to develop the ZIPs and explains their characteristics in the past as well as the present.

1.5 Methods

This qualitative study conducts documentary research and a case study. In addition, observations were conducted to examine actions and behaviors of the coordinator and teachers at a ZIP workshop.

As stated in the research question, this study is divided into two major parts: an exploration of the historical background of the development and transformation of ZIPs from the colonial period to the present, and an analysis of their current implementation, particularly their roles and functions. Documentary research analyzes documents that contain information about a phenomenon (Bailey, 1994). Documentary research that provides fuller research results enables readers to construct an alternative interpretation of ZIPs. Therefore, the method is applied throughout this study to answer the research question.

Documentary research generally involves the use of texts and documents as resource materials: government publications, newspapers, certificates, census publications, novels, film and video, paintings, personal photographs, diaries and innumerable other written, visual and pictorial sources in paper, electronic, or another hard copy form (Scott, 2006). These texts are classified into primary and secondary documents. Primary documents are produced by people who

experienced the particular event or were present at the scene. Secondary documents are produced by those who collected eyewitness accounts to compile the documents or have read eyewitness accounts (Bailey, 1994).

This study adopts both of the documentary data collecting methods. For the first part of the research on the historical background of the development and transformation of ZIPs, secondary documentary data collecting methods were used. History books written in Portuguese and English, government publications, historical materials, and data written in Portuguese are collected to trace the socio-historical and political contexts. Actually, collection and analysis of these documents were not easy because there were not enough historical documents written in Portuguese to procure at this time. Portuguese documents are more detailed, yet difficult to find not only in the field but also upon literature review. On the other hand, English documents are relatively easier to find but handle the education related facts and issues on more comprehensive terms. As a result, the lack of documentations that prove the socio-historical and political contexts in relation to the development of ZIPs remains the limitation of this research. No documents clearly define when ZIPs started or where the name of the system originated.

Furthermore, data on Mozambique's education policies, programs, and budgeting are collected by the Ministry of Education (MINED) and other institutions in Mozambique. All documents were collected when I visited Mozambique in 2015, as well as through the official website of the MINED. In addition, many documents written in Portuguese come from the UNICEF office in Mozambique. The UNICEF has supported the MINED in the expansion of ZIPs (MINEC, 2010). All these documents collected from Mozambique are useful to

understand the background of the revitalization of ZIPs in Mozambique, the current status of its implementation, and challenges and difficulties in practice.

In addition, activity reports, annual plans, and policy documents of multilateral and bilateral donors including the World Bank, the Association for the Development of Education in Africa (ADEA), the United Nations Educational, Scientific and Cultural Organization (UNESCO), the United Nations Children's Fund (UNICEF), the United States Agency for International Development (USAID) and other international organizations were additionally analyzed through their websites. They are utilized for understanding teacher education and training in Mozambique in comparison with other SSA countries to highlight the significance of ZIPs for teacher quality and teacher training.

For the second part of the research analyzing the current implementation of ZIPs, primary and secondary documentary data collecting methods with a case study methodology were employed. The case study methodology is one of the most frequently used approaches in the field of international development. It is useful to understand the process, activities, programs, and individuals in a holistic and in-depth way (Merriam, 1998; Creswell, 2012). Considering the research limitation, examining a case study in a designated region brings an in-depth and practical understanding of ZIPs. Therefore, this study selects a Chibuto district in the southern province of Gaza as a field site in order to collect primary documents. For the data collection, I visited the district in August of 2015 and stayed for two weeks meeting with the director of the District Services for Education, Youth and Technology (Portuguese: Serviço Distrital de Educação, Juventude e Tecnologia; SDEJTs) and forming a relationship with the coordinator of the ZIPs and the directors and teachers of the schools. Teachers' workshops in two ZIPs — the Alto

Changane ZIP and the Samora Machel 2 ZIP — were observed. However, because only data collection was permitted for the research, this study could not include the in-depth interviews as a research method. All data on education environment and conditions, schools, teachers, and implementation of ZIPs are collected from the SDEJTs of Chibuto and two selected core schools of two ZIPs in the Chibuto district.

CHAPTER II. LITERATURE REVIEW

This study reviews in-service teacher training methods and the School Cluster Model (SCM). The two concepts are significant as the comparative and analytical tools for this study. Given that ZIPs were revitalized as an in-service teacher training system, it is meaningful to review the concept of in-service teacher training and its issues in neighboring countries. In addition, because their structure and SCM are similar and their roles and functions seem to overlap, a review of these concepts is necessary.

2.1 In-service Teacher Training

2.1.1 Concept of In-service Teacher Training

The term “in-service teacher training” is widely used in the education sector in both developed and developing countries. However, there is no clear explanation of the category of in-service teacher training. Accordingly, this study explores its definition and concept, especially based on the conceptualization by Mulkeen (2010).

According to Mulkeen (2010), in-service training can be classified into three main groups: in-service initial training for unqualified teachers, in-service upgrading for qualified teachers, and continuous professional development.

1. In-service initial training for unqualified teachers, designed to allow unqualified teachers to obtain a recognized teaching qualification while they continue to teach.

2. In-service upgrading for qualified teachers, enabling teachers to upgrade to a higher level qualification, usually associated with higher pay.
3. Continuous professional development, usually in the form of short courses not linked to a specific qualification.

(Mulkeen, 2010, p. 91)

In the developing countries today, the term “in-service teacher training” refers only to initial training for unqualified teachers and upgrading for qualified teachers. It does not cover continuous professional development because even though the international community recognizes the importance of ongoing professional development opportunities, most teachers, once qualified, has little access to further assistance (Mulkeen, 2010). Mulkeen (2010) divides continuous professional development into three main categories:

1. Short training courses: The provision of short training courses was mainly through cascade training, with courses developed centrally and delivered locally through a network of trainers.
2. Support systems: The support services mainly consisted of individual support workers based at local centers and visiting schools to observe and support individual teachers and provide school-level training.
3. Peer networks: Peer networks were in evidence in only a minority of cases, but provided opportunities for teachers to meet and determine their own training needs.

(Mulkeen, 2010, p. 103)

In-service teacher training in developing countries needs to extend to continuous professional development. This study explains the reasons for this claim in the next section, focusing on the context of SSA.

2.1.2 Issues on In-service Teacher Training in Sub-Saharan Africa

In discussing the issues of teacher quality, it should be acknowledged that the majority of SSA countries are facing difficulties in recruiting teachers, and finding qualified teachers is even more challenging (Mulkeen, 2010). Adopting international development agenda, countries have been forced to cope with the sudden influx of students to basic education without appropriate measures to meet these challenges. They often suffer from the lack of infrastructure and shortage of human resources, particularly teachers.

Shortage of appropriately trained teacher is a serious problem in maintaining the quality of education. Average teacher's academic qualifications and level of training in SSA countries are far lower than international standards, as many of teachers are under-qualified or untrained. More adversely, it was reported that even the trained teachers who have pre-service education present low quality of teaching instructions, blaming inadequately and ineffectively designed teacher education programs and curriculum (Lewin, 2005). Indeed, observations of primary teachers in Kenya show how teachers dominate the classroom discourse with little feedback and attention to assure students' comprehension (Pontefract & Hardman, 2005).

Besides, there is a growing concern that more and more teachers are hired on a contractual basis, not as public servants. Teachers are unqualified with no

teaching certificates, and as a result are employed on short-term contracts (Mulkeen, 2010). Therefore, hiring contract teachers only compounds the problems of teacher shortage, and further escalates the costs of improving the quality of teachers (Junaid & Maka, 2014). Another side effect of contract teacher recruitment scheme is the decrease in salaries and reduced professional training. Given the poor working conditions, they are rarely motivated, generating further adverse impacts on pupil performance.

In fact, given poor economic conditions, SSA countries face critical challenges in lifting the morale of teachers through monetary compensation (Sifuna & Sawamura, 2009). The tight budget also causes the lack of teaching materials and instructional aids required for teaching, such as textbooks and chalkboards (Avalos, 2000).

There has been a wide range of initiatives and studies adopting various approaches to resolve such identified issues. To begin with, Hardman et al. (2011) found that Kenya, Tanzania, and Uganda are moving from the institution-based training system to school-based in-service teacher training which incorporates distance learning and the school cluster model to provide more cohesive training for the teachers to acquire necessary competencies.

On top of that, Dembélé & Lefoka (2007) report attempts made by some SSA countries for pedagogical renewal and address the importance of teacher development as the groundwork for further change. Traditional education in these regions is identified as being teacher-centered and lecture-driven. Therefore, transformation of the teacher's beliefs, values, and practices is necessary.

Yet, there is also a question of whether the context of Africa is truly reflected in the recommendations, projects, and studies. Regarding the northern paradigm

dominating the field, Johson et al. (2000) criticizes the inappropriateness of westernized ideas on teachers and development and instead insists that professional development should be organized with a serious understanding of the constraints and backgrounds of the teachers. That is why examining and comprehending policies, systems, cultural backgrounds, and practices should precede any diagnosis.

2.2 School Cluster Model

The intersection ZIPs and SCM provides an important opportunity to understand their concepts and functions today. For instance, the ZIP concept is very similar to that of SCM in its organizational structure; both are based on one core school and several satellite schools. Yet, the history of ZIPs proves its indigenusness in that it originated in the mission schools in the pre-independence period in Mozambique, while most countries adopted SCM in their national education policies as a result of popular administrative decentralization movement in the 1970s.

While many of the literature on SCM are individual country policy papers or project reports, there is limited resource introducing the general roles and functions of SCM. Therefore, the key literature reviewed in this chapter are by Bray (1987; 1999), Hoppers (1996), Knamiller (1999), Gidey (2002), and Giordano (2008). Most of the publications that include analyses of the practices of SCM in developing countries are produced by the international organizations.

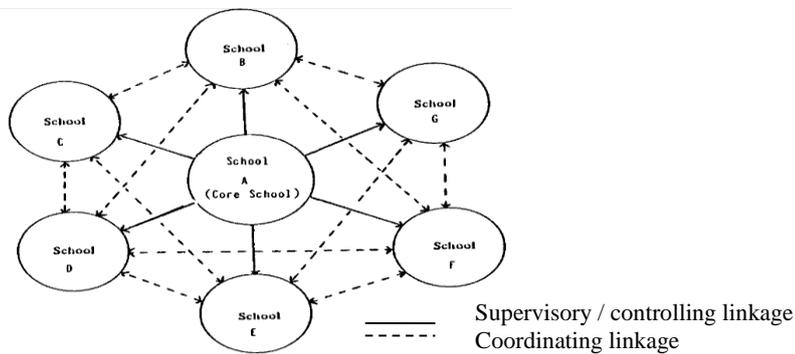
2.2.1 Concept and Historical Trends

1) Concept and Definition

Before exploring the concept of SCM, it is necessary to go over the term 'cluster'. Lexically, the term 'cluster' means a small group of people or thing close together. It means that clustering has is a similar concept to grouping. There are many terms referring to 'grouping of schools': 'complex' in India, 'network' (redes) or 'nucleo' in Latin America (Bolivia, Costa Rica, Nicaragua, Peru), 'zone' in Mozambique and Papua New Guinea, and 'cluster' in Myanmar, Sri Lanka, and Thailand (Bray, 1987; Bray, 1999, p. 20). However, despite the differences in terms, most systems have similarities (Bray, 1999, p. 12).

According to Bray (1987, p. 7) and Giordano (2008, p. 25), "a school cluster is a grouping of surrounding schools located reasonably near one another for administrative and/or educational purpose". In addition, Lunt et al. (1988) define a school cluster as "a grouping of schools with a relatively stable and long-term commitment to share some resources and decision-making about an area of school activity" (p. 17). The former definition focuses on the formation and purpose of school cluster, while the latter focuses on the roles and functions of school cluster.

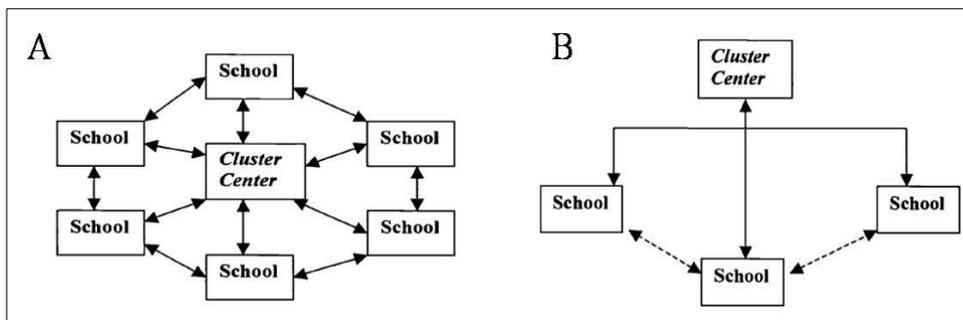
According to Bray (1987), a common SCM is composed of a core or central school and several satellite schools as shown in <Figure 1>. As the leader of satellite schools, the core school needs to coordinate the work of the cluster (Bray, 1987, p. 7). <Figure 1> shows that schools in the same cluster make some commitment to each other and operate in mutually supportive cooperation. In addition, according to Giordano (2008), its size can vary depending on the geography and accessibility of the schools (Giordano, 2008, p. 26).



Source: Bray (1987, p.8)

<Figure 1> A Common School Cluster Model

However, in reality, the formation of school clusters and their functions are changed at their implementation. Gidey (2002) explains it through geographical coverage. There are two types of clusters in terms of geographical coverage, as shown in <Figure 2>. According to model A, schools geographically surround the center and develop a relationship not only with the center but also among themselves. In model B, on the other hand, schools are geographically dispersed and relate only to the center and not among themselves (Gidey, 2002, p. 12). Therefore, the definition of Lunt et al. (1988) corresponds to model A.



Source: Gidey (2002, p. 13)

<Figure 2> Two Types of Clusters According to Geographical Coverage

Then what are the factors that define the format of an SCM? An SCM can be modified by its aims and objectives. In addition, Bray (1987) suggests five factors that define the format of an SCM: cluster formation (the extreme, the intermediate, the least extreme), coverage (institutional, geographical), size, the appointment of leaders, and financing (Bray, 1987, p. 27-33).

2) Historical Trends

Historical trends on SCM are divided into three periods. The first period covers the emergence of the SCM and its setting in some countries in the 1930s-40s, and the second period covers the expansion of SCM in other developing countries in Latin America, Asia and Africa in the 1960s-70s. Specifically, the second period can be classified into a movement in Latin America under the philosophy of 'conscientization' by Paulo Freire (Bray, 1987, p. 23) and a mix of UPE policy and decentralization movement in other developing countries. Lastly, the third period appears after the EFA Declaration in the 1990s and the 2000s.

Origin

The origin of SCM is not clear. However, there is some evidence that school clustering initiatives were developed in different countries. According to Bray (1987), the first regional initiatives in Latin America started in Bolivia in 1931 to help the disadvantaged indigenous people, and in the 1940s similar projects spread in other countries such as Peru and Costa Rica by targeting the disadvantaged rural areas. Giordano (2008, p. 23) also argues that in the early 1940s, the SCM was

first introduced in the UK and India to assist rural schools.² Overall, SCM was established to address the problems faced by schools in rural areas.

1960s-1970s

In the 1960s, a huge movement arose in Latin America. The idea to regroup schools was developed, and the SCM spread across countries (Caillods in Giordano, 2008, p. 11). Bray (1987, p. 23) finds the reason in Paulo Freire's philosophy of conscientization. In fact, the SCM was initially designed to perform administrative and pedagogical objectives. However, since the collaboration with the philosophy conscientization, the roles of SCM included political objectives. The political objectives are generally related to the notion of participation, equality, harmony, and democracy. Bray (1987) explains conscientization in this way.

“This word, coined by the great Brazilian educator Paulo Freire, means general consciousness-raising in a political sense. Freire's philosophy has had a major influence on the nuclearization projects in Ecuador, Nicaragua, and Peru. The 1972 nuclearization scheme in Peru, for example, drew its force from the country's 1968 revolution. Each nucleo was supposed to be governed by a Community Council, which was expected to use political analysis to identify its needs and to shape the education system accordingly. (p. 23)

² Papers (i.e. Bray, 1987; Hopper, 1998; Knamiller, 1999; Giordano, 2008) published by international institutions do not distinguish School Cluster Model and Teacher Resource Center (TRC) that are very similar in format and functions. Nevertheless, In the UK and India, there are institutions called TRC not SCM.

On the other side of the globe, the decentralization movements made SCM spread rapidly. In the 1970s, many countries started to adopt decentralization policies along with the SCM for their education systems. By collaborating with the administrative hierarchy in decentralization, SCM in earnest functioned as an administrative unit of the education sector at a community level. This was possible because SCM was recognized as a local-based small governance system. In the process, the model included economic role as well. In the end, it incorporates not only administrative and pedagogical but also political and economic role.

In a context of decentralization, clusters and resources centers are increasingly expected to accomplish a thousand different things, in addition to acting as a link between the central government, the education district officer, the schools and the communities. As is often the case with many good innovations, they have created much expectation, and nowadays, tend to be overburdened with tasks for which they are not competent and do not have the necessary resources. (Caillods in Giordano, 2008, p. 11)

As a result, required roles of SCM gradually varied. As cited above, Caillods (in Giordano, 2008, p. 11) argues that an SCM was increasingly expected to accomplish a thousand different things. In addition, their geographical coverage gradually expanded to urban areas. It seems that SCM became part of national packages for educational improvement in both the rural and urban areas (Giordano, 2008, p. 25). This was due to the idea that the SCM was an effective way of responding to teachers' needs and of ensuring professional growth (Kahn, 1982;

Gough, 1989; Knamiller, 1999, p. 20).

1990s and the EFA initiatives

Since the World Declaration on EFA in 1990, concerns for quality education started to get international attention, and access to education became the first achievement target. In the process, the number of students in primary schools increased drastically and new teachers were urgently needed in many developing countries. To meet the demand, untrained and unqualified teachers were contracted and employed. Given such background, the Dakar Framework in 2000 recognized the preeminent role of teachers in providing basic education or UPE of good quality. Many governments also started to implement educational governance reforms to ensure quality education (UNESCO, 2015). Giordano (2008) describes the situation as follows:

In order to provide universal basic education, countries such as Malawi and Uganda need to train massive numbers of teachers as quickly as possible. Many aid programs have utilized resource centers to ensure the rapid delivery of in-service training or to train unqualified teachers (Giordano, 2008, p. 25).

As an alternative, many international agencies started to provide funds and propose projects in relation to the SCM: UNICEF to Mozambique and Cambodia, World Bank to Romania and Bolivia, USAID to Mali (Giordano, 2008), Asian Development Bank (ADB) to Nepal, The Department for International Development (DfID) to Zambia, Kenya (Knamiller, 1999) etc. As a result, the

SCM has become a common feature of educational reform in the developing countries as a way of ensuring quality education especially in in-service teacher training (Giordano, 2008, p. 24).

2.2.2 Roles and Functions

1) Introduction of Roles and Functions

As Hoppers (1996) mentioned above, the roles of SCM gradually diversified. In addition, roles of SCM are defined by their objectives (De Grauwe & Carron, 2001). Considering the complexity of the roles of an SCM, this study introduces two different classifications of the roles of SCM, introduced by Bray (1987) and Giordano (2008).

Before looking at the Bray's classification, the roles of SCM have traditionally been identified as the following.

- improvement of education quality;
- improvement of cost-effectiveness;
- improvement of management of education;
- encouragement of community participation

Compared to the above, Bray's classification is more simple and clear: economic, pedagogic, administrative, and political. The economic role deals with sharing of resources and staff, and financing and fundraising issues. The pedagogic role includes teaching-learning related issues on schools, teachers, and students,

such as the educational environment and curriculum development. The administrative role covers individual school management and implementation, and integration of schools. The political role is linked to community participation and inequality reduction through consciousness-raising. In other words, taking a closer look, it is easy to find that Bray’s classification is very similar to the traditional definition of the roles of SCM.

On the other hand, Giordano (2008) proposes five roles as follows:

- improving the conditions of education delivery;
- addressing pedagogical goals and quality improvement;
- economic objectives: improving cost-effectiveness;
- addressing administrative concerns: improving education management;
- promoting interactions between school and community

However, even though Giordano suggested five roles of SCM, details of activities in each role, except improving the conditions of education delivery, are very similar to the traditional concept and Bray’s classification, as explained in [Table 1]. Therefore, one may conclude that the traditional concept and Bray’s classification still has an influence on Giordano’s classification.

[Table 1] Comparison of Roles of School Cluster Model

Traditional Definition	Bray (1987)	Giordano (2008)
• improvement of education quality	• Pedagogical Role	• improving the conditions of education delivery • addressing pedagogical goals and quality improvement
• improvement of cost-effectiveness	• Economic Role	• economic objectives: improving cost-effectiveness

Traditional Definition	Bray (1987)	Giordano (2008)
<ul style="list-style-type: none"> • improvement of management of education 	<ul style="list-style-type: none"> • Administrative Role 	<ul style="list-style-type: none"> • addressing administrative concerns: improving education management
<ul style="list-style-type: none"> • encouragement of community participation 	<ul style="list-style-type: none"> • Political Role 	<ul style="list-style-type: none"> • promoting interactions between school and community

Source: Reconstructed by author from Bray (1987) & Giordano (2008)

2) Pedagogical Role and Functions

Among the various roles described above, the educational quality and pedagogical role will be more considered in this study. Bray (1987) and Giordano (2008) suggest the detailed functions to the pedagogical role in which they explain similar categories in access to resources, teacher development, curriculum development, and education innovation [see Table 2].

[Table 2] Pedagogical Functions of School Cluster Model

Classification	Bray(1987)	Giordano(2008)
Access to Resource	<ul style="list-style-type: none"> • allowing schools to gain access to extra resources 	<ul style="list-style-type: none"> • provide better access to teaching and learning resources
Teacher Development	<ul style="list-style-type: none"> • encouraging teacher development 	<ul style="list-style-type: none"> • teacher development and training
Curriculum Development	<ul style="list-style-type: none"> • promoting curriculum development 	<ul style="list-style-type: none"> • production of materials, adaptation, and development of curriculum
Education Innovation	<ul style="list-style-type: none"> • providing an environment for innovation 	<ul style="list-style-type: none"> • create and promote innovations and good practice in education
Others	<ul style="list-style-type: none"> • encourage cooperation in school projects • encourage pupil competition • integrate of the different levels of schooling • integrate of schools with non-formal education 	<ul style="list-style-type: none"> • co-operation for special education needs • testing and assessment • pedagogical supervision and support • breaking the isolation of rural teachers and pupils

Source: Reconstructed by author from Bray (1987) & Giordano (2008)

In addition to this, Bray (1987) includes encouraging cooperation in school projects, encouraging pupil competition, integration of the different levels of schooling, and integration of schools with non-formal education. On the other hand, Giordano (2008) includes breaking the isolation of rural teachers and pupils, pedagogical supervision and support, co-implementation for special education needs, and testing and assessment.

2.2.3 Current Trends and Issues

As mentioned above, under the EFA initiatives at the global level, in the 1990s and early 2000s, international organizations provided funds to the developing countries and proposed the introduction of the SCM in the education domain. Given faith in the SCM as a way of ensuring quality education, many developing countries adopted the model in their national education policy in various ways. Accordingly, Giordano (2008) groups cases of SCM in five general categories based on the organization structure (national, rural), target subjects, and activities: the national cluster model, the resource center model, the teacher group, the network, and the rural cluster model (Giordano, 2008, p. 47).

The main issue around the implementation of SCM is related to its role. Basically, an SCM is designed to improve the quality of teaching and learning at the school and classroom level by exchanging ideas and information among teachers and students under the cooperation between schools (Giordano, 2008). In addition, an SCM is also required to deliver teacher education at school level. For example, some countries such as Malawi, Uganda, and Ethiopia utilized SCM as an in-service teacher training system (Hoppers, 1996; Giordano, 2008).

However, for decentralization, SCM also serves a number of administrative purposes through their linkage of schools at the sub-district level (Giordano, 2008). Other studies also point out the phenomenon (Hoppers, 1996; Bray, 1999, De Grauwe & Carron, 2001; Giordano, 2008). The representative case of Thailand shows the successful role of SCM in the line of official administrative hierarchy (Bray, 1999). Above this, countries such as Cambodia, Bangladesh, Bolivia, Namibia utilize SCM as the nation-wide education model to serve administrative purposes. In the process, SCM plays a role as an administrative unit. However, it must be noted that this additional role has a negative influence on the implementation of SCM.

Based on the previous literature review, Giordano (2008) points out some disappointing outcomes of SCM implementation as follows. The idea of cluster center-based teacher development is not directly linked to the teaching-learning process in class. Organizational and practical problems make the operation of school clusters worse. The poor coordination system also causes an inefficient sharing of materials and teachers. In addition, there are financing issues. In order to support this critique, Giordano cites Greeves' (2003) report: in the case of Cambodia, "clustering has only worked when the relatively high level of financial and technical support has been provided by international organizations and NGOs." In detail, Giordano (2008) categorized issues in administrative and political roles.

[Table 3] Administrative and Political Issues of School Cluster Model

Administrative Issues	Inadequate preparation of cluster heads Inadequate conditions for resource center supervision and support Cluster coordinators, resource people and tutors overburdened with work
Political Issues	Lack of authority, cluster heads, and supervisors Resistance of head teachers to cluster initiatives

	Lack of overlap in cluster boundaries and administrative boundaries Non-participation of stakeholders Inadequate support from the education administration Sustainability and survival of cluster initiatives Lack of formal structure
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Source: Reconstructed by author from Giordano (2008)

To sum up, many unexpected issues accompany the practice of SCM in each country. Given these difficulties, Giordano (2008) suggests some strategies as follows: effective cluster center-based support and training, whole-school approach, active support of local stakeholders, encouraging local innovation through grants programs.

Nevertheless, the most important thing to consider is that there are not enough case studies and researches on the practice of SCM. The issues described above are the overall characteristics of the practice of the model found in some case studies. However, even though the importance of SCM was emphasized for quality education in the 1990s and the early 2000s, and has even been expanded since the late 2000s, there is still a lack of studies that reveal the challenges and limitations of its practice at the national level. This tendency ultimately prevents any improvement of SCM in practice in different cases and contexts. SCM should be implemented in different, context specific ways, and local case studies must be considered from multiple dimensions.

In that sense, the research presented here illuminates the ZIPs in Mozambique whose structural format is similar to that of the SCM. As mentioned above, some regarded the ZIPs in Mozambique as a mere example of SCM studies (Hoppers, 1996; Bray, 1999, Giordano, 2008). However, the government of Mozambique did not adopt SCM in their national policy, while other countries did. Nevertheless, the system could still provide meaningful implications to scholars, policy-makers,

practitioners who implement the SCM in their context due to their similarities to the system. This approach helps to find ways of ensuring the quality of teachers and educational practice not only internationally but also in the local context ultimately. The following chapters will present the system in Mozambique in socio-historical and political context.

CHAPTER III. ZIPs in MOZAMBIQUE

This chapter traces the origin and the development process of ZIPs in the socio-historical and political contexts, and explores the roles and functions of ZIPs in the current implementation. The socio-historical and political contexts in which the previous incarnations of ZIPs arose persist today to influence its current implementation. In particular, such vestiges bring the same challenges and limitations, hindering the implementation of the newly born ZIPs to run as intended.

In this sense, this study is divided into two major parts: an exploration of the historical background of the development of ZIPs from the colonial period to the present, and an analysis of the current implementation of ZIPs, particularly its educational roles and functions. This approach is useful to makes the diagnosis of the present and to suggest an alternative way to overcome its issues.

3.1 Development of ZIPs in Mozambique

As for the development of ZIPs, no documents clearly define when it started or explain from where the name originated. Nevertheless, this study assumes the initial movement that could be considered a forerunner of ZIPs based on previous literature (Ribeiro, 2007; Nivagara et al., 2016).

A forerunner of ZIPs is found in the practice of Catholic missionaries dispatched from Portugal in the colonial period. This influenced the education movement and policy of the FRELIMO³ in the pre- and post- independence

³ FRELIMO has been the ruling party in Mozambique since its independence. Founded in 1962 before the independence, FRELIMO began as a nationalist movement fighting for the independence of the Portuguese

period. Even though it deteriorated during the civil war, the government of Mozambique reintroduced ZIPs in the mid-1990s as their national policy and has maintained it since.

Therefore, this section explains the historical background of development and transformation of ZIPs from the colonial period to the present. This section consists of three subsections: (1) mission schools in the colonial period, (2) FRELIMO's education policy in 1960s-1980s, and (3) the revitalization of ZIPs after the civil war.

3.1.1 Mission Schools in the Colonial Period

History of education in Mozambique has relied on missionary education for a long time (Cross, 1987). Missionary education was confronted with rapid changes because of the shifting relationship between religion and politics. Therefore, mission schools seem to have improved and developed their own ways of survival in harsh conditions.

In relation to ZIPs, there were two practices in the colonial period: training for missionary teachers and Catholic seminars for young Mozambicans. The first was a teachers' gathering for training in mission schools, and the second shows how the legacy of Catholic mission schools was transferred to the Mozambicans as a forerunner of ZIPs.

Overseas Province of Mozambique. Right after the independence, at the party's 3rd Congress in February 1977, it became an officially Marxist-Leninist political party and struggled through a long civil war against an anti-Communist faction RENAMO. The FRELIMO Party approved a new constitution in 1990, which established a multi-party system, and in 1992, the civil war ended as both parties signed the Rome General Peace Accords.

1) Training for Missionary Teachers

Given the fact that the ZIPs were revitalized in the mid-1990s as a pedagogical system for in-service teacher training, tracing the indigenous movement of teachers for self-training is a key element proving it as the forerunner of them. The initial precedent of teacher training is found in the initiatives of Catholic missionaries in the colonial period.

During the colonial period, the government of Portugal supported and controlled education in the colonies through the Catholic mission schools only. Before 1759, there were Protestant mission schools in Mozambique as well, but they were few with minimal influence. Moreover, Protestant missionaries were exiled from the Portuguese domain following Portugal's political transformation. Subsequently, only Catholic mission schools exercised their influence over Mozambique. The government of Portugal permitted public schools in its colonies in 1845 for the first time.

In this situation, education was supported and controlled by the government of Portugal. Particularly, teachers in Catholic mission schools were trained in the College of the Overseas Missions in Portugal and dispatched to its colonies. There existed no teacher training institution in Mozambique (Ferreira, 1974). Nevertheless, Catholic missionaries built their societies to open classes for teacher training, as Ribeiro (2007) describes as follows:

The origin of the ZIP idea emerged before 1975. During the colonial period, mission schools belonging to the Catholic Church were one of the main instruments of the Portuguese domination of the indigenous population.

During the pre-independence period, missionary school teachers were periodically gathered and given pedagogical and methodological support. Apart from pedagogical and methodological assistance, these meetings also provided the teachers with religious, civic and moral knowledge. (Ribeiro, 2007, p. 163)

This attempt by Catholic missionaries seems to have become a basis of teacher training in Mozambique; its practice is very similar to the purpose of ZIPs that exists as an in-service teacher training system.

Nevertheless, there were limitations in terms of the target trainees. The activities were only for the missionaries who came from Portugal. Africans were denied opportunities to be trained as teachers. In fact, in contrast with Catholic mission schools, the Protestant mission schools in Mozambique frequently employed the African clergy, taught them language and other subjects, and provided the untrained with teacher education until the mid-eighteenth century (Ferreira, 1974). However, as mentioned above, it did not last long.

No teacher training institution in Mozambique and no class for African teacher training meant that there were no teachers trained at the local level to provide the Mozambican students with a general education. As a result, it became one of the decisive factors that hindered the training of local teachers in Mozambique for a long time.

However, the changing political climate in Portugal shifted missionary policies in the colonies, affecting the circumstance of teacher training in Mozambique. The government of Portugal proclaimed itself a republic and implemented the

separation of church and state in 1910, at which point lay mission⁴ began. Before the separation, the primary role of mission schools was to make converts of Africans. In addition, mission schools were financially supported and controlled by the government of Portugal. However, as the government of Portugal no longer concerned itself with missionaries and mission schools, the education mission was no longer financially supported by the government. Furthermore, the government did not care anymore to send missionaries as professors for colonial education, and instead established the principle of lay missions employing personnel on the local level. As a result, Mozambique suffered a lack of teachers.

In fact, in the late nineteenth century and early twentieth century, colonial education gradually started changing its direction from mission education to commercial and vocational education that included general education contents. In that process, the remaining teachers were required to supplement teaching in general education (Ferreira, 1974).

... there were schools where improvised teachers claimed to offer primary instruction to native children. Attendance at these schools was minimal, even when they were turned over to secular priests... (Ferreira, 1974, p. 58)

As a result, teachers in Mozambique, not only the remaining missionaries but also the newly appointed African teachers needed to share their teaching experience and knowledge to upgrade their teaching skills. Naturally, a kind of teachers' gathering began. Above all, the fact that African teachers began to appear

⁴ There is no original evidence on when the term "Lay Missions" was used for the first time. This study adopts the terms used by Ferreira (1974).

in African education in this lay mission period was a significant success.

The policy of lay missions was of short lived, from 1910 to 1926. After the end of lay missions, the government of Portugal returned control of education to the Catholic mission schools. Since Salazar's Estado Novo in 1933 in Portugal, the colonial policy was changed to civilizing mission or Portuguezation, and the government of Portugal dispatched missionaries to control its colonies and to educate the Mozambican people (Cross, 1987).

Therefore, it can be concluded that the policy of lay mission triggered the indigenous movement of teacher training in Mozambique even though its duration was not long. Succeeding the legacy of the Catholic missionary teachers' gatherings, education in Mozambique started to partially adopt a system of teachers' learning community.

2) Catholic Seminars for Young Mozambicans

Right after the abolishment of lay missions in 1926, and as the Catholic party came to power, the dictatorship government of Portugal conducted strict control of Catholic missions in its colonies. This situation changed the colonial policies and their climate. As a result, education for Africans also concentrated on Catholic mission schools in the period before Mozambique achieved its independence in the mid-1970s (Ferreira, 1974).

In relation to teacher training or education, the government of Portugal established Institute Primary Teacher Education (Portuguese: Instituto de Magistério Primário; IMAP) that helped assistant primary teachers prepare for local certification under the Catholic mission (Cross, 1987). However, it was not

clear that there continued teachers' gatherings and activities for the purpose of in-service teacher training.

In that moment, however, a new type of education appeared as inspiration for ZIPs – the Catholic seminars. The government of Portugal supported the Catholic seminars in order to strengthen its ideological dominance in overseas territories. The purpose of these seminars was 'Portuguezation', or a civilizing mission that was meant to Christianize (Madeira, 2005). Whatever the purpose was, as a type of informal school, the seminars were a strong attraction for young Mozambicans because they were unique opportunities for them to continue education after primary school.⁵

Through the seminars, young Mozambicans continued their education, and as a result became the leaders of Mozambique who led and engaged in armed struggle against Portugal. Gasperini (1989) claims that the seminars became an initial base of FRELIMO, and Israel (2014) argues that it became informal FRELIMO schools whose programs were mostly left to the initiative of individual teachers.

In fact, colonial culture and the political, economic and social organization of the overseas territories were in contrast with their needs, interests, and aspirations of the "acculturated" young Mozambican. Some of them, more sensitive, were beginning to realize the irremediable contrast between the promises of equality and democratization, with that the regime sought to gain credibility in the colonies and abroad, and the conditions of discrimination in that the population lived. (Translated in English. Gasperini, 1989, p. 22)

⁵ The law that upheld ethnic discrimination in the public schools was abolished in 1964 by Decree No.45908.

No matter what the reason, the seminars influenced the formation of FRELIMO because young Mozambicans who gained new consciousness in these institutions gathered and found FRELIMO in 1962. In addition, FRELIMO borrowed its education system from mission schools to educate Mozambicans during and after the armed independence struggle (Gasperini, 1989; Israel, 2014).

Although it is a stretch to deem the Catholic seminars for young Mozambican a prototype of ZIPs, the fact that the seminars had an influence on the formation of FRELIMO and became a FRELIMO's education system, which in turn became the prototype of ZIPs, is not to be overlooked. The influence of the Catholic mission was reflected and easily found in FRELIMO's education policy.

3.1.2 FRELIMO's Education Policy in 1960s-1980s

This section explores a prototype of ZIPs in FRELIMO's education movement and policy, particularly revealing how FRELIMO has constructed the beginning of ZIPs pre- and post- independence period. Given the fact that when the government of Mozambique established the education policy after the end of its civil war in 1992, the government used the term "revitalization" of ZIPs, exploration in this section will be the evidence of such revitalization.

This section consists of two subsections of (i) Pilot Centers, and (ii) Political and Administrative Organization of Schools (Portuguese: Organização Política e Administrativa das Escolas; OPAE). This section only focuses on the periods immediately before and after the independence through Pilot Centers and OPAE. Pilot Centers was born in the early 1960s and OPAE was in the mid-1970s. In the late 1970s, all national systems including education deteriorated as the civil war

had been raging (Ribeiro, 2007). This section highly relies on Gasperini (1989) and Israel (2014) due to the data limitation.

1) Pilot Centers

Introduction of Pilot Centers

In the mid-1960s, FRELIMO started to set up schools for Mozambicans and to train teachers for armed struggle, against colonial policies. By 1967 more than 10,000 children were enrolled in FRELIMO primary schools, and a few years later, teachers trained by FRELIMO carried on FRELIMO's vision that regarded the purpose of education not as the production of the national elite but as a means to serve the people under socialism. As a result, by 1974 more than 20,000 children were enrolled in the four-year primary school program in various provinces. Considering that there were 496,381 students in primary schools in 1969/70 (Ferreira, 1974, p. 81), the number of students in FRELIMO schools were not large. However, these movements were significant in the modern education history of Mozambique in that the schools became the basis for armed struggle and the graduates became the leaders of the protests.

The Pilot Centers (Portuguese: Centros-Piloto) was born in this context. They were primary schools that were located in the Liberated Zones (Portuguese: Zonas Libertadas). The Liberated Zones were established by FRELIMO as the base for the armed struggle in the colonial period. As one of its first actions, FRELIMO focused on the establishment of new primary schools and the organization of adult education for literacy through the Pilot Centers. This was not only to increase

schools but also to liquidate colonialist and imperialist education and culture (FRELIMO, 1977). Gasperini (1989) pointed out the two reasons for the establishment of primary schools.

Schools were established for two reasons: one is a structure and the other is superstructure. A new way of thinking, feeling, and acting was necessary to reorganize production and consumption and to improve the conditions of existence. Traditional habits and conceptions, that blocked initiative and creativity, were discussed for the first time. (...) On the other hand, the expansion and exacerbation of the military conflict created the need to equip the popular army with instruments such as reading, writing, and calculus, indispensable in the use of modern weapons and in adopting a complex strategy. To meet these demands, a few hundred schools were born under trees. (Translated in English. Gasperini, 1989, p. 26)

It is not unclear since when the young Mozambicans who became the leaders received the idea of Karl Marx and socialism as their political ideology for armed struggle. However, the argument of Gasperini above showed that FRELIMO has followed and advocated Marxism-Leninism. In this context, education became a tool for diffusion of ideology and schools a space to realize that ideology. Eduardo Mondlane, the first president of FRELIMO, and his follower Samora Machel created the Pilot Centers for such particular purpose.

Pilot Centers were placed in the proximity of military bases to defend the children from possible incursions (Israel, 2014). They were designed as a base

where the people took power and proposed to overcome the gaps created by the capitalist division of labor, linking study to production and integrating education into the community under the Marxism-Leninism. For armed struggle, Pilot Centers were to educate, to produce, and to fight (Gasperini, 1989).

Even though FRELIMO focused on primary education and adult literacy, the main purpose of education seemed to accelerate the transformation of consciousness in order to put FRELIMO's project into action, and to produce a living and to fight. These purposes are evidenced in the education activities. For production, teachers and students in Pilot Centers spent several hours a day on agricultural and craft production, and building anti-aircraft shelters. Meat for their food came from small animal breeding or hunting. As a result, there was a mutual relationship between the Pilot Centers and the inhabitants of the Liberated Zones through the exchange of products and services. In addition, teachers and students received advanced political and military training, according to age, in order to prepare to face the situations created by war. After all, students in Pilot Centers grew up with soldiers and were subjected to military rules, routines, and ceremonials (Gasperini, 1989; Israel, 2014).

Teacher Training in Pilot Centers

In this period, FRELIMO was confronted with a lack of human and material resource. In the 1960s, teachers had only one more year of schooling than their pupils (Gasperini, 1989). Such was inevitable given the Portuguese colonial education policy decreeing only primary education – four years of schooling – for Mozambicans and with no teacher education institutions for Mozambicans

(Ferreira, 1974). With the growing need for teaching, FRELIMO applied the principle that those who had studied should teach what they knew to others. As a result, those who completed only primary schools could become primary school teachers. It showed how FRELIMO confronted the lack of human resources. The quality of teachers was obviously extremely poor, and they needed to find a new way to improve the quality of teachers.

The condition of material resources was the same. Even though FRELIMO was founded in 1962 and tried to focus on education from the beginning, by 1968, there was still no guidebook for teachers to teach and no textbook and notebook for students to learn. Teachers used a piece of dark wood as a board, and dry cassava became a chalk. Geographic map and other information were written on the sand floor (Gasperini, 1989). After all, all teaching materials were mostly left to the initiative of individual teachers (Israel, 2014). Individual teachers needed to look for their own ways to teach.

To overcome these poor teaching conditions, teachers joined hands with each other. Teachers had frequent meetings and brief training courses for themselves. In addition to this, through the district and provincial meetings, those who had more experience provided insights to other teachers about the objectives, content, and methods for each lesson of the following month. On top of this, teachers gathered, and then discussed the political, social, and military issues (Gasperini, 1989, p. 27).

There is some doubt if these types of teachers' gatherings and meetings were organized by voluntary teachers who realized their difficulties to teach or if they were forced by FRELIMO as a system. Given that teachers' participation in agriculture and military work, and the contents of the teachers' discussions on

political, social, and military issues, teachers in the Pilot Centers seemed to be controlled and forced by FRELIMO and as a result their activities were limited. Moreover, given that the purpose of education was oriented to instill national consciousness against colonialism and capitalism, it is presumed that the teachers' learning through the gatherings and meetings did not include deep pedagogical issues for better teaching and quality education.

Nevertheless, these movements of teachers are very similar to today's ZIPs. Even if it is unclear that the Pilot Centers assumed the form of school clusters, its structure as a group of schools, and the details of their activities — such as frequent meetings among teachers to make up for poor teaching, the range of participants from schools to district / provincial level, the domination of more experienced teachers as others listen and learn their lessons — were very similar to the current ZIPs. Therefore, this study concludes that a similar form to the ZIPs were already in practice in the period of armed struggle by FRELIMO.

2) Political and Administrative Organization of Schools (OPAE)

Introduction of OPAE

On June 25, 1975, Mozambique became independent. FRELIMO which became the ruling party tried to extend its political hegemony to the whole country. In that process, the president Samora Machel proclaimed the application of the experience of the Liberated Zones⁶ to the whole country as a part of the

⁶ Even if the experience of the Liberated Zones was rich and was consolidated over a decade, its maximum expansion reached only over 10% of the population and 1/5 of the Mozambican territory (Verschuur et al., 1986, p.36).

development strategy of the new state (Gasperini, 1989). Actually, at that time, there were great disparities in education, i. e. school and teachers between urban to rural, boys to girls, white and black. In addition, many Portuguese teachers in mission schools and public schools returned to Portugal, resulting in a drastic lack of teachers. The remaining numbers of trained and matured teachers were inadequate to meet the needs. Therefore, recognizing the poor situation, FRELIMO tried to establish a new state and a new education system by taking lessons from the experiences of the Liberated Zones.

Schools that set free from the colonial regime ... democratized structures at all levels, transforming management into a collective body in that teachers and students participate in the process of national reconstruction (Machel, 1978).

OPAE originated from the Pilot Centers in Liberated Zones. OPAE brought about significant internal changes in education. One significant factor was that OPAE adopted democratic leadership methods⁷. In the method, the subjects were teachers, students, and school staff. Through OPAE, they were organized into working groups that discussed and made decisions about many aspects of school life (Gasperini, 1989).

Community-based Activities of OPAE

As briefly mentioned above, teachers, students, and school staffs had their own

⁷ The democratic leadership method was included under the Democratic Centralism developed by Lenin under the slogan 'opportunity to learn the exercise of power'.

group in OPAE. Teachers were organized into groups according to the subjects they taught. They discussed together didactic planning and exchanged their experiences. It was an opportunity for training and requalification for both the younger and the older members. And a group of students was led by an elected leader to discuss behavior and learning outcomes of each student, teaching methods, interpersonal relationships, and ways of implementing principles. In addition, a group of school staffs discussed specific issues such as working conditions, relationships with other components of school life, and political and social problems (Gasperini, 1989).

The groups of students, teachers, and school staffs met in sections of groups dedicated to various aspects of school life, such as culture, sport, health and hygiene, discipline and social problems, school-community, administration, and work-study. It was possible to ensure the autonomy of subjects and harmony among members. In addition to this, the school council consisted of students, parents, and community members, and assisted in school management that was headed by a pedagogical director, an administrative director and a political director (Gasperini, 1989). All systems were designed to claim the democratic idea.

The idea and practice of OPAE were plentiful and democratic in that the subjects who participated in the decision-making for education and school issues were varied from the school director to community members, and the roles and functions of schools were dynamic. In addition, OPAE covered various other functions besides being a teacher's society, such as school administration, finances, and community development (Gasperini, 1989). This fact shows that FRELIMO reflected Democratic Centralism, their ideological base, in education practice.

However, bureaucratic centralizing tendency appeared in education

administration in schools and as a result weakened FRELIMO's sense of Democratic Centralism. The subject participation was suppressed. This tendency gradually reduced even the space for creativity and grassroots initiatives that FRELIMO intended to nurture. Gasperini (1989) interpreted this phenomenon as the consequence of inadequate training and lack of experience of the new leading agents. Focusing on teachers, the following is a deeper look into an example.

Challenges of OPAE: Case of Teacher Community

Poor education conditions had an influence on teachers. In the beginning, teachers made advances in teaching through the teachers' gatherings conducted by the Pilot Centers and OPAE. For example, there were autonomous local movements to print texts and produce manuscripts by the teacher groups to use as teaching material (Gasperini, 1989). These materials were meaningful in that there was no teaching material developed and distributed by the government at that time. These methods were widely used until the new manuals were developed by the central government.

However, not much later the government prohibited teachers from making teaching material and sharing their pedagogy under the process of nation-state building through education (Gasperini, 1989). The prohibition contradicts the idea of Democratic Centralism which ensures the participation of subjects in making a decision about education and schools, encourages teachers to make their own groups, and to ensure teachers' autonomy as a solution the lack of teachers.

The government prohibition shows that the Mozambican education system was highly politically centralized (UNESCO, 2006). Furthermore, in these contexts,

the schools remained distant from life and production due to their urban character inherited from the colonial system. The idea of Marxism-Leninism, particularly the linkage of work-study was implied in education policy and practice in Mozambique (Gasperini, 1989).

3.1.3 Revitalization of ZIPs after the Civil War

This section explores the background of the introduction of ZIPs in education policy and related issues. Given the fact that the previous practices had never been called “ZIPs”, examining the background to the launching of ZIPs and related issues are critical to understanding its formation in relation to its the socio-historical and political contexts.

ZIPs today have similarities and compared with previous practices by mission schools and initiatives by FRELIMO. Therefore, this section consists of (i) the background to the introduction of ZIPs as an education policy, and (ii) issues in the roles of ZIPs.

1) Background to Introduction of ZIPs as an Education Policy

The international political transformation, the collapse of a number of socialist governments, and the achievement of institutional market-based reforms (e.g. privatization) influenced the nation rebuilding and reconstruction of the education system in Mozambique. By amending its national constitution toward marketization, the Mozambique government completely revised its National

Education System (Portuguese: Sistema Nacional de Educação; SNE)⁸ in 1992. Contrary to the first SNE that emphasized fostering the socialist “New Man”, the new SNE declares that education is the right of all citizens and mentions the right of and the right to education. In addition, reflecting Mozambique’s commitment to the Jomtien Declaration in 1990, the new SNE contains the values of the new international initiative on Education for All.

Based on the new values of education at the international and national levels, the government announced the first National Education Policy (Portuguese: Política Nacional da Educação; PNE) in 1995. ZIPs first appeared as part of this national education policy. In the PNE, ZIPs were defined as a pedagogical system for in-service teacher training and it was heralded as a solution for under-qualification of teachers (GoM, 1995).

At the same time, as the government administratively adopted decentralization as their national policy, the education system also suits. The provinces, districts and community levels under the law of municipalities (Lei n° 3/94) and the decree n° 49/94 was adopted in 1994 (Alexander, 1997; MINED, 2012). As a result, the government established new institutions such as the Provincial Directorates of Education and Culture (Portuguese: Direcção Provincial da Educação e Cultura; DPECs) and District Services for Education, Youth and Technology (Portuguese: Serviço Distrital de Educação, Juventude e Tecnologia; SDEJTs) at a provincial and district levels. The new administration system was arranged in a hierarchy from the national level to district level as shown in [Table 4] below.

⁸ Mozambique enacted the National Education System (SNE) in 1983 for the first time. The SNE was enacted to bolster Marxism-Leninism as the ideology of the ruling party. According to the SNE, the purpose of education was to bring up a socialist New Man. Under this system, education was regarded as a tool to tighten national control and to infuse patriotism.

[Table 4] Education Administration System in Mozambique

National Level	Provincial Level	District Level	Lower Level (Community etc.)
Ministry of Education(MINED)	Provincial Directorates of Education and Culture (DPECs)	District Services for Education, Youth and Technology (SDEJTs)	Zones of Pedagogical Influence (ZIPs)

Source: Reconstructed by author based on the MINED (2012) PEE 2012-2016

Regarding the roles of ZIPs, looking into the decentralized education system is meaningful. According to [Table 4], the decentralized education system does not legally cover the community level. In other words, ZIPs are not legally authorized to function as an administrative unit. It shows a clear difference in the roles of ZIPs in comparison with the Pilot Centers in the Liberated Zones which were designed for effective ruling at the local level.

Instead, the government of Mozambique assigned a new objective of ZIPs: strengthening the services of pedagogical supervision and school inspection to enable more systematic monitoring of teaching activity (GoM, 1995). It seems that even though ZIPs were not defined by law as an administrative unit, the government of Mozambique rediscovered the value of ZIPs through its history and FRELIMO's education practice and assigned the new role to ZIPs as the core pedagogical system.

2) Issues in the Roles of ZIPs

Even though the government of Mozambique defined ZIPs' new role, it has been somewhat ambiguous and arguable. That is because the meaning of the term 'pedagogical' was not clear, and there was not a clear definition of the position of ZIPs in the education system. This is directly related to the financial and

administrative problems in carrying out the policy. Ribeiro (2007) describes the situation as follows:

According to a document, ZIP staffs are expected to act as immediate tutors of trainees, but the main responsibilities of guidance, supervision, evaluation and inspection will lie with the Centro de Formação Regional Training Centre (CFR) staff, in coordination with the Education Provincial Office and Education District Offices together with pedagogical staff. (...) this strategy can keep ZIPs too dependent on the regional and national levels, three alternatives were suggested: (i) ZIPs as a pedagogical support unit; (ii) ZIPs as an administrative/mediator unit between schools and Education District Offices; or (iii) ZIPs as a pedagogical supervising unit. However, the question remained: That of the three alternatives that meet the country's needs is still a matter of debate. Opinions suggest that the first alternative seems to be the most appropriate in the sense that it demands less investment in terms of building new infrastructures, as these are already available. As for the last two alternatives, i.e. redefining ZIPs as an administrative/mediator unit between schools and Education District Offices or as a pedagogical supervision unit, will be costly, because the ZIPs will need new infrastructures, recruitment, and training of new personnel. (Ribeiro, 2007, p. 165)

In the beginning of the introduction of ZIP, its role seemed broad. Many tasks such as guidance, supervision, evaluation, and inspection were required of the ZIPs, and three different roles were suggested: a pedagogical support unit, an

administrative/mediator unit, and a pedagogical supervising unit.

Two years later in 1997, the ZIPs were defined by a new regulation (Portuguese: Regulamento Orgânico das Zonas de Influência Pedagógica) as centers in which local schools will have the opportunity to organize a series of activities related to teaching matters. The regulation narrowed down its role to teaching matters, and was closest to the pedagogical support unit in the previous conception.

However, even though the roles of ZIPs focused on teaching matters, collateral issues still remained due to the failure of decentralization, including the lack of money, the absence of a qualified staff and material resources (Ribeiro, 2007). But for Ribeiro (2007), other studies also point to decentralization in explaining the practice of ZIPs (Hoppers, 1996; UNESCO, 2006; Ribeiro, 2007). However, these analyses premise that ZIPs are administrative/mediator units between schools and SDEJTs. Therefore, this analysis needs to reconsider the exact role for ZIPs.

As a result, the structure in which ZIPs are dependent on government support impedes effective implementation of pedagogical activities. In addition, it is difficult to bring teachers to the core schools for workshops and pedagogical interchange to participate in various programs. Such issues may give rise to low teacher participation rate and difficulties in implementing in-service teacher training.

As a new attempt, the government of Mozambique launched a Manual to Support ZIPs (“ZIPs Manual”) supported by UNICEF in order to ameliorate the situation. It clarifies that ZIPs are tools to realize continuous education and training of teachers for the improvement of the quality of education. To support the practice, the ZIPs Manual suggests more detailed criteria with examples, detailed plans, and necessary sample forms for efficient implementation attached.

Finally, the ZIPs are defined as a pedagogical system, especially for in-service teacher training (MINEC, 2010).

3.2 Roles and Functions of ZIPs

This section looks into the concept of ZIPs based on the ZIPs Manual, and its practice through the case study of the Chibuto district in order to verify the roles and functions of ZIPs. This section contributes to understanding the current roles of ZIPs reflecting not only the socio-historical and political contexts but also the issue of quality education.

3.2.1 The Concept of ZIPs

To understand the concept of ZIPs, this study looks at their description in the ZIPs Manual and papers published by the government of Mozambique.

ZIPs are groups of schools. One ZIP consists of three to six schools based on the administrative district and one of them is designated as the core school (Portuguese: Sede da ZIP). As a group of schools, a ZIP is under the umbrella of SDEJT. The core school is selected by SDEJT based on locational accessibility and the school director's competency assessed by one's pedagogical and administrative experience.

In general, the director of the core school who has the pedagogical and administrative experience becomes the ZIP coordinator. The ZIP coordinator has to visit schools in one's ZIP quarterly for monitoring and supervision of various teachers' activities, and summon teachers for pedagogy sharing seminars. The ZIP coordinator must prepare a yearly visiting plan and submit to the SDEJT. In

addition, the ZIP coordinator must hold a monthly meeting with the advisory committee to inspect and supervise the performance of ZIPs (MINEC, 2010). Therefore, the competence and capability of the coordinators are vital in the implementation of ZIPs.

SDEJTs organize the ZIPs in their district. Each school in a ZIP has to be located within 10 km from the core school, not only for efficient management by the coordinator, but also to facilitate participation by teachers. Each ZIP is basically formed along the administrative district. Considering the number of schools and distance from the core school, each ZIP cannot go over the limited number of teachers – 150 in primary education, and 300 in secondary education (MINEC, 2010). Therefore, distance, access and the number of teachers taken together decide the number of schools in one ZIP.

Structurally, ZIPs have two autonomous organic bodies: ZIP assembly and ZIP coordination council. The assembly is a yearly meeting of all teachers in the ZIP, or is additionally held at the coordinator's request. The assembly must prepare and approve the ZIP activity report and the year plan. On the other hand, the coordination council is a monthly meeting of the ZIP coordinator and other school directors, which may also be additionally held as necessary. The council prepares and evaluates the annual pedagogical activity plan, analyzes and reviews the main findings of peer activities, evaluates the degree of implementation of teaching programs by cycle, class, and discipline, and prepares annual reports (MINEC, 2010).

To enhance the competence of ZIPs, the ZIPs Manual indicates a list of minimally required documents each must produce, classified as general, pedagogical, and organizational. Each ZIP has to keep these documents on file.

They include related statutes, regulations, plans, sample forms, manuals, database, reports, etc. By satisfying these requirements, the ZIPs intend to fulfill following functions:

- Ensure that materials are available to the ZIP teachers for consultation in the resource center
- Ensure the preparation and completion of the final assessment
- Hold seminars, meetings, conferences, training, and other meetings
- Analyze students' performance by cycles, classes, disciplines and pedagogical indices
- Adapt teaching programs to local contexts and ensure their fulfillment
- Identify pedagogical difficulties, investigate their causes, and propose solutions and alternatives
- Integrate local curriculum into the nationally designated content
- Update and systematize data on faculty and staff in the ZIP schools
- Develop self-assessment of schools in each ZIP

3.2.2 The Practice of ZIPs: Case Study of Chibuto District

1) Overview of Chibuto District

To look into the practice of ZIPs, this study selects the Chibuto district⁹ in the

⁹ The district of Chibuto is a famous municipality in Mozambique because it was selected as Mozambique's Millennium Village in 2007 that counted on support from the UN Millennium Project on the Millennium Development Goals. The initiative continued for 5 years. As the Millennium Village was intended to address the challenges of extreme poverty in many overlapping sectors such as agriculture, education, health, infrastructure, gender equality, and business development, Millennium Village Project in the district of Chibuto also covered agriculture, health, and infrastructure (including energy).

southern province of Gaza. Chibuto district combines both urban and rural regions. Even though Chibuto has drawn attention in the last 10 years through the UN Millennium Project, it still shows typical characteristics of a vulnerable rural area. Therefore, this study selects the district in order to show the current conditions of ZIP implementation, not only in the urban but also in the rural area.

The Chibuto district consists of six administrative posts: Chibuto City, Alto Changane Post, Changanine Post, Chaimite Post, Godide Post, and Malehice Post. Among them, Chibuto City is more modernized with economic and industrial facilities. However, the rest of the district is rural, and some regions are off-grid. These conditions have influenced the implementation of the ZIPs in the Chibuto district.

2) Configuration of ZIPs

In the Chibuto district, there are 18 ZIPs for 118 primary schools¹⁰. Each ZIP consists of four to eleven schools, on average, 6.5 schools, as shown in [Table 5] (GDC-SDEJT, 2015). On the other hand, there is no ZIP for secondary schools. The general lack of secondary schools hinders the formation and implementation of ZIPs.

[Table 5] List of ZIPs for Primary Schools in Chibuto District (2015)

Names of ZIPs	Nos. of Schools belonging to each ZIP
Sede B, Sede C, Maguiguane, Samora Machel 2	4
Sede A, Muxuquete, Malehice A, Malehice B, Canhavano	5

¹⁰ In the district, as of April of 2015, there are 59,333 students (50,455 for primary, 8,878 for secondary) in 1,356 classes (1,179 for primary, 117 for secondary), 123 schools (118 for primary and 5 for secondary). There are 852 trained teachers (698 for primary, 154 for secondary) and 340 untrained teachers (317 for primary, 23 for secondary). About 28.5% of total teachers are not trained (GDC-SDEJT, 2015).

Names of ZIPs	Nos. of Schools belonging to each ZIP
Samora Machel 1	6
Mohambe, Alto-Changane	7
Muxaxane, Tlhatlhene, Chipadja	8
Maqueze, Mahuntsane, Mangoro	11

Source: GDC-SDEJT (2015)

According to the ZIPs concept, in relation to primary education, one ZIP is suggested to consist of six primary schools at most. However, in the Chibuto district, eight ZIPs — Mohambe, Alto-Changane, Muxaxane, Tlhatlhene, Chipadja, Maqueze, Mahuntsane, Mangoro — are composed of more than seven schools, larger than the government suggestion. However, given educational conditions in the rural areas, this seems reasonable. According to the ZIPs Manual, the numbers of schools in one ZIP should range from three to six, and the number of teachers must be limited to 150 in primary level. It means that each school has to be composed of 25 to 50 teachers. But in reality, only urban area schools generally employ more than 20 teachers.

In the case of Chibuto district, only the schools in Chibuto City have more than 20 teachers, while the other rural posts have less. In total, there are 1,015 teachers in 118 primary schools in the Chibuto district, with 8.6 teachers per school on average. The small number of teachers is much more marked in a rural area. For example, seven schools consist of the Alto Changane ZIP, and a total number of teachers in this ZIP is 22 (Park & Yoo, 2015, p.81). The average number of teachers in the seven schools is only three as shown in [Table 6]. It shows that a total number of teachers in one ZIP in a rural area could be smaller than one school in the urban area. Therefore, the ZIPs Manual does not reflect the configuration of rural school ZIPs in practice.

[Table 6] Numbers of Teachers in Alto Changane ZIP

	Grade (Nos. of Classes)	Nos. of Students	Nos. of Teachers		
			Trained Teachers	Untrained Teachers	Total
School A	1-5(5)	200	3	2	5
School B	1-5(5)	201	2	2	4
School C	1-5(5)	131	2	1	3
School D	1-5(5)	187	2	1	3
School E	1-5(5)	137	3	-	3
School F	1-3(3)	86	1	1	2
School G	1-3(3)	51	2	-	2
Total		993	15	7	22

Source: Materials at the Alto Changane ZIP Workshop held in 18-19th of August 2015

3) Roles and functions / Activities of ZIPs

Originally, the government designed ZIPs as a pedagogical system with autonomous organic bodies to support teachers' teaching practice, composed of the ZIP assembly and ZIP coordination council. Through the ZIP coordination council, directors of schools must come together and share ideas once a month. Moreover, all teachers in the ZIP must gather at the ZIP assembly to approve the annual activity report and next year's activity plan once a year. Except for the ZIP assembly, there is no official program or seminar for all teachers in the ZIPs. Instead, under the ZIP assembly, subgroup formations composed of school directors, directors and deputy directors of pedagogy, of discipline delegates are recommended. This structure of ZIPs shows that it is designed under the premise that each school has a well-prepared pedagogical system for teachers such as teachers' groups or communities composed of those who are motivated to participate in the system. Under such assumption, school directors may manage teachers and monitor their activities, and ZIP coordinators could make schools in their ZIPs collaborate and balance themselves.

But in reality, there are not enough teachers in each school to conduct such activities. On average, there are 8.6 teachers in one primary school in the Chibuto district. Especially in the rural Alto Changane ZIP, there are only three teachers on average in its seven schools. Three teachers in a school are not enough to operate a well-prepared pedagogical system.

Therefore, considering the school size, the numbers of teachers, and training condition, it is difficult to implement activities for teacher groups at the school level, even if the ZIP coordinator visits these schools each quarter to support their activities and share one's experiences based on the ZIPs Manual.

To overcome the practical barriers to teacher's group activities, SDEJT of Chibuto operates ZIPs differently. Following the trimester education system, three times a year during the student's vacation, each ZIP in the district holds teacher's workshop for two days organized by ZIP coordinators. The workshop performs the role of ZIP assembly and ZIP coordination council at the same time.

Compared to the once-a-year ZIP assembly for all teachers as recommended in the ZIPs Manual, three-times-a-year workshops seems more practical and localized. One week before the vacation commencement, the director of Chibuto SDEJTs of summons eighteen ZIP coordinators and holds a meeting in which all ZIP coordinators present their two-day workshop plans and confirm the dates. The workshop needs to be held in the week following the vacation commencement in the assigned dates for each ZIP.

[Table 7] Teachers' Workshop Schedules in two ZIPs in Chibuto District

	Samora Machel 2		Alto Changane	
	Time	Program	Time	Program
D A Y 1	07:30-08:00	Registration	08:00-8:30	Registration
	08:00-08:15	Opening	08:30-10:00	Opening & Analysis of Trimester Pedagogy
	08:15-08:30	Formation of Working Group		
	08:30-10:00	Group Activity		
	10:00-10:15	Intermission	10:00-10:20	Intermission
	10:15-11:30	Group Activity Presentation	10:20-11:30	Group Activity
	11:45-12:00	Closing	11:30-13:00	Group Activity Presentation & Presentation of DAY1 Activity
D A Y 2	07:30-08:00	Registration	08:00-08:30	Registration
	08:00-08:20	Presentation of DAY1 Activity	08:30-09:00	Formation of Working Group
	08:20-10:50	Presentation of Quarterly Report	09:00-09:20	Intermission
	10:50-11:05	Intermission	09:20-11:00	Group Activity
	11:05-11:20	Conclusion	11:00-13:00	Group Activity Presentation
	11:20-12:00	Closing	13:00-13:20	Closing

Source: Materials at the Alto Changane ZIP Workshop held in 18-19th of August 2015 & the Samora Machel 2 ZIP Workshop held in 20-21st of August 2015

[Table 7] shows workshop schedules in two different ZIPs in the Chibuto district. The Samora Machel 2 ZIP is located in Chibuto City and there are 54 teachers from four schools. According to the ZIPs Manual, each school in ZIPs must be located within five to seven km from the core school. On the other hand, the Alto Changane ZIP is located in Alto Changane Post 52 km from the Chibuto City, and there are 22 teachers from seven schools. Two schools out of seven are located farther than 10 km from the core school, and no school is located within 5 km. Relative accessibility of the Samora Machel 2 ZIP in the city is higher than the Alto Changane ZIP.

Even though the two ZIPs are located in different conditions and have slightly

different schedules for their workshops, there are some commonalities.

First, the workshops are held only in the morning because of the inconvenient transportation system and no budget for the luncheon. The Chibuto district does not have public transportation systems such as bus and taxi, and there is no transportation support budgeted for transportation of implementation of ZIPs. Therefore, teachers take the personal motorcycle, the local mini-bus that operates 2~3 times a day, or go on foot from their schools or homes to the core school. In addition, as there is no budget for the luncheon, teacher's workshops are finished in the early afternoon. These infrastructure and budget problems make the workshops even less efficient by causing absence and tardiness of teachers.

Second, teachers conduct group activities to share pedagogical experiences. Teachers are grouped by the facilitators. The 54 teachers in the Samora Machel 2 ZIP are divided into five groups by grade and disciplines, and the 22 teachers in the Alto Changane ZIP are divided into two groups. Each group shares their idea on the given question prepared by the ZIP coordinator and approved by the SDEJT of Chibuto. After the group activity, teachers make a presentation in front of other colleagues and open discussion continues based on the results of group activities.

Third, teachers conduct quarterly reports. Representative teachers of each school report to the ZIP coordinator on students' status, such as the number of enrollment, dropout, and completion in the trimester, reasons of dropout, evaluation of academic achievement, and school activities. The collected data is submitted to SDEJTs and then reported to DPECs and MINED. It means that ZIPs function as a center of raw data collection. Such quarterly report seems to be similar to the role of the ZIP coordination council managed by the school directors. The overlapping duties are because the ZIP coordination council is not systemized

in practice and there is a general lack of teachers. In the case of the Alto Changane ZIP, some school directors and teachers do not have clearly defined role boundaries. Due to the school size, even though the ZIPs Manual prohibits directors from giving lectures, directors still teach students as teachers, or teachers play a director's role at the same time.

Considering the six objectives of ZIPs that focus on in-service teacher training, in the Chibuto district, there is identity confusion as the ZIPs are implemented. The ZIPs of Samora Machel 2 and Alto Changane implemented not only teacher group activities but also gathered quarterly report related to school administration and management. During the two-day's workshops, teachers only participated in group activities for only half the day, no more than three hours. On the other the day, teachers reported school and student status to ZIP coordinators and other member teachers.

Given the educational conditions and the lack infrastructure, such mixed and confused practice of the ZIPs seems inevitable. Such situation had been the cause of debate around the roles and functions of ZIPs in the 1990s. Nevertheless, considering that the government of Mozambique regards ZIPs as a pedagogical system for ensuring the quality of teachers, its implementation must focus on its objectives. Even though the gatherings are few, it is encouraging that the teachers still do gather to share their ideas and pedagogical experiences under the ZIP coordinator. This positive practice needs to be expanded.

CHAPTER IV. DISCUSSION

This chapter discusses the characteristics of ZIPs and the socio-historical and political vestiges embedded in the system in the process of the transformation of modern history. Furthermore, this study tries to expand the meaning of ZIPs to the discourse of quality education in order to suggest an alternative to the roles and functions of ZIPs in the current education context.

For this purpose, this chapter is divided into three discussions: (i) unclear roles and functions of ZIPs, (ii) unclear positioning of ZIPs, (iii) implications. The first two sections explain the current characteristics of ZIPs, while the last section explains the meaning of ZIPs in the quality education context. For the discussion, this study attempts to interpret ZIPs in comparison with the School Cluster Model (SCM).

4.1 Unclear Roles and Functions of ZIPs

The government of Mozambique proclaimed ZIPs as a pedagogical system for in-service teacher training in the 1990s. The objectives of them were 1) to guarantee the pedagogical development of teachers, 2) to promote continuous professional development of teachers, 3) to encourage exchange of pedagogical, sports, and cultural ties between schools, 4) to ensure rationalization of resources and available teaching support, 5) to promote pedagogical support of teachers, and 6) to encourage educational materials production (MINEC, 2010). As found earlier, a forerunner of ZIPs was training for missionary teachers in the colonial period, and its legacy continued in a changed form with FRELIMO's Pilot Centers and

Political and Administrative Organization of Schools (Portuguese: Organização Política e Administrativa das Escolas; OPAE). Naturally, the government of Mozambique revitalized ZIPs following this tradition.

The objectives clearly show that the roles and functions of ZIPs focus on teachers' development and enhance the teaching-learning process. The difference, particularly in the pedagogical role, becomes clear in comparison with the SCM as shown in [Table 8].

[Table 8] Comparison of Pedagogical Role of SCM and ZIPs

Classification	School Cluster Model		ZIPs (MINED, 2010)
	Bray(1987)	Giordano(2008)	
Access to Resource	<ul style="list-style-type: none"> allowing schools to gain access to extra resources 	<ul style="list-style-type: none"> provide better access to teaching and learning resources 	<ul style="list-style-type: none"> ensure rationalization of resources and available teaching support
Teacher Development	<ul style="list-style-type: none"> encouraging teacher development 	<ul style="list-style-type: none"> teacher development and training 	<ul style="list-style-type: none"> guarantee of the pedagogical development of teachers promote continuous professional development of teachers promote pedagogical support of teachers
Curriculum Development	<ul style="list-style-type: none"> promoting curriculum development 	<ul style="list-style-type: none"> production of materials, adaptation, and development of curriculum 	<ul style="list-style-type: none"> encourage educational materials production
Education Innovation	<ul style="list-style-type: none"> providing an environment for innovation 	<ul style="list-style-type: none"> create and promote innovations and good practice in education 	
Cooperation among schools	<ul style="list-style-type: none"> encourage cooperation in school projects 		<ul style="list-style-type: none"> encourage the exchange of pedagogical, sports, and cultural ties between schools

Classification	School Cluster Model		ZIPs (MINED, 2010)
	Bray(1987)	Giordano(2008)	
Others	<ul style="list-style-type: none"> • encourage pupil competition • integrate of the different levels of schooling • integrate of schools with non-formal education 	<ul style="list-style-type: none"> • co-operation for special education needs • testing and assessment • pedagogical supervision and support • breaking the isolation of rural teachers and pupils 	

Under the pedagogical role umbrella, detailed functions of ZIPs are different from those of SCM. ZIPs are more oriented to in-service teacher training by reflecting the Mozambican context. Particularly, the term “pedagogical” in ZIPs covers the narrow definition of teacher development and teaching issues, in comparison to the broader role of SCM as classified by Bray (1987) and Giordano (2008). In the same sense, Nivagara et al. (2016) express the expectations of ZIPs in terms of in-service teacher training for teacher development and teaching-learning competence as follows:

- Teacher training for the production and use of relevant teaching-learning means to improve the teaching-learning process;
- In-service training of teachers;
- Placing as a pedagogical priority for teachers and schools to improve students’ quality and learning;
- Continuous supervision of teaching-learning activities in order to ensure support, monitoring, and control to achieve quality;
- Training of school councils;

- Support schools in terms of material resources or didactic materials and the means of education required for quality education;
- Mobilization of teachers and schools to continuously improve the quality of teaching and learning outcomes of students;
- Planning at local level of organizational strategies of schools and teachers to improve the quality of teaching and learning outcomes;
- Promotion of group work, situation analysis, solutions to problems of the functioning of schools and teachers at the local level;
- Supporting schools and teachers in identifying and overcoming student' learning difficulties;
- Concern for the observance by teachers and schools of standards and reference standards for the quality of teaching work and the quality of student learning;
- Visibility/perception of the ZIP as a center for consultation and exchange of experience among teachers;
- Taking the ZIP as an instrument regulating practices in teaching and governance of schools;
- Constitution of ZIP as a pedagogical team committed to quality educational goals;
- Pedagogical advice to the new teacher to play his new role and to develop a sense of professional socialization by helping him to learn appropriate, critically, the rules and values of the school.

Items listed by Nivagara et al. (2016) show that ZIPs need to focus on quality education through group activities for ZIP coordinators, school directors, and

teachers. However, even though there are many expected functions of ZIPs in relation to in-service teacher training and quality education, this study finds that the practice of ZIPs does not ensure those pedagogical functions in practice.

For example, there is a lack of a practical guide for implementation. The government of Mozambique published the ZIPs Manual. However, the manual only provides general information on formation and operation of ZIPs including the structure and organization of ZIPs and the role of the coordinator and each organic bodies; it does not provide a curriculum guide for in-service teacher training and teachers' activities. In addition, an excessive amount of tasks are given to the ZIP coordinator. The implementation of ZIPs heavily depends on the capacity of the ZIP coordinator. The role of the ZIP coordinator cannot be organically distributed. So in reality, a ZIP coordinator has many tasks besides pedagogical monitoring and supervision.

Based on such reality, Nivagara et al. (2016) mention the actual functions of ZIPs based on current practice:

- Supervision (A)
- Analysis of teachers (B)
- Analysis of school performance (quarterly and/or year ended) (C)
- Presentation of the quarterly/annual report (D)
- Dissemination of composition of examining jurisdiction (E)
- Dissemination of the criteria of the SDEJTs inherent in the examinations (F)
- Use of gown by teachers (G)
- Progressions and career advancement of teachers (H)

- Control of attendance of teachers (I)
- Classroom planning and distribution (fortnightly or quarterly) (J)
- Study of the General Statute of Public Officials and Agents (Portuguese: Estatuto Geral dos Funcionários e Agentes do Estado; EGFAE), article 49 and of Decree 5/2011 (K)
- Opening of the academic year (L)
- Teacher's day celebration (M)
- Check student drop-outs (N)
- School production (O)
- Use of the Direct Support Fund (Portuguese: Fundo de Apoio Directo à Escola; ADE) to the Schools (P)
- Disclosure of regulations and guidelines of higher bodies (Q)

(Translated in English. Nivagara et al., 2016, p. 62)

In addition, Nivagara et al. (2016) sort out ten out of the above sixteen as the general functions of ZIPs. They are: supervision (A), analysis of school performance (C), presentation of the quarterly / annual report (D), control of attendance of teachers (I), classroom planning and distribution (J), opening of the academic year (L), teacher's day celebration (M), use of the Direct Support Fund to the Schools (P), and disclosure of regulations and guidelines of higher bodies (Q).

Some functions are already found in the case of Chibuto district: supervision (A), analysis of school performance (C), presentation of the quarterly and annual report (D), check student drop-outs (N). In addition, a function such as the use of the Direct Support Fund to the schools (P) is described in the ZIPs Manual. In fact,

many studies already pointed out the barriers and limitations of ZIPs in practice (Ribeiro, 2007; Junaid & Maka, 2014), stressing the difficulties in communication, financing, and infrastructures. Therefore, considering the capacity of implementation of ZIPs at the practice level, the numerous listed functions serve to distract from its main role.

In addition, all the functions described here seem far from in-service teacher training activities, and do not overlap with the expectation developed by Nivagara et al. (2016). It automatically reminds one of the other roles of SCM including administrative, political, and economic roles as described in [Table 1] in chapter II, even though ZIPs should be specialized for the pedagogical role. According to [Table 1], inadequate preparation of cluster heads, inadequate conditions for supervision and support, and overburdened work are pointed out as administrative issues likewise in ZIPs.

Therefore, if the government of Mozambique wants to achieve quality education through teacher education, particularly in-service teacher training through ZIPs as planned, it must define the exact roles and functions of ZIPs in the Mozambican education context in both urban and rural areas to implement on both the policy and practice levels.

4.2 Unclear Positioning and non-Independence of ZIPs

In the previous part, this study points out the issue of unclear roles and functions of ZIPs and discusses the need for clarity. However, this issue is relatively minor details ZIPs are confronting. ZIPs are suffering from unclear positioning. Given the fact that the issue is related to the socio-historical and

political contexts of Mozambique, a discussion around ZIPs needs to be diverse. Therefore, this section discusses the position of the ZIPs in the Mozambican education structure, particularly in relation to decentralization.

Since the 1990s, the government of Mozambique has proclaimed that ZIP is a pedagogical system for in-service teacher training (MINEC, 2010). However, there has been an argument around the detailed roles and functions of ZIPs and whether it could play a role as a pedagogical support unit, an administrative unit between schools and SDEJTs, or a pedagogical supervising unit (Ribeiro, 2007). It was not clear why these arguments arose in the introduction and expansion of ZIPs. However, there was no sophisticated design to implement ZIPs even as the government of Mozambique recognized the chronic education problems arising from the long colonial education policy and the legacy of civil war and adopted ZIPs as an alternative way to solve the problems.

The government of Mozambique adopted decentralization system in 1994 and the education system was also combined in decentralization. As a result, the education system has an administrative hierarchy from the national level to the district level. However, there was no official administrative unit under the SDEJTs, particularly between SDEJTs and schools. Nevertheless, after the introduction of ZIPs in the education policy, it was required to perform administrative roles even though it was not defined as an official administrative unit.

This tendency is interpreted as a result of the influence of SCM. In fact, some studies link ZIPs with decentralization and interpret challenges and limitations of ZIPs as a failure of decentralization (Ribeiro, 2007; Junaid & Maka, 2014). This interpretation is possible if ZIPs have been influenced by the neighboring countries which adopted SCM in combination with their decentralization

movement (Hoppers, 1996; Knamiller, 1999; Giordano, 2008). Under the decentralization influence, SCM functions as the administrative system and core schools play a role as the administrative unit. As a result, under the influence of SCM, ZIPs would be required to perform the administrative role as well, and continue to keep this role as an administrative unit between schools and SDEJTs.

However, in considering the international trends and the situations of the neighboring countries, the interpretation that ZIPs have been influenced by decentralized SCM is rather premature. SCM was expanded around the world in the 1970s in combination with the decentralization movement. In this process, SCM has played a role of an administrative unit at the lower level. However, the situation at that time in Mozambique was different. A forerunner of ZIPs in the same period was not a registered government agency, but rather functioned as schools or centers where people gathered, learned, and shared whatever they needed. Furthermore, even when FRELIMO intended to decentralize its education policy through Pilot Centers and OPAAE from the 1960s to the 1980s, it did not work as originally intended; the operation of Pilot Centers and OPAAE was gradually centralized (Gasperini, 1989). Therefore, the initial precursor of ZIPs from the 1960s to the 1980s functioned as space politically control people through education under the centralized government rather than functioning as an administrative unit.

Later, when the government of Mozambique revitalized ZIPs as a pedagogical system in the mid-1990s, the political and economic situation in Mozambique and the purpose of education had changed. Breaking from the socialist political economy, Mozambique adopted free market economy and recognized education as the right of all citizens. In addition, at the same time, the international

community agreed on the purpose of education, and as a result declared an initiative, Education for All that emphasizes quality education at international and national levels. The SCM in this period was also recognized as a way of ensuring quality education at the global level (Giordano, 2008), and SCM's core role also became to ensure quality education even as it was required to continue its administrative role under decentralization. The ZIPs revitalized in the 1990s also started to receive attention as an in-service teacher training system for ensuring quality education at the national level.

Therefore, this political and historical transformation around ZIPs and the possible influence of SCM on the ZIPs have produced an environment in which the policy-makers dispute their roles, whether it is a pedagogical support unit, an administrative unit, or a pedagogical supervising unit. Each unit may play different roles.

The role as a pedagogical support unit seems very similar to the role of an in-service teacher training center or hub. As a pedagogical support unit, ZIPs may allow unqualified teachers to obtain a recognized teaching qualification while they continue to teach, and help qualified teachers to upgrade to a higher level of qualification (Mulkeen, 2010). It is directly related to the practice of quality education which emerged as the main goal of the international education domain.

On the other hands, the role as the administrative unit between schools and SDEJTs and as the pedagogical supervising unit is different from that of the pedagogical support unit. An administrative unit may play a literal administrative role and therefore function as an independent and partially official administrative unit at the community level like the administrative role of SCM. For example, in the case of the ZIPs in the Chibuto district, they function as of education post

(Portugues: Posto)¹¹ offices under the district office, SDEJTs. The rural areas display this tendency more clearly than the urban areas. The Alto Chanagne ZIP covers schools in Alto Changane post where it functions as an administrative unit. All the documents published by schools specify that the schools which belong to Alto Chanagne ZIP. It means that ZIPs are positioned in between SDEJTs and schools as an administrative unit.

Beyond these roles, the unclear positioning of ZIPs blurs their role as an independent and autonomous body. Still today, ZIPs have not been officially permitted and authorized by the government as an institution. As a result, there is no building, no staff, no resources, and no financial support for the implementation of ZIPs as an independent pedagogical system. As a result, ZIPs by themselves do not have the power to manage administrative and financial details. Such capacity is naturally determined by the capacity and conditions of the SDEJTs and schools. Therefore, the autonomy of ZIPs should be guaranteed by repositioning it between schools and SDEJTs.

Consequently, this study concludes that the current ZIPs were revitalized within these multi-dimension changes of the international and national environments and has been developed to change its roles and functions within Mozambican modern history. Consequently, it is difficult to define the roles of ZIPs, and this causes instability in its positioning. The position of ZIPs must be clarified for an efficient implementation of ZIPs in the current Mozambican education system. Furthermore, the government of Mozambique must oversee the ZIPs instead of delegating its duty to the provincial DPECs and district SDEJTs.

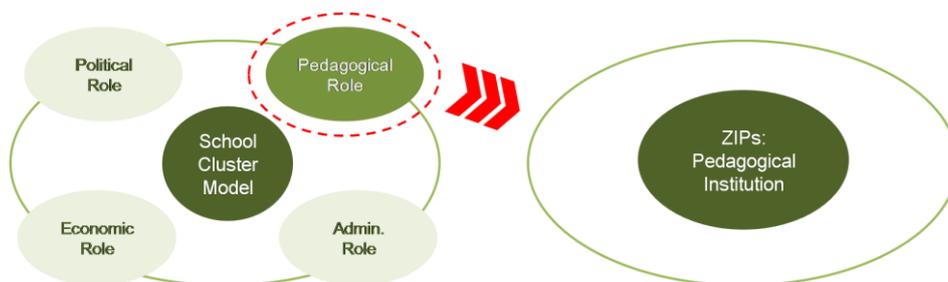
¹¹Administratively, the district of Chibuto consists of six administration posts: Chibuto City, Alto Changane Post, Changanine Post, Chaimite Post, Godide Post, and Malehice Post.

4.3 Implications

4.3.1 Implication for Quality Education

This section illuminates the significance of ZIPs in the quality education context, recognizing that ZIP is defined as a pedagogical system for in-service teacher training. Even though their roles are unclear and their position is unstable under the decentralized administration hierarchy, ZIPs are still expected to perform a crucial role in the Mozambican education context. It is the main reason the government of Mozambique reintroduced ZIPs as an education policy as well.

Even though some studies classify ZIPs as an example of SCM (Hoppers, 1996; Bray, 1999; Knamiller, 1999; Giordano, 2008), ZIPs were designed to perform the pedagogical role (MINEC, 2010), more specialized in pedagogical functions in comparison than the SCM.



<Figure 3> Comparison of the Roles of School Cluster Model & ZIPs

Especially the roles of ZIPs are more focused on in-service teacher training to ensure the quality of teachers, as shown in [Table 8]. It coincides with the international education development initiatives which underline the importance of qualified teachers as the prerequisite to quality education as a way of achieving

EFA (UNESCO, 2005; UNESCO, 2015). In addition, it shows a way of ensuring quality education at the national and local contexts in line with international development initiatives.

The case study of the ZIPs offers an implication for the implementation of SCM in SSA and other developing countries in achieving the quality education. Therefore, beyond the Mozambique context, at the level of international education development initiatives, this approach suggests meaningful implications for the in-service teacher training practice as a way of ensuring the quality of teachers. Furthermore, through the case study of the ZIPs, the pedagogical functions must focus on professional development of teachers and teaching-learning competence in order to ensure quality education.

4.3.2 Implications for Policy and Practice

The need to ensuring the quality of teachers through in-service teacher training is the underlying motivation observed by this study in both the national and international levels. Even though the importance of qualified teachers was emphasized at the global level as a way of ensuring quality education, countries in SSA are facing difficulties in ensuring qualified teachers in real terms. Shortage of appropriately trained teachers, of course, appears to be a serious problem maintaining quality education. The average teacher's academic qualifications and level of training are far lower than international standards, as much of teachers are under-qualified or untrained. Under such circumstances, teacher training often receives significant attention as a critical factor for ensuring the quality of teachers.

Yet, as this study explored and found through the case of Mozambique, there

are many difficulties in conducting in-service teacher training at national and local levels in developing countries, one of which is the discrepancy between policy and practice. In other words, as assumed at the onset of this study, there are gaps between international development agenda and practice at the national level. If the international community and policy-makers design the policies and agenda without considering the national and local contexts, and if donors provide new education programs or projects without an understanding of the past and existing trends under global initiatives, it is very difficult to bring any changes in education practice. Therefore, in order to reach the global goals and target, it is critical that the international community, including the donors, consider the national and local contexts in line with global initiatives. In addition, the policy-makers at the national level need to consider the education environment and local contexts of each region when designing its policy.

CHAPTER V. CONCLUSION

This study explored the development of the ZIPs in Mozambique to discern how it has been shaped and revitalized in national practice, and to some degrees by global trends since the 1990s. The dynamics between the international development agenda on quality education and the national practice in Mozambique were examined. In conclusion, ZIPs are highlighted as a possible approach to in-service teachers training for teacher qualification. The history, practice, and challenges of ZIPs were addressed as a way of ensuring the quality of teachers in Mozambique. Based on findings and discussions, this chapter concludes with a summary, final thought, limitations, and possibilities for further research.

5.1 Summary

The Sustainable Development Goals were launched in September 2015 embracing quality education as the fourth goal representing the international community's recognition of the importance of quality education once again. In fact, since the World Conference on Education for All in 1990 in which there was a global consensus about the importance of quality in education, the international community has struggled to ensure quality education in the developing countries. Many developing countries still confront numerous challenges to achieve quality education. Under such situation, the international society is increasingly focusing on in-service teacher training, recognizing it as a strong tool in ensuring quality education at the school level.

Mozambique has chronic education problems, particularly in the lack of teachers and the prevalence of under-qualified teachers. The government of Mozambique has tried to overcome these chronic education problems in various ways since the end of the civil war in 1992. Under the situation, ZIPs were designed as a pedagogical system for in-service teacher training. It was originally intended to enhance the teaching-learning competence and professional development of teachers. However, ZIPs have received much criticism on its effectiveness in the past twenty years, because student academic achievement today is still quite low. In that sense, this study is designed to illuminate the pedagogical meaning of the ZIPs in the Mozambican education context and to find implications in terms of global-national dynamics in quality education.

This study adopted documentary research as the qualitative research method. The data utilized in this study is mainly secondary documents collected from the Ministry of Education in Mozambique and other international and national institutions/organizations in Mozambique. The data for the case study in the designated district in rural Mozambique is collected as primary documents. In addition, this study employed the School Cluster Model (SCM), whose concept, format, and roles are similar to ZIPs, as a comparative analytical tool. The SCM distinctively has four different roles: administrative, pedagogical, economic, and political.

Through the research, this study finds the roles and functions of ZIPs and how they were influenced by the socio-historical and political contexts.

ZIPs' roles and functions were changed in socio-historical contexts since the colonial period by developing its own indigenous characteristics. In the colonial period, there was a teacher education program for Portuguese missionaries and

African teachers. In addition, Catholic seminars for young Mozambicans provided inspiration for the Pilot Centers and Political and Administrative Organization of Schools (OPAE) initiated by the FRELIMO after the independence. The pedagogical characteristics of these precursory systems are similar to that of ZIPs.

ZIPs were revitalized in the 1990s as a pedagogical system for in-service teacher training by the government of Mozambique. These revised ZIPs consist of one core school and several satellite schools and has autonomous organic bodies: the ZIP coordination council and the ZIP assembly. ZIPs target teachers and encourage activities by teacher's groups and gatherings. In addition, it includes the development of curriculum and teaching resources for enhancing teaching-learning competence.

Despite the positive objectives and expectations for ZIPs, in practice there have been limitations. To be specific, the ZIPs concept has been confused due to the influence of numerous contexts. The definition of the ZIPs' roles and functions, as well as the ZIPs' position in the education system, is unclear. Even as the government proclaimed ZIPs as a pedagogical system for in-service teacher training, the system plays various other roles beyond the pedagogical. In addition, ZIPs function as an educational administrative unit even though it is not authorized as a unit, and does not receive any support from the central or upper local governments and is not given the autonomous capacity.

Based on the examination on the ZIPs in Mozambique, this study provides implications for in-service teacher training in relation to the quality of teachers, and offers some suggestions for further research. First, the international community, including the donors of international development programs, must consider the national and local contexts including socio-historical aspects as well

as the global initiatives when designing and planning education programs and projects for a certain country. Second, within a country, given the fact that the educational discrepancy between regions is one of the factors hindering the achievement of quality education, regional comparative research on the implementation of an education model should be conducted. And policymakers at the national level should consider the education environment by each region and local contexts when designing policies. Third, other countries that adopted the SCM as their national policy may be analyzed for comparison to explore similarities and differences between them and find ways of contributing to the issue of teacher quality in the national and international contexts.

5.2 Final Thoughts

As I concluded this thesis, I find myself contemplating the question that drove me to undertake the study in the first place: “Do ZIPs provide in-service teacher training contributing to ensuring teachers’ development and enhancing the teaching-learning process?” In the beginning, I had a pessimistic answer for this question. In fact, when I first encountered ZIPs as one who was interested in the effects of schools and teachers on community development in rural areas, I was more focused on the political and administrative roles and functions of ZIPs. However, in exploring ZIPs, my interest has gradually changed to the pedagogical roles of ZIPs. My question was thus changed to “How do ZIPs provide in-service teacher training contributing to ensuring teachers’ development and enhancing the teaching-learning process?” The question led me for the first time to think about the issues of teachers and their education in relation to quality education beyond

ZIPs.

However, before answering the question of “how”, I found that the roles of ZIPs are complex even though it is externally simple, and that it does not play a role as an in-service teacher training system. In the end, I raised the question “What are the actual roles and functions of ZIPs in practice and how do the political and socio-historical vestiges influence the formation of its characteristics up to this day?” In order to answer the question, I started to explore the education history in Mozambique and current policy and practice in the education sector. Finally, the results became the output of this research.

The practice of ZIPs has many additional challenges beyond the historical legacy. Here are some examples of what I observed.

The first issue is the distance between schools. The core school is far from the satellite schools while the means of transportation was lacking. According to the ZIPs Manual, satellite schools should be located within 10 km from the core school. However, some schools are located farther than 10 km from the core school. In addition, there is no budget support for transportation to take coordinators and teachers to their destinations. For visiting other schools, teachers and coordinators take their personal motorcycles, the local mini-bus that operates 2~3 times a day or go on foot. The ZIP coordinator and teachers are stranded and hindered from efficient of implementation of ZIPs.

The second issue is in the implementation of the ZIP coordination council. The ZIP coordinator has to visit every satellite school quarterly for monitoring and supervision, and the ZIP coordination council must be held once a month. However, due to the lack of access to schools, monitoring and supervision by ZIP coordinators do not take place each quarter as planned. Moreover, activities of the

ZIP coordination council are integrated into the ZIP workshops as a presentation of the quarterly reports. Some of the ZIP teachers who have to participate in group activities three times a year are absent or tardy to ZIP workshops even though the workshop starts early in the morning and finishes in the early afternoon because of the limitation of transportation.

The third is the lack of financial support. In fact, challenges founded in the case of the Chibuto district such as school size and the number of teachers would not be so damaging if the modified ZIPs in the district would be implemented as planned. However, as the lack of finances prevents effective implementation, stable financial support is necessary. If there is at least one transporting vehicle for teachers and ZIP coordinators in each ZIP, the ZIP workshop and the other events would be held more frequently in accordance with Chibuto district planning. The percentage of absence or tardiness would be lower.

The fourth observation is the low academic achievement of teachers. The academic achievement and pedagogical training experiences of teaching are varied in each ZIP. In order to share their pedagogical experience at the same time and same place, teachers need to meet general qualifications. However, as the case of Alto Changane ZIP shows, one-third of the teachers are untrained. Even among the trained teachers, there is a big gap on their education background and years of teaching experiences: they graduated from different institutions and learned with a different curriculum, and passed through the different training period. These issues originate from the lack of stable pre-service teacher education system and frequent changes in education reform to supply as many teachers as quickly as possible. As a result, in order to enhance the implementation of ZIPs as in-service teacher training, the way to harmonize pre-service and in-service teacher training

should be considered and developed. This factor is important in that no other studies and research on SCM and ZIPs mention it as a decisive factor for efficiency and success.

Lastly, there is no program for training ZIP coordinators and facilitators to help group activities in ZIP workshops. According to the ZIPs Manual, the ZIP coordinator has many tasks: quarterly visits to satellite schools for monitoring and supervision of various teachers' activities, holding a seminar for teachers' pedagogical sharing, holding monthly meetings with the advisory committee (MINEC, 2010). However, even though the ZIP coordinator conducts many tasks, there is no program for training them. The only training is the meeting for all ZIP coordinators in the SDEJT for one week before the vacation commencement where all the ZIP coordinators make a presentation on their workshop plans. Considering the importance of ZIP coordinators in its implementation, ways to develop and ensure the quality and capacity of ZIP coordinators must be considered.

However, despite the limitations and challenges described here, I believe that the ZIP system is not a fail design. Rather, it could contribute to ensuring the quality of education through in-service teacher training if the stakeholders find ways for effective implementation. In my opinion, the best method of in-service teacher training is through peer group activities. If implemented as designed, ZIPs with their teacher peer group activities may prove to be an effective teacher training system.

Finally, I find myself continually asking what administrators, ZIP coordinator, and teachers can do to successfully implement ZIPs as a pedagogical system for in-service teacher training. And who will define the role and position of the ZIPs in Mozambican education for further development? These questions remain as part

of suggestions to further studies.

Furthermore, during the research process, I got interested in the relationship between education and national ideologies including socialism and nationalism that appeared before and after the independence of Mozambique. This consequently led to an interest in post-colonialism in relation to the current education situation. It remains a further research topic to be explored.

Finally, I hope I have contributed something new to the discussion of in-service teacher training in SSA in terms of teacher quality for quality education. I really had one aim for this paper: to discover something veiled and to offer something significant. The improvement of teacher quality training will not remain as an empty rhetoric of global initiatives. To achieve the dream, stakeholder practices must be examined at each level.

5.3 Limitations and Suggestion for Further Studies

5.3.1 Limitations

This study focuses on the development and characteristics of ZIPs as an in-service teacher training system. Although some meaningful implications were found, there are still unavoidable limitations.

First, this study is limited by the fact that there are no prior studies with a similar or identical focus for reference and comparison. This study tries to focus on ZIPs with an understanding of educational and societal contexts. Naturally, there have been studies that mention ZIPs in the past decade. However, these studies only deal with ZIPs as one example of educational decentralization movement, school cluster, or teacher education practice in Africa in comparison

with other countries. In other words, it was difficult to find a single study dealing mainly and comprehensively with the ZIPs within the context of a country's history, policy, and practice. In that sense, this study contributes to expanding the research on ZIPs for future research.

Second, this study is limited by my own proximity to the topic of investigation in some points: language fluency and cultural and another type of bias. As a South Korean researcher who has conducted research on education in Mozambique, I am limited in my ability to read and interpret Portuguese language research studies on the topic, even though I majored in Portuguese and lived in Lusophone countries for a few years. In addition, as a researcher who has grown up in Korea, which is an economically developed donor country and a third party to education development in Mozambique, there were perpetuating multifaceted bias when designing and conducting the study. However, I have developed an understanding of the modern history of Mozambique and related theories including socialism, nationalism, and post-colonialism through the research.

5.3.2 Suggestions for Further Studies

Considering the findings and limitations embedded in this study, there are several paths for future research. These suggestions are particularly focused on the pedagogical significance of ZIPs in quality education.

First, the number of researched cases on the practice of ZIPs needs to increase by region. Comparative research by region is particularly necessary because ZIPs are influenced by the decentralized system even though it is not designed as an administrative unit of decentralization. It means that the implementation of ZIPs

would vary by region. Therefore, further study needs to reveal different dimensions in ZIP implementation considering the regional education conditions and settings, and explain the position of ZIPs between SDEJTs and schools in relation to its autonomy. Given the fact that the educational discrepancy between regions is one of the factors halting the achievement toward quality education in Mozambique, a comparative research on implementation of ZIPs by region is needed.

Second, in order to understand ZIPs and reveal their indigenous characteristics, there is an urgent need to do comparative research on the countries that adopted SCM as part of their national policy through policy-borrowing. As a way of revealing the indigenous characteristics, this study only tried to trace the origin and development of the ZIPs in the Mozambique context. However, in order to find the indigenous characteristics of ZIPs, analyses of other countries that adopted SCM may show similarities and differences as a way of revealing country-specific indigenous characteristics both in the ZIPs' history and in their current form. This approach will provide the best way to ensure the survival of ZIPs by contributing to teacher quality and education practice in the local context.

Third, literature review and case studies on peer group activities of teachers have to be reinforced by the further research on ZIPs. For in-service teacher training, ZIPs should enable cooperation of teachers based on teachers' community to realize peer group activities. Therefore, in order to suggest an ideal practice for ZIPs, literature review and case studies on teacher peer group activities should be added in reflecting on their implementation. In the process, the analysis on challenges and barriers to implementing ZIPs should be approached from multiple dimensions.

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APPENDIX

1. ZIPs in Practice



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<Photo 1> The building of District Education, Youth and Technology Services (SDEJTs) in Chibuto

RELACÃO NOMINAL DAS ESCOLAS EM FUNCIONAMENTO POR ZIPS - 2013

SEDE "A"		
Nº	Nome da Escola	Contato
01	EPI e 2º Grau Ngungunhane - Padre Falalta Tomba	826157054
02	EP 1º e 2º Grau B1 - Loulade	827116750
03	EP - 1º Grau de B2 - da Cidade	826668114
04	EP - 1º Grau de B - Matucos	826651903
05	EP 1º Grau de Matucos	826003330

SEDE "B"		
Nº	Nome da Escola	Contato
01	EPI e 2º Grau 21 de Junho U.1 - Virgílio J. Machanga	82 03 50 430
02	EP 1º Grau de J. Matucos	826641750
03	EP 1º Grau de B1 da Cidade	82742938
04	EP 1º Grau de 23 de Junho U. 2 - Joana Costa	826000333

SEDE "C"		
Nº	Nome da Escola	Contato
01	EPI e 2º Grau B3 da Cidade - Gaspar Comato	82 51 01 377
02	EP 1º e 2º Grau Matucos - João Sime	809470393/829230740
03	EP 1º Grau de 23 de Junho U.3 - Armando Macos	822900180
04	EP 1º Grau de 1º de Maio - Madalena Ramon	825775814

"MAGUIGANE"		
Nº	Nome da Escola	Contato
01	EPI e 2º Grau Macalense - Afonso Pelembé	82 07 61 546
02	EP 1º e 2º Grau Macos	826767500
03	EP 1º Grau de Sargento - Jacinto Mavungu	825452112
04	EP 1º Grau de 1 de Junho - Evandro Chichava	826657903

MUSKANE		
Nº	Nome da Escola	Contato
01	EPI e 2º Grau Guatemane - Olga Nogueira	827864442
02	EP e 2º Grau Mungunguane - Joana Moutinho	820944092
03	EP 1º Grau de Mungunguane - Joana Zito	823920760
04	EP 1º Grau de Nhamitanga - António Nogueira	829441212
05	EP 1º Grau de 23 de Junho	826744220
06	EP 1º e 2º Grau Matucos	826651903
07	EP 1º Grau de Mungunguane - Fátima Moutinho	826744220
08	EP 1º e 2º Grau Matucos	826651903

MOLIMBE		
Nº	Nome da Escola	Contato
01	EPI e 2º Grau Chibuto B2 - Cândido Cas	86 12 12 311
02	EP 1º e 2º Grau Bantel - David Comato	826447500
03	EP 1º Grau de Chibuto B1 - André Lourenço	82 00 74 046
04	EP 1º Grau de Góia geral - Carlos Oliveira	823388936
05	EP 1º Grau de Chibuto B3 - Renato Moutinho	82 51 43 584
06	EP 1º Grau de Góia - Carolina Chinge	86 12 37 372
07	EP 1º Grau de Mungunguane - Samuel Balda	824623620

TILHATRENE		
Nº	Nome da Escola	Contato
01	EPI e 2º Grau Tilhathene - Rodrigues Mungunguane	826168194/863823
02	EP 1º Grau de Góia - Evandro Moutinho	826441220
03	EP 1º Grau de Chibuto - Nelson Moutinho	861218974
04	EPI e 2º Grau Funguane - José Moutinho	861212126
05	EP 1º Grau de Mungunguane - Agostinho Chingone	82 78 60 236
06	EP 1º Grau de Matucos - Miguel Zito	825217569/8252
07	EP 1º Grau de Mungunguane - Evandro Comato	822118640
08	EP 1º Grau de Matucos - João Lourenço	861766133

SAMORA MACHEI - B1*

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<Photo 2> List of ZIPs and contact list of ZIP coordinators are collected by director of SDEJTs in Chibuto



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<Photo 3> Alto Changane School is the core school of Alto Changane ZIP



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<Photo 4> Inside view of classroom in Alto Changane School



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<Photo 5> Inside view of classroom in Alto Changane School in intermission

República de Moçambique
Governo do Distrito de Inhambane
Serviço Distrital de Educação, Juventude e Tecnologia
Alto Changane

Assunto: Aperfeiçoamento pedagógico referente aos dias 18 e 19 de agosto de 2015.

Nº	Horas	Atividades	Responsabilidade
01	08:00h as 08:30h	• concentração dos participantes e controle das presenças.	Responsabilidade Protocolo
02	08:50h as 10:00h	• sessão de abertura • apresentação do programa de atividades des- • desenvolvimento do aproveitamento pedagógico pre- senciado por sessões e dificuldades dos trabalhos, • distribuição de tarefas pelos grupos.	Coordenador da ZSP
03	10:10:00h	Intervalo	
04	10:20h as 11:30h	• Metodologias de ensino de ditado • Apresentação dos trabalhos de grupos.	Participantes
05	11:50h as 13:00h	• Solutos • Considerações finais e fim dos traba- lhos de aula.	Participantes Coordenador da ZSP

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<Photo 6> Schedule for the Alto Changane ZIP Workshop held in 18-19th of August 2015 (First day)

Nº	Horas	Atividades	Responsabilidade
01	08:00h as 08:30h	• Concentração dos participantes, Controle de presenças.	Responsabilidade Protocolo
02	08:30h as 09:00h	• leitura, análise e aprovação do sintese do dia anterior. • Formação de grupos de trabalho.	Participantes.
03	09:20h	Intervalo	
04	09:20h as 11:00h	• Distribuição de tarefas pelos grupos. • Introdução ao estudo das letras ç e s.	Participantes
05	11:00h as 13:00h	• Apresentação dos trabalhos dos grupos. • Comentários sobre os trabalhos; • Diversos; • Considerações finais, encerramento do aperfeiçoamento.	Participantes e Coordenador da Zip.

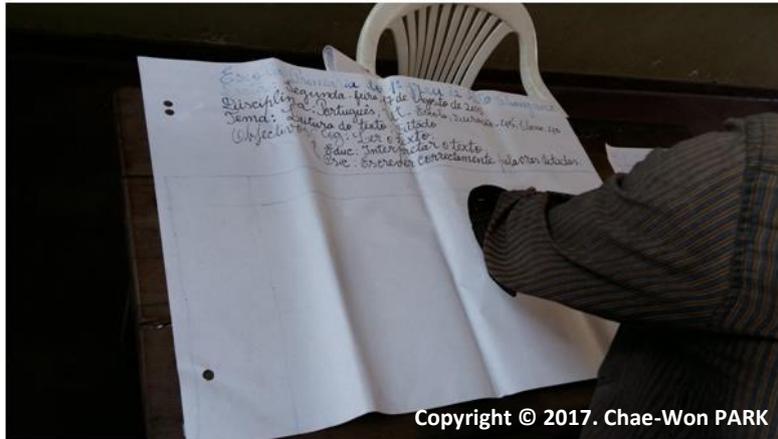
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<Photo 7> Schedule for Alto Changane ZIP Workshop held in 18-19th of August 2015 (Second day)



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<Photo 8> Group activities of teachers in Alto Changane ZIP Workshop



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<Photo 9> Preparation for presentation of group activities by teachers at the Alto Changane ZIP Workshop



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<Photo 10> Presentation of group activities by teachers at the Alto Changane ZIP Workshop



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<Photo 11> Collecting quarterly information for each school during teacher group activities

Nome da Escola	1º Trimestre		2º Trimestre		3º Trimestre		4º Trimestre		Total		Faltando						
	M	F	M	F	M	F	M	F	M	F	M	F					
Alto Changane	93	105	200	90	103	193	64	79	143	71	77	74	5	5	1	1	2
Macunene	26	101	201	74	101	192	61	76	137	67	75	71	4	8	3	3	3
Chimuzine	32	59	131	65	54	119	46	43	89	71	80	75	7	5	12	-	-
Matriculados	13	74	187	86	73	159	59	63	122	69	67	68	6	1	7	1	1
Chibuto	81	56	137	80	56	136	51	43	94	64	71	69	1	1	2	-	-
Total	39	48	86	34	44	78	23	20	55	70	71	71	5	3	8	-	-
Outros	21	22	51	28	20	48	17	16	33	61	80	69	1	2	3	-	-
Total	60	70	137	62	64	126	40	36	76	131	151	140	6	5	11	1	1

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<Photo 12> Presentation of quarterly reports at the Alto Changane ZIP Workshop: Number of students (Enrollment, Dropout, Completion by school, by sex)



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<Photo 13> Macunene School is the core school of Samora Machel 2 ZIP

Horas	Actividades	Responsável
07:30-07h50min	Concentração dos participantes	Protocolo
07h50min-08h00min	Controlo de presenças Entoação do Hino Nacional	Protocolo
08h00min-08h15min	Sessão de abertura e apresentação do programa do aperfeiçoamento	Coordenadora
08h15min-08h30min	Formação dos grupos de trabalho. Tema Metodologia de ensino de Ditado (1º, 2º e 3º ciclos).	Dr. Ofício DA's
08h30min-10h00min	Trabalho nos grupos	Membros dos grupos
10h00min-10h15min	Intervalo	Protocolo
10h15min-11h30min	Sessão plenária	Participantes
11h45min	Interrupção das actividades do dia	

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<Photo 14> Schedule for Samora Machel 2 ZIP Workshop held in 20-21st of August 2015 (First day)

Actividades Programadas para o segundo (2º) dia.

Horas	Actividades	Responsável
07.30-8.00	Concentração dos participantes Entoação do Hino Nacional Controlo de presenças	Protocolo
08.00-08.20	Apresentação da síntese do dia anterior e sua análise	Redactores
08.20-10.50	Apresentação do relatório trimestral e sua análise	Coordenadora da ZIP
10.50-11.05	Intervalo	Protocolo
11.05-11.20	Leitura da síntese final	Redactores
11.20-12.00	Sessão de encerramento.	Coordenadora

Redacção	Protocolo
-Crisostimo	-Luciana Ilda
-Moira	-Ofélia Zita
-Silva Mario	

Chibuto, aos 11 de Agosto de 2015
A coordenadora

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(Dulce Evelina Venias Chichava)

<Photo 15> Schedule for Samora Machel 2 ZIP Workshop held in 20-21st of August 2015 (Second day)



<Photo 16> Formation of working group at the Samora Machel 2 ZIP Workshop



<Photo 17> Group activities of teachers at the Samora Machel 2 ZIP Workshop

2. Certificate of IRB Exemption

심의면제 통보서

수신

책임연구자	이름: 박채원	소속: 사범대학 글로벌교육협력전공	직위: 석사과정
지원기관	해당없음		

과제정보

승인번호	IRB No. E1608/003-003
연구과제명	교육의 질 관점에서 본 모잠비크 ZIP의 의의 분석 연구
연구종류	학위 논문 연구, 공개된 정보를 이용하는 연구
면제일자	2016-08-22
검토의견	본 연구는 모잠비크의 ZIPs 사업과 관련하여 공개된 공식 보고서 자료에 포함된 면담 일부 기록을 이용한 연구로 「생명윤리 및 안전에 관한 법률」 시행규칙 제13조 제1항에 근거하여 심의를 면제합니다. (22차 심의 면제)
심의결과	면제승인

상기 연구과제에 대하여 본 위원회에서는 심의면제대상임을 확인합니다.

모든 연구자들은 아래의 사항을 준수하여야 합니다.

1. 연구자에게서는 제출하신 계획서에 따라 연구를 수행하여야 하며, 이와 다르게 연구를 진행하실 경우 다시 심의를 진행하셔야 함을 유의하시기 바랍니다.
2. 위원회의 요구가 있을 때에는 연구의 진행과 관련된 보고를 위원회에 제출하여야 합니다.
3. 연구윤리를 위하여 관련부처가 필요시 조사 및 감독 차원에서 현장점검을 실시할 수 있습니다.
4. 연구와 관련된 기록은 연구가 종료된 시점을 기준으로 최소 3년간 보관하여야 합니다.

2016년 08월 22일

서울대학교 생명윤리위원회 위원



국문초록

모잠비크 ZIPs의 형성 및 특징에 관한 연구

서울대학교

대학원 글로벌교육협력전공

박채원

모잠비크는 내전에서 종식된 1992년 이후로 국가 재건을 위해 노력해오고 있다. 교육은 그 가운데 가장 핵심적인 분야로 모잠비크 정부는 교육의 안정화를 위한 다양한 정책을 펼치고 있다. 그중 학교클러스터형 현직교사교육모델인 ZIPs는 1990년대 중반 이래 도입되어 20년 넘게 이어져오고 있는 가장 대표적인 모잠비크 교육 정책이자 제도다. 모잠비크 정부는 ZIPs가 모잠비크에서 고질적으로 안고 있는 낮은 교육의 질과 및 교사 교육의 문제를 해결할 수 있는 대안이라고 바라본다.

그러나 이러한 기대에도 불구하고 EFA 선언 이후 발행된 국제사회의 많은 문건은 모잠비크의 ZIPs이 교육의 질을 보장하지 못한다고 바라보며 ZIPs의 실천적 한계점을 지적하고 있다. 정리해보면 비판은 주로 지방분권화된 교육 행정의 실패와 현직교사교육 모델로서의 한계 두 가지 측면에서 이루어진다. 그러나 근본적으로 교육 행정과 교사교육모델은 교육 내 서로 다른 층위의 문제로 하나의 범주 안에서 논의되기 어렵다.

본 연구는 이처럼 서로 다른 층위의 논의를 할 수 있게 하는 ZIPs

의 실질적인 역할과 기능에 주목한다. 동시에 오늘날의 역할과 기능에 모잠비크의 역사, 정치, 사회적인 맥락이 어떻게 영향을 미치게 되었는지 함께 살펴본다. ZIPs는 식민지 시대 선교사들이 실행하였던 교사교육모델로부터 유래되었으며, 독립을 전후한 시기 FRELIMO가 도입한 사회주의형 지역 사회 정치, 경제, 교육 공동체로 변화 및 발전하였다. 이후 1990년대 초 모잠비크 정부가 국제사회의 정세 변화에 발맞추어 시장경제를 도입하고 국제사회의 보편적 교육 달성에 동참하면서 ZIPs는 모잠비크가 직면한 교육의 문제를 타개할 수 있는 현직교사교육 모델로 재등장하게 되었다.

그러나 ZIPs을 둘러싼 이러한 다양한 정치, 사회, 역사적 환경의 변화는 모잠비크 교육 내에서 ZIPs의 위상과 위치는 물론이고 그 역할과 기능의 방향성을 명확하게 제시하지 못하는 한계를 낳았다. 동시에 국제사회에서 보편적 교육 달성을 위한 하나의 방편으로 확대하고자 도입한 학교클러스터모델(School Cluster Model)의 확산이 모잠비크의 독자적인 모델인 ZIPs의 역할에 영향을 미침에 따라 현재 ZIPs는 교사교육 모델 외의 역할, 예를 들어 행정적, 정치적, 경제적 역할을 수행하도록 요구 받고 있다.

본 연구는 ZIPs가 새롭게 확정한 현직교사교육 모델의 역할을 올바르게 수행하기 위해서 모잠비크 정부가 ZIPs 위상과 위치를 새롭게 정립하고 그에 따른 역할과 기능을 마련해야 한다고 바라본다. 이를 통해 ZIPs가 직면한 정책과 실천의 격차를 해소할 수 있을 것이다. 또한 ZIPs가 개별 국가 내에서의 교육의 질 달성을 위한 하나의 실천, 더 나아가 국제개발협력의 실천과 관련한 함의를 제공할 수 있다고 바라본다. 국제사회의 실천 의제인 교육의 질 달성을 위해서는 개별 국가의 교육 제도에 대한 존중이 이행되어야 하는데, 이를 위해서는 외

부의 시선으로 가시적인 현상을 재단하기보다는 개별 제도가 생겨난 개별 국가의 역사, 정치, 사회적 맥락이 고려되어야 한다.

주제어: 현직교사교육모델 ZIPs, 교육의 질, 교사의 질, 교사 훈련,
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