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The Cluster System for Primary Schools

by

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Myanmar Education Research Bureau
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by
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Acknowledgement: This paper is the outcome of the collaborative effort of ESS Working Group No. 6 (Organization and Management of the Education System). The working group, chaired by Daw Hla Kyu (DBE) included the following members: U Myint Thein (DBE), U Thein Htay (DHE), U Saw Gibson (Yangon University) and U Myint Han (MERB).
ABSTRACT

The primary school cluster management system is studied in this paper. It reviews the functions of the clusters and identifies administrative and pedagogical problems encountered within the cluster system. The findings, which are based on a survey, show that it is necessary to introduce the cluster system systematically in order to strengthen educational management at the primary level. There is an urgent need for a comprehensive feasibility study which will lead to the formulation of a policy strategy and implementation plan for this system.
PREFACE

The Ministry of Education, UNDP and UNESCO are engaged in a joint effort to review the present state of education and manpower training in the Union of Myanmar. This review is being carried out under the Education Sector Study project, which began in mid-1990. The objective of the project is to help improving Myanmar's education system so it can make contribute more effectively to the country's social and economic development. The first phase of the Education Sector Study (ESS), a detailed diagnosis and analysis of the needs of the education sector, is now completed. A synthesis of the main findings has been issued in a separate report.

This paper is one of a series of working papers produced by Myanmar ESS participants. The series covers various important aspects of education, such as quality and efficiency, linkages between education and employment, costs and financing, school facilities, and sector organization and management. The ESS Working Papers series addresses itself to all professional staff in the education sector, as well as to interested researchers. It is hoped that these papers will contribute to stimulate a national discussion on ways and means to improve Myanmar's education system.

Dr. Khin Maung Kywe
National Project Director

Antoine Schwartz
Chief Technical Adviser
<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Full Form</th>
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<tr>
<td>ATEO</td>
<td>Assistant Township Education Officer</td>
</tr>
<tr>
<td>BERB</td>
<td>Burma Educational Research Bureau</td>
</tr>
<tr>
<td>DBE</td>
<td>Department of Basic Education</td>
</tr>
<tr>
<td>DHE</td>
<td>Department of Higher Education</td>
</tr>
<tr>
<td>DTAVE</td>
<td>Department of Technical, Agricultural and Vocational Education</td>
</tr>
<tr>
<td>ESS</td>
<td>Education Sector Study</td>
</tr>
<tr>
<td>MERB</td>
<td>Myanmar Education Research Bureau</td>
</tr>
<tr>
<td>PAT</td>
<td>Primary Assistant Teacher</td>
</tr>
<tr>
<td>SHS</td>
<td>State High School</td>
</tr>
<tr>
<td>SMS</td>
<td>State Middle School</td>
</tr>
<tr>
<td>TEO</td>
<td>Township Education Officer</td>
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CHAPTER I

INTRODUCTION

The Myanmar education system has been experiencing pressures such as financial constraints and rising public demand for education caused by population growth, by general desires for higher academic qualifications, and by traditional conception on education as the only vehicle for social mobility. With this backdrop of different pressures, school clusters have become an essential educational innovation in Myanmar since the 1960s as an attempt to meet the need for quantitative and qualitative growth within the constraint of limited resources.

Aims

This paper generally aims to study the primary school-cluster management system in Myanmar. Specifically, it also attempts to review the functions of the clusters and identify administrative and pedagogical problems encountered within the cluster system.
CHAPTER II

BRIEF OUTLINE OF THE DEVELOPMENT OF THE CLUSTER SYSTEM

Definition

A school cluster is defined as a grouping of schools for administrative and pedagogical purposes. Administratively, the school cluster acts as a focal point between central and local levels and provides better framework for local decision-making such as sharing of staff and facilities and supervision of schools within the cluster. Moreover, the school clusters are pedagogically aimed at improvement of quality within individual schools, and promoting linkages among different levels of basic education and different types of schools. Main components of a school cluster system are functions of school clusters, organization, management and finance.

Profile

The cluster system has been practised at the primary level in Myanmar for about 25 years. It was first introduced in 1967 by the North-West Command Education Supervisory Committee, covering Mandalay, Sagaing, and Magway Divisions by the name of Ka-ka-Sa (Self-helping and coordinating groups among the primary schools). Thus primary schools were geographically grouped for ease in communication and management. This type of cluster system is perceived by teachers to emphasize administrative more than pedagogical aspects.

In 1974, the Ministry of Education conducted an educational census. An analysis of the data indicated that one of the major problems at the primary level was the few-teacher primary schools which have only 1-4 teachers for all the 5 grades of the primary education. At the census date, 84.7 per cent of 15,373 primary schools were few-teacher schools which 61.5 per cent of 2,541,975 primary students attended. In these few-teacher schools, sharing of staff and facilities through cluster system is needed for improvement in the quality of education offered. In accord with the above definition of school cluster, the belief is that a cluster school system could improve the provision of educational sources in few-teacher schools especially in rural areas.
Figure 1
Schools and Students (1974 Educational Census)

SCHOOLS

A. (15.3%)  
B. (84.7%)

A. % of fully-staffed schools  
B. % of few-teacher schools

STUDENTS

A. (57.2%)  
B. (42.8%)

A. % of primary students in fully-staffed schools  
B. % of primary students in few-teacher schools
In order to improve Primary Education, the Burma Educational Research Bureau (BERB), now the Myanmar Education Research Bureau, conducted a research project on "The improvement of teaching/learning situation in the few-teacher schools". It was carried out in Kyaiklat, Hlegu, Pyay, Shwedaung, Taikkyi and Patheingyi townships in 1976/77 to 1977-78.

As a continuation of this project, BERB launched another research project named "The Promotion of Primary Education Through a System of School Clusters" in Patheingyi township, Mandalay Division in the academic year 1978/79. In 1979/80, BERB extended the project to Aunglan (Now Myaedae) township.

These research projects tried to encourage the decentralized administrative practices through school clusters at primary level. However, the practice in administrative system remains centralized.

In order to promote primary school efficiency, MERB implemented a pilot project on quality improvement of primary schools in Nyaunglebin Township, Bago Division beginning in AY 1990/91. The cluster management system was used in the project in order to increase cooperation and coordination among schools administratively and pedagogically. Objectives of this project are:

- To shift the emphasis from passing examinations to achieving learning objectives;
- To lay foundation for the development of child-centred approach rather than subject-centred approach in teaching-learning;
- To have 380 untrained primary teachers complete cluster-based in-service teacher training course;
- To have primary curriculum evaluated, active learning methods developed, and effective evaluation techniques introduced;
- To improve intermediate-level supervision and management by renovating and establishing cluster management system at the primary level.

In September 1990, the Department of Basic Education issued a directive to adopt the cluster system in conducting Standard 4 Final Examinations throughout the Union starting from AY 1990/91.
ANALYTICAL SURVEY OF EXISTING CONDITIONS OF THE PRIMARY SCHOOL CLUSTER MANAGEMENT SYSTEM IN MYANMAR

Sample townships

As part of the current Education Sector Study, a small-scale survey was conducted by sending two sets of questionnaires to four townships with cluster experience, namely, Patheingyi (Mandalay Division), Myaedae (Magway Division), Pyay (Bago Division) and Pintaya (Shan State). One set was for Township Education Officer and the other was for 10 primary headteachers in each township. All questionnaires except those from Pintava township were returned and provide data for this paper.

Analysis of the Survey

One assistant township education officer (ATEO) has to supervise and manage more than 70 primary schools. Thus there are obvious difficulties in supervision and management of the primary schools in a township. The current situation of supervisor/schools ratio is the same as the census taken two decades ago. Thus, a great need for the development of an efficient primary school management system is obvious. Table 1 also shows pupil-teacher ratio and teachers per school in each of these three townships. Analysis of these data shows that there are large classes with few teachers in some townships like Myaedae.

Table 1
Background Data on School Clusters
(1990-1991)

<table>
<thead>
<tr>
<th>No</th>
<th>Township</th>
<th>ATEO</th>
<th>Primary Schools</th>
<th>Pupil-Teacher Ratio</th>
<th>Teachers per School</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Patheingyi</td>
<td>1</td>
<td>107</td>
<td>39.0</td>
<td>4.4</td>
</tr>
<tr>
<td>2.</td>
<td>Pyay</td>
<td>2</td>
<td>148</td>
<td>35.2</td>
<td>4.6</td>
</tr>
<tr>
<td>3.</td>
<td>Myaedae</td>
<td>2</td>
<td>185</td>
<td>43.6</td>
<td>3.5</td>
</tr>
</tbody>
</table>

The survey also shows that on average 71.2 per cent of the primary schools are few-teacher schools whereas 28.7 per cent are fully-staffed primary schools (Table 2). Existence of few teacher schools indicates a need to introduce cluster management system at primary level. Sharing of staff and facilities among the schools within a cluster is to be materialized in order to improve the quality of education especially in few-teacher schools.
Table 2
School Type within Cluster

<table>
<thead>
<tr>
<th>No</th>
<th>Township</th>
<th>Entry year to cluster system</th>
<th>Type of Primary School in Cluster Formation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Few-Teacher School</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>2 teacher school</td>
</tr>
<tr>
<td>1</td>
<td>Patheingyi</td>
<td>1972</td>
<td>6</td>
</tr>
<tr>
<td>2</td>
<td>Pyay</td>
<td>1969</td>
<td>49</td>
</tr>
<tr>
<td>3</td>
<td>Myaedae</td>
<td>1964</td>
<td>76</td>
</tr>
</tbody>
</table>

Moreover, analysis of data in the following Table 3 shows that a norm is needed for cluster size in order to ensure effective management within each cluster.

Table 3
Cluster Size

<table>
<thead>
<tr>
<th>No.</th>
<th>Township</th>
<th>No. of Clusters</th>
<th>Average Cluster Size</th>
<th>Total No. of Primary Schools</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Patheingyi</td>
<td>12</td>
<td>9</td>
<td>107</td>
</tr>
<tr>
<td>2.</td>
<td>Pyay</td>
<td>8</td>
<td>19</td>
<td>148</td>
</tr>
<tr>
<td>3.</td>
<td>Myaedae</td>
<td>11</td>
<td>17</td>
<td>185</td>
</tr>
</tbody>
</table>

The cluster formation in the respective townships was based mainly on the ease in communication, transportation and management. The clusters are now being formed on the basis of closeness to the State Middle or State High School for conducting Standard 4 Final Examination in 1990/91 in line with instruction of the DBE. Analysis of data from these four townships shows that each township group of TEOs, ATEOs and headmasters has developed its own criteria for the formation of primary school cluster (Table 4).
Table 4
Criteria for Cluster Formation

<table>
<thead>
<tr>
<th>No.</th>
<th>Township</th>
<th>Criteria for cluster formation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Patheingyi</td>
<td>1) Closeness to SMS/SHS&lt;br&gt;2) Ease in transportation and communication&lt;br&gt;3) About 10 primary schools in each cluster&lt;br&gt;4) Competence of head teachers</td>
</tr>
<tr>
<td>2.</td>
<td>Pyay</td>
<td>1) Based on village track&lt;br&gt;2) Ease in communication and transportation&lt;br&gt;3) Ease in management for conducting the final examination</td>
</tr>
<tr>
<td>3.</td>
<td>Pintaya</td>
<td>1) Closeness to SMS/SHS&lt;br&gt;2) Based on village track&lt;br&gt;3) Topography of the area for ease in communication&lt;br&gt;4) Flexible number of schools in one cluster</td>
</tr>
<tr>
<td>4.</td>
<td>Myaedae</td>
<td>1) Based on village tract&lt;br&gt;2) Ease in communication and transportation&lt;br&gt;3) Adjustment of educational activities within clusters</td>
</tr>
</tbody>
</table>

Regarding the functions of the cluster, it was evident in Patheingyi Township that sharing the staff and helping facilities to few-teacher schools are one of the main functions in Tathar Oo Primary School, Kalama Taung Primary School and Pa-Ya-Ya-4 Primary Schools. Generally, it was found in these townships that the functions of the clusters are mainly for management, communication and other social welfare activities and rarely for academic activities (Table 5).
<table>
<thead>
<tr>
<th>No.</th>
<th>Township</th>
<th>Main functions of the cluster</th>
</tr>
</thead>
</table>
| 1.  | Patheingyi | 1) Academic matters such as adjustment of lessons for quarterly, mid-term tests and final examination  
                              2) Managerial assistance to ATEO and TEO  
                              3) Organization of school sports and other activities  
                              4) Distribution of commodities, pay, text books, etc. |
| 2.  | Pyay | 1) Supervision  
                              2) Examination  
                              3) Dissemination of instruction |
| 3.  | Pintaya | 1) Adjustment of quarterly syllabus  
                              2) Question setting for tests and final examination  
                              3) Distribution of pay, commodities, text books, etc.  
                              4) Implementation of educational activities after occasional meetings |
| 4.  | Myaede | 1) Adjustment of monthly lessons  
                              2) Adjustment of co-curricular activities  
                              3) Adjustment of school examinations  
                              4) Distribution of pay |
CHAPTER IV

CONCLUSION

Within the historical context of the development of a cluster system in Myanmar, this paper has outlined the current operational status of cluster systems based on a small survey. Analysis of survey data led to identification of varying criteria for cluster organization, functions and to identification of two major sets of issues - administrative and pedagogic issues. Given that the supervisor-school ratio has been relatively unchanged over decades, school clusters have the potential to provide a better framework for inspection of schools of manageable size. Moreover, the introduction of cluster-based Standard 4 Final Examination in 1990/91 reinforced the cluster movement. Because positive and negative features are associated with the experience of cluster schools in Myanmar, there is an urgent need to undertake a comprehensive feasibility study that will formulate a workable policy strategy and implementation plan for this important educational innovation.

In order to strengthen educational management at the primary level within the existing financial constraint, it is necessary to introduce the cluster system systematically. Before effective large-scale implementation of the cluster system, both administrative and pedagogical issues need to be identified. The following are the major issues to be tackled at various levels of Basic Education.

Administrative Issues

- a basic need to develop a strategy to implement primary school cluster management system;
- a need to develop awareness of the concept and effectiveness of cluster system among all personnel likely to be involved;
- lack of the systematic procedure for formation of clusters, selection of core schools and election of cluster leaders;
- inadequacy of expertise and experience of Township Education Officers (TEOs) and Assistant Township Education Officers (ATEOs) about the cluster management system at primary level;
- inefficient management due to the present highly centralized management system;

Pedagogical Issues

- lack of a comprehensive list of critical learning competencies for different mastery levels on the basis of which learners can be evaluated;
- need to develop the multigrade and large class methodology;
- requirement for the modification of the examination system;
• inadequate classroom space and facilities for active learning methods;
• reluctance, as well as, resistance from teachers to apply new techniques in teaching-learning situations.
• lack of proper in-service training programmes for primary Assistant teachers (PATs).
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