

**JAPAN INTERNATIONAL
COOPERATION AGENCY**

**MINISTRY OF EDUCATION
THE DEMOCRATIC SOCIALIST
REPUBLIC OF SRI LANKA**

**ADDITIONAL STUDY
TO THE MASTER PLAN FOR THE DEVELOPMENT
OF SCIENCE AND MATHEMATICS IN THE
PRIMARY AND SECONDARY LEVELS
IN THE DEMOCRATIC SOCIALIST REPUBLIC
OF SRI LANKA**

**(EDUCATIONAL KAIZEN PILOT PROJECT
FOR TSUNAMI-AFFECTED SCHOOLS
AND ZONAL EDUCATION OFFICE, KALMUNAI)**

**FINAL REPORT
MAIN REPORT**



SEPTEMBER 2005

KRI INTERNATIONAL CORP.

HM
JR
05 – 50

**JAPAN INTERNATIONAL
COOPERATION AGENCY**

**MINISTRY OF EDUCATION
THE DEMOCRATIC SOCIALIST
REPUBLIC OF SRI LANKA**

**ADDITIONAL STUDY
TO THE MASTER PLAN FOR THE DEVELOPMENT
OF SCIENCE AND MATHEMATICS IN THE
PRIMARY AND SECONDARY LEVELS
IN THE DEMOCRATIC SOCIALIST REPUBLIC
OF SRI LANKA**

**(EDUCATIONAL KAIZEN PILOT PROJECT
FOR TSUNAMI-AFFECTED SCHOOLS
AND ZONAL EDUCATION OFFICE, KALMUNAI)**

FINAL REPORT

MAIN REPORT

SEPTEMBER 2005

KRI INTERNATIONAL CORP

HM
JR
—

EXCHANGE RATE
(As of September 2005)
US\$ 1.00 = ¥ 112.46 = Rs. 101.32

PREFACE

In response to a request from the Government of the Democratic Socialist Republic of Sri Lanka, the Government of Japan decided to conduct the Master Plan Study for the Development of Science and Mathematics Education in the Primary and Secondary Levels (the Study) and entrusted the Study to the Japan International Cooperation Agency (JICA). JICA selected and dispatched a study team headed by Mr. Toshikazu Tai of KRI International Corp. from November 2002 to January 2005.

In the last stage of the Study, the Tsunami disaster attacked Sri Lanka on 26 December 2004. In the area affected by the Tsunami disaster, urgent measures for rehabilitation and reconstruction are desired in education sector as well as in other sectors.

Considering the situation, JICA decided to dispatch the study team for additional study activities from February to September 2005. The study team held various discussions with the officials concerned of the Government of the Democratic Socialist Republic of Sri Lanka and implemented a pilot project in Kalmunai Educational Zone to improve the situation applying the method developed through the Study. Based on the result of the pilot project, the final report with a proposed action plan for sustainable improvement in education management has been prepared.

I hope that this report will contribute to the rehabilitation and reconstruction in the education sector and to the enhancement of friendly relationship between the two countries.

Finally, I wish to express my sincere appreciation to the officials concerned of the Government of the Democratic Socialist Republic of Sri Lanka for their close cooperation extended to the Additional Study.

September 2005

Kazuhisa MATSUOKA,
Vice-President,
Japan International Cooperation Agency

September 2005

Mr. Kazuhisa Matsuoka
Vice President
Japan International Cooperation Agency (JICA)
Tokyo, Japan

Dear Mr. Kazuhisa Matsuoka,

Letter of Transmittal

We are pleased to submit to you the Final Report on “The Additional Study to the Master Plan for the Development of Science and Mathematics in the Primary and Secondary Levels in the Democratic Socialist Republic of Sri Lanka”. Under the contract with your esteemed organization, the Additional Study was carried out for eight months from February to September 2005.

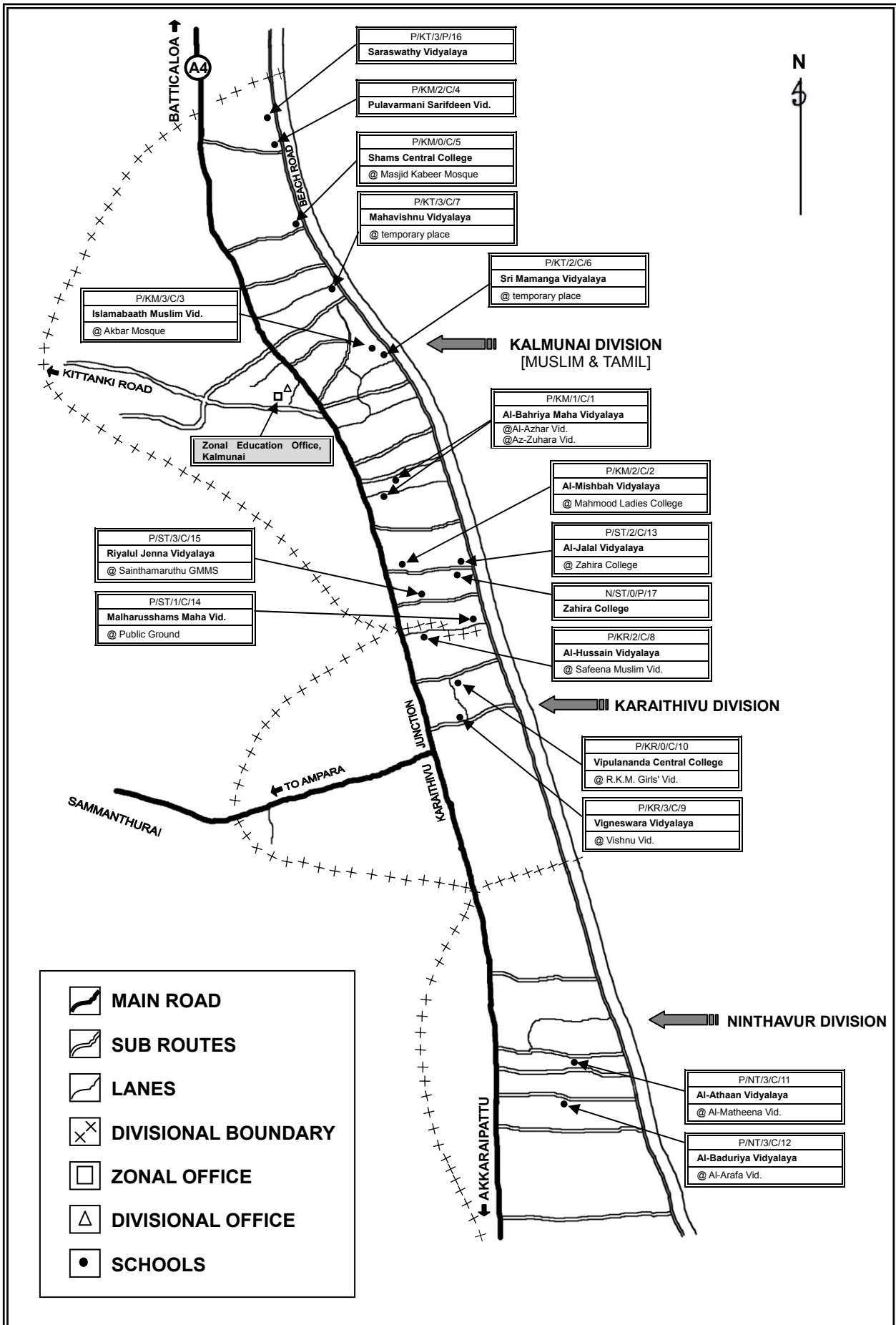
The Additional Study conducted a pilot project in the Kalmunai Educational Zone applying Educational Kaizen approach that was formulated and implemented in “The Master Plan for the Development of Science and Mathematics in the Primary and Secondary Levels”. Based on the lessons learnt from the pilot project, an action plan was formulated to expand Educational Kaizen Activities to all the schools in the Kalmunai Educational Zone.

We wish to take this opportunity to express our sincere gratitude to the Embassy of Japan and JICA. We also wish to express our deepest gratitude to the Ministry of Education and the Zonal Education Office, Kalmunai, and concerned officers of related agencies for the courtesies and cooperation extended to the team during the course of the Additional Study.

Very truly yours,

Toshikazu Tai
Team Leader

LOCATION MAP OF THE PILOT PROJECT



PHOTOGRAPHS OF THE PILOT PROJECT

Photos of Pilot Schools

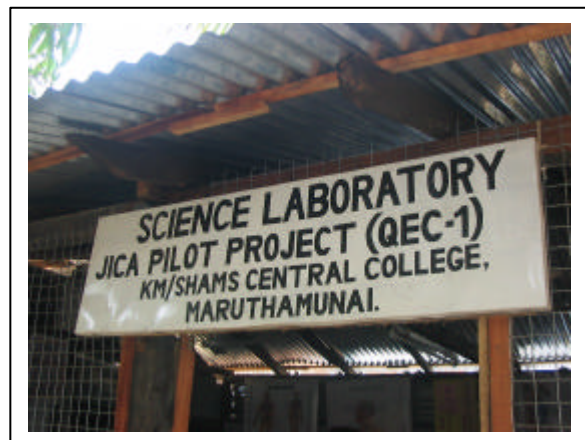
1. Buildings of Tsunami-affected schools



2. Classes under a tree and in a temporary shed



3. Laboratory in a temporary shed



4. 5S activities



5. 100-box calculation



6. Model Experiment Workshop



7. Final Workshop



Photos of Zonal Education Office

1. Big Cleaning Day



2. New Desk Arrangement



3. Development of Filing System



**ADDITIONAL STUDY TO THE MASTER PLAN
FOR THE DEVELOPMENT OF SCIENCE AND MATHEMATICS
IN THE PRIMARY AND SECONDARY LEVELS
IN THE DEMOCRATIC SOCIALIST REPUBLIC OF SRI LANKA**

**FINAL REPORT: MAIN REPORT
SEPTEMBER 2005**

TABLE OF CONTENTS

LOCATION MAP OF THE PILOT PROJECT	
PHOTOGRAPHS OF THE PILOT PROJECT	
ABBREVIATIONS	
CHAPTER I INTRODUCTION	1
1.1 Study Background	1
1.2 Study Objectives.....	2
1.3 Target Area.....	2
1.4 Overall Timeframe.....	3
CHAPTER II PILOT PROJECT FOR TSUNAMI-AFFECTED SCHOOLS.....	4
2.1 Outline of the Pilot Project.....	4
2.2 Selection of the Pilot Schools.....	4
2.3 Implementation Process of the Pilot Project	5
2.3.1 Preparation.....	5
2.3.2 Formation of SEIKA and QE Circles	6
2.3.3 Preparation of Proposals by the Pilot Schools.....	7
2.3.4 Financial Arrangement	7
2.3.5 Implementation and Monitoring.....	8
2.4 Activities Implemented by the Pilot Schools	8
2.4.1 Topics of QE Circles.....	8
2.4.2 Implementation of Activities	8
2.4.3 Major Activities of QE Circles	9
2.5 Supporting Activities for the Pilot Schools	10
2.5.1 Monitoring and Advisory Activities	10
2.5.2 Workshops	11
2.5.3 Inspection Programs	16
2.6 Results of the Pilot Project	16
CHAPTER III PILOT PROJECT FOR THE ZONAL EDUCATION OFFICE.....	22
3.1 Outline of the Pilot Project.....	22
3.2 Implementation Process of the Pilot Project	22
3.2.1 Preparation.....	22
3.2.2 Formation of ZEIKA and QE circles.....	22
3.2.3 Financial Arrangement	23
3.2.4 Implementation and Monitoring.....	24
3.3 Activities Implemented by the Zonal Education Office.....	24

3.4	Supporting Activities	26
3.5	Progresses and Results of the Pilot Project	26
CHAPTER IV RESULTS OF THE ADDITIONAL STUDY		28
4.1	Lessons Learned	28
4.2	Questionnaire Survey on Pilot Project	38
4.2.1	Questionnaire Survey for Pilot Schools.....	38
4.2.2	Questionnaire Survey for Zonal Education Office	42
4.3	Conclusion	44
CHAPTER V ACTION PLAN FOR SUSTAINABLE EXPANSION.....		48

List of Tables

Table 2.2.1	List of Pilot Schools	5
Table 2.4.1	Major Activities of QE Circles.....	9
Table 2.5.1	Workshops Conducted and Numbers of Participants	11
Table 2.5.2	Evaluation of School Presentations (Top 7).....	13
Table 2.5.3	Award Winners for Best Pilot School.....	16
Table 2.6.1	Developments in Pilot Schools	18
Table 4.1.1	Lessons Learned from Activities of the Pilot Project at Tsunami-Affected Schools.....	29
Table 4.1.2	Lessons Learned from Activities of the Pilot Project at the Zonal Education Office.....	35
Table 4.2.1	Results of the Questionnaire Survey for the Pilot Project for Tsunami-affected Schools.....	38
Table 4.2.2	Results of the Questionnaire Survey for the Pilot Project for Zonal Education Office.....	42

List of Figures

Figure 1.1.1	Master Plan Study and Additional Study.....	2
Figure 1.4.1	Overall Timeframe of the Additional Study	3
Figure 2.3.1	Implementation Structure for Educational Kaizen Activities.....	6
Figure 3.3.1	Red Tag and Yellow Tag	24

List of Boxes

Box 2-1	What it means to have an own place to run the school.....	21
Box 4-1	Change in School Culture through Educational Kaizen Activities....	40
Box 4-2	Educational Development.....	41
Box 4-3	Importance of School Monitoring.....	45
Box 4-4	Revival and Development of Shams Central College	47

Appendix

- Appendix 1 Results of Monitoring Survey on Baseline Situations of Pilot Schools
- Appendix 2 Outputs of QE Circle Activities
- Appendix 3 Monitoring Evaluation
- Appendix 4 Structure, Activities and Capacity of Kalmunai Zonal Education Office
- Appendix 5 Questionnaires
- Appendix 6 Questionnaire Results

ABBREVIATIONS

ADE	Assistant Director of Education
A/L	G.C.E. Advanced Level (A-Level)
DDE	Deputy Director of Education
DEO	Divisional Education Office
ERA	Environment Related Activities
GOJ	Government of Japan
GOSL	Government of Sri Lanka
ISA	In-Service Advisor
JICA	Japan International Cooperation Agency
MOE	Ministry of Education
NGO	Non-Governmental Organization
NIE	National Institute of Education
O/L	G.C.E. Ordinary Level (O-Level)
QC	Quality Control
QE	Quality Education
QEC	Quality Education Circle
SEIKA	School Educational Initiative of Kaizen Activities
SLEAS	Sri Lanka Education Administrative Service
SLPS	Sri Lanka Principal Service
SLTS	Sri Lanka Teaching Service
ZDE	Zonal Director of Education
ZEIKA	Zonal Education Initiative of Kaizen Activities
ZEO	Zonal Education Office

CHAPTER I INTRODUCTION

1.1 Study Background

Sri Lanka has made remarkable improvements in human development indicators since its independence. However, the core problem in education sector is considered to lie in its 'quality.' In particular, the pass rates of science subjects in O/L and A/L examinations remain considerably lower than those of other arts and commerce subjects. There was a need to strengthen and improve the science and mathematics education in order to meet the demand for quality human resources of the country.

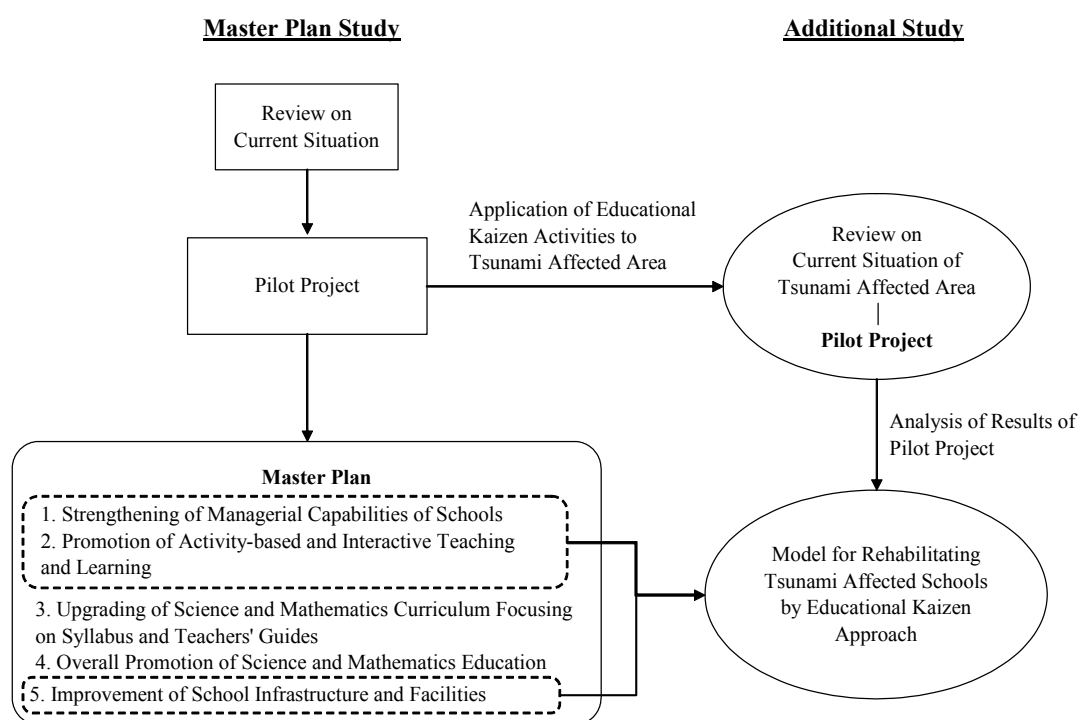
In response to the request made by the Government of Sri Lanka (GOSL) to the Government of Japan (GOJ) for technical assistance for the Master Plan Study for the Development of Science and Mathematics in the Primary and Secondary Levels, and in accordance with the Scope of Work (S/W) signed between the Ministry of Education (MOE) and the Japan International Cooperation Agency (JICA), the Master Plan Study was carried out during the period from November 2002 to February 2005. The final report containing the Master Plan was submitted to and accepted by MOE in February 2005.

During the study period, a pilot project was implemented at the selected 25 pilot schools island-wide. The year-long project proved that Educational Kaizen activities, or school-based activities, were effective in improving school management, quality of education, as well as infrastructure and facilities of the schools in Sri Lanka.

On 26th December 2004, a disastrous Tsunami of the Indian Ocean brought an unprecedented catastrophe to the coastal areas of Sri Lanka. The total death toll had reached over thirty thousand. Hundreds of thousands of victims had lost their houses and all belongings. Many of the schools have been destroyed or used as a refugee camp. As such, there were a number of challenges and issues to be addressed in resuming school operation and bridging it to normalcy.

Under this situation, GOSL requested to GOJ that Educational Kaizen activities be implemented in Tsunami-affected schools, which will further verify the applicability of the approach suggested in the Master Plan. Therefore, it was agreed by MOE and JICA to implement the Additional Study to the Master Plan for the Development of Science and Mathematics in the Primary and Secondary Levels (the Additional Study) by applying Educational Kaizen activities to Tsunami-affected schools. The implementation of the Additional Study was entrusted to KRI International Corp. and the Study commenced in February 2005.

The relationship between the Master Plan Study and the Additional Study is shown in Figure 1.1.1.



Source: JICA Study Team

Figure 1.1.1 Master Plan Study and Additional Study

1.2 Study Objectives

The objectives of the Additional Study are:

- To verify and enhance the applicability of Educational Kaizen activities substantiated in the Master Plan
- To improve the environment and quality of education of the Tsunami-affected schools in Kalmunai Zone by mobilizing the school staff, students and community members through participation in Educational Kaizen activities
- To improve the capacity and administrative efficiency of Kalmunai Zonal Education Office by introducing Kaizen activities in the office
- To help strengthen the planning and implementing capacity of the Counterpart Personnel in MOE through implementation of the Study

1.3 Target Area

The Additional Study covers the Educational Zone of Kalmunai in Ampara District, North and Eastern Province. Kalmunai was one of the hardest hit areas by Tsunami.

1.4 Overall Timeframe

Initially this Additional Study was planned for three months from the end of February to the end of May 2005. However, further promotion of Educational Kaizen activities and monitoring of the pilot project was found necessary and the Study was extended till the end of September 2005.

The overall timeframe of the Additional Study is shown below.

		March	April	May	June	July	Aug.	Sept.	
School Terms		Term 1		Term 2				Term 3	
	Muslim School	█		█			█		
	Tamil School	█		█			█		
Activities									
Pilot Project for Tsunami-Affected Schools									
1	Pre-preparation for the pilot project	█							
2	Preparatory Workshop	█							
3	Preparation of proposal	█							
4	Submission of proposal	█							
5	Kick-Off Workshop	█							
6	1st disbursement of budget	█							
7	Intermediate Workshop I	█							
8	Submission of Intermediate Report		█						
9	2nd disbursement of budget		█						
10	5S Seminar		█						
11	Model Experiment Workshop I		█						
12	Intermediate Workshop II		█						
13	Submission of Intermediate Report II			█					
14	Model Experiment Workshop II			█					
15	Disbursement of additional budget				█				
16	Workshop on Healthy School Culture					█			
17	Submission of Final Report							█	
18	Monitoring activities	█							
19	Questionnaire Survey							█	
20	Final Workshop							█	
Pilot Project for Zonal Education Office									
1	Preparation of proposal				█				
2	1st disbursement of budget				█				
3	Submission of Intermediate Report					█			
4	2nd disbursement of budget					█			
5	Kaizen Seminars					█	█	█	
6	Submission of Final Report							█	

Source: JICA Study Team

Figure 1.4.1 Overall Timeframe of the Additional Study

CHAPTER II PILOT PROJECT FOR TSUNAMI-AFFECTED SCHOOLS

2.1 Outline of the Pilot Project

The Pilot Project for the Development of Tsunami-Affected Schools in Kalmunai Zone was designed based on the experience of the previous one-year pilot project under the Master Plan Study implemented at 25 schools island-wide. The basic concept of the pilot project is to apply Educational Kaizen activities, or school-based activities, to the Tsunami-affected schools. “Kaizen” means continuous improvement involving everyone – i.e., top management, managers and workers. Kaizen activities include various methodologies of participatory approach such as 5S¹, suggestion system and Quality Control (QC) circle.

In situations of a sudden disaster as in the case of a Tsunami attack, a massive amount of aid flows into the affected area, where a lot of relief items are provided to victims and survivors by the government, donors and non-governmental organizations (NGOs). While certain items are provided sufficiently or even excessively, some of the priority needs are not being met. The concept of the pilot project is that such a gap could be identified and relief and development effort well coordinated at the school-level through Educational Kaizen activities. The pilot project applies the Educational Kaizen concept and promotes school-based activities, so that the schools can function as the center of community mobilization and rehabilitation, rather than passively relying on relief and aid provisions.

Duration of the pilot project was initially two months from March to May 2005. It then was extended up to September 2005, as two months was too short to reap fruits from Educational Kaizen activities. The school-based activities and supporting activities of the pilot project were continued for a total of six months.

2.2 Selection of the Pilot Schools

Of the 57 schools in Kalmunai Zone, 15 schools were totally destroyed and 2 schools were partly damaged by Tsunami. Through discussion with the Zonal Director of Education (ZDE), it was agreed that all of those 17 affected schools be selected as the pilot schools of the project. The selection of the pilot schools were then approved by the MOE. List of the pilot schools is shown in Table 2.2.1.

¹ 5S originated in Japan and stands for five systematic steps of the process, that are SEIRI (Classify), SEITON (Clear), SEISOU (Clean), SEIKETSU (Continue, Standardize), and SHITSUKE (Commitment, Discipline). 5S aims to create a highly productive working environment.

Table 2.2.1 List of Pilot Schools

School ID					Name of School	Enrolment *
Ownership	Division	School Type	Damage	No.		
P	KM	1	C	1	Al-Bahriya Maha Vidyalaya, Kalmunaikudy	1,619
P	KM	2	C	2	Al-Mishbah Vidyalaya, Kalmunaikudy	1,758
P	KM	3	C	3	Islamabaath Muslim Vidyalaya, Kalmunai	56
P	KM	2	C	4	Pulavarmani Sarifdeen Vidyalaya	566
P	KM	0	C	5	Shams Central College, Maruthamunai	1,542
P	KT	2	C	6	Sri Mamanga Vidyalaya, Kalmunai	195
P	KT	3	C	7	Mahavishnu Vidyalaya, Pandiruppu	110
P	KR	2	C	8	Al-Hussain Vidyalaya, Malihaikadu	419
P	KR	3	C	9	Vigneswara Vidyalaya, Karaitheevu	176
P	KR	0	C	10	Vipulananda Central College, Karaitheevu	1,126
P	NT	3	C	11	Al-Athaaan Vidyalaya, Nintavur	49
P	NT	3	C	12	Al-Baduriya Vidyalaya, Nintavur	113
P	ST	2	C	13	Al-Jalal Vidyalaya, Sainthamaruthu	1,002
P	ST	1	C	14	Malharusshams Maha Vidyalaya, Sainthamaruthu	1,765
P	ST	3	C	15	Riyalul Jenna Vidyalaya, Sainthamaruthu	209
P	KT	3	P	16	Saraswathy Vidyalaya, Periyaneelavanai	105
N	ST	0	P	17	Zahira College, Sainthamaruthu	2,172
Total						12,982

Notes:

Ownership N=National; P=Provincial
 Division KM=Kalmunai Muslim; KT=Kalmunai Tamil; KR=Karaitheevu;
 NT=Nintavur; ST=Sainthamaruthu
 School Type 0=Type 1AB; 1=Type 1C; 2=Type 2; 3=Type 3
 Damage C=Completely Damaged; P=Partly Damaged

* Enrolment before Tsunami

Source: JICA Study Team

2.3 Implementation Process of the Pilot Project

2.3.1 Preparation

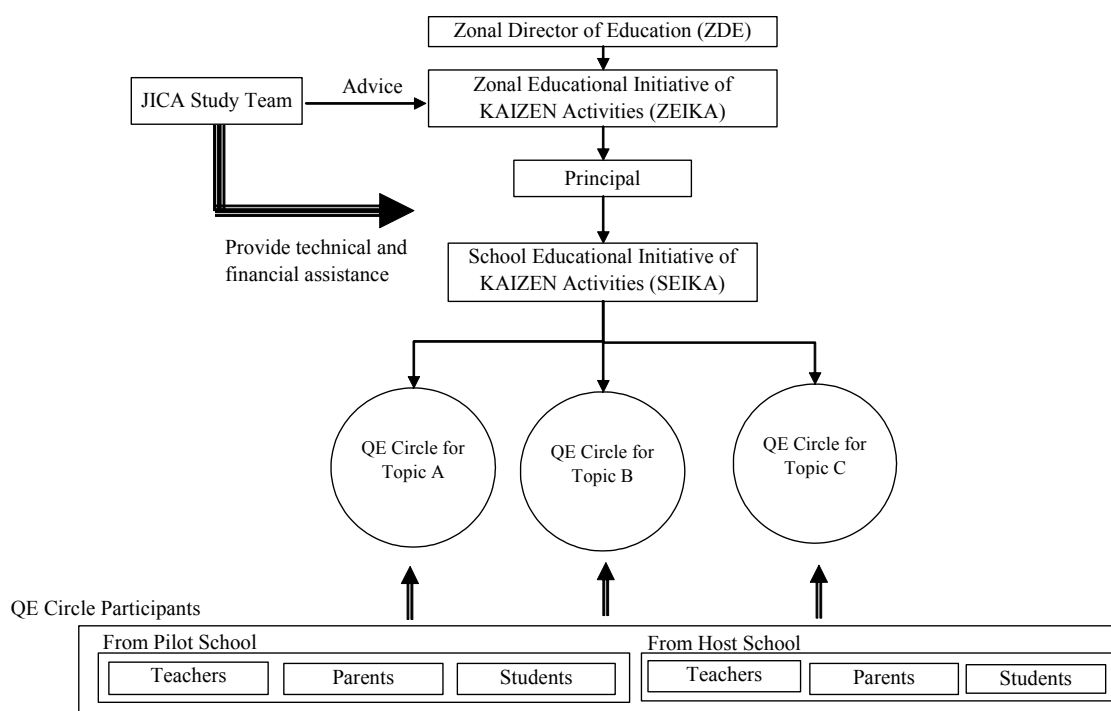
Following the discussions between ZDE and JICA Study Team regarding the implementation of pilot project, a **Preparatory Workshop** was held on March 1,

2005, inviting the representatives from pilot schools as well as host schools². The objective of the workshop was to provide the selected schools with an introduction to the project concept and guidance on how to form SEIKA and QE circles and to prepare proposals. The idea of Educational Kaizen was explained by the JICA Study Team. A few potential topics of QE circles were suggested, which would fall into the following three categories.

- (1) Improvement of school environment and management
- (2) Improvement of quality of education
- (3) Development of basic infrastructure and facilities

2.3.2 Formation of SEIKA and QE Circles

Each pilot school formed **SEIKA** (School Educational Initiative of Kaizen Activities) as the school-level decision-making committee for Educational Kaizen activities. SEIKA members consist of principal (chairperson), teachers, parents as well as other resource persons and well-wishers. Where the school is operated in another school premises, it was requested that the principal and teachers of the host school also be included in SEIKA.



Source: JICA Study Team

Figure 2.3.1 Implementation Structure for Educational Kaizen Activities

² Some of the Tsunami-affected schools are operated in the premises of other non-damaged schools, which are called “host schools”.

After the SEIKA members were appointed, the committee identified the topics to be worked on through Educational Kaizen activities, and formed 2-3 **Quality Education Circles (QE circles)**. A QE circle consists of teachers, parents and students, totaling about 5-10 members.

The implementation structure is shown in Figure 2.3.1.

2.3.3 Preparation of Proposals by the Pilot Schools

Based on the instructions given at the Preparatory Workshop, each pilot school prepared a project proposal, containing activity and budgetary plans of each QE circle. Proposals were then submitted to the JICA Study Team.

JICA Study Team reviewed the proposal of each school. Following the discussions with the principals and revisions of proposals as necessary, 42 QE circles of the 17 pilot schools were approved.

2.3.4 Financial Arrangement

Shortly after the proposals were accepted, a **Kick-Off Workshop** was held on March 7, 2005, in order to launch the pilot project and to provide financial guidelines for its implementation. English and Tamil versions of the document “Financial Guidelines” were distributed to the schools, providing detailed instructions on the financial procedure and regulations. The pilot schools were requested to open and maintain a bank account exclusively for the pilot project, with the chairperson, vice-chairperson (or secretary) and treasurer of SEIKA being registered as the three co-signers. Instructions were given on proper book keeping methods and financial management, where more than half of the SEIKA members must give their signatures on receipt notebook and approve the purchases made in the project.

The budget for the pilot project was allocated to the 17 pilot schools based on the size of student population. The fund was transferred from the JICA Study Team to the Zonal Director of Education (ZDE) in two installments in accordance with the agreement. The ZDE then transferred the money to the respective schools in the form of bank cheques.

In the extended period of the pilot project (June – August 2005), the additional fund was allocated to the top seven pilot schools with good performance. These schools were selected as they had received “A” or “B+” in the monitoring evaluation. Also by mid-May, they had spent most of the fund initially allocated to them in March, which indicates smooth and active implementation of Educational Kaizen activities according to the plans. In other words, a general correlation was observed between the monitoring evaluation and expenditure percentage. Again, transfer of the additional fund was made by the JICA Study Team to the schools through ZDE. The same financial guidelines were applied for the use of additional fund.

2.3.5 Implementation and Monitoring

Implementation of Educational Kaizen activities commenced at the pilot schools according to their activity plans in their proposals. SEIKA meeting was called to make the financial guidelines known to all members and to approve the spending of fund by QE circles. SEIKA was responsible for directing and coordinating the QE circle activities to be implemented. The activity plans in the initial proposals, however, had to be modified frequently as the order of priority of the needs was changing.

Intervention was made through monitoring and advisory activities. The two monitoring teams of national consultants carried out the monitoring activities by visiting the pilot schools regularly.

In parallel to the commencement of activities, a Monitoring Survey on **Baseline Situation** was conducted in mid-March in order to obtain the information on the current situation of the pilot schools, including their temporary and (planned) permanent locations, number of students and teachers, as well as the needs and problems identified and expressed by the schools. The result of the survey is summarized in Appendix 1.

2.4 Activities Implemented by the Pilot Schools

2.4.1 Topics of QE Circles

42 QE circles were formed at the 17 pilot schools. Topics of the QE circles fall into the three categories of (1) Improvement of school environment and management; (2) Improvement of quality of education; and (3) Development of basic infrastructure and facilities.

However, due to the rapidly changing actual situations on the ground, there was a need to amend some of the QE circle topics and activities. For example, a pilot school's relocation from its host school to an independent temporary place brought the necessity of new topics (e.g., temporary sheds, sanitary facilities, school equipments, etc.) that were not given a prime concern earlier. Also, with the transition from emergency to development and reconstruction phase, the priority for nutrition program diminished and that for educational development has increased. In such cases, it was the schools themselves that could best identify and address the newly-arisen, unmet needs at the school level. Therefore, some of the QE circle topics were modified to avoid the overlap or neglect of needs.

2.4.2 Implementation of Activities

Educational Kaizen activities in the pilot project are carried out by QE circles under the direction and guidance of SEIKA. SEIKA meetings are held at least twice a month to discuss the implementation of activities. In particular, use of

funds of the pilot project requires approval of SEIKA as a decision-making body. Therefore, regular and frequent meeting is necessary in order to proceed with the activities without delay.

Pilot schools were requested to submit a Proposal of Purchase, attached with at least two quotations, to the JICA Study Team in advance of purchasing an item costing more than Rs. 10,000 per unit.

2.4.3 Major Activities of QE Circles

Major activities carried out by the QE circles are summarized in Table 2.4.1.³

Table 2.4.1 Major Activities of QE Circles

ID	Name of School	School Environment and Management		Quality of Education		Basic Infrastructure and Facilities			
		Management	Nutrition	Primary	Junior/Senior Secondary	Classroom / Building	Children's park	Library	Laboratory
P/KM/1/C/1	Al-Bahriya Maha Vidyalaya, Kalmunaikudy		1	1	1			1	1
P/KM/2/C/2	Al-Mishbah Vidyalaya, Kalmunaikudy	1		1	1				
P/KM/3/C/3	Islamabaath Muslim Vidyalaya, Kalmunai		1	1				1	
P/KM/2/C/4	Pulavarmani Sarifdeen Vidyalaya		1		1			1	
P/KM/0/C/5	Shams Central College, Maruthamunai			1	1			1	1
P/KT/2/C/6	Sri Mamanga Vidyalaya	1	1	1	1	1		1	1
P/KT/3/C/7	Mahavishnu Vidyalaya, Pandiruppu	1	1	1		1			
P/KR/2/C/8	Al-Hussain Vidyalaya, Malihaikadu	1	1		1			1	
P/KR/3/C/9	Vigneswara Vidyalaya, Karaitheevu		1	1			1		
P/KR/0/C/10	Vipulananda Central College, Karaitheevu				1	1		1	1
P/NT/3/C/11	Al-Athaan Vidyalaya, Nintavur			1			1		
P/NT/3/C/12	Al-Baduriya Vidyalaya, Nintavur		1	1			1		
P/ST/2/C/13	Al-Jalal Vidyalaya, Sainthamaruthu	1			1			1	1
P/ST/1/C/14	Malharusshams Maha Vidyalaya, Sainthamaruthu	1			1	1		1	1
P/ST/3/C/15	Riyalul Jenna Vidyalaya, Sainthamaruthu		1	1				1	
P/KT/3/P/16	Saraswathy Vidyalaya, Periyaneelavanai		1	1				1	
N/ST/0/P/17	Zahira College, Sainthamaruthu				1	1			1
Overall		6	10	11	10	5	3	11	7
Percentage		10%	16%	17%	16%	8%	5%	17%	11%
Total		63							

Source: JICA Study Team

In general, in the first half of the pilot project (March – May 2005), the pilot schools focused on setting up minimum basic infrastructure and environment based on their urgent needs, such as temporary classrooms and nutritious mid-day meals, which would encourage students to come back to school after

³ The number of major activities (total 63) is larger than the number of QE circles (total 42), as some of the QE circles have more than one category of activities.

the disaster. In the latter half of the project (June – August 2005), the activities were directed more towards management and educational activities, rather than infrastructure development and nutrition program.

2.5 Supporting Activities for the Pilot Schools

2.5.1 Monitoring and Advisory Activities

(1) Objectives

The objectives of the monitoring and advisory activities for the pilot schools are:

- To provide on-site advice to the principal, SEIKA and QE circles on the implementation of Educational Kaizen activities, particularly on solving problems and overcoming constraints
- To assist SEIKA and QE circles in establishing a participatory and transparent decision making process
- To evaluate the progress of Educational Kaizen activities
- To monitor expenditure of the pilot schools

(2) Monitoring Team and Method

The Monitoring Team consists of six Tamil-speaking national consultants, one of whom has also worked as a monitoring expert for the previous one-year pilot project under the Master Plan Study.

The monitoring sheet was developed by the monitoring team together with the JICA Study Team. Through the discussions with SEIKA and QE circle members, the monitoring team filled in the monitoring sheet with the information and observation on (1) progresses, (2) problems, and (3) suggestions of SEIKA and each QE circle.

Also, the monitoring team evaluated the progresses of activities at each pilot school, on the criteria of (i) principal's leadership, (ii) participation, (iii) communication, and (iv) outputs. The results of the monitoring evaluation, given in the letter grades of "A" to "C" rating, were informed to the pilot schools.

(3) Regular Monitoring Schedule

The monitoring schedule was initially prepared so that the team would visit each pilot school at least once a week on a regular basis. In making the schedule, consideration was given to the hours (morning/evening) and locations of school operation in order to make it most efficient. Later, this weekly schedule was modified to a bi-weekly one, so that there will be more time for in-depth discussions and on-site advisory activities at each school.

(4) Special Monitoring Visits

In order to supplement the regular activities by the monitoring team, special visits were made by resource persons. Resource persons included the principals and teachers of the Tamil-medium schools under the former pilot project at 25 schools. It was effective as they can address the teachers of the pilot schools referring to their own experience of Educational Kaizen. Practical ideas and suggestions were given by the resource persons, which motivated the pilot schools.

2.5.2 Workshops

To facilitate the implementation of Educational Kaizen activities, the JICA Study Team organized various workshops and seminars throughout the course of the project. Principals and teachers of the pilot schools as well as of the host schools participated in them. Also, officers of the Zonal Education Office were invited to attend.

List of the workshops conducted and the number of participants to each is shown in the Table 2.5.1.

Table 2.5.1 Workshops Conducted for Schools and Numbers of Participants

	<i>Workshop Title</i>	<i>Date</i>	<i>Total Number of Participants</i>		
			<i>Pilot Schools</i>	<i>Host Schools</i>	<i>Zonal Office</i>
(1)	Intermediate Workshop	3.22.2005	58	5	2
(2)	Seminar on 5S	4.25.2005	50	9	2
(3)	Model Experiment Workshop	5.7.2005	20	20	3
(4)	Intermediate Workshop II	5.12.2005	50	7	2
(5)	Model Experiment Workshop II	6.13-17.2005	103	51	8
(6)	Workshop on Healthy School Culture (1)	7.2-3. 2005	29	17	0
	Workshop on Healthy School Culture (2)	7.16-17.2005	31	14	0
(7)	Final Workshop	9.17-18.2005	239	26	13
	Total		580	149	30

Source: JICA Study Team

(1) Intermediate Workshop (March 22, 2005)

One-Day Intermediate Workshop was held, inviting SEIKA chairperson, vice-chairperson (or secretary), and treasurer as well as all QE circle leaders. The objective of the workshop was to facilitate and accelerate the implementation of Educational Kaizen activities.

Resource persons for this workshop included a group of principal and teachers from St. Mary’s College, Trincomalee, one of the former 25 pilot schools. They demonstrated their experience of Educational Kaizen activities, including the problems faced and benefits obtained through the activities.

In addition, a Counterpart Team member from the National Institute of Education (NIE) gave a presentation on 100-box calculation – its concept and method – followed by an actual practice of Addition exercise by the participants. A detailed instruction manual “A Guideline to 100-Box Calculation” developed in the Master Plan Study was distributed to the participants.

The workshop program also included a two-hour introductory session on how to improve children’s psycho-social well-being.

(2) 5S Seminar (April 25, 2005)

To introduce 5S to the pilot schools and host schools, a seminar was held at the General Hospital, Ampara. The hospital has been implementing 5S for four years under the leadership of the present Medical Superintendent, and has won several awards for its quality of services and productivity.

A Kaizen expert, who also provided his consulting service for the previous pilot project, gave a lecture to the participants, focusing on the practice of Kaizen at school. The participants were then taken for an observation tour of the hospital premises (wards and offices) guided by the hospital staff.

(3) Model Experiment Workshop (May 7, 2005)

A Model Experiment Workshop was held, inviting two teachers (science and/or mathematics, or primary) from each of the 17 pilot schools and 10 host schools. The objective of the workshop is to introduce interactive teaching and learning through demonstration and implementation of model experiments.

Target grade for the model experiments was set for Grades 4 to 9. For this workshop, the following five topics were selected from the instruction manual developed under the Master Plan Study. In selecting the topics, priority was given to the activities that do not require specialized equipments and materials. These experiments could be conducted with easily available materials such as basic stationery items.

No.	Title	Grade
Activity (1)	Forecasting the Future	4-7
Activity (2)	Let Us Draw Our School Map	4-9
Activity (3)	Let Us Keep Our School Environment Clean	4-7
Activity (4)	Observing the Behavioral Pattern of an Insect	4-9
Activity (5)	Can You Locate the Treasure?	8-9

The workshop was held in two sessions (morning and afternoon). Participants were divided into groups of 4-6 teachers of pilot schools and host schools together, and practiced the model experiments in the groups. It was intended that by engaging in group work, participants will learn to work together and cooperative culture will develop between the pilot school and host school. Benefits of introducing model experiments include initiating student-friendly culture in a class and mitigating students' post-Tsunami mental problems through team work.

(4) Intermediate Workshop II (May 12, 2005)

One-day Intermediate Workshop II was organized in order to share the progresses of the project among the pilot schools and host schools. Each of the 17 pilot schools made a presentation on their Educational Kaizen activities, covering (1) the selection of topics, (2) activities performed, (3) problems faced and how they were solved, (4) progresses and outputs, and (5) future plans.

All the participants were asked to evaluate the school presentations and to give marks of 1 to 4, with "1" being "poor" and "4" being "excellent." Average was taken of all the evaluation marks and the following top seven schools were awarded.

Table 2.5.2 Evaluation of School Presentations (Top 7)

	ID	School Name	Average Marks
1st	P/KM/0/C/5	Shams Central College, Maruthamunai	3.08
2nd	P/KM/2/C/2	Al-Mishbah Vidyalaya, Kalmunaikudy	3.02
3rd	P/KR/0/C/10	Vipulananda Central College, Karaitheevu	2.85
4th	P/KT/2/C/6	Sri Mamanga Vidyalaya, Kalmunai	2.79
5th	P/KT/3/P/16	Saraswathy Vidyalaya, Periyaneelavanai	2.70
6th	P/KM/2/C/4	Pulavarmani Sarifdeen Vidyalaya	2.68
7th	P/KM/1/C/1	Al-Bahriya Maha Vidyalaya, Kalmunaikudy	2.65

Source: JICA Study Team

(5) Model Experiment Workshops II (June 13-17, 2005)

Five-Day Model Experiment Workshop II was conducted, having a team of resource persons from a former pilot school in Jaffna. The objective of the workshop is to promote model experiment activities and share the experience and resource of the 25 former pilot schools. Seven teachers of Vembadi Girls' High School conducted the sessions on Environment Related Activities (ERA), Primary Mathematics, Junior Secondary Science, and Junior Secondary Mathematics.

The following topics were introduced at respective sessions.

ERA

Activity (1)	Air fills a space
Activity (2)	Observing the magnetic fields
Activity (3)	Effect of heat
Activity (4)	Let us spin a wheel by water

Primary Mathematics

Activity (1)	Number bonds using dominoes
Activity (2)	Let us do money transfers
Activity (3)	Getting to know 3-dimension
Activity (4)	Adding and subtracting rapidly

Junior Secondary Science

Activity (1)	Making electric circuits
Activity (2)	Can heat move a balloon?
Activity (3)	Digesting system of our body
Activity (4)	Bulb light without batteries

Junior Secondary Mathematics

Activity (1)	Drawing polygon shapes
Activity (2)	Making a dice
Activity (3)	Finding out the area of different shapes

On the fifth day of the program, principals of the pilot schools and host schools were invited for a review session, to discuss with the resource persons how they could better implement QE circle activities, with a focus on school culture and interactive teaching and learning. Active discussions took place among the participants and the experience of Vembadi school was well shared. In particular, many pilot schools principals felt the importance of team work among teachers, as demonstrated by the Vembadi teachers. "I understood that principal and teachers should work as a family," stated a participating principal.

(6) Workshop on Healthy School Culture (July 2-3 & 16-17, 2005)

Need for psychosocial counseling for tsunami-affected students had been identified, but most teachers lacked such skills. The JICA Study Team, through monitoring activities as well as its experience of previous pilot project, recognized that in order to relieve the trauma and stress of students, the school

culture should be open and student-friendly and that all teachers, regardless of their individual qualifications or specialization, should have at least the basic knowledge of how to identify the students in need of assistance. In this viewpoint, the Workshop on Healthy School Culture was conducted for the teachers of pilot schools and host schools. The objectives of the workshop were (i) to identify determinant factors to improve school culture, and (ii) to strengthen helping responses to assist psychological recovery of students traumatized by the disaster.

One of the tools introduced at this workshop is the **mutual assessment system**, in which there are three types of assessment: (i) Principal assessment by teachers, (ii) Teacher assessment by other teachers, and (iii) Teacher assessment by students. It was meant for the principals and teachers to identify their strengths and weaknesses, through which communication among them would be enhanced. Also, **open class system** was introduced and role-played by the participants.⁴ For the psychosocial development of tsunami-affected students, an intervention model was used to explain the decision making process for the children in need of assistance.

This workshop was new to many of the participants in its topics and approach as well as its methods (group discussions, presentations, role plays, etc.). Following the workshop, all of the participating schools introduced mutual assessment system in their schools by developing their own set of questionnaires. The first session was followed up in the second session held after two weeks, where participants brought the questionnaire sheets drafted by their schools and shared the progresses.

(7) Final Workshop (September 17-18, 2005)

To anchor the pilot project, the Final Workshop was held for two days, having over 100 participants from the pilot schools, host schools, ZEO and MOE. 40 QE circles of the 16 pilot schools as well as three QE circles of the zonal education office made presentations on their Educational Kaizen activities performed during the course of the project⁵. Four judges, from the neighboring zonal education offices (Akkaraipattu and Sammanthurai) and one of the former 25 pilot schools, were invited to be on the panel to evaluate the presentations based on a given set of criteria.

In the awards ceremony that followed the presentation sessions, Best QE Circles were awarded, based on both monitoring evaluation (by the monitoring team) and presentation evaluation (by the judges). Best performing principals as well as other groups and individuals who contributed most to the activities were also

⁴ Open class system is used to improve classroom teaching by having another teacher (colleague) to observe a class and giving comments on the teaching and learning process.

⁵ One of the pilot schools, Malharusshams Maha Vidyalaya, did not attend the workshop on both days. It seems that they had lost interest and enthusiasm after they finished all project funds.

commended with awards. Finally, the Best Pilot Schools were awarded to those that demonstrated highest overall achievement through the pilot project. The awards ceremony was attended by the representatives from MOE as well. Table 2.5.3 is the list of schools that received the Best Pilot School awards.

Table 2.5.3 Award Winners for Best Pilot School

1	Best Pilot School – Winner	Shams Central College
2	Best Pilot School – 1 st Runner Up	Pulavarmani Sharifudeen Vidyalaya
3	Best Pilot School – 2 nd Runner Up	Sri Mamanga Vidyalaya

Source: JICA Study Team

2.5.3 Inspection Programs

Pilot schools were requested to submit Intermediate Report I (April 2005), Intermediate Report II (May 2005) and Final Report (September 2005) to the JICA Study Team, summarizing the activities and financial record. JICA Study Team inspected these reports and receipts for all expenditure. At the Final Inspection Program in September 6-8, 2005, accounts of the pilot project were settled between the pilot schools and the Zonal Education Office / JICA Study Team.

2.6 Results of the Pilot Project

Most of the pilot schools successfully implemented the pilot project based on the activity plans that they themselves developed. It shows that the school-based Educational Kaizen activities can be applied to the Tsunami-affected schools in the post-disaster phases to develop the school management, quality of education and infrastructure/facility. When the school staff and students are given the opportunity to play a major role in their day-to-day activities, be it work or study, the level of enthusiasm and commitment is raised, as is the level of achievement. Outputs of QE circle activities are listed in Appendix 2.

Monitoring evaluation of Educational Kaizen activities at the pilot schools are summarized in Appendix 3. Ten schools are rated at “A” or “B+” grades after the six-month activities of the pilot project.

The 17 pilot schools can be grouped into the following four according to the status on the relocation of school administration after tsunami.

Group 1. Own Permanent Place

School is operated on its original place, using sheds and the remaining partly damaged buildings.

Group 2. Independent Temporary Place

School is relocated to a temporary site (other than school premises), and is operated in temporary sheds and/or buildings.

Group 3. Recently Relocated from Host School to Own Place

School was operated at a host school for more than six months, but due to the administrative difficulties faced in its course, recently shifted to its own place.

Group 4. Displaced to Host School

School is displaced to a host school and operates evening session.

It was observed in general that those schools that had obtained their own place to run the school showed earlier and higher achievement in Educational Kaizen activities than those that had to be accommodated in a host school for an extended period of time conducting classes in the evening (afternoon) session. Securing of private land is very difficult even if it was only for a temporary use. Nevertheless, committed principals and teachers were able to obtain their own place for the school with the support from well-wishers and the community.

The developments seen in the pilot schools at the end of the project are summarized in Table 2.6.1 as a brief comparison to the baseline situation.

Table 2.6.1 Developments in Pilot Schools

Group	ID	School	<i>at the beginning of the pilot project</i>	<i>at the end of the pilot project</i>
1	P/KM/2/C/4	Pulavarmani Sarifdeen Vidyalaya	School was operated on its original place, using the remaining buildings. Students basic hygiene and nutrition needs were not adequately met. Overall teacher awareness was observed, but only a small group of teachers was actively involved in the activities.	Nutrition program was conducted with full support of parents and brought attendance increase. Library was developed and 5S techniques are applied. Leadership of newly-appointed principal improved and teacher culture has been changing with the implementation of mutual assessment.
1	P/KT/3/P/16	Saraswathy Vidyalaya	Being partly damaged, school is operated on its original location. School culture is fairly transparent, with discussions taking place among principal and teachers. Poverty of students' families, and the resulting mischief in students' health and learning environment, was considered a problem.	Principal's leadership and teachers' cooperation is observed at a high standard. Parents cooperation in nutrition program was also good. Attention is paid to the development of educational activities (100-box calculation, model experiment, extra classes, etc.).
1	N/ST/0/P/17	Zahira College	This partly damaged school is also a host school. Problems were seen in leadership, transparency, communication and cooperation. Principal's interest is directed to purchasing equipments and modernizing facilities, rather than educational improvement.	Principal's dominance in handling all activities hindered participation of other staff members. Low level of transparency caused hostility and suspicion towards the project. A few teachers are trying to bring in a change in the school culture through mutual assessment.
2	P/KM/3/C/3	Islamabaath Muslim Vidyalaya	School was relocated to an empty land belonging to mosque. With no basic facilities, the environment was too pathetic and unfavorable to conduct classes. Students hygienic condition was also poor. Teachers' enthusiasm and parents' interest were among the lowest level.	Classes are conducted in a shed built by NGO. Nutrition program helped to improve students' health and attendance. 5S is implemented in classrooms and office. Principal's effort is commendable, though teacher culture is yet to be improved.
2	P/KM/0/C/5	Shams Central College	School was operated at incomplete buildings belonging to a mosque. Environment was not suitable for education, but teachers were heartily committed to continue teaching. Distribution of relief items had disrupted school operation at the beginning, but staff cooperation resolved such problems.	Commitment of teachers brought the cooperation of parents and the community. Private houses were offered to be used as library, laboratory and classrooms. Students' participation was also active. A notable result of their effort is that after Tsunami no student left the school to enter other schools.
2	P/KT/2/C/6	Sri Mamanga Vidyalaya	Classes were conducted in tents or under trees. No facilities were available for school administration and educational activities. But principal's facilitative leadership and teachers' commitment was remarkable. Concept of Educational Kaizen was understood well by the staff.	Parent participation in nutrition program was observed at a high level. 5S is widely implemented by all and making the school environment pleasant. In the temporary sheds (provided by other NGO), a science laboratory and library have been developed.
2	P/KT/3/C/7	Mahavishnu Vidyalaya	School resumed at the principal's residence and was later shifted to a temporary shed built by an NGO. Teachers' cooperation was fairly high. Security was a problem as the school was surrounded by refugee camps. Parents' support was difficult to obtain as most were in camps and could not afford to give support.	Steel net was installed around the shed for the security of furniture and equipments. They were quick to start the activities introduced by the project, such as 5S, 100-box calculation, model experiment and mutual assessment. However, bottom-up decision making process is still weak.
2	P/KR/2/C/8	Al-Hussain Vidyalaya	The school was operated at a host school in evening session. Students' physical and mental health problems were a concern to teachers, as well as the lack of facilities available to them at the host school. Implementation of activities was put on hold by the principal until the school is shifted to its own place.	Shifted to a temporary shed built by NGO and started morning session in June. Principal's office is arranged well based on 5S method. However, only the principal is working hard. Teachers' involvement and parent participation is yet to be satisfactory.
2	P/ST/1/C/14	Malharus Shams Maha Vidyalaya	School was temporarily operated at two host schools. But following a parents protest in late March, shifted to the Public Ground. Environment was far from conducive to study, as the ground was entirely covered with Tsunami debris and rubbish. There were a number of unmet basic needs to run the school there.	Two sheds were constructed by the project. Secondary classes are conducted in the morning, and primary in the evening. Files are kept properly in the office. Library and laboratory were developed, with books and equipments. However, the principal and teachers lost the momentum when the money was finished.

Group	ID	School	<i>at the beginning of the pilot project</i>	<i>at the end of the pilot project</i>
3	P/KM/1/C/1	Al-Bahriya Mahal Vidyalaya	The school was operated at two host schools, which caused them many administrative difficulties. Interest of host school principals seemed high at the beginning, but it did not last long as they saw little benefit in having affected school with them. Participation of teachers and parents was not satisfactory.	Library was opened at a house offered by the community. But relationship with host schools was poor. The school shifted to its original place in August. Gr.6-13 classes are conducted there in the morning, while primary are still at the host school. Activities tended to be purchase-oriented.
3	P/ST/2/C/13	Al-Jalal Vidyalaya	Temporarily relocated to a host school, but did not win the support from them. Necessary facilities were not made available for displaced school, which disrupted the school operation. Teacher culture was passive and dull, and little attention was paid for educational development.	Shifted back to the original location in July to run the school in remaining buildings and sheds. Parents' support was obtained in repairing the facilities. Teachers started to cooperate to re-activate their school. Library and laboratory were developed.
3	P/ST/3/C/15	Riyatul Jenna Vidyalaya	Two displaced schools in one host school, conducting evening session. Relationship with host school was not positive. Students' hygienic status was inadequate. Teachers' enthusiasm was low due to so many difficulties faced.	Staff finally agreed to shift to a vacant building near the destroyed school in July, and developed it with high interest and ownership. Classes are conducted with new teaching aids developed by the teachers. Student attendance and enrolment increased.
4	P/KM/2/C/2	Al-Mishbah Vidyalaya	Operated at a host school in evening session. Had to face lack of facilities as they had a large student population. Communication among staff was weak and there was no team work. School administration and educational activities were disorganized.	Sharing of experience and awarding at the Intermediate Workshop gave confidence to teachers and motivated them to carry out activities with enthusiasm. Team spirit developed among staff, led by some committed teachers. More attention is paid on enhancing educational activities.
4	P/KR/3/C/9	Vigneswara Vidyalaya	The school was operated at a host school in evening session. Students' physical and mental health problems were a concern to teachers, as many come to school in hunger and fall asleep in class. Principal's leadership is weak.	Plans were made to shift to a temporary shed but it has not been materialized, partly due to lack of principals' leadership in making decisions and taking action. Play land was developed in the host school premises. Some of the teachers are enthusiastically implementing model experiment activities.
4	P/KR/0/C/10	Vipulananda Central College	The school operation resumed at a host school. Gr.10-13 in the morning and Gr.6-9 in the evening. It was difficult to arrange teachers' shift because classes were divided in two sessions. Lack of teaching time was also a problem. The school becomes noisy as the two schools use different time schedules.	Two sheds were constructed by the project, added by another few by Unicef and NGOs. Now all classes are conducted in the morning. Time schedule was adjusted to avoid disturbance to the host school. Development of library and laboratory united the school community and motivated teachers and students.
4	P/NT/3/C/11	Al-Athaan Vidyalaya	Operated at a host school as an integrated school (practically under one administration). Absence of principal caused confusion and disruption. Awareness of Educational Kaizen was low among teachers of both schools, and the activities were delayed.	After teachers visited other pilot schools that are conducting activities successfully, they got an idea and were determined to take any challenge to improve their school. Host school principal took the leadership. Model experiments and 100-box calculation increased students' interest in learning.
4	P/KM/1/C/1	Al-Baduriya Vidyalaya	The school was accommodated in a host school in the evening session. Though the host school was cooperative, the principal's interest and leadership was weak. Parents' participation was also at a low level.	Parents' participation was poor even in the nutrition program. Teachers always have excuses. Lack of principals' leadership and understanding of Educational Kaizen hindered meaningful achievement in activities. The principal and teachers started to identify their weaknesses through mutual assessment.

Source: JICA Study Team

From the results of the six-month activities of the pilot project, following can be extracted.

(1) Need for an Own Place

The monitoring evaluation indicates that many of the displaced pilot schools showed improvement only after shifting from host school to their own place. In other words, an important factor for early and rapid improvement is that Tsunami-affected schools should have a separate and autonomous place to run the school at an early stage of its recommencement after the disaster. Having to operate in an evening (afternoon) session is a disadvantage to them, as it is not suitable time for children to come to school and study because of the intense daytime heat and their customary lunch time.

Having two different bodies of administration in one school is another inconvenience caused by the two-shift system. One Divisional Director of Education stated that running two schools in one place is like a compartment in a train where you cannot but bother each other. There are various administrative problems (e.g., different time schedules, security and maintenance of facilities and equipment) as well as practical problems (shortened school hours). The only exception to such a problem would be, as was the case for Al-Athaan Vidyalaya (pilot school) and Al-Matheena Vidyalaya (host school) in Nintavur, a special arrangement where teachers and students of a displaced school are integrated into those of the host school and working virtually under one administration.

(2) Need for Change in School Culture

Though a notable change in school culture was seen in most of the pilot schools, it will take much more time for Educational Kaizen activities to take root in people's attitudes and thinking. As the monitoring evaluation indicates, the schools that showed achievement at an early stage of the project maintained high rating throughout the project, whereas those that had poor performance remained in the same group of rating. Changing school culture is never an easy task, but once it is achieved, some visible and sustainable impact can be attained on the school management as well as quality of education.

An important stimulus for changing the school culture was the introduction of mutual assessment system. It helps to enhance communication among the staff, which is the first step toward changing culture of the school. Also, sharing of experiences among the pilot schools through workshops and school visits was effective in inducing the change.

Box 2-1 What it means to have an own place to run the school

A primary school located in the seashore of Sainthamaruthu, 5km south of Kalmunai, Riyalul Jenna Vidyalaya was totally destroyed by the Tsunami on December 26, 2004. Nothing but debris remained of the school, and nobody could even identify the plot of land where the school used to be before Tsunami. 25 students were killed in the waves.

In late January, an instruction was given by the Zonal Director of Education that the school would be displaced to Sainthamaruthu G.M.M.S. and resume classes in the 1-5pm evening session. In that same time slot at GMMS, another Tsunami-affected school, Malharussams Maha Vidyalaya, had its primary classes. Though there was a possibility to use a vacant building close to the school's original place, the principal and teachers of Riyalul Jenna Vidyalaya refused to shift there because of fear that another Tsunami might come and wash them away.

The situation seemed daunting. Poverty of students' families, which already was a problem before Tsunami, deteriorated severely as most were in a poor fishing community and lost all means of earning. Students' hygiene condition was to all appearances unsatisfactory. They came in hunger and unclean. Attendance was poor as students had to walk a long distance to come to the displaced school, and as their parents expected them to work instead of study. Having to operate in a host school with yet another school brought all sorts of administrative and managerial problems.

Through the pilot project, Riyalul Jenna Vidyalaya conducted nutrition program, library development, and 100-box calculation. However, monitoring evaluation of this school remained low, as teachers' enthusiasm was not seen at all. Every time excuses and negative statements came out of discussions. The fact that they did not have their own place to run the school seemed the biggest problem to them.

Having no alternatives, teachers finally decided in July 2005 to shift to the vacant hospital building near the sea to have their school. Once moved in, they immediately took actions to transform the space into a school. Some hazardous parts of the building were repaired (such as holes in the floor and staircase with no walls), walls whitewashed and doors installed. 5S is implemented in classrooms and office, and many students are seen voluntarily picking up trash to put it into a dustbin. There is a plan to develop a new library. Though there are still many problems, including lack of furniture and sanitary facilities, teachers are eager to come up with ideas to develop their school by overcoming the problems, and they are proud of doing so by themselves.

According to the principal, after the school was re-opened in the new place, there have been several new students' admissions. The community support is increasing, as an expression of appreciation to the service and commitment of principal and teachers. Students look cleaner, livelier, and better disciplined.

Principal looks back and comments, "Now I realize that our refusal to shift here at the beginning was not really because of fear of sea, but it was just an excuse for avoiding work. Now we know we can do a lot of things if we are strongly determined."

CHAPTER III PILOT PROJECT FOR THE ZONAL EDUCATION OFFICE

3.1 Outline of the Pilot Project

Zonal education office (ZEO) is responsible for administrative work of the government schools and teachers in the zone as well as quality improvement of teaching and learning in the schools. It is the education administrative office that serves as the closest point of contact for schools, except for divisional education offices (DEOs) that come under ZEO and are responsible for the distribution of textbooks and other administrative works. There are 92 zonal education offices under 8 provincial departments of education in the country. However, there are a number of problems in the way that many of these zonal offices are run, including the information management system and school monitoring system⁶. In order for the enhancement of school management and quality development of education in Sri Lanka, strengthening of the roles and capacity of ZEO is an urgent requirement.

In this viewpoint, the Pilot Project for the Development of Kalmunai Zonal Education Office was implemented from June to September 2005 as a supplement to the on-going project for the Tsunami-affected schools that had started in March 2005. As in the pilot project for schools, the concept of Educational Kaizen was applied to Kalmunai ZEO, having the staff of about 100 members. Through the pilot project, it was aimed that the efficiency and effectiveness of the day-to-day activities of ZEO would improve, so that the needs of the schools would be better attended by ZEO.

3.2 Implementation Process of the Pilot Project

3.2.1 Preparation

In preparation for the introduction of Educational Kaizen activities, all-staff meeting was called for three times by the Zonal Director of Education (ZDE). Directors, officers and clerks attended. The JICA Study Team explained the concept and objectives of the pilot project to the staff, emphasizing the importance of improving productivity. The JICA Study Team also suggested possible Kaizen topics to be taken up for the development of ZEO.

3.2.2 Formation of ZEIKA and QE circles

At the third staff meeting as mentioned above, **ZEIKA** (Zonal Educational Initiative of Educational Kaizen Activities) was formed in the presence of all

⁶ The report of a brief study on the structure, activities and capacity of the Kalmunai Zonal Education Office can be found in Appendix 4.

staff members. ZEIKA is the decision-making body for Kaizen Activities at the zonal office. Under ZDE as the Chairperson, ZEIKA consists of ZEO officers and clerks, as well as the Directors of the two neighboring zones (i.e., Akkaraipattu and Sammanthurai). ZEIKA also nominated a principal and a teacher from the pilot schools as its members, in order to better reflect the voices of those whom the ZEO is serving for.

Then the topics of the QE circles were finalized, along with the QE circle members. Each QE circle has a leader, secretary, and a treasurer. The QE circle members, in consultation with the JICA Study Team, prepared a project proposal containing activity plans and cost estimates. The three QE circles of the ZEO are as follows.

QEC	Topic	Objectives
1	Administrative and Management Improvement	<ul style="list-style-type: none"> To improve the efficiency of office administration To make the office environment clean and pleasant
2	Information Management Improvement	<ul style="list-style-type: none"> To share the information among everybody To develop transparent culture in the office
3	Promotion of model experiment and 100-box calculation through monitoring activities at schools	<ul style="list-style-type: none"> To improve teaching and learning process for practical and activity-based lessons To strengthen monitoring capabilities of zonal education officers To strengthen basic calculation skills through 100-box calculation To expand model experiment to all schools in Kalmunai Zone To enhance the knowledge of science and mathematics

3.2.3 Financial Arrangement

The financial guidelines were explained by the JICA Study Team to ZEIKA. In principle, the guidelines given to the zonal office were the same as those applied for the pilot schools. However, since ZEO, being a government administrative institution, must observe the government rules and procedures on handling financial matters⁷, the arrangement was modified on the issue of cheques. The three co-signers mentioned in the “Financial Guidelines” (i.e., Chairperson, Secretary and Treasurer of ZEIKA) would sign and submit a form in order to

⁷ According to the government procedure, there are three officers in ZEO that are authorized to sign a cheque, and two of them must sign. That is, the first signature by ZDE or Accountant, and the second signature by Financial Assistant or Accountant.

approve the government-authorized officers (ZDE, Accountant, and Financial Assistant) to draw a cheque from the project account.

3.2.4 Implementation and Monitoring

ZEIKA called meetings twice a month on average and discussed the activities and the financial status of each QE circle. Instruction and guidance was given by the JICA Study Team with regards to organizing a meeting, taking minutes of meeting, and maintaining transparency.

Activities of ZEIKA and QE circles were monitored by the JICA Stud Team through frequent discussions with the relevant members. In addition, special monitoring visits were made by a Kaizen & 5S Expert, who provided practical on-site consultation particularly on 5S and filing system.

3.3 Activities Implemented by the Zonal Education Office

(1) 5S – Big Cleaning Day

As the first step of 5S, that is SEIRI, a Big Cleaning Day was organized at ZEO with the voluntary participation of 83 staff members of the office. In order to avoid disturbing the routine office work, this activity was held on a Saturday.

In identifying the items to be discarded, tagging system was introduced. Items that can be discarded immediately are tagged with Red Tag, while items that must be inspected after a certain period of time before being discarded are tagged with Yellow Tag. Sample of these tags are shown in Figure 3.3.1 below.

RED TAG			
Category	1. School file	4. Furniture	
	2. Subject file	5. Equipment	
	3. Accounts file	6. Other	
Item Name			
Division / Branch			
Reason for Red tagging			
Date			
Name			
Signature			
Approval			

YELLOW TAG			
Category	1. School file	4. Furniture	
	2. Subject file	5. Equipment	
	3. Accounts file	6. Other	
Item Name			
Division / Branch			
Date			
Name			
Signature			
Approval			
Next Date of Inspection			

Figure 3.3.1 Red Tag and Yellow Tag

A large amount of unnecessary items, such as old documents and files, broken furniture and equipments, were removed from the office. Old files were set on fire or transferred to a separate storehouse. As a result, a lot of office space was obtained, as the spaces that earlier were full of dumped items and were unusable are now converted to a cubicle for an officer.

In addition to the physical improvement of office itself, an important result of this activity was the team work spirit among the staff. High level of cooperation was observed among the participants.

(2) Office Renovation and Re-Arrangement

Following the cleaning activities, renovation of the office was started, including repairing of broken furniture, repainting of walls and furniture, re-arrangement of partitions and cubicles, and improvement of toilet facilities. In painting the walls and furniture, different colors were used for different units of the office (i.e., central, administration, accounts, planning and school works) to make each unit easily recognizable to the staff and visitors.

Desk layout was changed so that the staff in the same unit would sit facing each other, as often seen in Japanese offices. The result of this was that space was saved and the problem of congestion was solved. This also helped to enhance communication among the staff, and supervision of them has become easier.

(3) Staff Capacity Development – Computer Training

Computer training was conducted for the ZEO administrative staff by using cascade system. Two clerical staff attended a 15-minute daily session taught by a secretary of JICA Study Team. They were then expected to teach another two staff members each in the second layer of the cascade, who were also to teach another two in the third layer.

Though the two trainees in the first layer gained a fairly good knowledge of MS Word and Excel, it was difficult to transfer the same to the second and third layer trainees, due to the time constraints. Also, all of them did not have enough opportunity to practice what they have learned, due to limited availability of computers.

(4) School Monitoring

Assistant Director of Educations (ADEs) in charge of subjects and In-Service Advisors (ISAs) normally visit schools and monitor the subject-related matters. For the promotion of school based management, however, monitoring capabilities of ISAs on managerial aspect need also be strengthened. For this purpose, the members of QE Circle 3, mainly ADEs and ISAs, participated in the monitoring and advisory activities of the JICA Study Team to learn the monitoring of managerial as well as technical issues at schools. One or two officers were assigned for each day of the week according to the monitoring schedule.

Through the joint monitoring activities, they gained understanding on the importance of improving school management, including principal's leadership, staff cooperation and commitment, and school culture. They also learned model experiments and 100-box calculation introduced to and implemented at the pilot schools.

(5) Promotion of Model Experiment and 100-Box Calculation

Seminars were conducted four times for the teachers of non-pilot schools to promote model experiments and 100-box calculations. They were organized by the ADEs and ISAs who learned these activities through the joint monitoring activities as mentioned above. It provided an excellent opportunity to expand the activities of pilot project to all 57 schools in the zone.

3.4 Supporting Activities

(1) Kaizen Seminar

With the objective to boost the Kaizen activities at the zonal office, a series of Kaizen Seminar was held by inviting a Kaizen and 5S Expert as a resource person. A total of 120 participants, from ZEO and DEO, attended the seminar where the practical ideas and experience of the expert were shared in his visual presentation.

(2) Observation Visit to Ampara General Hospital

An observation visit to the Ampara General Hospital was made by the members of ZEIKA to learn 5S by seeing its actual implementation at a government institution. The tour guided by the hospital staff focused on how the offices and administration units were maintained at the 5S renowned hospital, with proper information management system. In particular, participants showed keen interest in the filing system, in which any particular document could be located immediately from tens of thousands of files kept in the hospital's record room.

3.5 Progresses and Results of the Pilot Project

Educational Kaizen activities introduced to the Zonal Education Office are still underway to see real results and outcomes. It will take much more time for the system to be established and maintained. Stated below are the progresses and results achieved so far.

(1) 5S Activities

Cleaning activities were carried out several times by the ZEO staff. Garbage collection system is being developed so that there will be no dumping of rubbish in the court garden. 5S activities started to bring a change, not only in the physical appearance of the office, but also in the attitudes of the staff. Implementation of 5S should be continued, along with the awareness raising program.

One notable example of attitudinal changes of the staff seen is that, when their working chairs and desks were being repainted and temporarily unusable, the staff worked on the floor to sort out the documents. A director stated that should

this happened earlier, nobody would work and all would just go home saying they can not work because they do not have a desk.

The activities to improve the office environment, including re-painting and renovation, were initiated in the pilot project, and have expanded in their scale with the financial support from the Provincial Department of Education as well as other donors and NGOs. Some of the difficulties faced in carrying out the office renovation are obtaining necessary materials and laborers in time, and minimizing the disturbance and disruption to the routine office work.

(2) Filing System

New file covers were purchased to replace all the personal and school files that were old and split apart. The file code system was developed with serial numbers given to each file, indicating the unit of the office (e.g., Administration, Accounts, Planning, etc.), class of service (e.g., SLEAS 2, SLPS 1, SLTS 3-II), and a serial number. Instruction was given to insert a list of file contents (title of the document with page number and the date filed) to the first page of each file, so that one does not need to flip through all the pages to locate any particular document in a file. However, due to the delay in the office renovation work and delivery of files by the dealer (as these files were custom-made), the file covers are yet being changed at the time of writing this report.

(3) Capacity Development of ISAs

ADEs and ISAs, who are responsible for school monitoring, were assigned to join the monitoring activities conducted by the JICA Study Team for the pilot schools. They observed and took part in the discussions with the principals and teachers regarding subject matters as well as managerial issues. It provided an opportunity for on-the-job training for these officers on the proper monitoring activities that are expected of them.

Having learned the model experiment and 100-box calculation through monitoring activities at the pilot schools, ADEs and ISAs for mathematics and science conducted four seminars for non-pilot school teachers to promote interactive teaching and learning. They provided instructions and demonstrations of the selected topics of model experiment and 100-box calculation. These seminars were then followed up on the routine school visits by the ADEs and ISAs.

CHAPTER IV RESULTS OF THE ADITIONAL STUDY

4.1 Lessons Learned

Lessons learned from the pilot project for the Tsunami-affected schools and for the Zonal Education Office are summarized in Table 4.1.1 and Table 4.1.2 respectively.

Table 4.1.1 Lessons Learned from Activities of the Pilot Project at Tsunami-Affected Schools

Activity	Result	Lessons Learned
<p>I. School management and environment</p>		
<p>Overall</p>	<p>School culture started to change and school staff became enthusiastic in many pilot schools through Educational Kaizen activities.</p>	<ul style="list-style-type: none"> • The change of school culture seen in many of the pilot schools proved that <u>Educational Kaizen activities can be applied to the Tsunami-affected schools to improve management, educational activities and basic infrastructure/facility.</u> • Even in a chaotic situation in the aftermath of a disaster, <u>schools could start reviving their school operation and could change the school culture with teamwork.</u> Through a combination of Kaizen methods such as QE circle activities, 5S, suggestion system, schools could raise the motivation of teachers and cooperation of parents. • Nutrition program implemented in 11 pilot schools in the first half of the pilot project also helped students to return to schools. As a result, attendance rates and student enrolment increased. • Teamwork was strengthened through Educational Kaizen activities and it contributed to relieving teachers and students who were psychologically affected by Tsunami. • However, it will take much longer time for the pilot schools to return the school operation to their original state, since many schools are still operated on temporary places, facing a serious lack of facilities including furniture, sanitary facilities and educational equipments. • <u>The two-shift system makes the school operation difficult,</u> particularly for the Tsunami-affected schools that have to conduct afternoon session at their host schools. • It is widely observed that frequent and even excessive supply of relief aid items to Tsunami-affected people makes them dependent and demoralized, discouraging them from self-help. Unfair distribution also creates jealousy among people, which may then induce conflict in the communities.

<p>Formation of SEIKA</p>	<p>All pilot schools formed SEIKA, comprising 10 to 15 members from the school staff, parents and community.</p>	<ul style="list-style-type: none"> • The pilot schools could form SEIKA within 2-3 days from the initial project announcement, since there was a strong need felt by them to start activities urgently. • If the pilot school is accommodated in a host school, their SEIKA included members from both pilot school and host school. However, building and maintaining close cooperative relationship between the pilot school and host school was not easy, and in some cases there was a conflict between the two parties. • <u>When a proper mechanism was developed, schools were able to work collaboratively with different groups within and outside the school, which was the very first experience for most of them and was most required in such an emergency situation.</u>
<p>Formation of QE circles</p>	<p>42 QE circles were formed, comprising 5 to 10 members from school staff, parents and students.</p>	<ul style="list-style-type: none"> • QE circles could be formed within 2-3 days. However, because there was a frequent change in needs as a result of on-going relief activities of various donor agencies and NGOs, some QE circles changed their topics according to the current needs felt by them. • It is not so easy for all QE circle members to understand the benefits of Educational Kaizen and commit themselves to the activities. As a result, in some QE Circles, only a few members were engaged in the activities, while others did not participate.
<p>Implementation of 5S</p>	<p>5S was introduced and implemented at 13 pilot schools.</p>	<ul style="list-style-type: none"> • 5S was introduced to the pilot schools after they recovered regular school operation. (It is not appropriate to introduce 5S when the school operation is totally out of normalcy or in an emergency situation.) • However, there are still difficulties for the Tsunami-affected schools to start implementing 5S. First, the physical conditions of some schools are extremely unfavorable, such as under a tree or in a dump site, which discourages them to introduce 5S. Second, some schools are operated in afternoon at a host school and they are unable to or hesitate to conduct 5S activities freely by their own ideas and decisions.

		<ul style="list-style-type: none"> • Though it took time, schools gradually started understanding the benefits of 5S and introducing 5S techniques to the offices and classrooms. • Introduction of 5S contributed to changing students' behaviours and attitudes.
<p>Introduction of suggestion system</p>	<p>9 pilot schools introduced suggestion system.</p>	<ul style="list-style-type: none"> • <u>Suggestion system was an effective tool to encourage people to think about and contribute toward improvement of school.</u> However, as the suggestion system was new and unfamiliar to many, most of the suggestions submitted were mere requests and complaints, rather than constructive suggestions. • The numbers of suggestions have been increasing gradually, as there are many needs for improvement and people are motivated to have their own suggestions recognized and implemented. Even primary class students can submit their creative ideas. They will start making appropriate suggestions once the system is established and well understood.
<p>Introduction of mutual assessment system</p>	<p>16 pilot schools introduced mutual assessment system (principal evaluation by teachers, teacher evaluation by students, and teacher evaluation by peer teachers)</p>	<ul style="list-style-type: none"> • <u>The mutual assessment system helped to enhance communication among staff and gave an opportunity for teachers to improve their teaching skills.</u> • The mutual assessment system also helped to make the school culture open and student-friendly. • Some teachers thought mutual assessment is not appropriate as it may hurt the person being assessed. In such cases, modifications were made to make the questions easily acceptable to them. But gradually, those teachers too realized the benefits and necessity of mutual assessment system in their schools. • <u>Questionnaire sheets were developed by the schools themselves, according to the needs and indicators identified by them.</u> • Students were also involved in preparing questionnaires, to incorporate their views and ideas on how to improve teaching and learning process. • Results of assessment were analyzed and summarized to find ways for improvement.

II. Educational activities		
Overall	School operation has been gradually returning to the normal state in the pilot schools.	<ul style="list-style-type: none"> • Host schools as well as the pilot schools accommodated in a host school have to operate in the morning and afternoon hours respectively. This allows them only for 4 hours to conduct classes, while they would normally have 6.5 hours a day. It causes the most serious constraints for these schools to cover the syllabus given by MOE. • <u>Cooperation among teachers in the pilot schools started.</u> For instance, as supply of Tamil-medium textbook for social science in Grade 7 is delayed, some teachers started preparing their original teaching materials by getting together with other school teachers.
Promotion of model experiments	Most pilot schools implemented model experiments in order to promote practical and interactive teaching and learning process and to apply science and mathematics to daily life.	<ul style="list-style-type: none"> • Teachers showed very keen interest in model experiments introduced at the Model Experiment Workshop. Model experiments were developed through the pilot project under the Master Plan Study for the Development of Science and Mathematics. • Although it is not easy to implement model experiments at schools with severely limited facilities, <u>most schools introduced model experiments within their capacities using available resources.</u> • Implementation of model experiments promotes interactive teaching and learning, practical activities, teamwork as well as self-learning, which helps Tsunami-affected students to recover from their psychological damage.
Introduction of 100-box calculation	All pilot schools introduced 100-box calculation to strengthen the skills of four basic operations of arithmetic.	<ul style="list-style-type: none"> • Most of pilot schools showed keen interest and implemented 100-box calculation. • Students liked the exercise and showed progresses in their calculation skills. • Through concentrating on 100-box calculation and breaking their calculation record times, <u>students have been gradually becoming confident to continue to study even in a difficult situation.</u> • 100-box calculation was introduced also to non-pilot schools by ISAs through seminars and school visits.

III. Basic infrastructure and facilities		
Overall	Most of the pilot schools improved basic infrastructure and educational facilities with the support from parents.	<ul style="list-style-type: none"> • One of the <u>strongest requirements felt by the schools is to operate classes at their own premises, not at host schools, since the afternoon session is not convenient for them.</u> Therefore, some schools identified private land and mosque and moved there to start school operation, even though most of these places are not suitable for schools in terms of the size, conditions of building and surrounding environment. • Because various donors and NGOs are providing assistance to Tsunami-affected people in the area, development needs of schools are changing day by day. <u>Under such a fluctuating situation, school based management is most needed, as schools themselves would be able to adjust their activities based on their current needs in a timely manner.</u> • When pilot schools were allowed to prepare their development plan based on their needs and priority, they could improve basic infrastructure and educational facilities with a strong sense of ownership. As a result of this ownership, many pilot schools have won the fullest cooperation of parents. • However, <u>lack of coordination between the donors and government, and lack of information at the school level, caused inefficient use of resources.</u> For example, semi-permanent buildings had to be demolished because there would be permanent building to be constructed on the same site.
Improvement of basic infrastructure	Many pilot schools improved basic infrastructure such as sheds, library and laboratory facilities, and garbage management in cooperation with parents, and students	<ul style="list-style-type: none"> • Some of the pilot schools shifted from host schools to their original place and resumed school operation with the remaining buildings. They faced severe shortage of basic facilities such as water, toilets, electricity, furniture, and all basic educational equipments. • With the support from parents, the pilot schools constructed temporary sheds, science laboratories and libraries and rehabilitated school offices. • Even in a temporary location, some of the Type IAB schools could take a new batch of students to A/L science stream this year, because they had a new science laboratory developed by the pilot project. • Many principals and teachers used to carry all important documents everyday with them when going

		<p>to/from school, because they did not have any office space to keep them safe. After having office space in a temporary building, all files can be kept in the office safely and such inconvenience was solved.</p> <ul style="list-style-type: none"> • Community offered some pilot schools lands and rooms (part of private house) to be used as their libraries. Libraries were constructed by the pilot project. <u>Cooperative activities between schools and community were observed under this emergency situation.</u>
<p>Rehabilitation of educational facilities</p>	<p>Many pilot schools rehabilitated educational facilities based on their needs.</p>	<ul style="list-style-type: none"> • <u>Rehabilitated educational facilities such as laboratory and library motivated students to study science and mathematics with increased interests.</u> • Some donor agencies and NGOs had made commitment to provide desks and chairs to schools, but the actual distributions were not materialized as promised. This caused confusion in schools, and many students had to study on the floor.

Table 4.1.2 Lessons Learned from Activities of the Pilot Project at the Zonal Education Office

Activity	Result	Lessons Learned
I. Management and administration		
Formation of ZEIKA	ZEIKA was formed as an implementing committee for Kaizen activities at the zonal level, comprising of 18 members from the office, schools, and the neighboring zones	<ul style="list-style-type: none"> • Under the Zonal Director of Education as the Chairperson, <u>all units of the office were represented in ZEIKA</u>. Directors of neighboring zones were also included as members. • <u>Representatives of schools in the zone were also included in ZEIKA</u>, in order for the zonal office to better meet the needs of schools. • <u>Appointment of members should be made based on the individuals' interest and enthusiasm, rather than their positions.</u> • ZEIKA meeting should be held twice a month, but more frequent meeting is required to get the activities on track at the start. • Instructions were given at the beginning on how to hold a meeting and how/who to maintain the minutes of meeting. A meeting should not last longer than one hour. • Financial report of QE circles needs an approval of ZEIKA by the signatures of majority of ZEIKA members.
Formation of QE circles	3 QE circles were formed under ZEIKA, comprising around 5 members from the staff of ZEO.	<ul style="list-style-type: none"> • The topics of QE circles were selected at ZEIKA meeting, based on the needs and priority. • QE circles are represented in ZEIKA by their leaders. QE circle meetings (formal or informal) should be held regularly. • Those with interest and sense of responsibility should be appointed as leaders, regardless of their official positions held.
Introduction of 5S	5S is introduced to a zonal education office for the first time in the country, with participation of	<ul style="list-style-type: none"> • As part of 5S (SEIRI) activities, a Big Cleaning Day was organized by QE circles of the zonal office, and 83 persons participated in it. Having heard about such a unique initiative of ZEO, a retired principal in the area volunteered to provide lunch and refreshments for all participants.

	officers and staff members	<ul style="list-style-type: none"> • A large amount of outdated documents (some were 30-40 years old), most of which were not necessary, were identified and discarded after inspection by ZDE. Likewise, other unnecessary items such as broken furniture and equipment were removed from the office. • <u>As a result of SEIRI activity, significant amount of space was saved and many rooms were transferred from a dumping storeroom to a working space.</u> • <u>A high level of team work was observed when the staff of ZEO was engaged in cleaning activities in a cooperative manner.</u> • New arrangement of desks was introduced, so that the members of staff would sit face to face to each other, which contributed to enhancing communication among them as well as to saving space in the office free of congestion.
Improvement of office environment	Work on the improvement of office environment has started	<ul style="list-style-type: none"> • With the view to improve the efficiency of office administration by modernizing the office environment and facility, renovation work has been undertaken, such as repairing wiring and toilets, painting walls, arranging partitions and cubicles. • As the physical change of the office was visible to the staff and visitors, it aroused their interest in the project. • However, due to the lack of proper planning, routine work of the office is disrupted as the renovation work has been taking weeks.
Development of filing system	Proper filing system was introduced to all units of the ZEO.	<ul style="list-style-type: none"> • New filing system was introduced, in which each file has its own code number indicating the unit of office (administration, accounts, planning, etc.) and class of service (SLPS I, SLTS II, etc.) and a serial number. • File cupboards were re-arranged in each unit of the office so that files are easily accessible within the limited amount of space. • All personal file covers are being replaced by new ones with color labels on the spine and list of contents on the first page.

		<ul style="list-style-type: none"> Assistance was obtained from school teachers in replacing thousands of file covers and rearranging them.
II. School monitoring		
Capacity development of ISAs	ISAs (science, maths, Tamil and English) participated in the monitoring visits of JICA Study Team to the pilot schools and observed the activities.	<ul style="list-style-type: none"> The most important role of ISAs is school monitoring, but its effectiveness needs to be improved. Also the communication among ISAs is very poor, partly due to the fact that there is no place in the office for these field officers. ISAs learned the concept and activities of Educational Kaizen by participating in the monitoring visits to the schools. It provided an on-the-job training to them and motivated them to promote the activities to other schools. <u>ISAs were motivated in organizing seminars and introducing new teaching methods and activities to teachers, as they receive positive response from the participants.</u>
Promotion of interactive teaching and learning	100-box calculation and model experiment activities were introduced to all schools in the zone including 40 non-pilot schools.	<ul style="list-style-type: none"> As one of the QE circle activities, ISAs organized seminars on 100-box calculation and model experiments for the teachers of non-pilot schools. The instruction manuals developed by JICA Study Team were used in the seminars. Teachers showed interest in 100-box calculation and model experiments. After they learned them at the seminars, they implemented the activities in their classes. ISAs monitored the implementation of these activities at schools when they visited schools in their routine service.

4.2 Questionnaire Survey on Pilot Project

In order to assess the impact of the pilot project, a questionnaire survey was conducted in mid September 2005 at the final stage of the project. Two separate questionnaires were developed: one for the principal, teachers and students of the pilot schools and the other for the staff of the zonal education office. The English version of the questionnaires is attached in Appendix 5⁸.

4.2.1 Questionnaire Survey for Pilot Schools

The questionnaire survey was conducted in all the 17 pilot schools. Principals and teachers, who were present and available on an agreed survey date and time, participated in the survey. As for students, only Grade 9 students⁹ were asked to take part in the survey. Altogether 19 principals¹⁰, 290 teachers and 219 students responded the questionnaire survey. The summary result of the survey is shown in Table 4.2.1 below. The result disaggregated by school is attached in Appendix 6.

Table 4.2.1 Results of the Questionnaire Survey for the Pilot Project for Tsunami-affected Schools

	Questions	Respon- dents	Not at all	Little	Hard to tell	Fairly	Very Much
(1)	Compared to Before Pilot Project, the enthusiasm or commitment of principal is improved:	Principal	0.0%	0.0%	0.0%	15.8%	84.2%
		Teachers	0.7%	7.9%	1.7%	32.8%	56.9%
		Students	2.3%	5.9%	2.7%	11.9%	77.2%
		Total	1.3%	6.8%	2.1%	23.5%	66.3%
(2)	Compared to Before Pilot Project, the enthusiasm or commitment of teachers is improved:	Principal	0.0%	0.0%	5.3%	57.9%	36.8%
		Teachers	0.3%	5.9%	2.8%	42.1%	49.0%
		Students	0.0%	4.1%	0.9%	24.2%	70.8%
		Total	0.2%	4.9%	2.1%	35.2%	57.6%
(3)	Compared to Before Pilot Project, students' enthusiasm and liking to attend school is improved:	Principal	0.0%	0.0%	0.0%	36.8%	63.2%
		Teachers	0.7%	5.5%	5.9%	40.0%	47.9%
		Students	2.3%	3.7%	3.2%	9.6%	81.3%
		Total	1.3%	4.5%	4.5%	27.3%	62.3%
(4)	Compared to Before Pilot Project, relationship between the school and parents is improved:	Principal	5.3%	5.3%	10.5%	52.6%	26.3%
		Teachers	8.3%	13.8%	14.1%	45.5%	18.3%
		Students	3.7%	15.1%	9.6%	32.4%	39.3%
		Total	6.3%	14.0%	12.1%	40.3%	27.3%
(5)	Compared to Before Pilot Project, relationship between the school and the community is improved:	Principal	0.0%	10.5%	0.0%	68.4%	21.1%
		Teachers	6.9%	16.9%	13.1%	47.9%	15.2%
		Students	4.6%	10.0%	13.2%	32.9%	39.3%
		Total	5.7%	13.8%	12.7%	42.4%	25.4%
(6)	The Pilot Project has contributed to rehabilitating or improving school facilities of your school.	Principal	0.0%	0.0%	0.0%	21.1%	78.9%
		Teachers	1.7%	7.2%	3.4%	33.1%	54.5%
		Students	0.0%	5.5%	4.1%	14.6%	75.8%
		Total	0.9%	6.3%	3.6%	25.0%	64.2%

⁸ The questionnaire was first prepared in English and translated into Tamil language. The Tamil version was used for the survey.

⁹ If there are multiple Grade 9 classes, only one class was selected for the survey.

¹⁰ Deputy and Vice Principals are also classified as Principals.

	Questions	Respon- dents	Not at all	Little	Hard to tell	Fairly	Very Much
(7)	The Pilot Project has contributed to rebuilding or improving morale among students, teachers and parents of your school.	Principal	0.0%	0.0%	5.3%	26.3%	68.4%
		Teachers	2.8%	7.9%	3.8%	37.9%	47.6%
		Students	0.0%	0.9%	2.3%	21.9%	74.9%
		Total	1.5%	4.7%	3.2%	30.9%	59.7%
(8)	The Pilot Project has contributed to improving the quality of education at your school.	Principal	0.0%	0.0%	0.0%	15.8%	84.2%
		Teachers	1.4%	4.5%	2.1%	31.4%	60.7%
		Students	0.5%	1.8%	1.8%	14.2%	81.7%
		Total	0.9%	3.2%	1.9%	23.7%	70.3%
(9)	In your opinion, what was the most helpful/effective resource item from the pilot project?						
	Principal		Teachers		Students		
	1. Regular Monitoring Visit	57.9%	1. Library	42.9%	1. Regular Monitoring Visit	43.4%	
	2. Library	42.1%	2. Regular Monitoring Visit	34.6%	2. Library	34.2%	
	3. Sci. Laboratory	31.6%	3. Sci. Laboratory	28.0%	3. Sci. Laboratory	27.4%	
	4. Classroom/office Furniture	26.3%	4. Temporary Shed	23.5%	3. Nutrition Program	27.4%	
(10)	In your opinion, what was the most effective tool introduced by the pilot project?						
	Principal		Teachers		Students		
	1. 100-box Calculation	68.4%	1. 100-box Calculation	65.7%	1. 100-box Calculation	75.3%	
	2. SEIKA/QEC System	52.6%	2. 5S	44.3%	2. 5S	41.6%	
	3. 5S	42.1%	3. SEIKA/QEC System	27.7%	3. Suggestion System	35.2%	
	4. Mutual Evaluation	21.2%	4. Suggestion System	24.6%	4. SEIKA/QEC System	20.1%	
	5. Suggestion System	10.5%	5. Mutual Evaluation	18.3%	5. Mutual Evaluation	16.4%	

 More than 80%  Between 50% and 80%

Source: JICA Study Team

The following are the summary findings of the survey.

(1) Improved School Culture

- Altogether around 90% of the respondents found that enthusiasm or commitment of principals, teachers and students has all improved during the pilot project.
- In all but 2 pilot schools more than 80% of the respondents of each category (i.e., principal, teachers and students) found positive improvement in principal.
- In all but 3 pilot schools more than 80% of the respondents of each category found positive improvement in teachers.

- In all but 4 pilot schools more than 80% of the respondents of each category found positive improvement in students.
- Altogether around 67% of the respondents found that relationship between the school and parents as well as that between the school and the community has improved during the pilot project.

Box 4-1

Change in School Culture brought through Educational Kaizen Activities

Introduction of Educational Kaizen to the pilot schools made the school culture open and transparent, where everybody is involved in the development of their school with sense of shared responsibility and ownership. Below are some of the statements made by principals and teachers.

“By this project, we are trained to share all work in a team.” (Teacher, Vipulananda Central College)

“Other NGOs would give things to the affected people, but JICA is different in that it allocates the budget and we can decide what we should do. It’s a new system.” (Principal, Riyalul Jenna Vidyalaya)

“We learned for the first time how to conduct a project successfully, from planning, implementing and monitoring.” (Teacher, Vipulananda Central College)

“Earlier, the school was like a bank, where teachers come only to collect their salaries. But now it has become a *school* where we work and learn.” (Principal, Islamabaath Muslim Vidyalaya)

“Now I can see a good team spirit among our staff.” (Principal, Vipulananda C.C.)

“After Educational Kaizen activities were introduced, female teachers are also getting responsibilities in the school work.” (Teacher, Vipulananda Central College)

“The suggestions from students and others are being entertained. Some remarkable changes have taken place, because everyone is loyal to the school now.” (Principal, Pulavarmani Sharifudeen Vidyalaya)

“...5S system is also successfully implemented at school. For example, if anyone finds a piece of discarded paper in the school environment, he/she will pick it up and put it in the dust bin. This kind of attitude has now been well rooted in the minds of children as well as teachers.” (Principal, Al-Hussain Vidyalaya)

“5S system introduced by JICA has laid a strong foundation for the future development of our school.” (Principal, Vigneswara Vidyalaya)

“Students are implementing 5S system not only at school, but also at their homes.” (Principal, Al-Jalal Vidyalaya)

(2) Improved School Facilities

- Altogether 89.2% of the respondents found that the pilot project has

contributed to rehabilitation and improvement of school facilities.

- In all but 4 pilot schools more than 80% of the respondents of each category found that the pilot school has contributed to improvement of school facilities.

(3) Improved Quality of Education

- Altogether 94% of the respondents found that the pilot project has contributed to improving the quality of education. It was expressed most strongly by principals (100%) and students (95.9%).
- In all but 2 pilot schools more than 80% of the respondents of each category found that the pilot school has contributed to improvement of quality of education.

Box 4-2

Educational Development achieved through Educational Kaizen Activities

Quality improvement of education generally receives low attention in the situation of post-disaster emergency. However, Educational Kaizen activities introduced in the pilot project were effective in improving the standard of education. The pilot project was unique in its emphasis on promoting educational activities and bringing benefits to students.

“Tsunami gave us a bad experience, but we had some good experience, like the JICA Project. It gave us the opportunity to develop the education standard in our area.” (Zonal Director of Education, Kalmunai)

“Many NGOs and donors came and provided aid, which helped us to get relief and make shelters to live, but JICA is the only one that guided us to get good education.” (Principal, Riyalul Jenna Vidyalaya)

“Everyone thought at the beginning that JICA would give the money and leave us, as other NGOs do. But JICA expected that every rupee should be used for the development of educational activities.” (Principal, Al-Baduriya Vidyalaya)

“Tsunami-affected students got the courage to develop their physical and mental health through Educational Kaizen activities.” (Principal, Al-Hussain Vidyalaya)

“100-box calculation exercise is like a meditation. If we do it first in the morning, it helps us to wake up the brain and start the work with fresh mind.” (Teacher, Al-Jalal Vidyalaya)

“100-box calculation is a good activity. Students learn it with much interest. They like this method of learning. Their parents to are interested in getting the worksheets and give them to their children at home for additional practice.” (Principal, Al-Hussain Vidyalaya)

(4) Improved Morale

- Altogether 90.6% of the respondents found that the pilot project has contributed to rebuilding and improving morale among students, teachers and parents of the school. It was most strongly expressed by students (97%).
- In all but 3 pilot schools more than 80% of the respondents of each category found that the pilot school has contributed to rebuilding of morale.

(5) Important Resources and Tools for Educational Kaizen Activity

- Among the resources which the pilot project provided, Regular Monitoring Visit, Library and Science Laboratory were the three resources identified as most effective by all categories of respondents.
- Among the tools introduced by the pilot project, 100-box Calculation was found most effective by all categories of the respondents.
- Introduction of 5S, SEIKA/QEC System, Suggestion System, and Mutual Evaluation was also found effective.

4.2.2 Questionnaire Survey for Zonal Education Office

For the zonal education office, 41 staff members (4 officers, 2 ISAs, 26 clerical staff and 9 others such as typist, store keeper, driver, etc.)¹¹ responded the questionnaire. The result of the survey is summarized in Table 4.2.2 below.

Table 4.2.2 Results of the Questionnaire Survey for the Pilot Project for Zonal Education Office

	Questions	Respondents	Not at all	Little	Hard to tell	Fairly	Very Much
(1)	Compared to Before Pilot Project, the enthusiasm or commitment of ZDE/DDE/ADE is improved:	Officers	0.0%	0.0%	0.0%	25.0%	75.0%
		ISAs	0.0%	0.0%	0.0%	0.0%	100%
		Clerical	0.0%	0.0%	0.0%	28.0%	72.0%
		Others	0.0%	11.1%	0.0%	0.0%	88.9%
		Total	0.0%	2.5%	0.0%	20.0%	77.5%
(2)	Compared to Before Pilot Project, the enthusiasm or commitment of ISA is improved:	Officers	0.0%	25.0%	50.0%	25.0%	0.0%
		ISAs	0.0%	0.0%	0.0%	0.0%	100%
		Clerical	39.1%	30.4%	8.7%	21.7%	0.0%
		Others	0.0%	33.3%	11.1%	55.6%	0.0%
		Total	23.7%	28.9%	13.2%	28.9%	5.3%
(3)	Compared to Before Pilot Project, the enthusiasm or commitment of clerical staff is improved:	Officers	0.0%	0.0%	0.0%	75.0%	25.0%
		ISAs	0.0%	0.0%	0.0%	0.0%	100%
		Clerical	0.0%	3.8%	0.0%	30.8%	65.4%
		Others	0.0%	0.0%	0.0%	44.4%	55.6%
		Total	0.0%	2.4%	0.0%	36.6%	61.0%

¹¹ The survey was conducted on a Wednesday when all the staff is supposed to be present at the office including ISAs, who are normally out of office visiting schools. However, on the day of the survey an island-wide strike was held by ISAs, thus no ISAs were present on that day. Later two ISAs agreed to take part in the survey.

	Questions		Respon- dents	Not at all	Little	Hard to tell	Fairly	Very Much
(4)	Compared to Before Pilot Project, efficiency of office administration is improved:		Officers	0.0%	0.0%	25.0%	75.0%	0.0%
			ISAs	0.0%	0.0%	0.0%	100%	0.0%
			Clerical	0.0%	7.7%	3.8%	42.3%	46.2%
			Others	0.0%	0.0%	0.0%	88.9%	11.1%
			Total	0.0%	4.9%	4.9%	58.5%	31.7%
(5)	Compared to Before Pilot Project, cleanliness of the office environment is improved:		Officers	0.0%	0.0%	0.0%	25.0%	75.0%
			ISAs	0.0%	0.0%	0.0%	50.0%	50.0%
			Clerical	7.7%	23.1%	11.5%	23.1%	34.6%
			Others	0.0%	44.4%	0.0%	22.2%	33.3%
			Total	4.9%	24.4%	7.3%	24.4%	39.0%
(6)	Compared to Before Pilot Project, relationship among office staff is improved:		Officers	0.0%	0.0%	25.0%	75.0%	0.0%
			ISAs	0.0%	0.0%	0.0%	0.0%	100%
			Clerical	0.0%	0.0%	3.8%	57.7%	38.5%
			Others	0.0%	0.0%	0.0%	77.8%	22.2%
			Total	0.0%	0.0%	4.9%	61.0%	34.1%
(7)	In your opinion, what was the most helpful/effective Kaizen activity introduced through the pilot project regarding to the improvement of Zonal Education Office?							
	Officers		ISAs		Clerical Staff		Others	
	1. Cleaning Day	100%	1. Cleaning Day	50.0%	1. Office Rearrang.	62.5%	1. Cleaning Day	77.8%
	2. Office Renov.	66.7%	1. Office Rearrang.	50.0%	2. Office Renov.	54.2%	2. Office Renov.	44.4%
	3. Sugg. System	33.3%	1. Working Time	50.0%	3. Cleaning Day	50.0%	3. Office Rearrang.	33.3%
			1. School Monitor.	50.0%			3. Filing System	33.3%

 More than 80%  Between 50% and 80%

Source: JICA Study Team

Based on the above results, following are the summary findings of the survey.

(1) Improved Office Culture

- 75.5% of respondents found that the enthusiasm or commitment of education officers has improved very much during the pilot project and altogether 97.5% of the respondents answered that there was improvement.
- 61.0% of respondents found that the enthusiasm or commitment of clerical staff has improved very much during the pilot project and altogether 97.6% of the respondents answered that there was improvement.
- 95.1% of respondents found that relationship among office staff has improved during the pilot project.

(2) Improved Administrative Efficiency

- 90.2% of respondents found that efficiency of office administration has improved.

- Among Kaizen activities introduced by the pilot project, Cleaning Day, Office Rearrangement (desk and cupboard re-arrangement) and Office Renovation (painting, partitioning, etc.) were found most effective.

4.3 Conclusion

Under this Additional Study, Educational Kaizen activities were implemented in 17 Tsunami-affected schools in Kalmunai Educational Zone for about six months, and additionally they were extended to Kalmunai Zonal Education Office for the final three months.

The following are main conclusions of this study. They are based on the findings from regular monitoring throughout the pilot project as well as the results of the questionnaire survey conducted at the end of the pilot project.

Educational Kaizen Activities at Tsunami-Affected Schools

The primary conclusion to be noted is that school-based Educational Kaizen activities were effective and efficient in improving not only school facilities but also improving school culture and quality of education in most of the 17 pilot schools.

In the post-disaster/reconstruction period such as after the devastating Tsunami, the situation of each school changes considerably in a short period of time as various donors and NGOs are bringing or pledging different material support to school in a rather unsystematic, uncoordinated way. Under such condition it is important for the school to have its own prioritized needs and targets clear so that the school itself can utilize such external support in a more effective and efficient way for the benefit of the school and its students. It is also necessary for the school to adjust and readjust its target and immediate actions according to the changing situation. For such environment, Educational Kaizen approach is most beneficial as it prepares schools for taking initiative, making decisions and mobilizing available resources to meet their own needs.

Regular Monitoring

To promote Educational Kaizen activities, regular monitoring visit is found essential. Monitoring serves dual purposes: on-site advice and support; and evaluation of progress.

On-site advice and support is especially important as each school often faces its unique problems and constrains. In various occasions pilot schools mentioned uniqueness of regular monitoring conducted throughout the pilot project as it is a new experience for most schools. The result of questionnaire survey has also confirmed that respondents found monitoring one of the most useful/effective resource items from the pilot project.

Box 4-3 Importance of School Monitoring

Monitoring played a vital role in motivating the pilot schools to achieve the objectives with notable impact on school management and educational activities. Regular and frequent visits by the team gave a moral and practical support to them. It was the first time for the schools to have this kind of technical (non-financial, non-material) input. The results of monitoring evaluations were made open, which encouraged all schools including the ones that received lowest marks. Many pilot schools expressed how they were benefited from the monitoring activities of the pilot project.

“...The important factor for us to carry out all these activities in a successful way is the monitoring team. Their scheduled visits, counseling and guidance made us to get the good results.” (Deputy Principal, Pulavarmani Sharifudeen Vidyalaya)

“Teachers are motivated because they know we are being evaluated by the monitoring team as well as by ourselves.” (Principal, Al-Hussain Vidyalaya)

“We have improved a lot, because of the pressure and encouragement given by the monitoring team.” (Principal, Islamabaath Muslim Vidyalaya)

“The weekly visit of the monitoring team is like energy to our body.” (Teacher, Riyalul Jenna Vidyalaya)

“Suggestions and advice given by the monitoring team helped us in many ways. It helped us to change the minds and attitudes of the community around the school. Earlier our school had a bad name in the community, but after the JICA project that name has changed.” (Principal, Islamabaath Muslim Vidyalaya)

“In the JICA Project, the monitoring team gave us the opportunity to work with them. It was the first experience for us.” (A/L Student, Vipulananda Central College)

“JICA project is different from those of other donors, because JICA Team supervises progresses in each and every activity and expects outputs from every unit of money invested.” (Teacher, Vipulananda Central College)

Evaluation of school’s progress using clear and transparent criteria through monitoring is also found effective in motivating the school for further progress. It also promotes healthy competition among schools which encourages them to further improvement.

Capacity Development for Educational Field Officers

For the expansion of Educational Kaizen activities to a larger number of schools, it is necessary to develop monitoring capacity of field officers (ADEs and ISAs) attached to zonal education office. They are expected to perform the activities of school monitoring and evaluation. However, currently there is no proper system

to monitor the performance of these field officers. Some kind of incentive may need to be brought in for field officers to work effectively and efficiently.

Strengthening of Zonal Education Office

In order to promote Educational Kaizen activities at school-level, capacity of zonal education office needs to be developed and administrative efficiency improved.

Under the pilot project for the zonal education office, introduction of 5S and its various activities (cleaning day, renovation and rearrangement of office space, unified filing system, etc.) have encouraged different cadres of office staff to work together and communicate more. Such group work may be useful as a first step towards better office culture which fosters Kaizen activities at the zonal education office.

The capacity and efficiency of zonal education office is tested especially at the time and aftermath of a disaster such as Tsunami. Donors and NGOs which are involved in the relief work and reconstruction in the area require accurate and timely information on schools and students from the zonal education office, which is expected to become a contact point and coordination body for such work. Efficient administrative capacity including information management is necessary for such a role.

Box 4-4 Revival and Development of Shams Central College

Established in 1959, Shams Central College, a Type 1AB school in Maruthamunai, 3km north of Kalmunai, has a student population of 1,600 from Grade 1 to 13, and 70 teachers. It was located 250 meters away from the beach, with all facilities including fully equipped laboratory and library, computer room, assembly hall, etc., all of which were completely destroyed in the disaster that hit the country on December 26, 2004.

Chaotic situation continued in the aftermath of disaster. However, those concerned about the education of children took painstaking effort to resume the school at the Majidul Kabeer Mosque. The school was reopened on January 25, 2005, and 286 students came.

Yet the teachers and students had to suffer great hardship in continuing their school – hazardous incomplete building, insufficient space, overcrowding and the resulting noises and disturbances, no sanitary facilities, and no educational facilities. The environment was far from conducive to learning. Teachers, nevertheless, were committed to maintain the standard of service provided to students. Three QE circles were formed and the members made every effort to revive the school with the support from parents and community.

A vacant land, cottage and sheds were provided by parents, and were transformed by the QE circles into a school library and science laboratory. Unavailability of masons and carpenters was overcome by a group of past and current students with such skills who stepped in to help in construction works. The mosque allowed its security watcher to look after the safety of the school as well. Various problems were solved also by the suggestions from all. For example, as they found the congested rooms extremely hot, roof was covered by cadjans. As it was difficult to gather parents for a meeting, they were grouped according to occupation and suitable times were fixed separately for their meetings. To ease the time constraints in conducting 100-box calculation, the time schedule was adjusted so that at least 10 minutes could be spent for the daily exercise in the morning, and some students were trained to help teachers in marking the answer sheets and analyzing the progresses in a graph.

The Educational Kaizen activities implemented at Shams Central College brought remarkable outputs and results. A new laboratory was made in this Tsunami-displaced school, and as a result, the school could take the new batch of students in A/L science stream in 2005. Shams kept all students without leaving to enter other schools. The number of experiments conducted at the laboratory has been increasing, and many students have been awarded at the Young Scientist Program. The library also motivated students not only for reading but also for various research projects.

Shams Central College received the awards for Best Pilot School as well as Best QE Circles at the Final Workshop of the Pilot Project.

CHAPTER V ACTION PLAN FOR SUSTAINABLE EXPANSION

Through the Pilot Project for the Tsunami-affected Schools in Kalmunai Educational Zone, commendable improvements have been achieved in school culture, quality of education, and school infrastructure/facilities in many of the 17 pilot schools. The momentum gained for Educational Kaizen in Kalmunai should be further accelerated and expanded. The Pilot Project for the Zonal Education Office has also set a motion for change at Kalmunai Zonal Office though many activities are yet to be implemented and its achievement evaluated.

Based on the lessons learned from the pilot project in Kalmunai, the JICA Study Team prepared an action plan for the sustainable expansion of Educational Kaizen activities in Kalmunai as well as its surrounding areas. This plan is to strengthen Kalmunai Zonal Education Office so that ZDE and ZEIKA can support school-based Educational Kaizen activities in the pilot schools and further expand them to non-pilot schools in the zone. The plan also includes expansion of Educational Kaizen activities to the neighboring Akkaraipattu zone.

This three-year action plan includes four objectives:

- Objective 1: Capacity and efficiency of Kalmunai Zonal Education Office will be further strengthened through Kaizen activities
- Objective 2: School management, quality of education, and school facilities will be improved in all schools in Kalmunai Zone through educational Kaizen activities
- Objective 3: Capacity of Akkaraipattu Zonal Office will be improved
- Objective 4: School management, quality of education, and school facilities will be improved in all schools in Akkaraipattu Zone through educational Kaizen activities

Activities to achieve each objective, organization/person in charge for each activity and timeframe are summarized in the following matrix.

ACTION PLAN FOR SUSTAINABLE EXPANSION OF EDUCATIONAL KAIZEN ACTIVITIES

Plan Period: January 1, 2006 – December 31, 2008
 Drafted: September 23, 2005

Objectives	Activities	Organization/ Person in Charge	Time Schedule		
			2006	2007	2008
<Objective 1> Capacity and efficiency of Kalmunai Zonal Education Office will be further strengthened through Kaizen activities	1.1	Continue existing QE circle activities	ZDE (K), QE circle leaders		
	1.2	Promote further QE circle activities	ZEIKA (K)		
	1.3	Award best practice QE circle every year	ZEIKA (K)	■	■
	1.4	Train Field Officers for effective school monitoring	ZDE (K)	■	
	1.5	Develop monitoring program to schools (method, monitoring criteria, schedule, etc.) and conduct regular monitoring	ZEIKA (K)	■	
	2.1	Organize half-day workshop for non-pilot schools in Kalmunai Zone to introduce Educational Kaizen concept utilizing principal and QE circle leaders who excelled under JICA Pilot Project	ZDE (K)	■	
<Objective 2> School management, quality of education, and school facilities will be improved in all schools in Kalmunai Zone through Educational Kaizen activities	2.2	Form SEIKA and QE circles, and start QE circle activities in non-pilot schools	Principal	■	■
	2.3	Organize a series of half-day seminars on 5S, 100-box calculation, model experiment, etc.	ZEIKA (K)	■	■
	2.4	Conduct regular school monitoring	ZEIKA (K)	■	■
	2.5	Organize semi-annual workshop to share the progress of each school	ZEIKA (K)	■	■
	2.6	Award best schools and QE circles every year	ZEIKA (K)	■	■

Appendix 1

Results of Monitoring Survey on Baseline Situations of Pilot Schools

Monitoring Survey on Baseline Situations of Pilot Schools (March 2005)

ID	Name of School	Gr.	Current Operation	Students	Teachers	Buildings / Relocation
P/KM/1/C/1	Km/Al-Bahriya Maha Vidyalaya, Kalmunaikudy	G1-13	1:00-5:00pm Al-Azhara V. (G6-13) Az-Zuhara V. (G1-5)	1619 (before) 1385 (now) 811 (G-13) 575 (G1-5)	30 (G6-13) 29 (G1-5)	- Original place in buffer zone. - Plan to build temp sheds in a private land provided by parents (now clearing the land) - Original place 200m from sea - Private land (375m from sea) identified. Gov't will give bldgs if the school could purchase the land (which is impossible)
P/KM/2/C/2	Km/Al-Mishbah Vidyalaya, Kalmunaikudy	G1-11	1:00-5:00pm Mahmood Ladies C	1756 (now) 1000 (today) 108 died	44 (now) 34 (today) (55 required)	- Completely washed away - Classes are conducted in a tent and under a tree at the mosque - WDC will build temp. sheds near the mosque - Land has been identified at 500 m from the sea and when it is purchased Sri Lankan Air will build 4 bldgs
P/KM/3/C/3	Km/Islamabaath Muslim Vidyalaya, Kalmunai	G1-5	8:00-12:00 Akbar Mosque (a tent)	56 (before) 33 (Feb.) 42 (now) 11 died some new students	6 (incl. Pr.)	- Completely washed away - Classes are conducted in a tent and under a tree at the mosque - WDC will build temp. sheds near the mosque - Land has been identified at 500 m from the sea and when it is purchased Sri Lankan Air will build 4 bldgs
P/KM/2/C/4	Km/Pulavarmani Sarifdeen Vidyalaya	G1-11	8:00-2:30 G1-9 original place G10-11 at Al-Manar CC	566 (before) 400 (now) 80 died	28 (now) 17 affected	- 8 classes in 3 temp. sheds - 1 out of 4 bldgs completely damaged and 3 bldgs are damaged but being used - Library bldg okay - School will be rebuilt on the same site by NRC (Rs.61 mil)
P/KM/0/C/5	Km/Shams Central College, Maruthamunai	G1-13	8:00-2:00 Masjid Ul Kabeer Mosque	1554 (before) 1450 (now) 104 died	63 (now) 1 died	- The original school completely washed away - Incomplete and unsafe 2-fl. bldgs (mosque) used as classroom - Private land is identified but not able to purchase
P/KT/2/C/6	Km/Sri Mamanga Vidyalaya	G1-9	8:00-2:00 Temporary place with tents Recently shifted from RKM M.V.	204 (before) 164 (now) 22 died	13 permanent 1 volunteer 3 grad trainee dep.principal died	- Original school, 75m from the sea, was completely damaged - The school started at RKM MV and moved to a private land temporarily - WDC are building temporary sheds - Private land identified for relocation (owner agreed to sell the land, and the consent)
P/KT/3/C/7	Km/Mahavishnu Vidyalaya, Pandiruppu	G1-5	8:00-12:00 Principal's house (1/31-) Will shift to a new permanent location next week (a temp shed)?	110 (before) 55 (now) 50 died	8 (6 female, 2 male)	- Original bldgs completely damaged (50m from sea) - Schools is operated at principal's house - Temp shed built in new place (surrounded by refugee camp) - Permanent bldg to be constructed by NGO? JICA?
P/KR/2/C/8	Km/Al-Hussain Vidyalaya, Malihaikadu	G1-9	1:00-5:00 Safeena Muslim V.	413 (now) (229 male; 184 female)	23 teachers	- Original place 10m from sea completely washed away

ID	Name of School	Gr.	Current Operation	Students	Teachers	Buildings / Relocation
P/KR/3/C/9	Km/Vigneswara Vidyalaya, Karaitheevu	G1-5	1:00-5:00 Vishnu V.	176 (before) 156 (now) 30 died	7 teachers	- Original place 250m from sea - 3 bldgs all damaged - World Vision to rebuild bldgs in original place (April -) - JICA mission visited for reconstruction?
P/KR/0/C/10	Km/Vipulananda Central College, Karaitheevu	G6-13	8:00-12:00 (G10-13) 1:00-5:00 (G6-9) RKM Girls'	1200 (before) 1058 (now) 27 died	43 (now) 1 died	- Original place 200m from sea (buffer zone boarder) - UNICEF, Human Development Organization (NGO) to build temp sheds in an adjoining private land - Private land identified for relocation (near main road) but unable to purchase (Rs.30 mil)
P/NT/3/C/11	Km/Al-Athaaan Vidyalaya, Nintavur	G1-5	8:00-12:30 Al-Matheena V. Al-Athaaan V. and Al-Matheena V. students mixed in same classes	46 (before) 41 (now) 35 (today)	6 teachers Principal to retire in June	- Original place 75m from sea - 2 bldgs washed away - Plan to construct new bldgs in Al-Matheena's ground
P/NT/3/C/12	Km/Al-Baduriya Vidyalaya, Nintavur	G1-5	1:00-5:00 Al-Matheena V.	106 (now) 1 died	9 (now)	- Original place 100m from sea - Completely damaged
P/ST/2/C/13	Km/Al-Jalal Vidyalaya, Sainthamaruthu	G1-9	1:00-5:00 Zahira C. Plan to shift to original place (temp. sheds to be constructed)	1002 (before) 900 (now) 50 died	29 teachers	- Original place 230 from sea - Temp sheds to be constructed at the original place - SEDCo (Sainthamaruthu Education Development Council) to decide relocation
P/ST/1/C/14	Km/Malharusshams Maha Vidyalaya, Sainthamaruthu	G1-13	1:00-5:00 Al-Hilal V.			- Original place 100m from sea - Private land identified for relocation but unable to purchase
P/ST/3/C/15	Km/Riyalul Jenna Vidyalaya, Sainthamaruthu	G1-5	1:00-5:00pm Sainthamaruthu GMMS (Malharusshams Primary using half of bldgs)	209 (before) 177 (now) 25 died	8 teachers 2 trainees	- Original place 10m from sea - Private land identified but unable to purchase (Rs.7,400,000)
P/KT/3/P/16	Km/Saraswathy Vidyalaya, Periyaneelavanai	G1-5	8:00-2:00 Original place	140 (before) 101 (now) 58 (today) 5 died	8 (now) 1 on maternity leave	- One bldg was partially damaged it is still being used. - Toilet, outside walls also damaged
N/ST/0/P/17	Km/Zahira College, Sainthamaruthu	G6-13	8:00-12:00 Own place	2300		- Walls damaged - 1 bldg used by feugees (DS promised to move them out within 1-2 days)

ID	Name of School	Problems / Needs 1	Problems / Needs 2	Problems / Needs 3	Parent Participation
P/KM/1/C/1	Km/Al-Bahriya Maha Vidyalaya, Kalmunaikudy	- Students come late to school after having lunch or come without lunch. Difficult to continue study in the afternoon without lunch. - 10-15/class come without lunch - Lack of students' shoes and uniforms	- Students' trauma and stress need to be addressed. Teachers need counseling skills. - Lack of teaching materials, textbooks - Shortage of furniture as the host school has fewer students	- Dep. Principal (one person) is the leader for all QEC --> told them to change and include more teachers of host schools - Students come from far away for G5 exam classes	Good (participation and interest) Principal meeting with parents (re: JICA project) today 3/16 5pm
P/KM/2/C/2	Km/Al-Mishbah Vidyalaya, Kalmunaikudy	- Students' families are originally from other village, so there is no attachment to this school. - Parents have fear about volatile security situation (STF camp, landmines, LTTE attack, nearby Tamil villages attack?) - Parents' behavior is unsatisfactory	- No trust between teachers and principal. Relationship is not good.	- Desks and chairs provided but cannot be used in a tent (security problem)	Poor
P/KM/3/C/3	Km/Islamabaath Muslim Vidyalaya, Kalmunai	- Lack of uniforms - Lack of basic items (soap, towel, toothbrush, etc.)			Good (by Pr.) Most are daily labor
P/KM/2/C/4	Km/Pulavarmani Sarifdeen Vidyalaya				
P/KM/0/C/5	Km/Shams Central College, Maruthamunai	- Lack of space - Classrooms are too congested and too noisy - Parallel classes are combined into one class	- Lack of classroom furniture (desks, blackboard) and toilet facilities	- Teachers are busy with relief distribution	
P/KT/2/C/6	Km/Sri Mamanga Vidyalaya	- Parents have no means of income - Children are not fed well, no shelter - Difficult to get parents cooperation (as they are extremely poor)	- Lack of school furniture (though ZED says he will provide, it hasn't come yet and it'll take time)	- Lack of teaching materials (available only in CMB, not in Kalmunai)	Good Parents meeting (re: JICA project) to be held 3/14, parents are to help nutrition program
P/KT/3/C/7	Km/Mahavishnu Vidyalaya, Pandiruppu	- Students' houses destroyed, living in camps, left in camps to protect family properties, and unable to come to school	- Students' stress, trauma is serious, but teachers don't have knowledge of counseling (how to identify stress, etc.)	- No security in the new place (temp shed with no protective walls). Cannot keep school furniture in the shed. Surrounding are refugee camps.	difficult (by Pr.) Participation in nutrition program suggested
P/KR/2/C/8	Km/Al-Hussain Vidyalaya, Malihaikadu	- Students' stress. - Rumor among students that they would die in six months because of tsunami water	- Difficult to conduct evening session as it's only 3-4 hours	- Need for books and educational aids	Not so good, can be improved

ID	Name of School	Problems / Needs 1	Problems / Needs 2	Problems / Needs 3	Parent Participation
P/KR/3/C/9	Km/Vigneswara Vidyalaya, Karaitheevu	- 17 children lost mother and have nutrition problem. Lack of care and love. - Many children cannot study and sleep in class. - Difficult to arrange teachers' shift because classes are divided into AM/PM sessions AM G10-13 (+RKM G1-5) PM G6-9 (+RKM G6-9)	- Need to address students' stress - Teachers' training for counseling needed - Psycho-social support needed	- Classrooms get so hot during the day	Good SEIKA meetings already held twice (records kept well)
P/KR/0/C/10	Km/Vipulananda Central College, Karaitheevu	- Difficult to arrange teachers' shift because classes are divided into AM/PM sessions AM G10-13 (+RKM G1-5) PM G6-9 (+RKM G6-9)	- 509 students' houses affected (357 students' houses completely destroyed) - Many students live in refugee camps - 30 teachers' houses affected	- Lack of textbooks, desks & chairs - Teaching time is short so the progress is slow	Good SEIKA & QEC meetings held and records kept well
P/NT/3/C/11	Km/Al-Athaa Vidyalaya, Nintavur	- Nutrition program budget too small to feed two school students (Matheena primary 391, secondary 670). Will use some budget for furniture as they have enough furniture now.	- Counseling program needed to achieve good mentality and physical health		Fair
P/NT/3/C/12	Km/Al-Baduriya Vidyalaya, Nintavur	- No electricity (bills have not been paid)			Poor
P/ST/2/C/13	Km/Al-Jalal Vidyalaya, Sainthamaruthu	- There is no security (watcher available only for Zahira) - No office space (just a desk outside the classroom) and equipments	- Students and teachers need psychological program - 25% students come from camps, others from relatives' houses	- Morning session preferred by all	Good (by Pr.)
P/ST/1/C/14	Km/Malharusshams Maha Vidyalaya, Sainthamaruthu	- Morning session is strongly preferred - Students have to walk a long distance mid-day when it's very hot	- Lack of classrooms (22 required, but only 17 available at Al-Hilal) - Classes are conducted only bi-weekly by turn	- Need for teachers' counseling program	Good
P/ST/3/C/15	Km/Riyalul Jenna Vidyalaya, Sainthamaruthu	- No permanent place for school. So many meetings are held but nothing happens. - Teachers disagree to use hospital bldg near the original place (close to sea) - Students who don't come to school are (i) displaced to other areas; (ii) staying at camp watching the family properties (security purpose)	- Difficult to get support from parents as they live far away from school	- As two schools are functioning at the same time (evening session), classroom operation is interrupted by noise. - Shortage of furniture as the host school has fewer students	Poor
P/KT/3/P/16	Km/Saraswathy Vidyalaya, Periyaneelavani		- Most parents are fed up with their life. - Teacher training for counseling is required. - Students' psychological affect (stress, feeling of loss) needs to be addressed.	- Refugees are becoming dependent on aid. Lazy attitude and alcoholic problem.	Good. Info shared. Parents are grouped to help mid-day meal program
N/ST/0/P/17	Km/Zahira College, Sainthamaruthu				

Appendix 2

Outputs of QE Circle Activities

Outputs of QE Circle Activities

ID	School Name	QEC Topic	Output
P/KM/1/C/1	Al-Bahriya Maha Vidyalaya, Kalmunaikudy	1 Changing the mentality of students to a joyful learning environment 2 Promoting reading habits among the primary students 3 Upgrading the standard of Science and Technology	<ul style="list-style-type: none"> • Food was provided to about 900 students per day for 20 days. • Attendance has improved from 80% to 90%. • Punctuality of students to come to school has also increased. Earlier it was only 33%, now 87% come to school on time. • 1,067 books have been purchased for the library. • Rubber seal is used for the library books. • 2 filing cupboards and 3 library cupboards were bought and are being used for the library and secondary classes. • Competitions and seminars are held in the library. • Students' comprehension skills are developed, as well as thinking power and fluency of speaking. • 100-box calculation is implemented for 419 students in Gr. 6-13. 50 students (9.5%) finish it within 2 minutes, 213 students (51%) within 4 mins. • Now the students enjoy working in a team, and their learning process has changed. Group studies have improved. • Science equipments were bought for the development of laboratory facilities. • Photocopy machine was purchased and tutes are printed. • Exams were held for Gr. 7-11 students. 344 students took the exam. 75% of them got over 50 marks.
P/KM/2/C/2	Al-Mishbah Vidyalaya, Kalmunaikudy	1 Uplifting the achievement levels of Tamil language, mathematics, and Environmental Activities in Grade 5 and O/L 2 Improving skills of English language (reading, writing, speaking listening) 3 Re-organizing the official documents destroyed by the Tsunami hit	<ul style="list-style-type: none"> • 100-box calculation has been implemented. Gr.5A class has started division exercise, and 80% of students have achieved target time. • Model experiments were introduced, and made it easy and interesting to understand the science and mathematics topics. • English examinations are being conducted. Students' writing skills are improved. • Alphabet writing & dictation activity is conducted in 5 classes, and these students were selected for zonal competition. • Most of students improved their pronunciation and removed the fear of speaking. • A cupboard has been installed in the office. All the students' details files are maintained in the cupboard properly. • Personal information sheets are prepared for each student. • All the documents were lost in Tsunami, but now it's easy to find necessary documents and information.
P/KM/3/C/3	Islamabaath Muslim Vidyalaya, Kalmunai	1 Establishing a self-study centre to improve the students' writing, counting and drawing skills 2 Producing healthy students	<ul style="list-style-type: none"> • 200 sheets of 100-box calculation have been printed. Only 10% of students did it correctly at the beginning, but now 75% can do it well. • 150 library books have been purchased. Gr.1-5 students are using the library facilities. • Students are provided with A4 papers and are improving their drawing skills. • 5 name boards were installed to each classroom and office. 5S is implemented in the office and classroom to arrange items neatly. • 14 plastic chairs, 6 tables, 6 white boards were bought for classroom and office use. • Office has been developed with necessary furniture and equipments (cupboards, chairs, calculator, etc.) and 5S is implemented. • Students achievement in Tamil language exam improved from 40 to 70 in average marks after implementing Tamil letter writing activities. • Gr.1-5 students were provided with food. Attendance has improved. Students learned hygienic habits.

ID	School Name	QEC Topic	Output
P/K/M/2/C/4	Pulavarmani Safedeen Vidyalaya	1	<ul style="list-style-type: none"> •400 books have been purchased for the library. About 200 students are using the books. •Lending system is available for Gr.8-9 students. •Students reading ability is improving. •5,000 sheets of 100-box calculation have been printed. Gr.5-9 students are doing the exercise daily. •Science lab was developed with the equipments kept according to 5S method.
		2	<ul style="list-style-type: none"> •Mid-day meals were provided to 400 students per day for 26 days from 24th March to 10th May. Total of 9,976 students received the meals. •The number of daily attendance of students has increased. •After the nutrition program, students have been coming to school on time. They learned to eat with god manner. •162 students received shoes, and all of them are using them daily.
		1	<ul style="list-style-type: none"> •Science lab was developed with equipments for most of the practicals. •Gr. 6-13 students use the lab in their practical period. •2,000 sheets of 100-box calculation exercise were printed. 100-box calculation has been implemented in Gr.6-11 and A/L science classes. Students are interested in the exercise, and most of them have reached the target. Now it's easy to do their mathematical work. •Record of practicals is maintained by teachers, and the number of practicals conducted in the lab has been increasing. •Waste of time on searching lab items has been significantly reduced because of the 5S activities implemented in the lab.
P/K/M/0/C/5	Shams Central College, Maruthamunai	2	<ul style="list-style-type: none"> •2 cupboards were installed for Gr.1-2 classrooms. •Workbooks and environmental books were provided to Gr.1-2 students. The reading skills are improving. •Attendance of students increased from 50% to 90% because of the figure coloring games. •9-box and 25-box calculation is implemented and calculation speed has been improved. •Mini laboratory was prepared for the primary section.
		3	<ul style="list-style-type: none"> •500 books are purchased for the library. •Library facility has been developed with necessary tables, chairs, and cupboards. •Lending system is available for O/L and A/L students. Other students use the library in their library period. •Students' reading ability has improved. Students write their findings and observation in "Digestive Record of Reading." •Students enthusiasm has increased in taking part in educational competitions.
		1	<ul style="list-style-type: none"> •About 145 students received a mid-day meal per day. •Because of the food program, attendance has increased from 50% to 89%. Punctuality has also improved. •Weight of the students has increased. •11 white boards were installed to the classrooms, to teach easily and to avoid dust from chalks. •3 science question books and 3 social studies books were purchased. •Reading ability has improved among students. •225 sheets of 100-box calculation exercises were printed for Gr.6-9 students. About 10 students can finish it within 2 minutes, 50 students within 5 minutes, 10 students within 7 minutes. •For Gr.4-5, 25-box calculation has been introduced. •Model experiment activities made the students' learning process easy, attractive and effective.
P/K/T/2/C/6	Sri Mamanga Vidyalaya, Kalmunai	1	<ul style="list-style-type: none"> •Promoting physical health and hygienic habits
		2	<ul style="list-style-type: none"> •Enhancing the quality of education in mathematics, science and English language

ID	School Name	QEC Topic	Output
P/KT/3/C/7	Mahavishnu Vidyalaya, Pandiruppu	<p>Obtaining basic school equipments for school management and teaching/learning activities</p> <p>3</p> <p>Promoting physical health and hygienic habits</p> <p>1</p> <p>Improving the school environment to de-traumatize the students</p> <p>2</p> <p>Promoting English language skills in primary classes</p> <p>3</p>	<ul style="list-style-type: none"> Office has been developed with principal's table and 5 plastic chairs. Students' files are kept properly in a newly purchased cupboard in the office. 6 plastic tables and chairs were provided for class teachers. It made the teaching easy and convenient. Radio was bought and has been used for English and Tamil language education. It is also used in the primary section to improve their active listening. Laboratory (Resource Center) and Library were developed with books, science equipments and furniture. Nutrition program was conducted for 27 days. Per day 32 students received mid-day meals (in total about 900 students). Attendance and punctuality improved. 5 tables and chairs were provided to class teachers. Office is equipped with table and chair. Steel net was installed around the temporary shed for protection. 5S activities are carried out. Each class has name board. Prizes are given to most beautiful class. Now the classes are maintained clean and arranged properly. 1,000 sheets of 100-box calculation were printed. 100-box calculation was introduced to Gr.3-5 students. Most Gr.3 students take 5 minutes to finish an addition exercise. In Gr.4 the students who took 10 mins earlier can now finish it within 3 mins. In Gr.5, a student took 6:45 min earlier but now takes 2:30 min. 10 workbooks were bought for Gr.5 students and 8 supplementary textbooks (primary English) were bought for teachers. English classes are conducted with the help of an outside teacher. Students' writing skills and pronunciation has improved. Nutrition food was given to 400 students per day for 17 days. Student attendance has increased from 350 to 400. 100-box calculation was introduced recently to Gr.8-9 students. Many of parents also supported 100-box calculation because of the improvement in students skills and memory power. 5S is implemented in office and classrooms. Waste of time is reduced and the school environment is pleasant and clean. 3 cupboards were provided to the host school. Books have been ordered for the library.
P/KR/2/C/8	Al-Hussain Vidyalaya, Malhaikadu	<p>Nutrition Programme</p> <p>1</p> <p>Improving the education standards of the students</p> <p>2</p> <p>Developing a school library</p> <p>3</p>	<ul style="list-style-type: none"> Children's park has been constructed with seesaws, sliders, etc. Gr1-5 students are using this park. Most students learned to keep the school clean according to 5S method. Because of the "learning by doing" activities, the letter writing skills and counting skills of Gr.1-2 students have improved. Nutritious food was provided to about 100 students per day for 24 days. Students' attendance and punctuality improved. Students learned the manners for eating food. 5S activities have been started. Cleaning equipments and file covers have been bought. A Tamil typewriter was purchased and a ronio machine was repaired. Preparation of teaching materials has become easy. 160 Gr.5 scholarship books were purchased. 16 students of Gr.5 are using these books. 100-box calculation is going well in Gr.4-5, and some students can finish within 3.5 minutes. Marks of the term exams and unit exams are improving.
P/KR/3/C/9	Vigneswara Vidyalaya, Karaitheevu	<p>Establishing a children's park</p> <p>1</p> <p>Enhancing awareness of nutrition through seminars</p> <p>2</p> <p>Improving the results of G5 Scholarship Exam</p> <p>3</p>	<ul style="list-style-type: none"> Children's park has been constructed with seesaws, sliders, etc. Gr1-5 students are using this park. Most students learned to keep the school clean according to 5S method. Because of the "learning by doing" activities, the letter writing skills and counting skills of Gr.1-2 students have improved. Nutritious food was provided to about 100 students per day for 24 days. Students' attendance and punctuality improved. Students learned the manners for eating food. 5S activities have been started. Cleaning equipments and file covers have been bought. A Tamil typewriter was purchased and a ronio machine was repaired. Preparation of teaching materials has become easy. 160 Gr.5 scholarship books were purchased. 16 students of Gr.5 are using these books. 100-box calculation is going well in Gr.4-5, and some students can finish within 3.5 minutes. Marks of the term exams and unit exams are improving.

ID	School Name	QEC Topic	Output
P/R/0/C/10	Vipulananda Central College, Karaitheevu	<p>1 Uplifting the achievement level of A-Level students</p> <p>2 Improving English skills of grades 6-11 students</p> <p>3 Improving the school environment</p>	<ul style="list-style-type: none"> • 1 white board was installed for A/L class. It's very clear and easy to understand what is written on the board. • 3 exams were held, and fear of exams decreased among students. • 5 students obtained the university entrance. (Last year it was only 5.) • Teachers conduct extra classes for A/L students. • Laboratory was developed, with facilities and equipments. • 100-box calculation is implemented. Weak students too are achieving improvement in maths subject. • Library was developed with the participation of students. Books are arranged according to 5S method. • Many students come to the library to read books freely. Students of host school also use the library. • Competitions were held and students' general knowledge enhanced through newspapers. • 2 temporary sheds were constructed. Earlier there was not enough space, but now the learning environment has improved. The classrooms are arranged well. • Student attendance has improved. • Implementation of 5S has started.
P/NT/3/C/11	Al-Athaan Vidyalaya, Nintavur	<p>1 Promoting play activities of students</p> <p>2 Additional classes to improve students' education and develop learning skills</p>	<ul style="list-style-type: none"> • A children's park is constructed, with see-saws, swings, sliders, etc. Parents gave cooperation to the construction. • Gr.1-5 students are doing "playing & learning" activities. (When they use see-saw or swing, they are taught to count in English.) • Attendance has increased, as students are interested in the play activities. • 100-box calculation has been conducted. Students are enjoying the exercise to improve basic calculation skills. • Earlier 80% of students took 10 minutes but now it has come down to 25%. • 290 books have been ordered. • Students' skills of writing Tamil alphabets are improving. • Scrap books are provided to students to match English words with pictures.
P/NT/3/C/12	Al-Baduriya Vidyalaya, Nintavur	<p>1 Providing nutritional food</p> <p>2 Developing Tamil and English language skills</p> <p>3 Establishing a children's park</p>	<ul style="list-style-type: none"> • Attendance is increasing by 10%. • Punctuality is maintained. • 156 books have been purchased. • Workbooks have been given to all students. • A steel cupboard was purchased to keep all the books and files. It's helpful for the office administration. • Tamil and English letter writing activities helped students to develop skills to write alphabets correctly. • 100-box calculation is conducted daily in Gr. 3-5. • Play instruments and equipments are developed. When the children are freely playing in the children park, they are happy and it helps to reduce the stress by Tsunami.
P/ST/2/C/13	Al-Jalal Vidyalaya, Sainthamaruthu	<p>1 Enhancing the students' learning and teaching activities by ensuring the availability of resources</p>	<ul style="list-style-type: none"> • An office room was made with the help of parents and well-wishers. • 5S is implemented in the office, with files arranged in order. • 60 scholarship books were purchased. • Library was newly opened with books and reading tables. • Laboratory equipments were purchased. • Activity room was made. • 100-box calculation has been implemented in Gr. 7-8.

ID	School Name	QEC Topic	Output
P/ST1/C/14	Malharusshams Maha Vidyalaya, Sainthamaruthu	1 Semi-temporary shed for the classrooms 2 Uplifting the achievement of Science and Technology	<ul style="list-style-type: none"> • 2 sheds were built to accommodate 11 classes. Because of this, morning session can be conducted for secondary classes. • Attendance has increased from 40% to 75% in the secondary classes (even on the first day of the term). • It has become convenient and easy to teach and study. • Office and administration room was made. Students' files, registers and other important documents are kept properly in the office. • 100-box calculation has been conducted in Gr. II. • Science lab was developed with OHP and science equipments for practicals. • Ronio machine was purchased and exam papers are prepared more efficiently.
P/ST/3/C/15	1 Riyalul Jenna Vidyalaya, Sainthamaruthu 2	1 Decreasing malnutrition and inculcating the healthy habits among the students Improving the reading ability 2	<ul style="list-style-type: none"> • Food was provided to 180 students for 16 days. • Earlier, attendance of Gr.1 students was 22, but now the number has increased to 27. • Students come early to school and most of them are neat. • 2 cupboards were bought for the library and office. Students' files are kept properly. • 315 books were bought for the library, and Gr.4-5 students are using them. • 5 white boards were installed to the classrooms. • 100-box calculation is going well in Gr.3-5. • 5S is implemented in classrooms and office after the school was shifted to Sainthamaruthu Hospital building. • After shifting to school, started the mobile library. Lending system is also available.
P/KT3/P/16	1 Saraswathy Vidyalaya, Periyaneelavanai 2	Improving learning and teaching environment Providing healthy mid-day meals 2	<ul style="list-style-type: none"> • 335 English reading books have been purchased, and about 60 children have been using them daily with the help of teachers. • 2 cupboards were bought (one for office work and another for the library books). • 5 white boards were installed in 5 classrooms. • Gr.4-5 students are doing 100-box calculation, and some of them have reached the 3-minute target. • Gr.1-3 students are doing 25-box calculation. • Nutritious food was provided to about 60 students (average) per day for 17 days. Total of 962 students received the food. • 23 parents participated in preparing the food for 10 days. • Earlier about 40-45 students attended the school, but now the number has increased to 66.
N/ST/0/P/17	2 Zahira College, Sainthamaruthu 3	Setting up a bicycle shelter Improving the education standards of the students in Gr. 6-13 3	<ul style="list-style-type: none"> • Bicycle shed was constructed. 200 bicycles can park in the shed. • Now the number of bicycles getting damaged and/or stolen has reduced • Students try to come early in order to get their bicycles in the shed. • Science textbooks were photocopied • 100-box calculation has been implemented to Gr.6. It took 15 minutes at the beginning, but now it has come down to 2 minutes. • 5S is implemented in office. • Teacher evaluation by students helped teachers to improve their teaching, such as writing notes of lessons and coming to class on time.

Appendix 3

Monitoring Evaluation

	Overall Monitoring Evaluation	Progress Indicators				Major Problems			Remarks					
		SS	Suggestion system	Mutual evaluation	100-box calculation	Model experiment	Management	Teacher culture		Community participation				
P/KM/1/C/1	Al-Bahriya Maha Vidyalaya	April: B	May: B	June: C	July: C	August: C	C+	C	A	B	C	X	X	Relationship with host school deteriorated. After shifting to their original place, activities became purchase-oriented.
P/KM/2/C/2	Al-Mishbah Vidyalaya	April: C	May: B	June: B	July: B+	August: B+	B+	B	B	B+	B		X	Recognition at the Intermediate Workshop gave them confidence and motivated them.
P/KM/3/C/3	Islamabaath Muslim Vidyalaya	April: B	May: B+	June: B+	July: B	August: B+	A	B	A	B	B		X	Principal's effort is creditable, but he has not won the cooperation of teachers.
P/KM/2/C/4	Pulavarmani Sarifdeen Vidyalaya	April: A	May: A	June: A	July: A	August: A	A	A	A	A	B			Leadership of newly-appointed principal has improved, and teacher culture is positive.
P/KM/0/C/5	Shams Central College	April: A	May: A	June: A	July: A	August: A	A	A	A	A	A			Commitment of teachers, students' enthusiasm, community participation, are all at a commendable level.
P/KT/2/C/6	Sri Mamanga Vidyalaya	April: A	May: A	June: A	July: A	August: A	A	A	B	A	A			Positive attitude of principal brings out teachers' commitment. Responsibilities are well shared.
P/KT/3/C/7	Mahavishnu Vidyalaya	April: B	May: B+	June: B+	July: B+	August: B+	A	A	A	A	A	X	X	Principal's decision prevails, and bottom-up decision-making process is weak.
P/KR/2/C/8	Al-Hussain Vidyalaya	April: B	May: B	June: B	July: B	August: B+	B+	B+	A	B+	B		X	Principal was waiting to do anything until the school shifted from host school to its own place.
P/KR/3/C/9	Vigneswara Vidyalaya	April: B	May: B	June: B	July: B	August: B	B	B	B+	B+	A	X	X	Principal's leadership is weak and ideas do not link to actions.
P/KR/0/C/10	Vipulananda Central College	April: B	May: B+	June: B+	July: B	August: A	A	B+	A	A	C			Development of library and laboratory united the school community and motivated the students.

		Overall Monitoring Evaluation					Progress Indicators					Major Problems			Remarks
		April	May	June	July	August	SS	Suggestion system	Mutual evaluation	100-box calculation	Model experiment	Management	Teacher culture	Community participation	
P/NT/3/C/11	Al-Athaaan Vidyalaya	C	C+	B	B	B+	B	C	B	B+	B+			X	Observation visit to other pilot schools motivated them. Working with host school with solidarity.
P/NT/3/C/12	Al-Baduriya Vidyalaya	C	C	C	C+	C	C	A	B	C	X			X	Principal's leadership is weak and teachers' awareness and commitment is low.
P/ST/2/C/13	Al-Jalal Vidyalaya	C	C	C	C+	C+	C	C	B	B					Improvement has been seen after shifting to their own place. Parents' cooperation is good.
P/ST/1/C/14	Malharushams Maha Vidyalaya	B	B	B	C+	C+	B	C	B	C	X	X			Momentum was lost and activities not sustained after finishing expenditure.
P/ST/3/C/15	Riyalul Jenna Vidyalaya	C	C+	C+	B	B	B	C	B	B+					High level of team work was observed after shifting to its own place at a vacant building.
P/KT/3/P/16	Saraswathy Vidyalaya	A	A	A	A	A	A	A	A	A				X	Principals' leadership and teachers' cooperation are at a high standard.
N/ST/0/P/17	Zahira College	C	C	C	C	C	C+	C	B	C	X	X	X	X	Principals' understanding is yet to be satisfactory, though a few teachers are committed to change school culture.

Appendix 4

Structure, Activities and Capacity of Kalmunai Zonal Education Office

Structure, Activities and Capacity of Kalmunai Zonal Education Office

1. Roles of Zonal Education Office (ZEO)

Zonal Education Office is responsible for administrative work of the government schools and teachers in the Zone as well as quality improvement of teaching and learning in the schools.

Roles and responsibilities given to ZEO in comparison to other education administrative institutions are shown below.

		Schools (by ownership)	
		National	Provincial
Recruitment & Appointment			
	Principal	M	P
	Teacher	M / P	P
	Minor staff	M	P
	ISA	P	
Transfer (within the Zone)			
	Principal	M	P / Z*
	Teacher	M	Z
Transfer (out of the Zone)			
	Principal	M	P
	Teacher	M	P
Distribution			
	Salery	Z	Z
	Textbooks	D	D
	Facility	Z	Z
Information Collection			
	School census data	Z	Z
	Personnel data	Z	Z
	Exam data	Z	Z

Note:

M = Ministry of Education

P = Provincial Department of Education

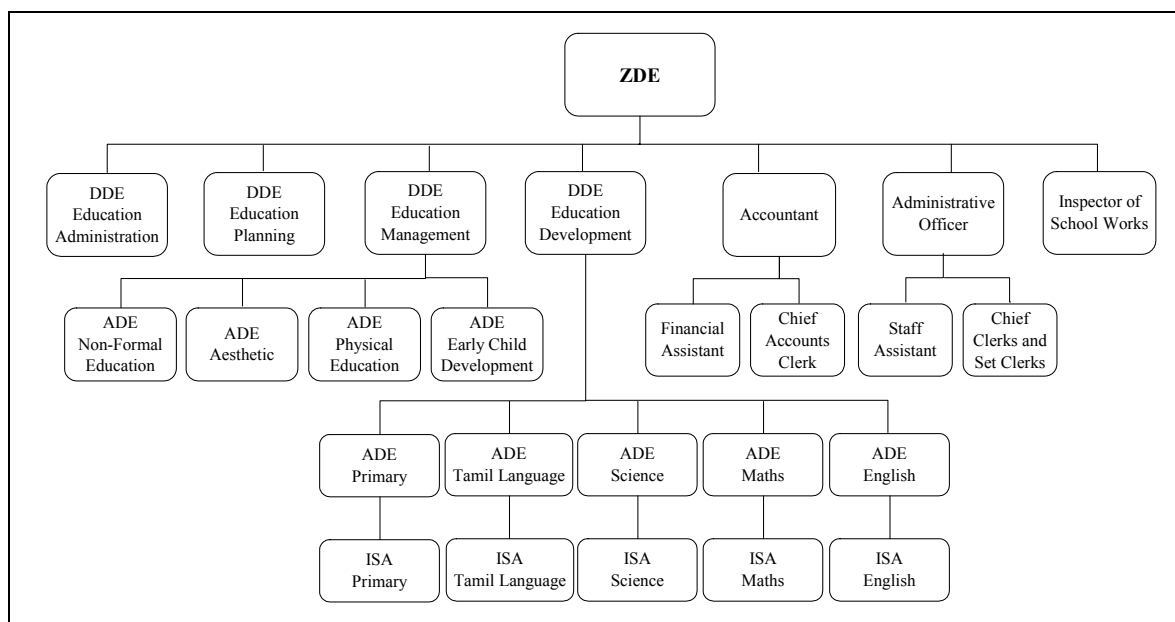
Z = Zonal Education Office

D = Divisional Education Office

* Grade 3 Principals can be appointed by Zonal Director of Education (ZDE)

2. Organizational Structure of ZEO

The cadre of Kalmunai Zonal Education Office is shown below.



Note: ZDE = Zonal Director of Education; DDE = Deputy Director of Education
 ADE = Assistant Director of Education; ISA = In-Service Advisor

Actual Staff Strength

Units	DDE	ADE	ISA	Clerical	Other
Education Administration	1			14	5 typists
Education Planning	1	1		2	
Education Management	1	2	7	1	
Education Development	1	8	30	1	
Finance				17	
School Works				1	1 ISW 1 Engineer 3 TAs
Sub-Total	4	11	37*	36	10
Total	98				

Note: DDE = Deputy Director of Education; ADE = Assistant Director of Education
 ISW = Inspector of School Works; TA = Technical Assistant

* Subject-wise details of 37 ISAs are as follows:

Subject	ISA
Primary	3
Tamil Language	3
Science	2
Mathematics	4
English	4
Social Studies	4
Others	17
Total	37

Other subjects include:
Religion, Sinhala language,
Home Science, Health Science,
Commerce, Music, etc.

Note: ISA = In-Service Advisor

3. Functions of Units in ZEO

Major functional areas of each unit of Kalmunai ZEO are summarized below.

Education Administration	Education Planning	Education Management	Education Development
<ul style="list-style-type: none"> - Student admission - School structure - School land, property & assets - Water, electricity - SDS, OBA - School societies - Student scholarship - Risk allowances - Shramadana - Students' health and welfare - Cultural program - School calendar - School timetable 	<ul style="list-style-type: none"> - EMIS - School census - Projects (preparation, monitoring and evaluation) - Teacher transfer information - IT Center - Staff appraisals 	<ul style="list-style-type: none"> - Research Centers - Co-curricular programs - Non-formal education - Guidance & counseling - Special education - ECD (Early Child Development) - Nutrition program - Teacher appraisal - Teacher Center - Sports & Culture - Grade 9 Exams - SBA (Gr.6-11) 	<ul style="list-style-type: none"> - Training program - Syllabus implementation - Student evaluation (Result analysis) - Competitions (subject) - ISAs - Library - SBA (Gr.12-13)

Finance	School Works
<ul style="list-style-type: none"> - Accounting of all receipts/payments - Salary - Tender & contract 	<ul style="list-style-type: none"> - Construction work

4. School Monitoring and Supervision (by ISAs)

ZEO has subject specialists, namely In-Service Advisors (ISAs), in different subject areas who are responsible for supervision and improvement of quality of teaching at the school level.

ISAs are recruited from experienced teachers and given training at National Institute of Education (NIE). ISAs' main functions are to carry out the in-service training of the teachers by assisting them with classroom teaching in the school. They observe classroom teaching conducted by the school teachers and/or conduct model classes. When they visit schools, they write comments and observation on a log book maintained at schools.

ISAs are required to visit at least 10 schools per months and submit monthly report ("Work Done Report") to DDE who will then send the reports to Provincial Department of Education. Upon submission of the report, ISAs are paid an allowance of Rs.1,000 per month to cover various expenses including transportation. Many ISAs use their own motorbikes to visit schools, while others use route buses. Some use bicycles to visit nearby schools. ISAs are expected to visit schools everyday of the week except for Wednesday which is designated as an office day (all government officers are required to stay in the office). In Kalmunai ZEO, there is an all-ISA meeting once a month called by the ZDE.

ISAs can monitor and advise schools only on subject-related matters and not others. For example, when they find managerial problems at school, ISAs report them to DDE or ZDE, rather than responding to them on the spot with corrective action.

5. Procurement/Maintenance of School Facility

Procurement/maintenance of school facility, including buildings and furniture, is the responsibility of Provincial Department of Education (PDE). Based on a proposal

submitted by ZEO, PDE allocates fund for such purposes. The distribution to schools is handled by ZEO.

There is no financial provision to ZEO for the procurement/maintenance of school facilities. For minor repairs, Rs.5,000-Rs.10,000 per month can be spent by the ZEO's discretion. ZEO, however, must go through the tender procedure when the cost involved is more than Rs.1,500.

6. Problems *Preliminarily* Identified in the Management of ZEO

(1) Human Resource Management

According to the Zonal Director of Education (ZDE) Kalmunai, there is a lack of Class I & II officers of SLEAS (Sri Lanka Education Administrative Service) in many of ZEOs in the North and Eastern Province. As a result, in Kalmunai ZEO, directors' positions are filled by Class III officers, except for the ZDE and one DDE. One of the DDE posts in the approved cadre remains vacant due to lack of qualified candidates.

On the other hand, there are over 50 staff members (including directors and administrative/clerical staff) in Kalmunai ZEO, some of whom do not have a desk in the office. It appears that the staff management of ZEO has not been effective. There are constantly at least a few vacant desks in every unit of the office. The head of unit and officers are not exactly aware of the whereabouts of the other staff of the same unit, when the person is not in his/her seat.

(2) Delegation of Responsibilities

Much of ZDE's time on a daily basis is spent on attending meetings held in and out of the Zone (which involves traveling), and going through papers and circulars while receiving continuous visits of individuals (principals, teachers, officers, parents, etc.) appealing for various approvals. Overall managerial functions of ZDE are to be strengthened, together with the roles and functions of other directors, such as DDEs and ADEs, so that the responsibilities are delegated to a reasonable extent and the office operations become more efficient.

(3) Information Management

Kalmunai ZEO keeps the personal files for over 1,500 principals, teachers and officers working in the Zone. All official documents, including appointment letters, salary data and attendance certificates of seminars and training courses, etc., throughout one's service years (30-40 years), are filed in a paper file. In addition, there are school files, subject files, exam files, etc., and tens of thousands of paper files are piled up in and out of cupboards and racks in many parts of the office.

Typically, it takes hours, or even days, to locate particular files. Therefore, considerable amount of time is wasted for searching for documents. Decisions of higher authorities such as central and provincial ministries, do not reach to school principals in a timely manner. Responses to the schools' various requests and inquiries are delayed. The absence of proper filing system causes administrative inefficiency. There is also a hygienic problem in the office as some old files are decayed in dust and rust.

File cupboards and racks of Kalmunai ZEO



In addition, the movable notice board placed in the outside corridor is not maintained well, with letters and announcement pasted without categorical / chronological order. Overall, the information management of ZEO is yet to be satisfactory.

(4) School Monitoring and Support

In-Service Advisors (ISAs) are expected to visit schools to provide on-site support and advice to teachers on daily classroom teaching. However, this is done on a rather ad-hoc basis and is not well systematized to deliver necessary in-service teacher education services. ISAs' visits are not welcomed or are even criticized by some schools that see little benefit from their fault-finding "inspection."

There are several constraints in ISAs' work, one of which is lack of facilities and funds available to them. ISAs do not have any room or a desk in the zonal office for their work including meetings and information sharing. As a result, there is little communication among the ISAs on a daily basis. Knowledge and information obtained through their daily school monitoring activities are not transferred from one ISA to another. Also, as ISAs are not given adequate funds for their work (Rs.1,000 monthly allowance), there is little incentive for them to cover all schools as expected (only the minimum of 10 schools per month is required.)

Although ISAs are expected to submit monthly activity reports to DDEs, the quality of ISA's services provided to schools may not be assured by these reports. School monitoring and supervision by ISAs would need to be streamlined to better meet the needs of schools.

(5) Use of Computer

Although there are seven computers currently available in the Kalmunai ZEO, most of them are not used on a daily basis. Only a few officers are capable of using computer for their work, while many others do not know how to use it or are afraid to use it because of limited knowledge and experience of handling computer. Several members of administrative staff even said that they prefer a typewriter to a computer.

Computer skills of officers need to be improved and the use of computer for the administration of daily work and data management is to be encouraged among the staff.

(6) Energy Consumption

The office lights and fans are turned on all the time, even when there is nobody in the room. Following are the problems found as causing inefficient use of energy at ZEO.

(a) No identification for switches

Switches on the walls are not marked or labelled. Therefore, people are unable to identify the right switch for a particular fan, and they leave the room with ceiling fan on.

(b) Structural problem of wiring system

There is only one main switch controlling all the lights, and it cannot be turned on/off in individual rooms. Therefore, lights are kept on all the time, even when they are used by nobody.



Switches on the walls are not labelled for easy identification. Also, there is only one main switch controlling all lights in an office.

(c) Earmarked budget allocation from MOE

MOE allocates budget for utility bills (electricity, water, telephone) of ZEO. The budget is specifically earmarked and cannot be used for any other purposes, even if the bills are low and money is saved. There is no limit in the amount of monthly bills of electricity and water. As a result, there is little incentive for ZEO to make special effort to save energy and reduce their utility bills.

Appendix 5

Questionnaires

Questionnaire Survey

School Name _____

You are: (i) Principal (ii) Teacher (iii) Student

Please choose and circle the most appropriate number that represents your response.

		Not at all	Little	Hard to tell	Fairly	Very Much
(1)	Compared to Before Pilot Project, the enthusiasm or commitment of principal is improved:	1	2	3	4	5
(2)	Compared to Before Pilot Project, the enthusiasm or commitment of teachers is improved:	1	2	3	4	5
(3)	Compared to Before Pilot Project, students' enthusiasm and liking to attend school is improved:	1	2	3	4	5
(4)	Compared to Before Pilot Project, relationship between the school and parents is improved:	1	2	3	4	5
(5)	Compared to Before Pilot Project, relationship between the school and the community is improved:	1	2	3	4	5
(6)	The Pilot Project has contributed to rehabilitating or improving school facilities (classrooms, laboratory, library, printing facilities, etc.) of your school.	1	2	3	4	5
(7)	The Pilot Project has contributed to rebuilding or improving morale among students, teachers and parents of your school.	1	2	3	4	5
(8)	The Pilot Project has contributed to improving the quality of education at your school.	1	2	3	4	5

(9) In your opinion, what was the most helpful/effective resource item from the pilot project?

Please select **one or two** (but no more than two) from below.

- a. Temporary shed
- b. Classroom/Office furniture
- c. Printing machine (photocopy machine, ronio machine, etc.)
- d. Library
- e. Laboratory
- f. Nutrition program
- g. Field trip

Pilot Project for the Development of Tsunami Affected Schools

h. Regular monitoring visits

i. Other (please specify) _____

(10) In your opinion, what was the most effective tool introduced by the pilot project?

Please select **one or two** (but no more than two) from below.

a. SEIKA / QE Circle System

b. 5S

c. Suggestion system

d. Mutual evaluation (teacher-principal, teacher-teacher, student-teacher)

e. Model experiment

f. 100-box calculation

g. Intervention model for child's well-being

h. Other (please specify) _____

Thank you very much for your cooperation.

Questionnaire Survey

(A) You are: (i) ZDE /DDE/ADE (ii) ISA (iii) Clerical (iv) Others (Specify _____)

(B) Are you a member of ZEIKA/QEC? (i) Yes (ii) No

Please choose and circle the most appropriate number that represents your response.

		Not at all	Little	Hard to tell	Fairly	Very Much
(1)	Compared to Before Pilot Project, the enthusiasm or commitment of the ZDE/DDE/ADE is improved:	1	2	3	4	5
(2)	Compared to Before Pilot Project, the enthusiasm or commitment of ISA is improved:	1	2	3	4	5
(3)	Compared to Before Pilot Project, the enthusiasm or commitment of clerical staff is improved:	1	2	3	4	5
(4)	Compared to Before Pilot Project, efficiency of office administration is improved:	1	2	3	4	5
(5)	Compared to Before Pilot Project, cleanliness of the office environment is improved:	1	2	3	4	5
(6)	Compared to Before Pilot Project, relationship among office staff is improved:	1	2	3	4	5

(7) In your opinion, what was the most helpful/effective Kaizen activity introduced through the pilot project regarding to the improvement of Zonal Education Office? Please select **one or two (but not more than two)** from below.

- a. Cleaning Day
- b. Suggestion System
- c. Improvement of Filing System
- d. Office Renovation (painting, partitioning, etc.)
- e. Office Re-arrangement (desk re-arrangement, cupboard re-arrangement, etc.)
- f. Computer Training
- g. Working Time Management
- h. School Monitoring
- i. Others (please specify) _____

Thank you very much for your cooperation.

Appendix 6

Questionnaire Results

No	School Name	No	Category	Q 1. Improvement of Principal's Enthusiasm					Q2. Improvement of Teachers' Enthusiasm				
				Not at all	Little	Hard to tell	Fairly	Very much	Not at all	Little	Hard to tell	Fairly	Very much
1	Al-Bahriya Maha Vidyalaya	1	Principal	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%	0.0%
		26	Teachers	0.0%	0.0%	0.0%	11.5%	88.5%	0.0%	3.8%	3.8%	42.3%	50.0%
		22	Students	0.0%	0.0%	0.0%	9.1%	90.9%	0.0%	13.6%	0.0%	18.2%	68.2%
2	Al-Mishbah Vidyalaya	1	Principal	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%	0.0%
		35	Teachers	0.0%	2.9%	0.0%	11.4%	85.7%	0.0%	2.9%	0.0%	28.6%	68.6%
		21	Students	0.0%	0.0%	0.0%	4.8%	95.2%	0.0%	0.0%	0.0%	0.0%	100.0%
3	Islamabaath Muslim Vidyalaya	1	Principal	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%	0.0%
		3	Teachers	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	33.3%	66.7%
4	Pulavarmani Sarifdeen Vidyalaya	1	Principal	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	100.0%
		21	Teachers	0.0%	0.0%	0.0%	19.0%	81.0%	0.0%	0.0%	4.8%	23.8%	71.4%
		29	Students	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	24.1%	75.9%
5	Shams Central College	2	Principal	0.0%	0.0%	0.0%	50.0%	50.0%	0.0%	0.0%	0.0%	50.0%	50.0%
		21	Teachers	0.0%	14.3%	0.0%	66.7%	19.0%	0.0%	4.8%	0.0%	33.3%	61.9%
		33	Students	0.0%	0.0%	0.0%	12.1%	87.9%	0.0%	0.0%	0.0%	0.0%	100.0%
6	Sri Mamanga Vidyalaya	1	Principal	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	100.0%
		11	Teachers	0.0%	9.1%	0.0%	0.0%	90.9%	0.0%	9.1%	0.0%	9.1%	81.8%
		7	Students	0.0%	0.0%	14.3%	28.6%	57.1%	0.0%	0.0%	0.0%	14.3%	85.7%
7	Km/Mahavishnu Vidyalaya	1	Principal	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%	0.0%	
		7	Teachers	0.0%	0.0%	0.0%	71.4%	28.6%	0.0%	0.0%	0.0%	57.1%	42.9%
8	Al-Hussain Vidyalaya	1	Principal	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%	0.0%
		20	Teachers	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	40.0%	60.0%
		24	Students	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	29.2%	70.8%
9	Vigneswara Vidyalaya	1	Principal	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%	0.0%	
		5	Teachers	0.0%	20.0%	0.0%	20.0%	60.0%	0.0%	0.0%	0.0%	80.0%	20.0%
10	Vipulananda Central College	1	Principal	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%	0.0%
		33	Teachers	0.0%	3.0%	3.0%	81.8%	12.1%	0.0%	9.1%	0.0%	51.5%	39.4%
		15	Students	0.0%	0.0%	0.0%	6.7%	93.3%	0.0%	13.3%	0.0%	46.7%	40.0%
11	Al-Athaan Vidyalaya	2	Teachers	0.0%	0.0%	0.0%	50.0%	50.0%	0.0%	0.0%	0.0%	50.0%	50.0%
12	Al-Baduriya Vidyalaya	1	Principal	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	100.0%
		5	Teachers	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
13	Al-Jalal Vidyalaya	2	Principal	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%	0.0%
		33	Teachers	0.0%	0.0%	0.0%	28.6%	65.7%	0.0%	2.9%	0.0%	54.3%	37.1%
		23	Students	0.0%	4.3%	0.0%	21.7%	73.9%	0.0%	13.0%	8.7%	39.1%	39.1%
14	Malharusshams Maha Vidyalaya	2	Principal	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	50.0%	50.0%
		27	Teachers	7.4%	25.9%	3.7%	40.7%	22.2%	0.0%	22.2%	3.7%	48.1%	25.9%
		15	Students	0.0%	33.3%	0.0%	26.7%	40.0%	0.0%	0.0%	0.0%	13.3%	86.7%
15	Riyalul Jannah Vidyalaya	7	Teachers	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	42.9%	57.1%
16	Saraswathy Vidyalaya	1	Principal	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	100.0%
		5	Teachers	0.0%	0.0%	0.0%	20.0%	80.0%	0.0%	0.0%	0.0%	40.0%	60.0%
17	Zahira College	2	Principal	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	50.0%	0.0%	50.0%
		29	Teachers	0.0%	31.0%	10.3%	31.0%	27.6%	3.4%	10.3%	17.2%	55.2%	13.8%
		30	Students	16.7%	23.3%	16.7%	23.3%	20.0%	0.0%	3.3%	0.0%	53.3%	43.3%
Total of 17 Schools		19	Principal	0.0%	0.0%	0.0%	15.8%	84.2%	0.0%	0.0%	5.3%	57.9%	36.8%
		290	Teachers	0.7%	7.9%	1.7%	32.8%	56.9%	0.3%	5.9%	2.8%	42.1%	49.0%
		219	Students	2.3%	5.9%	2.7%	11.9%	77.2%	0.0%	4.1%	0.9%	24.2%	70.8%
		528	Total	1.3%	6.8%	2.1%	23.5%	66.3%	0.2%	4.9%	2.1%	35.2%	57.6%

More than 80%
Between 50% and 60%

No	School Name	No	Category	Q3. Improvement of Students' Enthusiasm					Q4. Improvement of school-parents' relationship				
				Not at all	Little	Hard to tell	Fairly	Very much	Not at all	Little	Hard to tell	Fairly	Very much
1	Al-Bahriya Maha Vidyalaya	1	Principal	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%	0.0%	
		26	Teachers	0.0%	7.7%	0.0%	34.6%	57.7%	11.5%	7.7%	19.2%	57.7%	3.8%
		22	Students	0.0%	0.0%	0.0%	0.0%	100.0%	4.5%	13.6%	0.0%	31.8%	50.0%
2	Al-Mishbah Vidyalaya	1	Principal	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%	0.0%
		35	Teachers	0.0%	5.7%	0.0%	51.4%	42.9%	2.9%	11.4%	5.7%	57.1%	22.9%
		21	Students	0.0%	0.0%	0.0%	23.8%	76.2%	0.0%	4.8%	4.8%	28.6%	61.9%
3	Islamabaath Muslim Vidyalaya	1	Principal	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	100.0%	0.0%	0.0%
		3	Teachers	0.0%	0.0%	0.0%	33.3%	66.7%	0.0%	0.0%	33.3%	33.3%	33.3%
4	Pulavarmani Sarifdeen Vidyalaya	1	Principal	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%	0.0%
		21	Teachers	0.0%	0.0%	4.8%	33.3%	61.9%	0.0%	14.3%	14.3%	47.6%	23.8%
		29	Students	0.0%	0.0%	0.0%	20.7%	79.3%	0.0%	10.3%	17.2%	65.5%	6.9%
5	Shams Central College	2	Principal	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%	0.0%
		21	Teachers	0.0%	0.0%	4.8%	28.6%	66.7%	4.8%	19.0%	0.0%	52.4%	23.8%
		33	Students	0.0%	3.0%	3.0%	3.0%	90.9%	0.0%	9.1%	0.0%	21.2%	69.7%
6	Sri Mamanga Vidyalaya	1	Principal	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%	0.0%
		11	Teachers	0.0%	27.3%	0.0%	18.2%	54.5%	9.1%	0.0%	9.1%	72.7%	9.1%
		7	Students	0.0%	0.0%	0.0%	14.3%	85.7%	0.0%	14.3%	14.3%	28.6%	42.9%
7	Km/Mahavishnu Vidyalaya	1	Principal	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%
		7	Teachers	0.0%	0.0%	14.3%	42.9%	42.9%	14.3%	14.3%	28.6%	42.9%	0.0%
8	Al-Hussain Vidyalaya	1	Principal	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	100.0%
		20	Teachers	0.0%	0.0%	10.0%	25.0%	65.0%	5.0%	5.0%	5.0%	55.0%	30.0%
		24	Students	0.0%	0.0%	0.0%	8.3%	91.7%	0.0%	4.2%	8.3%	33.3%	54.2%
9	Vigneswara Vidyalaya	1	Principal	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%
		5	Teachers	0.0%	0.0%	0.0%	40.0%	60.0%	0.0%	20.0%	0.0%	60.0%	20.0%
10	Vipulananda Central College	1	Principal	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%	0.0%	
		33	Teachers	0.0%	3.0%	15.2%	45.5%	36.4%	9.1%	21.2%	27.3%	36.4%	6.1%
		15	Students	0.0%	13.3%	13.3%	6.7%	66.7%	6.7%	46.7%	0.0%	46.7%	0.0%
11	Al-Athaan Vidyalaya	2	Teachers	0.0%	0.0%	0.0%	50.0%	50.0%	0.0%	0.0%	0.0%	50.0%	50.0%
12	Al-Baduriya Vidyalaya	1	Principal	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%	0.0%
		5	Teachers	0.0%	0.0%	0.0%	20.0%	80.0%	0.0%	0.0%	0.0%	0.0%	100.0%
13	Al-Jalal Vidyalaya	2	Principal	0.0%	0.0%	0.0%	50.0%	50.0%	0.0%	0.0%	0.0%	0.0%	100.0%
		33	Teachers	0.0%	0.0%	0.0%	42.9%	51.4%	0.0%	2.9%	8.6%	42.9%	40.0%
		23	Students	0.0%	0.0%	8.7%	13.0%	78.3%	4.3%	21.7%	21.7%	26.1%	26.1%
14	Malharusshams Maha Vidyalaya	2	Principal	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	100.0%
		27	Teachers	0.0%	14.8%	11.1%	48.1%	25.9%	25.9%	18.5%	14.8%	40.7%	0.0%
		15	Students	6.7%	6.7%	6.7%	0.0%	80.0%	0.0%	13.3%	6.7%	13.3%	66.7%
15	Riyalul Jannah Vidyalaya	7	Teachers	0.0%	0.0%	0.0%	57.1%	42.9%	0.0%	28.6%	28.6%	14.3%	28.6%
16	Saraswathy Vidyalaya	1	Principal	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%
		5	Teachers	0.0%	0.0%	20.0%	80.0%	0.0%	20.0%	60.0%	20.0%	0.0%	0.0%
17	Zahira College	2	Principal	0.0%	0.0%	0.0%	50.0%	50.0%	50.0%	0.0%	0.0%	50.0%	0.0%
		29	Teachers	6.9%	13.8%	10.3%	34.5%	34.5%	17.2%	20.7%	24.1%	34.5%	3.4%
		30	Students	13.3%	13.3%	3.3%	6.7%	63.3%	16.7%	23.3%	20.0%	23.3%	16.7%
Total of 17 Schools		19	Principal	0.0%	0.0%	0.0%	36.8%	63.2%	5.3%	5.3%	10.5%	52.6%	26.3%
		290	Teachers	0.7%	5.5%	5.9%	40.0%	47.9%	8.3%	13.8%	14.1%	45.5%	18.3%
		219	Students	2.3%	3.7%	3.2%	9.6%	81.3%	3.7%	15.1%	9.6%	32.4%	39.3%
		528	Total	1.3%	4.5%	4.5%	27.3%	62.3%	6.3%	14.0%	12.1%	40.3%	27.3%

More than 80%
Between 50% and 60%

No	School Name	No	Category	Q5. Improvement of school-community relationship					Q6. Contribution to improvement of school facilities				
				Not at all	Little	Hard to tell	Fairly	Very much	Not at all	Little	Hard to tell	Fairly	Very much
1	Al-Bahriya Maha Vidyalaya	1	Principal	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
		26	Teachers	11.5%	15.4%	15.4%	57.7%	0.0%	0.0%	7.7%	0.0%	19.2%	73.1%
		22	Students	4.5%	27.3%	18.2%	27.3%	22.7%	0.0%	4.5%	0.0%	13.6%	81.8%
2	Al-Mishbah Vidyalaya	1	Principal	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
		35	Teachers	0.0%	14.3%	14.3%	48.6%	22.9%	0.0%	14.3%	5.7%	37.1%	42.9%
21		21	Students	0.0%	0.0%	0.0%	14.3%	85.7%	0.0%	4.8%	0.0%	19.0%	76.2%
		3	Principal	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%
3	Islamabaath Muslim Vidyalaya	3	Teachers	0.0%	33.3%	0.0%	66.7%	0.0%	0.0%	33.3%	0.0%	0.0%	66.7%
		1	Principal	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	100.0%
4	Pulavarmani Sarifdeen Vidyalaya	21	Teachers	0.0%	14.3%	9.5%	57.1%	19.0%	0.0%	0.0%	0.0%	19.0%	81.0%
		29	Students	0.0%	6.9%	6.9%	65.5%	20.7%	0.0%	0.0%	0.0%	10.3%	89.7%
		2	Principal	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
5	Shams Central College	21	Teachers	4.8%	28.6%	0.0%	47.6%	19.0%	0.0%	0.0%	0.0%	9.5%	90.5%
		33	Students	0.0%	0.0%	0.0%	15.2%	84.8%	0.0%	3.0%	0.0%	9.1%	87.9%
		1	Principal	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
6	Sri Mamanga Vidyalaya	11	Teachers	0.0%	9.1%	0.0%	63.6%	27.3%	0.0%	0.0%	0.0%	0.0%	100.0%
		7	Students	0.0%	28.6%	14.3%	14.3%	42.9%	0.0%	0.0%	0.0%	0.0%	100.0%
7	Km/Mahavishnu Vidyalaya	1	Principal	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
		7	Teachers	14.3%	0.0%	28.6%	57.1%	0.0%	0.0%	0.0%	57.1%	42.9%	
8	Al-Hussain Vidyalaya	1	Principal	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
		20	Teachers	0.0%	20.0%	0.0%	50.0%	30.0%	5.0%	5.0%	25.0%	10.0%	55.0%
24		24	Students	4.2%	0.0%	0.0%	58.3%	37.5%	0.0%	0.0%	29.2%	20.8%	50.0%
		1	Principal	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%
9	Vigneswara Vidyalaya	5	Teachers	0.0%	0.0%	0.0%	80.0%	20.0%	0.0%	20.0%	0.0%	60.0%	20.0%
		1	Principal	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
10	Vipulananda Central College	33	Teachers	6.1%	24.2%	18.2%	45.5%	6.1%	0.0%	0.0%	0.0%	36.4%	63.6%
		15	Students	0.0%	6.7%	13.3%	40.0%	40.0%	0.0%	13.3%	0.0%	26.7%	60.0%
11	Al-Athaan Vidyalaya	2	Teachers	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%	0.0%	
12	Al-Baduriya Vidyalaya	1	Principal	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
		5	Teachers	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	60.0%	40.0%	
13	Al-Jalal Vidyalaya	2	Principal	0.0%	0.0%	0.0%	50.0%	50.0%	0.0%	0.0%	0.0%	50.0%	50.0%
		33	Teachers	0.0%	5.7%	11.4%	42.9%	34.3%	0.0%	2.9%	2.9%	25.7%	62.9%
		23	Students	8.7%	21.7%	8.7%	39.1%	21.7%	0.0%	4.3%	0.0%	8.7%	87.0%
14	Malharusshams Maha Vidyalaya	2	Principal	0.0%	0.0%	0.0%	50.0%	50.0%	0.0%	0.0%	0.0%	0.0%	100.0%
		27	Teachers	29.6%	25.9%	7.4%	25.9%	11.1%	7.4%	11.1%	3.7%	55.6%	22.2%
15	Students	0.0%	26.7%	33.3%	13.3%	26.7%	0.0%	0.0%	0.0%	0.0%	100.0%		
15	Riyalul Jannah Vidyalaya	7	Teachers	0.0%	28.6%	14.3%	42.9%	14.3%	0.0%	14.3%	0.0%	42.9%	42.9%
16	Saraswathy Vidyalaya	1	Principal	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
		5	Teachers	20.0%	20.0%	60.0%	0.0%	0.0%	0.0%	0.0%	0.0%	20.0%	80.0%
17	Zahira College	2	Principal	0.0%	50.0%	0.0%	0.0%	50.0%	0.0%	0.0%	0.0%	50.0%	50.0%
		29	Teachers	13.8%	17.2%	31.0%	37.9%	0.0%	6.9%	20.7%	3.4%	62.1%	6.9%
30		30	Students	20.0%	6.7%	43.3%	23.3%	6.7%	0.0%	0.0%	6.7%	26.7%	46.7%
		19	Principal	0.0%	10.5%	0.0%	68.4%	21.1%	0.0%	0.0%	0.0%	21.1%	78.9%
290	Total of 17 Schools	290	Teachers	6.9%	16.9%	13.1%	47.9%	15.2%	1.7%	7.2%	3.4%	33.1%	54.5%
		219	Students	4.6%	10.0%	13.2%	32.9%	39.3%	0.0%	5.5%	4.1%	14.6%	75.8%
528	Total		5.7%	13.8%	12.7%	42.4%	25.4%	0.9%	6.3%	3.6%	25.0%	64.2%	

More than 80%
Between 50% and 60%

No	School Name	No	Category	Q7. Contribution to improving morale					Q8. Contribution to improving quality of education				
				Not at all	Little	Hard to tell	Fairly	Very much	Not at all	Little	Hard to tell	Fairly	Very much
1	Al-Bahriya Maha Vidyalaya	1	Principal	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	100.0%
		26	Teachers	0.0%	3.8%	0.0%	26.9%	69.2%	0.0%	3.8%	0.0%	30.8%	65.4%
		22	Students	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	18.2%	81.8%
2	Al-Mishbah Vidyalaya	1	Principal	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	100.0%
		35	Teachers	0.0%	2.9%	8.6%	48.6%	40.0%	0.0%	2.9%	0.0%	31.4%	65.7%
		21	Students	0.0%	0.0%	0.0%	33.3%	66.7%	0.0%	4.8%	4.8%	9.5%	81.0%
3	Islamabaath Muslim Vidyalaya	1	Principal	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	100.0%
		3	Teachers	0.0%	0.0%	0.0%	33.3%	66.7%	0.0%	0.0%	0.0%	0.0%	100.0%
4	Pulavarmani Sarifdeen Vidyalaya	1	Principal	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	100.0%
		21	Teachers	0.0%	14.3%	0.0%	14.3%	71.4%	0.0%	0.0%	4.8%	23.8%	71.4%
		29	Students	0.0%	0.0%	0.0%	31.0%	69.0%	0.0%	0.0%	0.0%	17.2%	82.8%
5	Shams Central College	2	Principal	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	100.0%
		21	Teachers	0.0%	4.8%	0.0%	28.6%	66.7%	0.0%	0.0%	0.0%	19.0%	81.0%
		33	Students	0.0%	0.0%	6.1%	9.1%	84.8%	0.0%	0.0%	0.0%	3.0%	97.0%
6	Sri Mamanga Vidyalaya	1	Principal	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	100.0%
		11	Teachers	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	100.0%
		7	Students	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	28.6%	71.4%
7	Km/Mahavishnu Vidyalaya	1	Principal	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%	0.0%	
		7	Teachers	0.0%	0.0%	0.0%	42.9%	57.1%	0.0%	14.3%	0.0%	14.3%	71.4%
8	Al-Hussain Vidyalaya	1	Principal	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	100.0%
		20	Teachers	0.0%	5.0%	0.0%	45.0%	50.0%	0.0%	0.0%	0.0%	45.0%	55.0%
		24	Students	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	4.2%	8.3%	87.5%
9	Vigneswara Vidyalaya	1	Principal	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	100.0%	
		5	Teachers	0.0%	0.0%	0.0%	80.0%	20.0%	0.0%	0.0%	0.0%	20.0%	80.0%
10	Vipulananda Central College	1	Principal	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	100.0%
		33	Teachers	0.0%	3.0%	6.1%	51.5%	39.4%	0.0%	3.0%	0.0%	42.4%	54.5%
		15	Students	0.0%	0.0%	0.0%	40.0%	60.0%	0.0%	0.0%	0.0%	20.0%	80.0%
11	Al-Athaan Vidyalaya	2	Teachers	0.0%	0.0%	0.0%	50.0%	50.0%	0.0%	0.0%	0.0%	50.0%	50.0%
12	Al-Baduriya Vidyalaya	1	Principal	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	100.0%
		5	Teachers	0.0%	0.0%	0.0%	60.0%	40.0%	0.0%	0.0%	0.0%	0.0%	100.0%
13	Al-Jalal Vidyalaya	2	Principal	0.0%	0.0%	50.0%	50.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
		33	Teachers	0.0%	11.4%	0.0%	34.3%	48.6%	0.0%	0.0%	0.0%	14.3%	80.0%
		23	Students	0.0%	0.0%	0.0%	39.1%	52.2%	0.0%	0.0%	4.3%	21.7%	73.9%
14	Malharusshams Maha Vidyalaya	2	Principal	0.0%	0.0%	0.0%	50.0%	50.0%	0.0%	0.0%	0.0%	0.0%	100.0%
		27	Teachers	18.5%	7.4%	7.4%	33.3%	22.2%	14.8%	14.8%	0.0%	40.7%	29.6%
15	Students	0.0%	6.7%	6.7%	33.3%	60.0%	6.7%	13.3%	6.7%	20.0%	53.3%		
15	Riyalul Jannah Vidyalaya	7	Teachers	0.0%	0.0%	14.3%	28.6%	57.1%	0.0%	0.0%	0.0%	71.4%	28.6%
16	Saraswathy Vidyalaya	1	Principal	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%	0.0%
		5	Teachers	20.0%	0.0%	0.0%	40.0%	40.0%	0.0%	0.0%	0.0%	0.0%	100.0%
17	Zahira College	2	Principal	0.0%	0.0%	0.0%	50.0%	50.0%	0.0%	0.0%	0.0%	50.0%	50.0%
		29	Teachers	6.9%	20.7%	10.3%	48.3%	13.8%	0.0%	17.2%	17.2%	55.2%	10.3%
		30	Students	0.0%	0.0%	6.7%	30.0%	63.3%	0.0%	3.3%	0.0%	13.3%	83.3%
	Total of 17 Schools	19	Principal	0.0%	0.0%	5.3%	26.3%	68.4%	0.0%	0.0%	0.0%	15.8%	84.2%
		290	Teachers	2.8%	7.9%	3.8%	37.9%	47.6%	1.4%	4.5%	2.1%	31.4%	60.7%
		219	Students	0.0%	0.9%	2.3%	21.9%	74.9%	0.5%	1.8%	1.8%	14.2%	81.7%
		528	Total	1.5%	4.7%	3.2%	30.9%	59.7%	0.9%	3.2%	1.9%	23.7%	70.3%

More than 80%
Between 50% and 60%

No	School Name	No	Category	Q9. Most Helpful/Effective Resource provided by the Pilot Project									
				Temp. shed	Furni- ture	Printin- g	Library	Sci. Lab.	School meals	Field Trip	Moni- toring	Others	
1	Al-Bahriya Maha Vidyalaya	1	Principal	0.0%	0.0%	0.0%	100.0%	0.0%	100.0%	0.0%	0.0%	0.0%	
		26	Teachers	23.1%	3.8%	3.8%	69.2%	34.6%	38.5%	0.0%	19.2%	3.8%	
		22	Students	36.4%	9.1%	18.2%	40.9%	31.8%	36.4%	0.0%	27.3%	0.0%	
2	Al-Mishbah Vidyalaya	1	Principal	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%
		35	Teachers	11.4%	22.9%	62.9%	0.0%	0.0%	25.7%	0.0%	57.1%	2.9%	
		21	Students	9.5%	23.8%	81.0%	9.5%	0.0%	4.8%	0.0%	61.9%	0.0%	
3	Islamabaath Muslim Vidyalaya	1	Principal	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	100.0%	0.0%	
		3	Teachers	0.0%	66.7%	0.0%	0.0%	0.0%	66.7%	0.0%	66.7%	0.0%	
4	Pulavarmani Sarifdeen Vidyalaya	1	Principal	0.0%	0.0%	0.0%	100.0%	100.0%	0.0%	0.0%	0.0%	0.0%	
		21	Teachers	0.0%	4.8%	0.0%	85.7%	33.3%	57.1%	0.0%	19.0%	0.0%	
		29	Students	3.4%	3.4%	62.1%	13.8%	3.4%	51.7%	3.4%	58.6%	0.0%	
5	Shams Central College	2	Principal	0.0%	0.0%	0.0%	100.0%	100.0%	0.0%	0.0%	0.0%	0.0%	
		21	Teachers	4.8%	0.0%	0.0%	95.2%	90.5%	0.0%	0.0%	4.8%	0.0%	
		33	Students	0.0%	18.2%	3.0%	93.9%	75.8%	3.0%	0.0%	3.0%	3.0%	
6	Sri Mamanga Vidyalaya	1	Principal	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%
		11	Teachers	0.0%	27.3%	0.0%	18.2%	45.5%	45.5%	0.0%	45.5%	18.2%	
		7	Students	0.0%	14.3%	14.3%	14.3%	0.0%	71.4%	0.0%	85.7%	0.0%	
7	Km/Mahavishnu Vidyalaya	1	Principal	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	100.0%	0.0%	
		7	Teachers	0.0%	42.9%	14.3%	14.3%	0.0%	71.4%	0.0%	57.1%	0.0%	
8	Al-Hussain Vidyalaya	1	Principal	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%
		20	Teachers	45.0%	40.0%	0.0%	0.0%	0.0%	35.0%	0.0%	60.0%	10.0%	
		24	Students	0.0%	20.8%	0.0%	0.0%	0.0%	100.0%	0.0%	79.2%	0.0%	
9	Vigneswara Vidyalaya	1	Principal	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%
		5	Teachers	20.0%	20.0%	0.0%	0.0%	0.0%	60.0%	40.0%	60.0%	0.0%	
10	Vipulananda Central College	1	Principal	100.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
		33	Teachers	33.3%	9.1%	0.0%	78.8%	54.5%	0.0%	0.0%	12.1%	0.0%	
		15	Students	33.3%	13.3%	0.0%	73.3%	33.3%	20.0%	0.0%	26.7%	0.0%	
11	Al-Athaan Vidyalaya	2	Teachers	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%	0.0%	
12	Al-Baduriya Vidyalaya	1	Principal	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%
		5	Teachers	0.0%	0.0%	0.0%	100.0%	0.0%	100.0%	0.0%	0.0%	0.0%	
13	Al-Jalal Vidyalaya	2	Principal	0.0%	0.0%	0.0%	50.0%	50.0%	50.0%	0.0%	50.0%	0.0%	
		33	Teachers	11.4%	25.7%	11.4%	54.3%	48.6%	8.6%	0.0%	25.7%	0.0%	
		23	Students	4.3%	26.1%	13.0%	39.1%	56.5%	0.0%	4.3%	52.2%	4.3%	
14	Malharusshams Maha Vidyalaya	2	Principal	100.0%	0.0%	50.0%	50.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
		27	Teachers	81.5%	22.2%	18.5%	7.4%	11.1%	0.0%	0.0%	40.7%	11.1%	
		15	Students	60.0%	20.0%	26.7%	6.7%	20.0%	0.0%	0.0%	46.7%	13.3%	
15	Riyalul Jannah Vidyalaya	7	Teachers	14.3%	14.3%	0.0%	85.7%	0.0%	28.6%	0.0%	57.1%	0.0%	
16	Saraswathy Vidyalaya	1	Principal	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%
		5	Teachers	0.0%	40.0%	100.0%	0.0%	0.0%	20.0%	0.0%	40.0%	0.0%	
17	Zahira College	2	Principal	0.0%	50.0%	0.0%	50.0%	50.0%	0.0%	0.0%	0.0%	50.0%	0.0%
		29	Teachers	32.1%	14.3%	46.4%	25.0%	10.7%	0.0%	3.6%	42.9%	7.1%	
		30	Students	63.3%	13.3%	36.7%	23.3%	20.0%	10.0%	0.0%	33.3%	0.0%	
Total of 17 Schools		19	Principal	15.8%	26.3%	10.5%	42.1%	31.6%	15.8%	0.0%	57.9%	0.0%	
		290	Teachers	23.5%	18.0%	17.6%	42.9%	28.0%	22.1%	1.7%	34.6%	3.8%	
		219	Students	20.5%	16.0%	26.9%	34.2%	27.4%	27.4%	0.9%	43.4%	1.8%	
		528	Total	22.0%	17.5%	21.3%	39.3%	27.9%	24.1%	1.3%	39.1%	2.8%	

More than 80%
Between 50% and 60%

No	School Name	No	Category	Q10. Most Effective Tool Introduced by the Pilot Project							
				SEIKA QEC	5S	Sug. System	Mut. eva.	Model Exp.	100 box cal.	Psy-social	Others
1	Al-Bahriya Maha Vidyalaya	1	Principal	100.0%	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%
		26	Teachers	26.9%	15.4%	30.8%	57.7%	11.5%	53.8%	3.8%	0.0%
		22	Students	36.4%	45.5%	9.1%	40.9%	0.0%	68.2%	0.0%	0.0%
2	Al-Mishbah Vidyalaya	1	Principal	0.0%	0.0%	0.0%	100.0%	0.0%	100.0%	0.0%	0.0%
		35	Teachers	14.3%	48.6%	22.9%	11.4%	8.6%	77.1%	2.9%	0.0%
21		21	Students	14.3%	42.9%	42.9%	19.0%	9.5%	61.9%	0.0%	0.0%
		3	Principal	0.0%	100.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%
3	Islamabaath Muslim Vidyalaya	3	Teachers	33.3%	66.7%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%
		1	Principal	100.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
4	Pulavarmani Sarifdeen Vidyalaya	21	Teachers	52.4%	61.9%	0.0%	9.5%	0.0%	76.2%	0.0%	0.0%
		29	Students	13.8%	51.7%	51.7%	13.8%	6.9%	62.1%	0.0%	0.0%
		2	Principal	100.0%	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%
5	Shams Central College	21	Teachers	38.1%	33.3%	23.8%	19.0%	23.8%	57.1%	0.0%	4.8%
		33	Students	6.1%	78.8%	12.1%	6.1%	9.1%	78.8%	3.0%	0.0%
		1	Principal	100.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
6	Sri Mamanga Vidyalaya	11	Teachers	45.5%	72.7%	18.2%	18.2%	0.0%	27.3%	0.0%	18.2%
		7	Students	0.0%	71.4%	14.3%	14.3%	0.0%	85.7%	0.0%	14.3%
7	Km/Mahavishnu Vidyalaya	1	Principal	0.0%	100.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%
		7	Teachers	14.3%	71.4%	14.3%	14.3%	28.6%	57.1%	0.0%	0.0%
8	Al-Hussain Vidyalaya	1	Principal	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%
		20	Teachers	20.0%	60.0%	45.0%	20.0%	0.0%	50.0%	5.0%	0.0%
24		24	Students	4.2%	79.2%	20.8%	0.0%	0.0%	95.8%	0.0%	0.0%
		1	Principal	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%
9	Vigneswara Vidyalaya	5	Teachers	20.0%	60.0%	0.0%	40.0%	20.0%	60.0%	0.0%	0.0%
		1	Principal	100.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%
10	Vipulananda Central College	33	Teachers	45.5%	75.8%	3.0%	6.1%	6.1%	54.5%	0.0%	0.0%
		15	Students	86.7%	26.7%	13.3%	53.3%	6.7%	13.3%	0.0%	0.0%
		2	Teachers	50.0%	50.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%
12	Al-Baduriya Vidyalaya	1	Principal	100.0%	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%
		5	Teachers	60.0%	0.0%	20.0%	0.0%	0.0%	100.0%	0.0%	0.0%
13	Al-Jalal Vidyalaya	2	Principal	0.0%	50.0%	50.0%	0.0%	0.0%	100.0%	0.0%	0.0%
		33	Teachers	2.9%	45.7%	48.6%	5.7%	2.9%	80.0%	0.0%	0.0%
		23	Students	8.7%	4.3%	52.2%	13.0%	26.1%	91.3%	0.0%	0.0%
14	Malharusshams Maha Vidyalaya	2	Principal	100.0%	0.0%	0.0%	50.0%	0.0%	50.0%	0.0%	0.0%
		27	Teachers	18.5%	22.2%	14.8%	40.7%	22.2%	51.9%	3.7%	0.0%
		15	Students	60.0%	13.3%	20.0%	26.7%	0.0%	80.0%	0.0%	0.0%
15	Riyalul Jannah Vidyalaya	7	Teachers	85.7%	14.3%	14.3%	0.0%	14.3%	71.4%	0.0%	0.0%
16	Saraswathy Vidyalaya	1	Principal	100.0%	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%
		5	Teachers	40.0%	60.0%	0.0%	20.0%	0.0%	60.0%	20.0%	0.0%
17	Zahira College	2	Principal	0.0%	50.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%
		29	Teachers	14.3%	17.9%	50.0%	10.7%	3.6%	82.1%	3.6%	0.0%
		30	Students	6.7%	0.0%	80.0%	3.3%	6.7%	96.7%	6.7%	0.0%
Total of 17 Schools		19	Principal	52.6%	42.1%	10.5%	21.1%	0.0%	68.4%	0.0%	0.0%
		290	Teachers	27.7%	44.3%	24.6%	18.3%	8.7%	65.7%	2.1%	1.0%
		219	Students	20.1%	41.6%	35.2%	16.4%	7.3%	75.3%	1.4%	0.5%
		528	Total	25.4%	43.1%	28.5%	17.6%	7.8%	69.8%	1.7%	0.8%

More than 80%
Between 50% and 60%