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}


Directorate of Primary Education
With the assistance of UNICEF, Bangladesh


\title{
Sub-cluster Training: An Evaluation of the Programme's Achievement
}

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\section*{PREFACE}

Bangladesh is committed to achieving its national education goal of total eradication of illiteracy within the next ten years. The Government's Perspective Plan targets to achieve the following by the year 2000: increase the gross enrolment rate to 95 percent, increase the primary education completion rate to 70 percent, and increase the adult literacy rate to 62 percent. The perspective plan also includes qualitative goals, such as, improvement in the quality of teachers training, supervision, management and monitoring systems; and undertaking of innovative programmes and research. In order to accomplish all these interrelated objectives, new innovative ideas have been adopted and continuous efforts have been made through different projects. To this end, cluster training, as one of the major experiments aimed at increasing the capability and enhancing the skill of the teachers was introduced by the GOB in 1983. Based on study findings, an improved version of the cluster training - "Subcluster Training" programme started implementation in 1992 and currently operating in thirty-six districts. This srudy purports to assess the achievement of the sub-clusier training programme prior to its nation-wide replication.

This study was carried out in close collaboration with the relevanr officials at the Directorate of Primary Education and UNICEF, Dhaka. The successful designing of this complex assessment would not have been possible without several discussion meetings at the initial stages of the study with Dr . Khairul Alam, Deputy Director, Directorate of Primary Education; Ms. Syeda Ayatunnessa, Ms. Razia Sultana, Mr. Halimuzzaman, and Mr. Abdun Noor, Assistant Directors, Directorate of Primary Education; and Dr. G.M. Shrestha, Education Section, UNICEF. I am immensely indebted to all of them for their intellectual support and valuable inputs provided at different stages of the study.

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I would like to express my deep indebtedness to Md. Shamsul Hoque, Director, Training, Dr. Khairul Alam, Deputy Director, Md. Shamim Ahmed, Depury Director, Training, Directorate of Primary Education; and Dr. G.M. Shrestha and Mrs. Mira Mitra of Education Section, UNICEF for their thorough review of the draft report and for providing us with useful suggestions in finalizing the report.

I am indebted to all the education officials, teachers, community people and the students included in the sample for their valuable time and unstinted support extended to our field teams.

I am thankful to Mr. M. Abdus Samad and Mr. Obaidur Rahman, both Project Officers, URC(B), for their tireless efforts put in the field management activities, and to Mr. M.A. Rashid for his untiring secretarial assistance in typing and retyping of this report.

Should the findings and recommendations be useful in understanding the complicated domain of the sub-cluster training programme and in designing the repiication plans of this programme, the efforts devoted in the stady would be considered worthwhile.

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}


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\section*{LIST OF ABBREVIATIONS}
\begin{tabular}{|c|c|c|}
\hline ADPEO & \(=\) & Assistant District Primary Education Officer \\
\hline ATEO & = & Assistant Thana Education Officer \\
\hline AVSC & \(=\) & AVSC International \\
\hline BBS & = & Bangladesh Bureau of Statistics \\
\hline C & = & Coder \\
\hline CARE & \(=\) & CARE-Bangladesh \\
\hline CO-PI & \(=\) & Co-Principal Investigator \\
\hline CV & = & Code Verifier \\
\hline DA & \(=\) & Dearness Allowance \\
\hline DC & = & District Commissioner \\
\hline DCI & = & Data Collection Instrument \\
\hline DD & = & Deputy Director \\
\hline DG & \(=\) & Director General \\
\hline DPE & \(=\) & Directorate of Primary Education \\
\hline DPEO & = & District Primary Education Officer \\
\hline E & = & Editor \\
\hline EFA & = & Education for All \\
\hline EV & = & Edit Verifier \\
\hline FI & \(=\) & Field Investigator \\
\hline FP & = & Family Planning \\
\hline FP-MCH & \(=\) & Family Planning and Maternal Child Health \\
\hline FS & \(=\) & Field Supervisor \\
\hline FSSAP & \(=\) & Female Secondary School Assistant Project \\
\hline GOB & = & Government of the People's Republic of Bangladesh \\
\hline HQ & \(=\) & Head Quarters \\
\hline HT & \(=\) & Head Teacher \\
\hline ICPD & = & International Conference on Population and Development (Cairo, 1994) \\
\hline IEC & \(=\) & Information Education and Communication \\
\hline MIS & \(=\) & Management Information Systems \\
\hline MSH & = & Management Sciences for Health \\
\hline NGO & = & Non-Government Organization \\
\hline NORAD & = & Norwegian Agency for Development Cooperation \\
\hline OR & = & Operations Research \\
\hline PI & = & Principal Investigator \\
\hline PTA & = & Parent Teachers Association \\
\hline SA & = & Systems Analyst \\
\hline SMC & = & School Managing Committee \\
\hline SWOT & = & Strength-Weakness-Opportunity-Threat \\
\hline TA & = & Travelling Allowance \\
\hline TEO & = & Thana Education Officer \\
\hline TNO & = & Thana Nirbahi (Executive) Officer \\
\hline
\end{tabular}
\begin{tabular}{lll} 
TOR & \(=\) & Terms of Reference \\
TOT & \(=\) & Training of Trainer \\
UN & \(=\) & United Nations \\
UNDP & \(=\) & United Nations Development Program \\
UNICEF & \(=\) & United Nations Children's Fund \\
UP & \(=\) Union Parishad (Council) \\
URC(B) & \(=\) University Research Corporation (Bangladesh) \\
USAID & \(=\) United States Agency for International Development
\end{tabular}

\section*{EXECUTIVE SUMMARY}

\section*{INTRODUCTION}

Education is the key yardstick of sustainable human development and an indispensable tool for the improvement of the quality of life. The primary education lays the foundation for it. Primary education has two fundamental objectives: to ensure basic education, and to prepare basis for subsequent higher education. Basic education has come to be recognized as one of the prime movers of economic, social and political development. Universal education and literacy is an established goal of the Government of Bangladesh. There has been a substantial expansion in education, particularly that of women over the last few years. New innovative approaches have been adopted to increase education coverage. The Bangladesh Government is committed to provide access to education to all primary school-age population and to increase the gross enrolment rate to 95 percent, and to increase the primary cycle completion rate to 70 percent by 2000. The government's future goals also include improvement of quality of teaching and learning in primary schools. To enhance the capability of teachers, continuous efforts have been taken through different projects. One of the innovative ideas experimented, was cluster training. The sub-cluster training is an improved version of cluster training. The programme was first introduced in 4 thanas of 4 divisions in 1992 and was further expanded in 1994.

\section*{OBJECTIVES}

The overall objective of this study was to assess the achievement of sub-cluster training programme currently in operation with the primary school, teachers of 36 districts in Bangladesh. The specific objectives of the study were as follows:
- to assess the impact of training on the teachers receiving the same;
- to examine the impact of training on the learning of students;
- to collect the opinion of the teachers, SMC and PTA members and education officials about the effectiveness of training;
- to review the management aspect of this training; and
- to identify the strengths and weaknesses of sub-cluster training and recommend ways of improving the same.

\section*{METHODOLOGY}

For a study dealing with the achievement of a training programme, it would have been ideal to conduct a study based on true experimental design. Since pre-intervention survey data are not available, a post-test only control design was adopted. The total number of sub-clusters selected for evaluation was 69 and the total number of schools selected was 327. As control area, one district within each of the four greater divisions was selected, and from each selected district, one thana was selected at random. From each selected thana, one government and one non-government school was selected at random. In each selected school, 30 students taking 10 from each of the Grades III to \(V\) were included in the sample. These 30 students in each school was considered as a group, and group discussion was held using guideline. As sample of parents, 5 (five) were selected randomly from each school from among the parents of children. Education officials and SMC-PTA Chairmenmembers were brought under the study on census basis.

Given the objectives of the study, the following broad groups of variables were covered: school related information, respondent characteristics, organization of sub-cluster training, management of sub-cluster training, teaching-learning situation in the sub-cluster and non-sub-cluster schools, and community involvement in the sub-cluster and non-sub-cluster areas. The data collection instruments used include separate interview schedules for head teacher, teacher, education officials, parents of school-going children; and discussion guidelines for the members of SMC, PTA and for school children.

This evaluation sudy was conducted by University Research Corporation (Bangladesh) in close collaboration with the Directorate of Primary Education, Ministry of Education and Education Section of UNICEF/Bangladesh.

All the data collection instruments were pre-tested. A five-day long intensive training was imparted to the field staff. The duration of field data collection was 34 days (May-June, 1996). The data management activities were carried out in-house at URC(B) HQs. The SPSS statistical package was used to enter, edit and analyze data.

\section*{KEY FINDINGS}

\section*{Organization, Management and Supervision}

Respondents perceived that the major purpose of sub-cluster training was to improve teachers' teaching quality. Other purposes of sub-cluster training, as perceived by the respondents, include application of new techniques of teaching, making the school attractive to children, increasing attendance, preventing dropout, etc.

The head teachers and teachers attended on an average six sub-cluster training sessions since it was introduced. The participation of SMC chairmen/members in sub-cluster training was poor and more so in the case of PTA chairmen/members. It seems that the SMC and PTA Chairmen/members were not timely and properly informed about the date and venue of training.

The commonly used training materials used in sub-cluster training were teachers' guide/manual followed by leaflets/modules. Chalk/duster and board were most commonly used teaching aids.

The co-curricular activities in which the participants mostly participated were reciting rhymes/poems, telling stories and singing songs. Other co-curricular activities performed by the participants include making jokes, performing comics, drawing pictures, showing physical exercises, etc.

Majority reported that sub-cluster training was heid in all the schools by turn. They also reported that, in most cases, the selection of date and venue of the training, selection of the topic and the presentator of the next demonstration class was jointly determined by the ATEO and the participants.

The ATEOs paid more frequent normal supervisory visits to schools than any other education officials during the last year. Majority of the head teachers and teachers reported that they were not visited by DPEOs, ADPEOs and other higher officials like TNOs, DCs, etc. during the corresponding period.

Though there was provision for visits of higher education officials during training sessions, only slightly over half of the head teachers and teachers reported to have experienced such visits.

A majority of the respondents reported that though there were provision for stationeries and enterrainment for the participants of sub-cluster training, the fund for these purposes was inadequate.

The major problems of management of sub-cluster training, according to the respondents, are shortage of teaching/training materiais and logistic facilities, poor allocation of fund for refreshment, no fund for transport, and inadequate supervision and monitoring system.

\section*{Teaching-learning Situation}

Majority were of the opinion that the mode of instruction of sub-cluster training was student-centered and the method of teaching was participatory.

In almost all training sessions demonstration class was followed by lesson criticism session and most participants were very active in such lesson criticism sessions.

In most cases, open discussion took place in sub-cluster training sessions. Both the head teachers' and teachers' participation in the open discussion was very much encouraging, while the participation of SMC and PTA chairmen/members was discouraging.

Majority of the head teachers and teachers reported that, in the training, they tried to identify teaching-learning problems and they also tried to apply their knowledge of sub-cluster training in class/school. However, they could not properly do so because of shortage of classrooms, shortage of teaching materials and other logistic facilities, shortage of teachers, etc.

Majority were of the opinion that the sub-cluster training had a positive impact on teaching-learning in school, it provided the teachers an opporrunity to develop/improve their teaching ability and it was conducive to skill development of children.

\section*{Strengths and Weaknesses}

The respondents identified multidimensional strengths of sub-cluster training. Mostly pronounced ones include new technique of teaching, greater/more use of teaching materials, sharing of ideas and experiences, etc. Major weaknesses of sub-cluster training, as identified by the respondents, are lack of or poor allocation of fund resulting in lack of refreshment, transport facilities and poor or inadequate supply of stationeries and materials, improper management resulting in shortage or irregular supply of leaflets, guides, improper planning and implementation, shortage of efficient trainers, etc.

\section*{Impact of Sub-cluster Training}

Students' enrolment was higher under sub-cluster than under non sub-cluster; attendance rate, especially of girls, was higher under sub-cluster than under non sub-cluster; dropout rate was lower under sub-cluster than under non sub-cluster; and girls' dropout rate was lower under sub-cluster than under non sub-cluster.

In terms of teaching aids available and in terms of holding of co-curricular activities, schools under sub-cluster appeared to be better than those under non sub-cluster.

Quality of teaching-learning was relatively better under sub-cluster than under non sub-cluster. Also, compared to those under non sub-cluster, the sub-cluster schools were reported to be more attractive and enjoyable to the students. Sub-cluster schools tend to observe various days/weeks on more occasions or issues than the non sub-cluster schools.

Teacher-student relationship was more congenial under sub-cluster than under non sub-cluster.
Community involvement in school affairs was not strong enough and there are scopes for improving/strengthening school and community relationship.

\section*{RECOMMENDATIONS}
- Based on the positive impact of the sub-cluster training in terms of enhancement of quality of teaching, improvement of learning environment, and increasing enrolment and attendance rates and reducing dropout rates (especially of girls) it is suggested that the sub-cluster training should be replicated, nationwide.
- Appropriate steps should be taken to strengthen school-community relationship. Greater participation of the SMC and PTA chairmen/members in sub-cluster training should be ensured. This may be done by involving the public representatives like members of parliament, local government representatives (UP chairmen/members), etc. in various school related affairs. To this end, appropriate advocacy and IEC measures should be undertaken.
- Adequate and timely supply of stationeries and materials for sub-cluster training needs to be ensured to help effective teaching-learning.
- More provision for fund for stationeries, refreshment and transport of participants needs to be considered for ensuring greater effectiveness of sub-cluster training.
- Monitoring and evaluation should a built-in component in the design of the sub-cluster training programme. The system of monitoring and evaluation should be emphasized as an integral part of sub-cluster training. Regular supervisory visits by higher education officials during the sub-cluster training sessions and subsequent follow-up visits should be ensured.
- Holding of sub-cluster training sessions during holidays may be experimented.
- Rescheduling of training timing needs to be considered. The suggested timing is 8:00 16:00, instead of the present timing 10:00-18:00.
- The issue of training of the trainers should be emphasized.


\section*{1. INTRODUCTION}

\subsection*{1.1. Background and Rationale}

The true human development is an outcome of interactions of three yardsticks of socio-economic progress, namely, life-expectancy (longevity variable), education/literacy (knowledge variable), and per capita real income (economic variable) (UNDP 1991: 16; Barkat 1994: 328). Thus, education is one of the most important yardsticks of sustainable human development, whereby the primary education lays the foundation for it. Primary education has two fundamental objectives: to ensure basic education, and to prepare basis for subsequent higher education. Basic education has come to be recognized as one of the prime movers of economic, social and political development. This is why the document of the International Conference on Population and Development (ICPD, Cairo 1994) have made the following statements "Education is an indispensable tool for the improvement of the quality of life ... Lack of basic education and low levels of literacy ... continue to inhibit the development process in every area" (UN 1995: 57).

Bangladesh, as a participant of the 1990 World summit on Education For All (EFA) is committed to ensure a place for every child in a school or an appropriate education programme, remove disparities, improve the quality and relevance of basic education, build a sense of ownership and accountability at the local level, and rally all sections of the society to achieve the goals of EFA (GOB-UNICEF, 1994). Universal education and literacy is an established goal of the Government of Bangladesh. There has been a substantial expansion in education, particularly that of girls over the last few years. New innovative approaches have been adopted to increase education coverage among the population. The GOB's targets for primary education as presented in its perspective plan (1995-2010) include:
- to provide access to all primary school-age population and to increase the gross enroiment rate to 95 percent by the end of the year 2000 with particular emphasis on the enrolment of girls;
- to increase the primary cycle completion rate to 70 percent by 2000 ; and
- to increase the adult literacy to 62 percent by the year 2000 (details see GOB 1995a: Document 4, p.32).

In addition to the abovestated, the government's furure goals also include improvement of quality of teaching and learning in primary schoois. In the massive task of education for all for a nation the single most important factor of skill of the teachers plays, to a great extent, decisive role in improving the quality of teaching - learning in primary education. To enhance the capability of teachers, continuous efforts have been taken through different projects remarkably since 1980. One of the innovative ideas experimented, was Cluster Training. It was initially introduced in seven districts in 1983 and from 1986, all the primary schools of the country were brought under this training programme. The objectives of cluster training were to increase capability and enhance skill
of the teachers through imparting in-service training, and to disseminate trainee-teacher's knowledge in the classroom. UNICEF, which had been supporting the training programme since 1986 , took an initiative in 1989 for a study to evaluate the success of cluster training, to identify the problems of implementation and to find feasible solutions. Also, workshops were organized following the study. According to the findings and suggestions of the studies and the workshop, it was decided to conduct the training at sub-cluster level (GOB 1995b).

Sub-cluster Training is an improved version of cluster training. The programme was first introduced in 4 thanas of 4 divisions in 1992 and was further expanded in 1994 (currently operating in 36 districts). The objectives of sub-cluster Training were as follows:
- to ensure attendance of trainers and trainees;
- to make training effective by providing training in relatively larger groups;
- to bring teachers of different schools together and to create opportunities for sharing ideas and experiences;
- to develop competitive attiude among the teachers for the overall development of the schools, acquiring experience about various schools' problems and solutions, and applying the same in practice;
- to enhance teachers capability in co-curricular activities, demonstration lesson etc. in addition to leaflet based training;
- to make training more effective by imparting one full-day training; and
- to develop harmonious relationship of schools with the community through open discussions in the presence of the members of SMC/PTA.

The activities constituting sub-cluster training include the following:
- a demonstration class by a teacher followed by constructive criticisms by other participants;
- training on a topic of mostly academic subjects on the basis of a training module known as "leaflet";
two/three types of co-curricular activities; and
open discussion with the participation of the members of SMC, PTA representatives and the guardians.

An evaluation (Aziz and Rahman, 1994) of initial trial of Sub-cluster Training revealed, among others, the following:
- sub-cluster training is more effective than cluster training;
- some vital issues of primary education such as dropout, enrolment, attendance of children, school environment, physical facilities etc. may be properly handled through sub-cluster training programme;
- as the chairmen of SMCs and PTAs are invited to participate in open discussion, they have been found (under sub-cluster training) to take much interest in school development and management. In many cases, they now take active role in solving minor problems locally; -
- the teachers are motivated in using teaching aids in the class and wherever the teachers are under sub-cluster training programme, the quality of teaching learning has improved.

Against this background the Government of Bangladesh, in collaboration with UNICEF, plans to introduce sub-cluster training programme throughout the country. Therefore, it was felt necessary to conduct a study to assess the achievement of this training programme before introducing it throughout the councry. Here in lies the rationale of the present study.

\subsection*{1.2. Study Objectives}

The overall objective of this study was to assess the achievement of sub-cluster training programme currendy in operation with the primary school teachers of 36 districts in Bangladesh. The specific objectives of the study were as follows:
i) to assess the impact of training on the teachers receiving the same;
ii) to examine the impact of training on the learning of students;
iii) to collect the opinion of the teachers, SMC and PTA members and education officials about the effectiveness of training;
iv) to review the management aspect of this training; and
v) to identify the strengths and weaknesses of sub-cluster training and recommend ways of improving the same.


\section*{2. METHODOLOGY}

\subsection*{2.1. The Study Design}

For a study dealing with the achievement of a training programme, it would have been ideal to conduct a study based on true experimental design, i.e., pre-and-post intervention surveys and come to a conclusion by comparing two sets of data. Since pre-intervention survey data are not available, a post-test only control design, as shown in the following diagram, was adopted
\begin{tabular}{|c|c|c|}
\hline \(\checkmark\) & Time & - \\
\hline Experimental Area & X \(\mathrm{O}_{1}\) & where, \(\mathrm{X}=\) Programme intervention \\
\hline Control Area & \(\mathrm{O}_{2}\) & = Sub-cluster Training \\
\hline
\end{tabular}
\(\mathrm{O}=\) Observation measurement

The above figures indicate that there was only one observation in each of the experimental and control areas. The difference between the two is that in the experimental area, sub-cluster training is (was) in operation while in the control area, there was no sub-cluster training in operation.

\subsection*{2.2. Variables, Indicators and Sources of Information}

Given the objectives of the study, the following broad groups of variables were covered: school related information, respondent characteristics, organization of sub-cluster training, management of sub-cluster training, teaching-learning situation in the sub-cluster and non-sub-cluster schools, and community involvement in the sub-cluster and non-sub-cluster areas. The detailed list of the variables with their relevant indicators by sources of data and data collection instruments is given in Table 2.1. The data collection instruments used include separate interview schedules for head teacher, teacher, education officials, parents of school-going children; and discussion guidelines for the members of SMC, PTAs and for school children.

Table 2.1: Variables and indicators by daia source(s) and data collection instrument(s)
\begin{tabular}{|c|c|c|c|}
\hline Variable or Group of Variables & Indicators & Data Source(s) & Data Collection Instrument(s) \\
\hline \begin{tabular}{l}
1. School-related Information: \\
(a) General
\end{tabular} & Year of establishment; Type of school (Govi./Non-Govt.); Registered/Non-registered, Year of registration; No. of Grades. Number of Classrooms, Number of teachers; Total number of students enrolled, Number of students by gender and Grade. Amendance rate of sudents by gender and Grade, Dropout rate by gender and Grade; Existence of school's own play-ground. & Head Teacher & Checklist \\
\hline (b) Teaching Aids & Existence of Chalk Board, Chalk, Duster, Display board, Picture, Charts, Map, Globe, Picnure instruments. Overhead Projector, Slides, Microphone, Picture books. Blocks, etc. & Head Teacher & Checkilist \\
\hline (c) Co-curricular Activities. & Holding of sports/literary/ culnural acuviues in the school and its frequency: Parucipation in inter-school compeution and receiving of prize; Observance of vanous national days. & Head Teacher & Checklist \\
\hline (d) Communiry Involvement Activities & Survey of school-age children, Modivation of parents and children: Holding of Parent-Teachers Day. PTA meetings. SMC meetings (including frequency, number of participants and topics). & Head Teacher & Checkist \\
\hline \begin{tabular}{l}
2. Respondent Characteristics: \\
(a) Teachers
\end{tabular} & Age. Sex, Experience in reaching, Educational Qualificacion; Professional Training received, Year(s) of receiving professional training, Topic, duration and frequency such of training; Participation in cluster/subcluster craining; Designation; Subjects and Grades taught. & Teachers(all) & Checklist \\
\hline (b) Officials of Primary Education & Age, Sex, Job Experience, Education. Designation, Professional Training received (by ropic, duration and frequency). & DPEO, TEO, ATEO & Inreiview \\
\hline \begin{tabular}{l}
(c) SMC and \\
PTA. \\
Members or Chairmen
\end{tabular} & Age, Sex. Education, Occupation, Income, Stans, Duration of association with SMC or PTA. & SMC and PTA Members and Chairmen & Checkist \\
\hline (d) Srudents & Age, Gender, Grade; Father/Mother's Name, Father's Occupation, Living address. & Students of selected primary schools & Checklist \\
\hline (e) Parents & Age, Gender, Education, Occupation, Income, Number of living children, Number of children passed school/ attending school (by gender). & Parents of the students who will be discussed with & Interview \\
\hline 3. Organization of Sub-cluster Training IOnly for Experimental Areas] & Frequency and duration of training; Training materiais used, Topics covered in training; Teaching aids used; Cocurricular activities in sub-cluster training centres. Number and types of co-curricular activities in which trainees participate; Method of training-participatory/nonparticipatory; Mode of instruction-student centered/teacher-centered; Extent of antendance of teachers and presence of SMC/PTA Chairmen-members: Reguianty of holding open discussions. & DPEOs, TEOs, ATEOs, Head Teachers, Teachers and SMC and PTA Chaimen-members & Interview \(+\) Group discussion \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|}
\hline Variable or Group of Variables & Indicators & Data Source(s) & Data Collection Instrument(s) \\
\hline \begin{tabular}{l}
4. Management of Sub-cluster \\
Training [Only for Experimental Areas]
\end{tabular} & Authonity, and mechanism of, planning and scheduling (including topic selection) of sub-cluster training; Holding of training in all the schools located in a sub-cluster area by rums; Average disance (in km.) of the training centers from the residence of the teachers: Training of Trainers (ATEO and above); Duration, frequency and topic of crainers' training: Preparation of training materials; Availability and use of training materials: Supervision of schools; Supervision, monitoring and evaluation of subciuster training programme; Logistics for sub-cluster training; Logisucs for supervision; Practice of taking preand post-cest of sub-cluster trainees; Weaknesses of management system and ways to improve. & \begin{tabular}{l}
DPEOs TEOs, ATEOs, Head \\
Teachers and Teachers
\end{tabular} & Interview \\
\hline \multirow[t]{6}{*}{Teachinglearning under Sub-cluster Training [Only for Experimental Areas]} & Extent of paracipacion of teachers in discussions. Areas. in which they actively participate in such discussions; Identificacion of teaching-learning problems, their causes and solutions; Teachers' sharing of ideas and experiences (including areas of such sharing); Teachers' opportuniry to develop their own ability of teaching and to contribute in improving the teaching styles of others; Nacure of lesson criticism session and suggestions offered. & TEOs. ATEOs, Head Teachers. and Teachers & Interview \\
\hline & Allowing sufficient ame for participation of students. Identifying weaknesses and giving remedials to the backward children. Providing oppormuity to the children to pracuse lessons in the class: Use of teaching aids: Participanus of raining conducting co-curncular activities (practused in training) in their respective schoois. & \begin{tabular}{l}
TEOs, ATEOs, Head Teachers, \\
Teachers (rainees) \\
and \\
Sudenas
\end{tabular} & Interview; Group discussion \\
\hline & Extent to which school is atractive and enjoyable to the students; State of atrendance and dropout; Knowiedge and awareness about cleaniiness; Students' degree of satisfaction about teaching. & TEOs, ATEOs, Head Teachers, Teachers, Parents and Sudents and SMC-PTA Chairmen-members & \begin{tabular}{l}
Incerview; \\
Group discussion
\end{tabular} \\
\hline & Interest and enthusiasm of SMC and PTA Chairmenmembers to be present and cake part in open discussion, Areas in which they acrively participate. & TEOs, ATEOs, Head Teachers, Teachers, and SMC.PTA Chairmen-members & Interview; Group discussion \\
\hline & Strengths and Weaknesses of sub-cluster craining. & DPEOs, TEOs, ATEOs. Head Teachers, Teachers, Parents and SMC-PTA Chairmen-members & \begin{tabular}{l}
Interview: \\
Group discussion
\end{tabular} \\
\hline & Perceppon of and awareness about teaching learning quality; Role of community and pareats in improving education and solving school probiems. & \begin{tabular}{l}
Head Teachers, Teachers, Parents and \\
SMC-PTA Chairmen-members
\end{tabular} & Interview: Group discussion \\
\hline \multirow[t]{3}{*}{\begin{tabular}{l}
TeachingLearning \\
Situation and \\
Community \\
Involvement in Control Area
\end{tabular}} & Use of teaching aids in the class, Allowing ime for participacion of sudents. Idenafying weaknesses and giving remedials to the backward children. Providing oppormaniry to the children to pracuse lessons in the ciass, Co-curricular activities in the class. & TEOs.ATEOs, Head Teachers, Teachers and Sudents & \begin{tabular}{l}
Interview; \\
Group discussion
\end{tabular} \\
\hline & Extent to which school is amactive and enjoyable to the srudents; Scate of amendance and dropout; Knowledge and awareness about cleandiness; Sudents' degree of satisfacion about teaching. & TEOs, ATEOs, Head Teachers. Teachers, Parents and Students, SMC and PTA Chaimen-members & \begin{tabular}{l}
Interview: \\
Group discussion
\end{tabular} \\
\hline & Perception of and awareness abous teaching and leaming quality; Role of communiry \& parents in improving educanion \& solving school probiems. & Head Teachers, Teachers, Parents and SMC-PTA Chairmen-members & \begin{tabular}{l}
Interview: \\
Group discussion
\end{tabular} \\
\hline
\end{tabular}

\subsection*{2.3. The Sample Design}

In accordance with the terms of reference, three thanas from each of the greater divisions where subcluster training is in operation were selected as experimental area and 25 percent of the sub-clusters in a selected thana was covered. The desired number of thanas ( \(3 \times 4=12\) ) were selected randomly from the list of intervention thanas mentioned in the TOR (Table 2.2).

From the list of sub-clusters obtained from the relevant TEO/ATEOs in each selected intervention thana, 25 percent of the sub-clusters were selected at random. All the schools in each selected subcluster were selected in the experimental (intervention) areas. The total number of sub-clusters selected for evaluation was 69 and the total number of schools selected was 327 (Table 2.3).

As control area, one district within each of the four greater divisions was selected purposively so that it is in close proximity to the intervention district(s) in the division under consideration. From within each selected district, one thana was selected at random. From each selected thana, one government and one non-government school was selected at random, in the control area.

The following are the categories of respondents included in the study: Education Officials (DPEOs, TEOs, ATEOs), Head Teachers, Teachers, SMC Chairmen-members, PTA members-chairmen, Parents, and Students attending the sample schools.

Education officials and SMC-PTA Chairmen-members were brought under the study on census basis. That is, all the DPEOs of the districts in the selected thanas, the TEOs and ATEOs of selected thanas, and the SMC-PTA Chairmen-members of the selected schools were covered. Similarly, the Head Teachers and Teachers of all the primary schools in the selected sub-clusters were interviewed (Table 2.3).

In each selected school, 30 students taking 10 from each of the Grades III to V were included in the sample. These 30 students in each school was considered as a group, and group discussion was held using guideline. But since teaching-learning also depends on the quality of students, they were selected on merit basis. On the basis of their performance in the last annual examination, half of the students in each class ( 5 of 10 ) were taken purposively from the meritorious ones and another half from the academically poorer ones. As sample of parents, 5 (five) were selected randomly from each school from among the parents of children. The process of selecting sample respondents was similar in both the experimental and control areas.

The sample size, by category of respondents in experimental and control areas is shown in Table 2.4.

Table 2.2: Total number of sub-clusters, primary schools, head teachers and teachers: subcluster (experimental) and non-sub-cluster (control) areas
\begin{tabular}{|c|c|c|c|c|}
\hline Name of the thana & Total subclusters \({ }^{\text {a }}\) & Total primary schools \({ }^{\text {a }}\) & Total head teachers \({ }^{\text {b }}\) & Total teachers (Excluding head teacher) \({ }^{b>}\) \\
\hline \multicolumn{5}{|c|}{Sub-cluster: Experimental} \\
\hline Tajmuddin & 12 & 98 & 98 & 317 \\
\hline Laxmipur & 46 & 215 & 215 & 727 \\
\hline Belaichhari & 3 & 27 & 27 & 51 \\
\hline Chattak & 23 & 122 & 32 & 335 \\
\hline Gazaria & 14 & 66 & - 66 & 278 \\
\hline Shibalaya & 12 & 71 & 71 & 322 \\
\hline Gopalganj & 36 & 188 & 185 & 820 \\
\hline Ashashuni & 18 & 146 & 146 & 537 \\
\hline Magura & 23 & 208 & 206 & 876 \\
\hline Rangpur & 31 & 123 & 123 & 574 \\
\hline Gabtali & 24 & 93 & 93 & 373 \\
\hline Jaldhaka & 17 & 85 & 85 & 239 \\
\hline Total & 259 & 1442 & 1347 & 5449 \\
\hline \multicolumn{5}{|c|}{Non-Sub-cluster: Control} \\
\hline Haimchar & NA & 58 & 58 & 202 \\
\hline Sonargaon & NA & 88 & 76 & 277 \\
\hline Lohagara & NA & 155 & 153 & 716 \\
\hline Kaliganj & NA & 58 & NA & NA \\
\hline Total & NA & 359 & 287 & 1195 \\
\hline
\end{tabular}

Source: a> Monthly report obtained from DG, Primary Education (DPE).
\(b>\) Data obrained in the field.

Table 2.3: Samples by categories: Sub-cluster and non-sub-cluster areas
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|}
\hline \multirow[t]{2}{*}{Name of the Fhana} & \multirow[t]{2}{*}{\# of
sample
sub-
clus-
ters} & \multirow[t]{2}{*}{\begin{tabular}{l}
\# of \\
Sample \\
School
\end{tabular}} & \multicolumn{7}{|c|}{Category of respondent} \\
\hline & & & \begin{tabular}{l}
Head \\
Teacher
\end{tabular} & Teacher & Parents & Educational official & \[
\begin{gathered}
\text { SMC } \\
\text { (group) }
\end{gathered}
\] & \[
\left|\begin{array}{c}
\text { PTA } \\
\text { (group) }
\end{array}\right|
\] & Sudents (group) \\
\hline \multicolumn{10}{|c|}{Sub-cluster: Experimental} \\
\hline Tajmuddin & 3 & 20 & 18 & 59 & 95 & 4 & 20 & - & 19 \\
\hline Laxmipur & 12 & 56 & 56 & 177 & 280 & 13 & 55 & 42 & 56 \\
\hline Belaichinari & 1 & 7 & 7 & 11 & 35 & 2 & 7 & 4 & 7 \\
\hline Chattak & 6 & 32 & 32 & 59 & 160 & 3 & 32 & 25 & 32 \\
\hline Gazaria & 4 & 18 & 18 & 59 & 90 & 1 & 13 & - & 18 \\
\hline Shibalaya & 4 & 21 & 21 & 74 & 105 & 4 & 19 & 1 & 21 \\
\hline Gopalganj & 9 & 46 & 46 & 148 & 227 & 7 & 44 & 19 & 46 \\
\hline Ashashuni & 5 & 25 & 25 & 59 & 124 & 3 & 25 & 22 & 25 \\
\hline Magura & 6 & 25 & 25 & 95 & 125 & 5 & 24 & 25 & 25 \\
\hline Rangpur & 8 & 32 & 32 & 106 & 160 & 7 & 32 & 25 & 32 \\
\hline Gabtali & 6 & 20 & 20 & 54 & 100 & 7 & 19 & 2 & 19 \\
\hline Jaldhaka & 5 & 25 & 25 & 73 & 119 & 4 & 25 & 19 & 25 \\
\hline Total & 69 & 327 & 325 & 974 & 1620 & 60 & 315 & 184 & 325 \\
\hline \multicolumn{10}{|c|}{Non-sub-cluster: Control} \\
\hline Haimchar & NA & 2 & 2 & 7 & 10 & 3 & 2 & 1 & 2 \\
\hline Sonargaon & NA & 2 & 2 & 11 & 10 & 3 & - & - & 2 \\
\hline Lohagara & NA & 2 & 2 & 8 & 10 & 3 & 2 & 1 & 2 \\
\hline Kaliganj & NA & 2 & 2 & 8 & 10 & 3 & 2 & 1 & 2 \\
\hline Total & NA & 8 & 8 & 34 & 40 & 12 & 6 & 3 & 8 \\
\hline
\end{tabular}

Table 2.4: Sample size by category of respondents and study areas
\begin{tabular}{|c|c|c|}
\hline Respondent categories & \begin{tabular}{l}
Sub-cluster (Experimental \\
Area \\
(No. of respondents/groups)
\end{tabular} & \begin{tabular}{l}
Non-sub-cluster (Control) Area \\
(No. of respondents/groups)
\end{tabular} \\
\hline \multicolumn{3}{|l|}{1. Education Officials:} \\
\hline DPEO & 13 & 3 \\
\hline TEO & 11 & 3 \\
\hline ATEO & 37 & 5 \\
\hline 2. Head Teacher & 325 & 8 \\
\hline 3. Teacher & 974 & 34 \\
\hline 4. SMC Chairman-member & 315 (groups) & 6 (groups) \\
\hline 5. PTA Chairman-member & 184 (groups) & 3 (groups) \\
\hline 6. Student & 325 (groups) & 8 (groups) \\
\hline 7. Parent & 1620 & 40 \\
\hline
\end{tabular}

\subsection*{2.4. Implementation}

This evaluation study was conducred by University Research Corporation (Bangladesh) in close collaboration with the Directorate of Primary Education (DPE), Ministry of Education and Education Section of UNICEF/Bangladesh. The evaluation was implemented in three broad steps:

Step 1: Collection and reviewing of secondary source materials, and discussions with the relevant personnel at DPE and UNICEF, Dhaka.

Step 2: Development of data collection instruments; pretesting of data collection instruments; recruirment of field and office staff: training of field and office staff; actual field data collection; preparation of analysis and tabulation plans; data processing.

Step 3: Analysis and writing of the report.
The field work was undertaken by twelve teams with a tocal of forty-two field staff. The field staff comprised twenty-eight field investigators, twelve field supervisors, and two field monitors. The duration of field data collection was 34 days (May-June, 1996).

Both quantirative and qualitative approaches were adopted to collect relevant information, using four sets of In -depth Interview Schedules (Head teacher, Teacher, Education Officials, and Parents), and two sets of discussion guidelines (one for the SMC/PTA members and the other for the sudents). All these data collection instruments (DCI) were prepared in English, and then based on the feedback from UNICEF, they were translated into Bengali. The draft Bengali Version of the DCIs were then pre-tested in two sub-cluster areas under Saruria thana of Manikganj district.

The pre-test team comprised twelve members - four members of the core team, two research assistants and six field investigators. In addition, as part of the pre-test activity, the core-team along with Assistant Director, sub-cluster raining, DPE visited one school in Dhaka city during the subcluster training session. All necessary revisions were done after reviewing the pre-test results. The DCIs were then finalized, and the final Bengali and English versions were submitted to UNICEF for final approval.

A five-day long intensive training was imparted to the preliminarily selected fifty-one field staff. The \(\mathrm{PI}, \mathrm{Co}-\mathrm{PI}\) and the Consultants of the study conducted the training sessions. On the final day of training, Dr. G.M. Shrestha, UNICEF/Dhaka delivered a lecture covering issues pertaining to the concept of sub-cluster.

The draft analysis and tabulation plans with dummy tables and chapter outlines were prepared during the data collection period, and then were submitted to UNICEF for reviewing. These were finalized after incorporating the relevant suggestions made by UNICEF representative and suggestions based on the post-field experience sharing meeting held at URC(B) HQs.

The data management activities comprising registration of field questionnaires, data processing (coding, editing, categorization of open-ended questions), and computer entry were carried out inhouse at \(\mathrm{URC}(\mathrm{B}) \mathrm{HQs}\). A total of twelve in-house persons were deployed for these activities. The SPSS statistical package was used to enter, edit and analyze data.

\subsection*{2.5. Organization of the Report}

In line with the purpose, and overall and specific objectives of the evaluation study this report presents six sections, including the introduction (Section 1) and the current section. Section 3 presents the relevant characteristics of sample categories. Section 4 analyses the major fearures of sub-cluster training. Impact of sub-cluster training is analysed in Section 5. The key findings and recommendations are presented in Section 6.

It is worthwhile to mention that all information in the tabular form is presented as Annex, and the source(s) of information is (are) shown under each table in the Annex. It has been done so with the view that the information would be of utmost utility for those policy planners who whould be involved with the task of designing the nation-wide replication plan of sub-cluster training. Since the respondents were multi-typed and indicators were many it has been decided to present the findings in graphic form in the text. Some terminologies are used interchangeably, e.g. subcluster/under sub-cluster/sub-cluster area/sub-cluster school/school under sub-cluster training. In case of non sub-cluster schools, similar terminologies are also interchangeably used.

\section*{3. SELECTED CHARACTERISTICS OF SAMPLE CATEGORIES}

The present section attempts to describe some basic characteristics of the sample schools and the sample of respondents.

It was revealed that highest number of schools, both under sub-cluster and non sub-cluster, were established before 1940 and the next higher number during 1970-1979 (Figure 3.1). Again, highest number of schools, both under subcluster and non sub-cluster, were government schools (over \(95 \%\) and about \(63 \%\) respectively see Annex table 3.1).


The mean number of teachers per school in the sub-cluster area was 4.18 and that in the non sub-cluster area was 5.75 (or about 6). Examining by gender, there were higher number of males than female teachers both under subcluster and non sub-cluster schools. However, under sub-cluster schoois, the number of male teachers was twice the number of female teachers (Figure 3.3).

Of the 333 schoois ( 325 under sub-cluster and 8 under non sub-cluster) investigated, over 76 percent had their own playground. Mean ages


It was observed that about a half of the sample schools, both under sub-cluster and non sub-ciuster, had 5 Grades and the other half had 6 Grades. Again, highest proportion of schools, both under sub-cluster and non sub-cluster, had 3-5 classrooms (Figure 3.2).
 of the Head Teachers, Teachers, Education Officiats and Parents interviewed, were 45, 40, 46, and 43 years respectively. Mean figures for job experiences of the Head Teachers, Teachers and Education Officials were 22, 17, and 21 years respecrively. The mean amount of cultivable land owned by the sample parents was 234 decimals, their mean amount of gross annual income was Tk .

45,351 , while their mean years of schooling was 7 (seven). By gender, about 89,63 , and 99 percent of the Head Teachers, Teachers, and Education Officials respectively were males and the rest females (Figure 3.4). About 96, 93, and 99 percent respectively of the Head Teachers, Teachers and Education Officials were married and the rest unmarried.*

By educational qualification, about 22 percent of the Head Teachers, read upto SSC, 46 percent were HSC, 25 percent Bachelors and about 8 percent Masters. About 47 percent of the Teachers (Asstt.) read upto SSC, 32 percent were HSC, over 19 percent Bachelors, and about 2 percent Masters. Of the Education Officials, 68 percent had Bachelors Degree and about 32 percent had Master's Degree.*

The SMC and PTA chairmen-members, both under sub-cluster and non sub-cluster, mostly read from class VI to HSC. The three major occupations in which the SMC and PTA
 chairmen-members were mostly involved were, in order, service, cultivation and business. By social status, most of the SMC-PTA chairmen-members participating in the discussion were teachers/opinion leaders or matbars. The mean duration of association of the chairmen-members with SMC was about 8 years and that with PTA was about 7 years.*

Out of the students sample, about one-third each were attending Grade III, Grade IV and Grade V. Little over half and less than a half of the selected students were boys and girls respectively. The parents of most of the selected students were agriculturists, followed by service-holders and businessmen.*

The distribution of the Head Teachers (HTs), Teachers and Education Officials according to their Professional qualification is presented in Annex table 3.4. It may be observed that highest proportion of the HTs, both under sub-cluster and non sub-cluster, received certificate-in-education. While the highest proportion of the Teachers (Asstt.) under sub-cluster received PTI, those under non subcluster reported receiving certificate-in-education. Most of the education officials, both under subcluster and non sub-cluster, reported receiving cluster trainingicurriculum dissemination training or training on management.

Highest proportions of the HTs and Teachers, both under sub-cluster and non sub-cluster, received their professional training in the year 1995 followed by 1994. However, highest proportion of the Education Officials under sub-cluster received their professional training in the year 1994 followed by 1995, while those under non sub-cluster received their training in 1995 followed by 1994. That is, taking the three categories together, most of the respondents received their professional training during 1994-95 (not reported in tabular form).

The highest proportion of the HTs under sub-cluster training mentioned 'Teaching Bangla' as the topic discussed in the last training followed by 'Mathematics' and 'Child Psychology'. 'Teaching Bangla', 'Mathematics', and 'Population and Health' were mentioned in each case by the highest proportion of the HTs under non sub-cluster training. Highest proportion of the teachers under subcluster training reported 'Bangla' as the topic of last training followed by 'Mathematics' and 'Principles of Education'. Highest proportion of the teachers under non sub-cluster training mentioned 'Social Science' as the topic discussed in the last training followed by 'Bangla' and 'Mathematics'. However, highest proportion of the Education Officials, both under sub-cluster and non sub-cluster, mentioned 'School Management' as the topic discussed in the last training followed by 'Administrative Rules' (Annex table 3.5).

As reported by the parents of school-going children, average number of children currently attending primary school was about 2, both under sub-cluster and non sub-cluster, and average number of children attending above primary level was nearly one (see Figure 3.5). However, distribution of school-going children by gender was aimost equal.



\section*{4. SUB-CLUSTER TRAINING: ORGANIZATION, MANAGEMENT STRENGTHS AND WEAKNESSES}

This section tries to analyze various aspects of sub-cluster training like organization and management of sub-cluster training, teaching-learning situation under sub-cluster trainings, and strengths and weaknesses of sub-cluster training.

\subsection*{4.1. Organization of Sub-cluster Training}

Normaily, a sub-cluster training session is supposed to be held once in two months in all the schools under a sub-cluster by turn. The day long training session is supposed to be conducted by the concerned ATEOs and is supposed to be participated by all the teachers in the schools and also by SMC and PTA chairmen/members.

A bulk majority of the education officials reported that the purpose of sub-cluster training was to improve teachers' teaching quality (Figure 4.1). Other purposes of sub-cluster training include applying new techniques of teaching, making school attractive to the children, increasing students' attendance and preventing dropout, and establishing close relationship berween school and the community.

About 90 percent of the head teachers and 81 percent of the teachers in the schools under subcluster areas attended sub-cluster training
 sessions at least 4 times since it was introduced. On an average, head teachers and assistant teachers attended training sessions 6.3 and 5.8 times respectively (Annex table 4.2). Six of the head teachers and 9 of the teachers, though they oelonged to sub-cluster schools, could not respond to any question related to sub-cluster training as they were either new comers or were on leave when sub-cluster training sessions were held.

Our discussion with SMC and PTA members revealed that though majority of the members of SMC and PTA visit schools either voluntarily or upon request by the head teachers for various purposes their participation in sub-cluster training sessions was very poor. Only one-fourth of the SlACs and slightly over one-tenth of the PTAs in the schools ever participated in the training sessions. Again, only either the chairman or a few of the members of these associations participated in the training. This observation was substantiated by the responses of education officials, head teachers and teachers. Only 15 percent of the education officials reported that the extent of participation by SMC chairmen/members in sub-cluster raining was good, the rest were reported to be either moderate or poor (Figure 4.2). Almost 92 percent of the education officials opined that the extent of participation of PTA chairmen members in the sub-cluster training was poor. A cross examination with the SMC
and PTA chairmen/members revealed that they (SMC and PTA chairmen/members) were not timely or properly informed about the time and venue of training.



Further, majority of the head teachers and teachers reported about either no or very little interest and enthusiasm of the SMC and PTA chairmen/members to be present in sub-cluster training (Figure 4.3).

Though module/leaflet numbers 1 to 48 were identified by the respondents, majority of them (head teachers and teachers) reported the modules 29 to 35 (module numbers) that were used in the training. Almost all the respondents mentioned pedagogy as one of the topics of the modules (Annex table 4.5). Other topics of the modules include school development, school management, community participation, etc.

Majority of the respondents reported teachers' guide/manual, followed by leaflets/modules, that were used as training materials in the sub-cluster training (Figure 4.4). Other training materials used in sub-cluster training include board, sign pen/marker pen, chalk/duster, poster, picture \(/ \mathrm{map} / \mathrm{globe}\), chart, art paper/coloured card, real and semi-real materials, etc. These were, however, reported by lesser number of respondents.


With respect to teaching aids, chalk/duster and board were most commonly used in sub-cluster training (Figure 4.5). Other reported teaching aids include chart/poster, picture, real/semi-real materials, marker/colour pencil, paper/art paper/card, counting materials, etc.

\section*{Fipura 4.5: Poreentaga didribution of Hoad teachers, Foachers and Education officials} by cocurrialia activatios in which the traineos participato in sub-ciuster training


Respondents reported various co-curricular activities in which the trainees participated during sub-cluster training. The most commonly cited co-curricular activity was reciting rhymes/poems followed by telling stories and singing songs. The other cocurricular activities in which the trainees participated during sub-cluster training are making jokes, drawing picture, showing physical exercise, performing comics and others like delivering extempore speech, testing ready wit, etc. (Figure 4.6).

\subsection*{4.2. Teaching-Learning Situation under Sub-cluster Training}

Fifty seven percent of the head teachers, 55 percent of the teachers and 43 percent of the education officials reported that the mode of instruction in sub-cluster training was studentcentered (Figure 4.7), and more than 95 percent of the head teachers and teachers were of the opinion that sub-cluster training was participatory (not shown in table).


Normally, the activities performed in a sub-cluster training session include, registration and welcoming of the participants, demonstration class followed by lesson criticism session, discussion on modules/leaflets, co-curricular activities, and open discussion including sharing of ideas and experiences.

In a demonstration class, one of the participants is asked to conduct a practical class on any particular subject in front of the students and other participants. His teaching style, use of teaching materiais, conduct, etc. are observed by the participants. Immediately after the demonstration class, the lesson criticism session takes place where the participants try to identify the strengths and weaknesses of the demonstration class and through discussion, try to suggest measures for improvement of the demonstration class.

Most of the respondents in this study reported that in almost all the cases (training sessions) demonstration lesson was followed by lesson criticism session (Figure 4.8). And as opined by the education officials, two-third of the participants, including head teachers and teachers, took either very active or active part in such lesson criticism sessions (Figure 4.9).



The open discussion session is a part of the subcluster training where the participants including head teachers, teachers, SMC and PTA chairmen/ members are supposed to take active part to discuss openly on matters related to school, training, teaching-learning, community participation, etc. Eighty seven percent of both head teachers and teachers and 88 percent of the education officials reported that open discussion took place in all the training centers either always or almost regularly (Figure 4.10).


Slightly over 56 percent of the head teachers and 58 percent of the teachers reported that the SMC chairmen/members were the participants (other than the teachers) in the open discussion (Figure 4.11). Lesser number of respondents reported about participation of PTA chairmen/members and guardians and even fewer proportion of respondents ( \(12 \%\) of head teachers and \(15 \%\) of teachers) identified education officials as the participants in open discussion. Thus, other than teachers and SMC chairmen/members, participation of PTA chairmen/members, guardians and education officials in the open discussion sessions was not encouraging.


Regarding the topics discussed in the open discussion session for sharing of ideas and experiences, the topic on ensuring attendance of children was most commonly cited by the respondents. Other commonly cited topics are identifying and solving problems of upward communication, preventing school dropour, procuring furniture for school and developing playground (Figure 4.13).

Figure 4.11: Percentage distribution of Head teachers and Teachers by other categories of participants of open discussion


Again, while 95 percent of the education officials placed the teachers in either moderately active or very active categories (in terms of participation in open discussion), only few of them placed the SMC and PTA chairmen/members in these categories (Figure 4.12). Remarkably, none of the education officials found the PTA chairmen/members in the very active category in terms of their participation in open discussion.


Topics like filling up of low land of the school, purchasing land for school, teacher-student relationship, tree plantation, etc. are also discussed during open discussion, but these were cited by relatively lesser number of respondents.

It may be noted that an overwhelming majority of the head teachers, teachers and education officials reported that the participants tried to identify teaching-learning problems of schools in a sub-cluster training. However, majority of them also reported that they faced problems in applying their knowledge of sub-cluster training in class/school. They cited reasons like shortage of class rooms and other logistic facilities in schools, shortage of teaching materials, shortage of teachers, etc. in this regard.

The sub-cluster training, if properly managed and conducted, is supposed to bring about a positive change in the quality of teaching-learning situation in the schools. This has been examined by taking some selected indicators discussed below.

It was revealed that almost all the head teachers and teachers, and all the education officials were of the opinion that sub-cluster training had an impact on the quality of teaching-learning in the school/area, it provided the teachers an opportunity to develop their ability of teaching and it was conducive to skill development of children. Ninety two percent of the head teachers, 87 percent of the teachers and 97 percent of the education officials also opined that the sub-cluster training provided the teachers an opportunity to contribute in improving the teaching syyles of their colleagues (Figure 4.14).
 Further, all the education officials stated that the sub-cluster training was helpful in developing leadership and management capabilities among the teachers and head teachers, and 98 percent of them also opined that the sub-cluster training was conducive in developing a sense of responsibility and accountability among the teachers and head teachers for the schooling outcomes or achievement by the students. The above discussion suggests that the sub-cluster training has a positive impact on the overall quality of teaching-learning situation in the schools.

\subsection*{4.3. Management and Supervision of Sub-cluster Training}

The sub-cluster training sessions are supposed to be held once in two months and alternately in all schools by turn. The respondents were asked if sub-cluster training was held in schools by turn. Eighty-four percent of the head teachers, 85 percent of the teachers and 92 percent of the education officials reported that sub-cluster training was held in all schools by turn.

As the participants need to move from one center (school) to another to attend sub-cluster raining, the distance of various centers from their residence may have an impact on their attendance in subcluster training. The average distance of training centers from the participants' (teachers') residence was reported to be slightly over 4 km .

The respondents were asked to report on various aspects of management of sub-cluster training. Seventy five percent of the head teachers, 97 percent of the teachers and 85 percent of the education officials reported that determination of the date and venue of next training was done by the concerned ATEO in consultation with the teachers (Figure 4.15).


With respect to selection of the person who should present the next demonstration class, more than three-fifths of the respondents stated that the issue was determined by the ATEO in consultation with the teachers. Seventeen percent of the teachers and 32 percent of the education officials indicated that this was determined by the participating head teachers. Thirty two percent of the head teachers, 7 percent of the teachers and 8 percent of the education officials also reported that it was decided either by the head teacher of the host school or jointly by the participanss in the last session (Figure 4.16).

Seventy seven percent of the head teachers, 89 percent of the teachers and 62 percent of the education officials said that the topic of the next demonstration class was selected jointly by the ATEOs and the participating teachers (Figure 4.17).


A large variation was found among the different categories of respondents with respect to their responses on the authority that develops training modules/leaflets. Though majority of the head teachers, teachers and education officials reported that the training modules were developed by the Directorate of Primary Education, a high proportion of them ( \(42 \%\) head teachers, \(41 \%\) teachers and \(23 \%\) education officials) also were of the opinion that the modules were developed with the assistance of the UNICEF (Figure 4.18).

A bulk majority of the head teachers and
 teachers reported that they did not experience any visits by the DPEOs, ADPEOs or DDs and other higher officials like TNOs, DCs, etc. during the last year (Jan. - Dec. 1995). As reported by the respondents, the ATEOs paid more frequent normal supervisory visits to schools than any other education officials during the last year. The ATEOs were followed by the TEOs in terms of frequency of their normal supervisory visits to schools during the period under consideration (Annex table 4.18). On an average, as reported by the head teachers, the ATEOs and TEOs visited the schools 8 and 1.5 times respectively during the last year. The corresponding figures for DPEOs, ADPEOs/DDs and other higher officials were \(0.4,0.2\) and 0.2 times respectively.

Most of the respondents including head teachers, teachers and education officials themselves reported that during their normal supervisory visits the education officials mostly checked various documents, checked teachers' and students' attendance registers, wrote comments on the inspection books and provided academic support to teachers and students (Annex table 4.19).

Thirty percent of the education officials also reported that they observed teaching/co-curricular activities during their normal supervisory visits to schools.

Besides the normal supervisory visits, there is also provision that the higher education officials pay visits to schoois where sub-cluster training sessions are in progress. All the education officials reported that there was a system of supervision of sub-cluster training by higher officials. However, only slightly more than half of the head teachers ( \(53 \%\) ) and teachers ( \(55 \%\) ) reported about higher officials' visit during sub-cluster training. That means in about 50 percent of the cases, higher officials did not pay visits to schools where sub-cluster training sessions were in progress. With respect to activities of the higher education officials during their visits to sub-cluster training sessions, most of the respondents (those who answered in affirmative with respect to the previous question) reported that the officials checked if sub-cluster training was held as per plan, checked availability of teachers' guide, checked if the teachers were benefitted by the training. They were also reported to see if the teachers could apply the acquired knowledge in practice, if sub-cluster training registers were being maintained properiy and to help solve problems related to sub-cluster training (Figure 4.19)

The education officials were asked to report if
there were provisions for follow-up of participants after imparting training and if there were any mechanism for evaluating the effectiveness of sub-cluster training. Almost all reported that there were provisions for follow-up of participants after imparting training and 78 percent reported about the existence of mechanism for evaluating the effectiveness of sub-cluster training.

figure 4.19: Paremiage diatribution of the Head lenchere, Teschers and Education officiais by activitias done by the suporvisorfo) during visiting a subcherar trining sat sion


The respondents were asked if there was funding provision for stationeries and entertainment for sub-cluster training. Eighty seven percent of the head teachers, 80 percent of the teachers and 77 percent of the education officials said that there was provision for stationeries, and 93 percent of the head teachers, 84 percent of the teachers and 68 percent of the education officials said that there was provision for entertainment (Figure 4.20). But 97 percent of the head teachers, 92 percent of the teachers and a similar proportion of the education officials opined that these were insufficient. Thus, though there were provisions for stationeries, entertainment and other materials for the participants, but according to an overwhelming majority of the respondents these provisions (funds) were insufficient.

Those who opined that the provisions for stationeries, entertainment and ocher materials were insufficient, justified their view with instances/reasons like lack of entertainment refreshment facilities, lack of fund for transport and no or inadequate supply of stationeries/ materials (Figure 4.21).


However, while the head teachers gave more emphasis on shortage or inadequate supply of stationeries and materials, the teachers emphasised on inadequate entertainment/refreshment facilities, but the education officials gave more emphasis on lack of transport facilities.

In order to resolve the problems stated above and in order to assess the amount of fund needed for this purpose, the respondent head teachers and teachers were asked to estimate the amount to be allocated for each participant per training. Both the categories of respondents were found to be consistent in estimating the amount. According to them, on an average approximately Tk .79 should be allocated per participant per training; the break-up being Tk. 34 for refreshment/entertainment, Tk. 31 for transport/conveyance and Tk. 14 for stationeries/materials.

Based on our information from the field that there are, on an average, 5 schools in a sub-cluster and there are on average 4 teachers in a school, and assuming that the training is conducted once in two months in each sub-cluster ( 5 schools X 4 teachers per school X 6 sub-cluster trainings X Tk. 79 per participant per training) one can estimate that (as suggested by the respondents) a total of \(\mathrm{Tk} .9,480\) would be needed for each sub-cluster per year.

With regard to problems of management of sub-cluster training the respondents identified many ranging from dearth of necessary materials to lack of efficient instructor (ATEO). The respondents, however, differed from each other (categories) with regard to nature and magnitude of the problems. While majority of both the head teachers and teachers cited dearth of teaching/training materials as one of the major problems of management of sub-cluster training, majority of the education officials cited inadequate allocation of money and no provision for TA or DA for the participants (Annex table 4.23). Other problems cited by the respondents are shortage of furniture and other logistic facilities, problem of entertainment/refreshment, problem of proper monitoring and evaluation and lack of efficient instructor.

The respondents also suggested various measures for solving the problems of management of subcluster training. Forty six percent of the teachers, almost a similar proportion of the head teachers and 57 percent of the education officials suggested that proper supply or local development of necessary training/teaching materials should be ensured (Annex table 4.23). Other measures suggested by the respondents include adequate supply of furniture and other logistic facilities, providing fund for transport/conveyance and refreshment, etc.

\subsection*{4.4. Strengths and Weaknesses of Sub-cluster Training}

In the preceding discussion on teaching-learning siruation under sub-cluster training, we have already observed that an overwhelming majority of the respondents offered positive comments on the impact of sub-cluster training on various issues pertaining to the quality of teaching and learning in the school. They also identified some of the problems especially of management of sub-cluster training. This sub-section of our discussion deals with the overall strengths and weaknesses of sub-cluster training as perceived by the respondents.

Regarding the strengths of sub-cluster training, majority of the head teachers, teachers, education officials and also parents opined that the new techniques of teaching (as learned through sub-cluster training) were conducive to improving teachers' skill/ability. Seventy two percent of the education officials, 64 percent of the parents and 34 percent of the teachers reported about the use of teaching materials, as taught and encouraged in training, was conducive to easy learning. Sixty five percent of the head teachers, 42 percent of the teachers and 38 percent of the education officials mentioned the practice of sharing of ideas and experiences as one of the strengths (for improving teachinglearning quality) of sub-cluster training.

Other strengths of sub-cluster training, as identified by the respondents, are lesson criticism sessions to identify the strengths and weaknesses of teaching, opportunity to interact with other colleagues and community members, learning to make the school more attractive and enjoyable to children, etc. (Annex table 4.24).

As regards to weaknesses, lack of adequate fund seems to have emerged to be a prominent factor. As perceived by the respondents, this lack of fund resulted in lack of entertainment/refreshment and transport facilities, and also in poor or inadequate supply of stationeries and materials. Another important weakness of sub-cluster training is inefficient management. As perceived by the respondents, this inefficient management resulted in shortage or irregular supply of leaflets/guides, improper planning and implementation and shortage or lack of good/efficient trainers. Other weaknesses of sub-cluster training, as cited by the respondents are, keeping classes suspended (in schools) on the day of training, ill-participation of SMC-PTA chairmen/members, etc.

The respondents were asked to offer suggestions for overcoming the weaknesses of sub-cluster training. A bulk majority of them suggested increased grant for entertainment and transport (Annex table 4.25 ). Also majority of them suggested proper measures to ensure adequate and timely supply of materials including teaching/training materials and stationeries. It may be noted that 45 percent of the parents could not suggest any measures. One third of the head teachers and about a half of the teachers also suggested for proper monitoring and evaluation of training. Other measures suggested by the respondents are ensuring supervision and follow-up, making provisions for training of trainers (TOT), introducing a system of evaluating training effectiveness, shortening of school hours instead of suspending classes on the day of training, etc.

\section*{5. IMPACT OF SUB-CLUSTER TRAINING}

The present section attempts to present the relative benefits of sub-cluster training as compared against non sub-cluster training. In this endeavour, however, at least the followings would be kept in mind: first, starting only in 1993, sub-cluster training has not passed enough time to reveal its impact"; and second, the overall teaching-learning situation is influenced by a host of factors whose effects are not always easy to segregate.

\subsection*{5.1. Enrolment, Attendance, and Dropout in the Schools}

The study shows that students' enrolment in 1996 was higher for schools under sub-cluster (mean \(=310\) ) than that under non sub-cluster (mean \(=253\) ) (Figure 5.1). Similarly, the students' enrolment in 1995 was higher for sub-cluster schools (mean \(=306\) ) than non sub-cluster schools (mean \(=225\) ) (Figure 5.2).



Further, compared to 1995, students' enroiment under both categories increased in 1996. And, irrespective of training status (sub-cluster and non sub-cluster), there was no pronounced gender differential in the enrolment of sudents.

The attendance rate was higher under sub-cluster (69.8) than under non sub-cluster (64.2). In each grade, girls' attendance rate was higher in the sub-cluster schools than in the non sub-ciuster schools (Figure 5.3).

It was also found that the dropout rate was slighly lower under sub-cluster (6.2) than under non subcluster (7.1) (Figure 5.4). However, the dropout rate by gender was not the same. Under subcluster, the dropout rate seems to be higher for the boys than the giris but under non sub-cluster, the

\footnotetext{
** If impact is measured in terms of an outcome continuum (conceptually), whereby 'impact' is the ultimate outcome, output is the immediate outcome, and effect is the intermediary ourcome.
}
rate is higher for the girls than the boys. Among all the categories, the dropout rate for the girls in the sub-cluster school was much lower than the same rate for the boys in sub-cluster and non subcluster, as well as the rate for the girls in non sub-cluster schoois. It is important to note that the dropout rate for the girls in Grades 3-5 in the sub-cluster schools is more or less two-fold lower than the comparable dropout rate for the girls in the non sub-cluster schools (see Annex table 5.4).



On the basis of the foregoing facts, it may be said that (a) students' enrolment was higher under subcluster than under non sub-cluster; (b) students' attendance rates in general and those for the girls in particular were higher under sub-cluster than under non sub-cluster; (c) dropout rate was lower under sub-cluster than under non sub-cluster; and (d) dropout rate of girls under sub-cluster was lower than the comparable rate under non sub-cluster.

However, the conclusions arrived at on the basis of the facts collected from school records did not tally exactly with the views of the HTs and Teachers. It may be observed that whereas the higher percentage of the HTs under sub-cluster ( \(90.5 \%\) ) than those under non sub-cluster (87.5) opined that compared to the recent past, student attendance increased in 1995, higher percentage of the Teachers under non sub-cluster ( \(100 \%\) ) than those under sub-cluster ( \(88.0 \%\) ) reported the same (Annex table 5.5). Again, whereas all of the HTs and Teachers under non sub-cluster opined that dropout rate declined in 1995, such responses under sub-cluster were 91.1 and 89.4 percent respectively.

\subsection*{5.2. Teaching Aids and Co-curricular Activities in the Schools}

It was revealed that the existence of teaching aids like chaik board, chalk, duster, abacus, picture books, and models made of clay was almost similar in schools under sub-cluster and non sub-cluster (Annex table 5.6). However, slides, microphone, pointer/stick, scale, compass/weighing machine, etc. were non existent in the non sub-cluster schools. Thus, in terms of type of teaching aids available, sub-cluster schools appear to be better than non sub-cluster schools.

With respect to holding of co-curricular activities in the schools during the last year (1995), it was observed that 75-96 percent of the schools under sub-cluster and non sub-cluster held sports, literary or cultural activities, participated in inter-school competition and received prizes in the competition during the last year and, such percentages were slightly higher for the schools under sub-cluster: (Annex table 5.7). Again, 75-92 percent of the schools under sub-cluster and non sub-cluster observed 21st February, 26th March, 16th December, Tree plantation week, vaccination or immunization day, and education day during the last year. However, holding of mother and child day, health-hygiene and sanitation day, and UN day was not at all reported by the non sub-cluster schools. That is, sub-cluster schools tend to observe various days/weeks on more occasions or issues than the non sub-cluster schools.

The mean number of times of holding sports, literary/cultural activities, inter-schooi competition and frequency of receiving prizes were higher for the schools under sub-cluster (mean=1.91, 5.04, 1.61 and 3.67 respectively) than those under non sub-cluster (mean \(=1.25,1.50,1.38\) and 2.00 respectively). That is, in terms of holding of co-curricular activities, schools under sub-cluster were more active than those under non sub-cluster.

The mostly cited specific co-curricular activities, both under sub-cluster and non sub-cluster, were singing songs, reciting rhymes or poems, organizing games and sporis, making jokes/performing comics/acting or dancing, and telling stories (Annex table 5.8). However, such responser were, by and large, higher for the respondents under sub-cluster than those under non sub-cluster. Singing songs, reciting rhymes or poems, making jokes or performing comics were also the specific cocurricular activities mostly cited by the SMC/PTA chairmen-members and students participating in the discussions. Additionally, over one-third of the school children mentioned 'telling stories/joyous stories' as the specific co-curricular activity conducted in the class.

\subsection*{5.3. Teaching-Learning Situation}

The responses of the interviewees as to whether students are allowed sufficient time for their proper participation in the class, whether teachers try to identify the weaknesses of backward children, and whether students are provided opportunity to practice lessons in the class are discussed below. Regarding allowance of time for participation of students in the class, about 67-95 percent of the HTs, Teachers, Education Officials and Parents replied in the affirmative and, such figures were consistently higher for the respondents under sub-cluster than those under non sub-cluster (Figure 5.5). Almost similar response patterns were also evident with respect to wherher teachers try to identify the weaknesses of backward children and
whether students are provided opportuniry to practice lessons in the class. This, again, was corroborated by the reportings in the group discussions held with the SMC/PTA chairmen-members and school children. In response to the three questions (teachers' allowance of time for participation of students, identifying the weaknesses of backward children, and providing opportunity to the students to practice lessons in the class), over four-fifths of the SMC chairmen-members, over twothirds of the PTA chairmen-members, and over four-fifths of the school students under sub-cluster said 'yes' respectively as against nil, over half, and over three-fourths of the SMC chairmenmembers, PTA chairmen-members and students under non sub-cluster respectively.

In response to how the teachers ensure participation of students, the major proportions of HTs, Teachers and Education Officials under sub-cluster training mentioned that they ensured it by 'asking sudents to answer questions orally or in writing' (Annex table 5.10). Of those under non subcluster, the major proportion of HTs and Teachers mentioned that they ensure students' participation by 'using various materials/co-curricular activities' while the Education Officials mentioned 'by asking to write on the chalk board/note book' and 'asking students to answer questions orally or in writing' (both in equal proportion). Regarding remedials provided to the backward children, the highest proportion of all categories of respondents, except Education Officials under non sub-cluster training, mentioned that this is done by 'teaching the backward children by the good students'. Again, about providing opportunity to the students to practice lessons in the class, the highest proportion across the categories of respondents, except the teachers under sub-cluster schools, mentioned 'asking them to answer questions after learning lessons in the class/question-answer'.

Regarding the respondents' perception about teaching-learning quality it was found that except parents, majority of the HTs, Teachers and Education Officials both under sub-cluster and non sub-cluster perceived the quality of teachinglearning as 'good' and such responses were slightly higher in number under sub-cluster than those under non sub-cluster (Figure 5.6). However, the views of the participants of discussion on this issue were little bit different. Highest proportion of the SMC chairmenmembers both under sub-cluster and non subcluster (about one-third each) regarded the
 quality of teaching-learning as 'good', highest proportion of the PTA chairmen-members under sub-cluster (over one-third) and non sub-cluster (about half) perceived the quality as 'average', while highest proportion of the students under subcluster (over a half) and non sub-cluster (one-third) expressed 'high satisfaction' on quality of teaching. When the students were asked as to why they were satisfied with teaching, all of the participating students under sub-cluster against only one-fifth of those under non sub-cluster said they 'understand lesson or lectures easily'. Taking the responses of all categories of respondents together, it may be said that the quality of teaching-learning was relatively better under sub-cluster than under non sub-cluster.

It was observed that the highest proportion of the interviewees both under sub-cluster and non subcluster considered that the school was attractive and enjoyable to the students and, such responses were consistently higher under subcluster than under non sub-cluster (Figure 5.7). This observation of the interview respondents was also supported by the views of the SMC/PTA chairmen-members participating in the group discussions. However, less than a half of the students both under sub-cluster and non sub-cluster regarded the school as 'moderately' enjoyable and attractive.


A very high proportion of the HTs and Teachers, both under sub-cluster and non sub-cluster, considered that the school was attractive and enjoyable to the students because 'they get opportunity to play/get free environment' in the school and, such responses were more pronounced under subciuster than under non sub-cluster (Annex table 5.13). Though the highest proportion of the Education Officials under sub-cluster offered the same reason as mentioned by the HTs/Teachers, those under non sub-cluster offered 'good teaching/desire to learn' as the reason why school was attractive and enjoyable to the students. 'Opportunity to play' was also the response most frequently cited by the SMC/PTA chairmen-members and school children as the reason why school was attractive and enjoyable.

As reasons as to why the school was not attractive and enjoyable to the students, highest proportion of the HTs under sub-cluster referred to 'poverty/financial hardship', highest proportion of the Teachers, Education Officials and Parents under sub-cluster mentioned 'Lack of physica! facilities in the school' (Annex table 5.13). The Head Teachers' reasoning about the non-attractiveness of the school was supported by the views of the PTA chairmen-members participating in the group discussions.

The highest proportion of the HTs, Teachers, Education Officials and Parents both under subcluster and non sub-cluster perceived the teacherstudent relationship as 'moderate' and, such responses were relatively higher under subcluster than under non sub-cluster (Figure 5.8). However, two-thirds and little over half of the participating students under sub-cluster and non sub-cluster respectively regarded the teacherstudent relationship as 'good/very good'. Asked as to why students considered the relationship as 'good/very good', over four-fifths and half of the students under sub-cluster and non sub-

cluster respectively mentioned that 'the teachers show affection or enquire about their wellbeing'. Taking the responses of all categories of respondents together, it is evident that teacher-student relationship was more congenial under sub-cluster than under non sub-cluster.

As ways of improving teaching-learning quality, the three suggestions more frequently cited by the students participating in group discussions were, in order, the following:
- use of more teaching aids and logistic facilities,
- teachers should explain lessons elaborately and in easy language, and
- increasing number of teachers.

These suggestions, again, were mostly offered by the students under sub-cluster than those under non sub-cluster.

\subsection*{5.4. Community Involvement Activities}

It was observed that except holding of SMC/PTA meetings, there was no substantial difference between the schools under sub-cluster and non sub-cluster with regard to community involvement activities (Figure 5.9). And, compared to holding of PTA meetings, more schools both under sub-cluster and non subcluster reported of holding SMC meetings. However, the mean number of SMC and PTA meetings were almost similar for schools under sub-cluster (mean \(=9\) and 4 respectively) and non sub-cluster (mean \(=9\) and 3 respectively - see Annex table 5.16).


According to the HTs, the mean number of holding parent-teachers' day was 1.76 under sub-cluster and 1.20 under non sub-cluster. The mean number of participants attending PTA meetings during the last year was 41.27 under sub-cluster and 21.75 under non sub-cluster. The mean number of participants attending SMC meetings during the last year was 67.20 under sub-cluster and 60.25 under non sub-cluster. Of the SMC chairmen-members who participated in group discussions, about three-fourths under sub-cluster and two-thirds under non sub-cluster reported that SMC meetings were held once in a month. Of the PTA chairmen-members participating in group discussions, about half under sub-cluster and one-fifth under non sub-cluster reported that PTA meetings were held 3-6 times in a year. Again, majority of the SMC/PTA chairmen-members both under sub-cluster and non sub-cluster reported thar they used to atrend respective meetings 'regularly' (not reported in Table).

The highest proportion of the HTs and SMC members under sub-cluster mentioned 'ensuring students attendance' as the topic discussed (Annex table 5.17). White highest proportion of the HTs under non sub-cluster mentioned the same as above, highest proportion of the SMC members under non sub-cluster mentioned 'school development and management' as the topic discussed. Highest proportion of the PTA members under sub-cluster mentioned 'school construction/repair' and those under non sub-cluster mentioned 'preventing school dropout' as the topic discussed in their meetings.

Most respondents, both under sub-cluster and non sub-cluster, perceived the collaboration between the teachers and the community as 'moderate' and there were no noticeable difference in such responses by training status (Figure 5.10). Of the SMC chairmen-members participating in group discussions, over twofifths and one-third under sub-cluster and non sub-cluster respectively perceived the collaboration as 'somewhat good'. Of the PTA chairmen-members, over half and about one-fifth under sub-cluster and non sub-cluster respectively perceived the relationship also as 'somewhat good' (not reported in Table).


The extent of community support for the development of the school by areas of support appear in Annex table 5.19. The figures in the table reveal that across areas of support, the respondents (HTs, Teachers, Education Officials) both under sub-cluster and non sub-cluster mostly termed the extent of community support as 'moderate'.

Considering all the relevant elements related to community involvement, it seems that irrespective of sub-cluster and non sub-cluster areas, community involvement in school affairs was not strong enough and there are room for improving/strengthening school-community relationship.

\subsection*{5.5. SWOT Analysis of Sub-cluster Training}

Based on the foregoing discussion on various aspects of sub-cluster training and based on other information gathered for the purpose of this study, one can make a SWOT (Strengths, Weaknesses, Opportunities and Threats) analysis of sub-cluster training. Chart 5.1 highlights major points of SWOT of sub-cluster raining. It can be observed that there are more strong strengths of sub-cluster training than the weaknesses. Also, there are more opportunities than threats. With positive and appropriate utilization of opportunities, the weaknesses can either be eliminated or be converted into strengths and, as a consequence, the influence of threats can be minimized. This is shown in the Chart 5.2.

\section*{Chart 5.1: SWOT of sub-cluster training}

\section*{Strengths}
- Conducive to improving teaching-learning quality
- Participatory training and active teacher participation
- Effective in developing teachers' sense of responsibility and leadership capability
- Effective sharing of ideas and experiences
- Scope for practice of co-curricular activities
- Existence of supervision and follow-up system

\section*{Weaknesses}
- Poor participation of SMC/PTA chairmen/members
- Inadequate fund for transport and refreshment
- Shortage of stationeries, training materials, other logistic facilities
- Irregular supervision and follow-up by higher officials
- Training conducted during school days resulting in loss of school hours
- Problem of proper monitoring and evaluation

\section*{Threats}
- Shortage of fund illiteracy and its emphasis on primary education
- Two out of eight major points in the GOB perspective plan are related to improving quality of teaching as well as increased allocation (for education) in the national budget
- Strong international community support for improving quality of life through education as manifested in ICPD, Beijing conference, etc.
- High prospects in utilizing public representatives as major political parties in the country (both in position and in opposition) are committed to eradication of illiteracy
- Increased public/community awareness towards the benefits of primary education

In the SWOT model, the strengths and weaknesses are internal to the sub-cluster programme, and the opportunities and threats are the factors external to the sub-cluster programme. The most transparent strengths of sub-cluster training programme lie in the fact that it is conducive to improving teaching-learning quality, it is participatory and thus, creates scope for teachers' active participation, it is effective in developing a sense of responsibility and leadership capability among the teachers, it is conducive to effective sharing of ideas and experiences, it creates scope for practising cocurricular activities and has some provision for supervision and follow-up. The major weaknesses of sub-cluster training include poor participation of SMC/PTA chairmen/members, inadequate fund for transport and refreshment, shortage of stationeries and logistics, irregular supervision and follow-up, training is conducted during school days and the absence of built-in monitoring and evaluation system. The major opportunities of sub-cluster training include GOB's commitment towards eradication of illiteracy and its emphasis on primary education, increased allocation in the national budget for education and for improving quality of teaching as manifested in the GOB's perspective plan, strong international community support for improving quality of life through education, prospects for engaging the public representatives for eradication of illiteracy, and increased awareness among the public towards benefits of primary education. There are, however, some threats of sub-cluster training as well. They are shortage of fund, gradual alienation of community members if their participation is not ensured and environmental limitations like flood, rain, poor communication facilities, etc. (Chart 5.1).

Considering the positive impact of sub-cluster training on the overall teaching-learning situation in schools and considering the major findings of the above SWOT analysis, one can suggest the subcluster training be replicated nationwide. Though in the short-run its positive impact on various aspects is not equally pronounced, in the long-run it would have synergistic and cumulative intergenerational effect.

Chart 5.2: Inter-relationship of SWOT components


Note: The process starts from cell (3). Opportunity (3) can be utlized for removing weaknosees (2), this (2) will strongly onnance the strengthe (1) resutting in little or no influence of threat (4). It may be noted that the dark lines indtcate strong influence and the dotted line indicates shaky influence.


\section*{6. KEY FINDINGS AND RECOMMENDATIONS}

\subsection*{6.1. Key findings}

\subsection*{6.1.1. Organization of Sub-cluster Training}

Respondents perceived that the major purpose of sub-cluster training was to improve teachers' teaching quality.

The head teachers and teachers attended on an average 6 sub-cluster training sessions since it was introduced. The participation of SMC chairmen/members in sub-cluster training was poor and more so in the case of PTA chairmen/members.

The commonly used training materials used in sub-cluster training were teachers' guide/manual followed by leanlets/modules. Chalk/duster and board were most commonly used teaching aids.

The co-curricular activities in which the participants mostly participated were reciting rhymes/poems, telling stories and singing songs.

\subsection*{6.1.2. Teaching-learning Situation under Sub-cluster Training}

Majoriry were of the opinion that the mode of instruction of sub-cluster training was student-centered and the method of teaching was participatory.

In almost all training sessions demonstration class was followed by lesson criticism session and most of the head teachers and teachers participated very actively in such lesson criticism sessions.

In most of the cases open discussion took place in sub-cluster training sessions. Both the head teachers' and teachers' participation in the open discussion was very much encouraging, while the participation of SMC and PTA chairmen/members was discouraging.

Majority of the head teachers and teachers reported that, in the training, they tried to identify teaching-learning problems and they also tried to apply their knowledge of sub-cluster training in class/school. However, they could not properly do so because of shortage of classrooms, shortage of teaching materials and other logistic facilities, shortage of teachers, etc.

Majority were of the opinion that the sub-cluster training had a positive impact on teaching-learning in school, it provided the teachers an opportunity to develop/improve their teaching ability and it was conducive to skill development of children.

\subsection*{6.1.3. Management and Supervision of Sub-cluster Training}

Majority of the respondents reported that sub-cluster training was held in all the schools by urn. They also reported that, in most of the cases, the selection of date and venue of the training, selection of the topic and the presentator of the next demonstration class was jointly determined by the ATEO and the participants.

The ATEOs paid more frequent normal supervisory visits to schools than any other education officials during the last year. Majority of the head teachers and teachers reported that they were not visited by DPEOs, ADPEOs and other higher officials like TNOs, DCs, etc. during the corresponding period.

Though there was provision for visits of higher education officials during training sessions, only slightly over half of the head teachers and teachers reported to have experienced such visits.

A majoriry of the respondents reported that though there were provision for stationeries and entertainment for the participants of sub-cluster training, the fund for these purposes was inadequate.

According to the respondents, the major problems of management of sub-cluster training are shortage of teaching/training materials and logistic facilities, poor allocation of fund for refreshment and transport. They suggested measures like proper and adequate supply of teaching/training materials, supply of furnirure and enhancement of logistic facilities, providing adequate fund for transport and refreshment, etc.

\subsection*{6.1.4. Strengths and Weaknesses of Sub-cluster Training}

The respondents identified many strengths of sub-cluster training. Mostly pronounced ones include new technique of teaching, greater/more use of teaching materials, sharing of ideas and experiences, etc. Major weaknesses of sub-cluster training, as identified by the respondents, are lack of or poor allocation of fund resulting in lack of refreshment, transport facilities and poor or inadequate supply of stationeries and materials, improper management resulting in shortage or irregular supply of leaflets, guides, inadequate monitoring and supervision, shortage of efficient trainers, etc.

Measures for overcoming such weaknesses as suggested by the respondents, are increased grant for entertainment and transport, adequate and timely supply of stationeries and materials, proper planning and implementation, ensuring proper supervision and follow-up, etc.

\subsection*{6.1.5. Impact of Sub-cluster Training}

Students' enrolment was higher under sub-cluster than under non sub-cluster; attendance rate, especially of girls, was higher under sub-cluster than under non sub-cluster; dropout rate was lower under sub-cluster than under non sub-cluster; and girls' dropout rate was lower under sub-cluster than under non suob-cluster.

In terms of teaching aids available and in terms of holding of co-curricular activities, schools under sub-cluster appeared to be better than those under non sub-cluster.

Quality of teaching-learning was relatively better under sub-cluster than under non sub-cluster. Also, compared to those under non sub-cluster, the sub-cluster schools were reported to be more attractive and enjoyable to the students. Sub-cluster schools tend to observe various days/weeks on more occasions or issues than the non sub-cluster schools.

Teacher-student relationship was more congenial under sub-cluster than under non sub-cluster.
Community involvement in school affairs was not strong enough and there are ample scopes for improving/strengthening school and community relationship.

\subsection*{6.2. Recommendations}
- Based on the positive impact of the sub-cluster training in terms of enhancement of quality of teaching, improvement of learning environment, and increasing enrolment and attendance rates and reducing dropout rates (especially of girls) it is suggested that the sub-cluster training should be replicated, nationwide.
- Appropriate steps should be taken to strengthen school-community relationship. Greater participation of the SMC and PTA chairmen/members in sub-cluster training should be ensured. This may be done by involving the public representatives like members of parliament, local government representatives (UP chairmen/members), etc. in various school related affairs. To this end, appropriate advocacy and IEC measures should be undertaken.
- Adequate supply of stationeries and materials for sub-cluster training needs to be ensured to help effective teaching-learning.
- More provision for fund for stationeries, refreshment and transport of participants needs to be considered for ensuring greater effectiveness of sub-cluster training.
- Monitoring and evaluation systems should be a built-in component in the sub-cluster design. The system of monitoring and evaluation should be emphasized as an integral part of sub-cluster training. In this regard regular supervisory visits by higher education officials during the subcluster training sessions and subsequent follow-up visits should be ensured.
- Holding of sub-cluster training sessions during holidays may be experimented.
- Rescheduling of training timing needs to be considered. The suggested timing is 8:00-16:00, instead of the present timing 10:00-18:00.
- The issue of training of the trainers should be emphasized.


\section*{REFERENCES}
\begin{tabular}{|c|c|}
\hline Aziz, M.A. and Rahman, S. (1994) & "Evaluation of Cluster Training and Sub-cluster Training Programmes: A Comparative Study", Dhaka. \\
\hline \begin{tabular}{l}
Barkat, Abul. \\
(1994)
\end{tabular} & "Transforming Human Deprivation into Human Development in Bangladesh: GONGO Dimensions", in Asian Profile, Vol.22, No.4, 1994, Asian Researsh Service. Hongkong. \\
\hline \[
\begin{gathered}
\text { BBS } \\
(1994)
\end{gathered}
\] & "Statistical Yearbook of Bangladesh", Dhaka: Bangladesh Bureau of Statistics. \\
\hline \[
\begin{gathered}
\text { GOB } \\
(1994)
\end{gathered}
\] & "Primary and Mass Education: Plan and Programmes", Dhaka: Primary and Mass Education Division, Govemment of the People's Republic of Bangladesh. \\
\hline \[
\begin{gathered}
\text { GOB } \\
\text { (1995a) }
\end{gathered}
\] & "Participatory Perspective Plan for Bangladesh 1995-2010", Planning Commission, Ministry of Planning, Govemment of the People's Republic of Bangladesh, Dhaka. \\
\hline \[
\begin{gathered}
\text { GOB } \\
(1995 b)
\end{gathered}
\] & "Sub-cluster Training" (Brochure). Dhaka: Training Division, Directorate of Primary Education, Government of the People's Republic of Bangladesh. \\
\hline \[
\underset{(1994)}{\text { GOB-UNICEF }}
\] & "Education Project Plan of Action 1996-2000: Meeting EFA Goals". Dhaka: GOBUNICEF. \\
\hline Khuda, B., & "Study on Relationship Between School Managing Committees and Parent Teachers \\
\hline Barkat, A., and & Associations to Increase Community Involvement in Non-Government Recognized \\
\hline \begin{tabular}{l}
Mannan, A. \\
(1994)
\end{tabular} & Schools", Prepared for the World Bank/Washington for the Female Secondary School Assistance Project, Dhaka: URC(B). \\
\hline \[
\begin{aligned}
& \text { UNICEF } \\
& \text { (1993) }
\end{aligned}
\] & "Primary Education in Bangladesh: Selected Facts, Goals and Strategies" (desk diary), Dhaka: Education, Section, UNICEF. \\
\hline \[
\begin{aligned}
& \text { UNICEF } \\
& \text { (1995) }
\end{aligned}
\] & "Terms of Reference (TOR) for the Study on Sub-cluster Training", Dhaka: UNICEF. \\
\hline \[
\begin{aligned}
& \text { UNICEF } \\
& \text { (1993) }
\end{aligned}
\] & "Primary Education" (in Bangla), Dháka: UNICEF. \\
\hline United Nations (1995) & "Population and Development Volume 1. Programme of Action adop-ed at the International Conference on Population and Development, Cairo, 5-13 September, 1994". Department of Economics and Sociai Information and Policy Analysis, UN, N.Y. \\
\hline
\end{tabular}
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